

1213

S. HRG. 98-425—Pt. 3

TOWARD THE NEXT GENERATION OF FARM POLICY

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

NINETY-EIGHTH CONGRESS

FIRST SESSION

PART 3

JULY 1, 5, AND 8, AUGUST 8, AND OCTOBER 14, 1983

Printed for the use of the Joint Economic Committee



51

TOWARD THE NEXT GENERATION OF FARM POLICY

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

NINETY-EIGHTH CONGRESS

FIRST SESSION

PART 3

JULY 1, 5, AND 8, AUGUST 8, AND OCTOBER 14, 1983

Printed for the use of the Joint Economic Committee



JOINT ECONOMIC COMMITTEE

(Created pursuant to sec. 5(a) of Public Law 304, 79th Congress)

SENATE

ROGER W. JEPSEN, Iowa, *Chairman*
WILLIAM V. ROTH, JR., Delaware
JAMES ABDNOR, South Dakota
STEVEN D. SYMMS, Idaho
MACK MATTINGLY, Georgia
ALFONSE M. D'AMATO, New York
LLOYD BENTSEN, Texas
WILLIAM PROXMIRE, Wisconsin
EDWARD M. KENNEDY, Massachusetts
PAUL S. SARBANES, Maryland

HOUSE OF REPRESENTATIVES

LEE H. HAMILTON, Indiana, *Vice Chairman*
GILLIS W. LONG, Louisiana
PARREN J. MITCHELL, Maryland
AUGUSTUS F. HAWKINS, California
DAVID R. OBEY, Wisconsin
JAMES H. SCHEUER, New York
CHALMERS P. WYLIE, Ohio
MARJORIE S. HOLT, Maryland
DAN LUNGREN, California
OLYMPIA J. SNOWE, Maine

BRUCE R. BARTLETT, *Executive Director*
JAMES K. GALBRAITH, *Deputy Director*

CONTENTS

WITNESSES AND STATEMENTS

FRIDAY, JULY 1, 1983

	Page
Jepsen, Hon. Roger W., chairman of the Joint Economic Committee: Opening statement.....	1
Branstad, Hon. Terry E., Governor of the State of Iowa	3
Lounsberry, Hon. Robert H., secretary of agriculture for the State of Iowa	8
Werries, Hon., Larry A., director of agriculture for the State of Illinois	16
Ausman, Hon. LaVerne, secretary of agriculture for the State of Wisconsin	18
Kanten, Anne, assistant commissioner of agriculture for the State of Minnesota	29
Johnson, Don, chairman, Iowa State ASCS Committee	49
Brune, William J., State conservationist for the State of Iowa, Soil Conservation Service, U.S. Department of Agriculture	52
Kolmer, Lee R., dean, College of Agriculture, and director, Iowa Agriculture and Home Economics Experiment Station, Iowa State University, Ames, Iowa	56
Donham, Kelley J., DVM, chief, comparative medicine section and associate professor, Institute of Agricultural Medicine and Environmental Health, College of Medicine, University of Iowa, Oakdale, Iowa	88
Guither, Harold D., professor of agricultural economics, University of Illinois, Urbana, Ill	126
Breimyer, Harold F., professor of agricultural economics and extension economist, University of Missouri at Columbia	138
Helmberger, Peter, professor of agricultural economics, University of Wisconsin, Madison, Wis	141
Kleckner, Dean, president, Iowa Farm Bureau Federation.....	158
Mintle, Ross, farmer, Poweshiek County, Iowa, and chairman, legislative committee, Iowa State Grange	163
Lehman, Philip S., vice president, Iowa Farmers Union	165
Steffen, Richard, president, Iowa National Farmers Organization.....	170
Holl, George, president, Iowa American Agriculture Movement	171
Gaskill, E. Thurman, past president, Iowa and National Corn Growers Associations	179
Heck, Raymond, president, Iowa Soybean Association	181
Fahn, Joe, president, Iowa Pork Producers Association	184
Christensen, Russell, president, Iowa Cattlemen's Association	186
Baudler, Earl J., president, Iowa State Dairy Association	188
Tubbs, Edward L., president, MABSCO Agricultural Services, Inc., and chairman, Maquoketa State Bank, Maquoketa, Iowa	197
McKee, Dean E., director, Market Economics, Deere & Co., Moline, Ill.....	207
Fischer, R. W., president, Soypro International, Inc.....	212
Tremmel, David L., vice president, Iowa Export-Import Trading Co	214
Brodgers, Lynette, director, Agricultural Development and Promotion Division, Iowa Development Commission	215
Mueller, Howard, chairman, Iowa Corn Promotion Board.....	217
Dingman, Most Reverend Maurice J., Bishop of Des Moines, on behalf of the National Catholic Rural Life Conference	223
Reagan, Michael V., commissioner, Iowa Department of Human Services.....	237
Lamb, Gary, Iowa Farm Unity Coalition	240
Novak, Christopher A., president, Iowa Association, Future Farmers of America	244

IV

	Page
Coons, Marion M., senior vice president and chief financial officer, Hy-Vee Food Stores, Inc.....	249
Pim, Bob, Iowa State director, Farmers Home Administration.....	254
Buffington, Arthur C., president, Federal Land Bank of Omaha.....	263
Pike, L. C., president, Farmers State Bank, Grundy Center, Iowa, and president, Iowa Bankers Association	269
Conover, C. B. (Neal), vice president, administration, Hayesville Savings Bank, and chairman, Iowa Bankers Association Agriculture Committee	271
Ludlow, Kenneth L., executive director, Iowa Grain & Feed Association, Des Moines, Iowa	283
Whipple, John, president, Iowa Fertilizer & Chemical Association.....	286
Bolen, Carrol, vice president, Pioneer Hi-Bred International, Inc.....	287
Boeck, Dwain, president, Iowa Farm Equipment Association, Inc.....	289
Thompson, Eric, president, MFA Inc., Columbia, Mo.....	299
Shivvers, Diane Ford, Iowa Chapter, Sierra Club	314
Peechatka, Walter N., executive vice president, Soil Conservation Society of America.....	316
McLaughlin, Charles, chairman, Soil Stewardship Committee, Iowa Natural Heritage Foundation	323
Roberts, Daryl E., attorney, Independence, Iowa	326
Grodahl, Wayne, SAC County, Iowa	331
Swanson, Harold, dean, Agriculture Department, Iowa Western Community College, Council Bluffs, Iowa.....	332
Narigon, Don, farmer, Nodaway, Iowa	340

TUESDAY, JULY 5, 1983

Abdnor, Hon. James, member of the Joint Economic Committee, presiding: Opening statement.....	357
Janklow, Hon. William, Governor, State of South Dakota.....	359
Ekstrum, Richard, president, South Dakota Farm Bureau Federation	372
Swenson, Leland, president, South Dakota Farmers Union.....	374
Hogen, Hon. Marvis, secretary of agriculture, State of South Dakota.....	385
Orton, John, commissioner of agriculture, State of Wyoming.....	389
Symens, Paul, president, District III, South Dakota Farmers Union, Amherst, S. Dak	394
Weckerly, Norman, president, Hurdsfield Grain Co., Hurdsfield, N. Dak	404
McKeown, Mrs. Gordon, farmer's wife.....	414
McKeown, Shane, farmer, Brookings County, S. Dak	416

AFTERNOON SESSION

Hall, Norma, national spokeswoman, Women Involved in Farm Economics (WIFE).....	418
Fisher, Marie, spokeswoman, South Dakota Women Involved in Farm Economics (WIFE)	421
Jobgen, Joyce, South Dakota delegate, American Agriculture Movement, Inc... 430	430
Heesch, Herb, representative, South Dakota Pork Producers Council.....	434
Nef, Rudy, officer, Valley Queen Cheese Factory, Inc., Milbank, S. Dak	437
Jurgenson, Lester, board member, Land O' Lakes, Inc.....	438
Thompson, John, professor, South Dakota State University.....	444
Edelman, Mark A., agriculture and public policy economist, South Dakota State University	445
McConnen, Richard, Agricultural Economics Department, Montana State University.....	459
Scott, Donald F., chairman, Department of Agricultural Economics, North Dakota State University	464
Nobe, Kenneth C., chairman, Department of Agricultural and Natural Resource Economics, Colorado State University	467
Fritzel, Dale, farmer.....	484
Minder, Delton, South Dakota State president, National Farmers Organization	489

FRIDAY, JULY 8, 1983

Symms, Hon. Steven D., member of the Joint Economic Committee, presiding: Opening statement.....	509
Abdnor, Hon. James, member of the Joint Economic Committee: Opening statement.....	511

	Page
Evans, Hon. John, Governor, State of Idaho	513
Meyer, Neil, College of Agriculture, University of Idaho, Moscow, Idaho	520
Martin, Michael V., Department of Agriculture and Resource Economics, Oregon State University, Corvallis, Oreg.....	522
Greig, W. Smith, professor of agricultural economics, Washington State Uni- versity, Pullman, Wash.....	526
Thomas, Wayne C., agricultural economist, Agricultural Experiment Station, University of Alaska, Fairbanks, Alaska	546
Luke, H. Alan, extension dairy marketing specialist, Washington State Uni- versity, Pullman, Wash.....	565
Ballow, Thomas W., executive director, department of agriculture, State of Nevada	569
Ellis, M. Keith, director, department of agriculture, State of Washington.....	572
Kelly, Keith, director, department of agriculture, State of Montana.....	576
Murphy, Terry, president, Montana Farmers Union.....	589
Poe, Ray, director of commodities, Idaho Farm Bureau Federation	591
Goodwin, Steve, National Farmers' Organization, Hazelton, Idaho	600
Beweese, Glen, State master, Idaho State Grange, Meridian, Idaho	601
Holman, Roy L., president, Utah-Idaho Farmers Union, Salt Lake City, Utah..	603

AFTERNOON SESSION

Patterson, Vicki, director, industry and government relations, Idaho Dairy- men's Association, and United Dairymen of Idaho, Boise, Idaho	617
Peperzak, Mark, president, Aurora Capital, Twin Falls, Idaho	622
Sinclair, Alex, Sinclair & Co., Inc., and vice president, Aurora Capital	626
Hovenden, Tom, executive vice president, Idaho Cattle Feeders Association, Inc., Boise, Idaho	638
Bivens, David, executive vice president, Idaho Cattlemen's Association, Boise, Idaho.....	648
Schoening, Hank, commissioner, Idaho Bean Commission, Nampa, Idaho.....	651
Foster, Ronald B., president, Upper Snake River Valley Sugar Beet Growers Association, Aberdeen, Idaho.....	652
Hartell, Barbara, president, 4-H Leaders Association, Boise, Idaho.....	656
Griffith, Jesse, Blackfoot, Idaho.....	659

MONDAY, AUGUST 8, 1983

Hamilton, Hon. Lee H., vice chairman of the Joint Economic Committee: Opening statement.....	669
Mutz, Hon. John M., lieutenant governor and commissioner of agriculture, State of Indiana.....	671
Burnette, Bill, deputy director, Council on Agriculture, State of Kentucky.....	692
Locker, Dale L., director, department of agriculture, State of Ohio.....	695
Humberd, D. Ray, professor and leader, agricultural economics and resource development, Agricultural Extension Service, University of Tennessee, Knoxville.....	712
Jones, Bob F., professor, Department of Agricultural Economics, Purdue Uni- versity, West Lafayette, Ind.....	716
McIntosh, Kenneth D., professor of agricultural economics, University of West Virginia, Morgantown.....	735

AFTERNOON SESSION

Bright, Susan, Indiana State president, Women Involved in Farm Economics (WIFE).....	747
Pearson, Harry L., vice president, Indiana Farm Bureau, Inc	754
Willis, Tommy B., national chairman, American Agriculture Movement	756
Villwock, Donald B., chairman, Young Farmers and Ranchers Committee, American Farm Bureau Federation.....	761
Wright, Harold W., president, Indiana Farmers Union, Indianapolis, Ind	763
Huston, Keith, director-at-large, North Central Regional Association of State Agricultural Experiment Station Directors.....	776
Eddleman, Robert L., State conservationist, Soil Conservation Service, U.S. Department of Agriculture.....	793
Robison, Lindon J., associate professor, Department of Agricultural Econom- ics, Michigan State University, East Lansing	795
Bright, Phillip, livestock and grain farmer, Centerville, Ind.....	823

FRIDAY, OCTOBER 14, 1983

Snowe, Hon. Olympia J., member of the Joint Economic Committee, presiding: Opening statement.....	Page 845
Kelley, Dorothy P., executive vice president, Maine Potato Council.....	847
Greaves, Stanley P., executive vice president, Maine Potato Sales Association, Presque Isle, Maine	867
Crichton, Peter, executive director, Aroostook, Family Farm Core.....	869
Coburn, Philip, vice chairman, Agri-Mark, Inc.....	881
Grant, Benjamin E., president, Grant's Dairy, Inc., Bangor, Maine.....	883
Beal, Richard E., Jr., State Young Farmer chairman, Maine Farm Bureau Association, Augusta, Maine.....	886
Chick, Michael R., Chick Orchards, Inc., Monmouth, Maine.....	896
Wilkinson, Nancy W., president, Wild Blueberry Association of North America.....	902
Bell, William, executive director, Maine Poultry Federation, Augusta, Maine ..	904
Cilley, George, deputy commissioner of agriculture, State of New Hampshire, on behalf of Stephen H. Taylor, commissioner	915
Smith, Stewart N., commissioner of agriculture, food and rural resources, State of Maine	916
Spear, Robert W., director, Northeast Region of the National Association of Conservation Districts	942
Mather, Mort, president, Maine Organic Farmers and Gardeners Association, Augusta, Maine	944
Fogler, John, chairman, Maine State Soil and Water Conservation Commission.....	947
Sewell, Dwight, Maine State Director, Farmers Home Administration, U.S. Department of Agriculture.....	955
Sirois, Gary B., Aroostook County Federal Land Bank Association	956
Williams, Joseph N., vice president, Northeast Bankshare Association, Augusta, Maine.....	958
Roy, Arnold, president, Farm Credit Service of Southern Maine	960

SUBMISSIONS FOR THE RECORD

FRIDAY, JULY 1, 1983

Ausman, Hon. LaVerne: Prepared statement.....	22
Bardole, Roy: Letter to Senator Jepsen, dated July 10, 1983, regarding farm programs, together with an attachment.....	352
Boeck, Dwain: Prepared statement	293
Breimyer, Harold F.: Prepared statement	139
Buffington, Arthur C.: Prepared statement.....	265
Conover, C. B. (Neal): Prepared statement.....	274
Dallager, Lee, past national president, Izaak Walton League of America, trustee, J. N. "Ding" Darling Conservation Foundation, Des Moines, Iowa: Statement of.....	347
Davis, A. Arthur, attorney at law, Des Moines, Iowa, on behalf of MABSCO Agricultural Services, Inc., and Rabobank Nederland: Statement of.....	344
Dingman, Most Reverend Maurice J.: Prepared statement.....	226
Donham, Kelley J.: Prepared statement, together with exhibits	90
Dorr, Tom, vice chairman, Iowa GOP Farm Policy Council, Iowa Republican Party, Des Moines, Iowa: Statement of.....	342
Gaskill, E. Thurman: Prepared statement.....	179
Guither, Harold D.: Prepared statement.....	128
Helmberger, Peter: Prepared statement, together with attached charts.....	144
Kanten, Anne: Prepared statement, together with attachments	31
Kleckner, Dean: Prepared statement.....	161
Kolmer, Lee R.: Prepared statement.....	59
Legvold, Jay, Eagle Grove, Iowa: Statement of.....	349
Lehman, Philip S.: Prepared statement	167
Lounsberry, Hon. Robert H.: Prepared statement.....	12
McKee, Dean E.: Charts reflecting the U.S. exchange rate trade weighted index and the U.S. dollar exchange rate versus U.S. agricultural exports	210
Peechatka, Walter N.: Prepared statement.....	318
Pim, Bob: Prepared statement.....	257
Roberts, Daryl E.: Prepared statement.....	328

VII

Swanson, Harold:	
Charts:	Page
Iowa realized net farm income, 1967, 1971-80.....	337
Total net farm income for selected years in Minnesota, neighboring States, and the United States.....	338
Iowa DHIA costs and returns, 1980.....	339
Thompson, Eric: Prepared statement, together with an attached letter.....	302
Tubbs, Edward L.: Prepared statement.....	200
Williams, Robert J., executive director, Trade Association of Proprietary Plants: Statement of.....	345

TUESDAY, JULY 5, 1983

Swenson, Leland: Paper entitled "A Program To Preserve the Family Farm" ..	377
Symens, Paul: Paper entitled "The Unit Plan for Parity, Questions and Answers".....	397
Weckerly, Norman: Prepared statement.....	406

AFTERNOON SESSION

Beck, Melvin, farmer, Wessington, S. Dak: Letter to Senator Abdnor regarding proposed legislation to freeze food target prices to the 1983 level.....	497
Edelman, Mark A.: Prepared statement.....	452
Fisher, Marie: Tables reflecting a breakdown for grain production and prices for livestock in Tripp County, S. Dak., the State of South Dakota, and the United States, 1978-81.....	424
Hofstad, Ralph: Paper entitled "A Perspective on a National Food and Agricultural Policy".....	504
Kayser, Father Leonard, Sioux Falls Diocesan director, National Catholic Rural Life Conference, Sioux Falls, S. Dak: Statement of.....	501
Lynd, J. D., executive secretary, South Dakota Association of Cooperatives, and chairman, South Dakota Ag Unity Group: Statement of.....	494
Nobe, Kenneth C.: Prepared statement.....	472
Scheflo, Monroe, president, U.S. Durum Growers Association: Statement of.....	492
South Dakota Livestock Association: Policy statement of.....	499

FRIDAY, JULY 8, 1983

Greig, W. Smith:	
Papers:	
"A Proposal for Changes in the Rules Under Which Farmers Produce and Market Agricultural Products".....	528
"A Proposal for Self-Determination in Dairy Production".....	538
Holman, Roy L.: Prepared statement.....	606
Poe, Ray: Prepared statement.....	593
Thomas, Wayne C.: Prepared statement.....	550

AFTERNOON SESSION

Hovenden, Tom: Prepared statement.....	642
Nelson, Cal, president, Nelson-Ricks Creamery Co., Salt Lake City, Utah, and National Independent Dairy Foods Association: Statement of.....	616
Sinclair, Alex: Market report entitled "Numbers To Ponder in Regards to Wheat Production and Exports".....	629

MONDAY, AUGUST 8, 1983

Jones, Bob F.: Prepared statement.....	721
Locker, Dale L.: Prepared statement.....	700
Mutz, Hon. John M.: Prepared statement.....	676

AFTERNOON SESSION

Bright, Phillip: Prepared statement, together with attachments.....	825
Bright, Susan: Prepared statement.....	749
Hamerman, Warren, chairman, National Democratic Policy Committee, New York, N.Y.: Statement of, together with an attached article.....	832
Huston, Keith: Prepared statement.....	782
Jessup, Hon. Roger L., an Indiana State senator: Statement of.....	841

VIII

	Page
Robison, Lindon J.: Prepared statement	802
Willis, Tommy B.: Charts reflecting the rise in agricultural assets and national farm debt, together with the fall in parity ratio for agricultural products as well as national taxable income and taxable income as a percentage of agricultural production assets	759

FRIDAY, OCTOBER 14, 1983

Beal, Richard E., Jr.: Prepared statement	888
Bell, William: Prepared statement	906
Chick, Michael R.: Prepared statement	898
Kelley, Dorothy P.: Prepared statement, together with attachments	851
McKernan, Hon. John R., Jr., a U.S. Representative in Congress from the First Congressional District of the State of Maine: Statement of	880
Smith, Stewart N.: Prepared statement	923

APPENDIX

Letters and statements submitted for the record by various organizations and individuals relative to future U.S. agricultural policy	973
--	-----

TOWARD THE NEXT GENERATION OF FARM POLICY

FRIDAY, JULY 1, 1983

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to notice, at 9:30 a.m., in the ballroom, Marriott Hotel, Des Moines, Iowa, Hon. Roger W. Jepsen (chairman of the committee) presiding.

Present: Senator Jepsen.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR JEPSEN, CHAIRMAN

Senator JEPSEN. The committee will come to order.

First of all, I want everyone to know this is iced tea. It looks like bourbon, but it's not.

Will Rogers once said that the farther he got away from Washington, D.C., the more hope he had for the country.

Another good author once said that when the end of the world comes, he wants to be in Cincinnati, because things always happen 20 years later there. [Laughter.]

We're talking about a new farm policy for the next generation. It's been 50 years ago, last month, since Franklin Roosevelt signed what was to be the foundation and, essentially, guidelines for Government involvement with farm price supports and other things over the past 50 years. With the exception of one brief study some 26 years ago it's the only time we've really had an overview, an overhaul, and a complete and total relook at agricultural policy in this country.

The Joint Economic Committee recently concluded a series of eight Washington hearings on the theme, "Toward the Next Generation of Farm Policy." I will, briefly, bring you up to date with a review of what happened in these meetings.

During these hearings we've heard from 28 national experts, addressing a variety of subjects ranging from farm policy in the post-PIK era to the consumer's interest in farm policy; from agriculture trade policy to economic conditions of the rural and agriculture business; conservation and stewardship of our soil; water resources; financing of agriculture in the 1980's and 1990's.

The testimony was comprehensive, it was controversial at times, and it was certainly thought provoking, which is what it was meant to be.

In our first hearing, Secretary Block identified three basic options for future farm policy:

No. 1, we can continue with our current programs;

No. 2, we can turn to protectionist policies as employed by the European Economic Community; or

No. 3, we can begin the movement toward a greater commitment to a more market-oriented U.S. agriculture.

Strongly recommending the third option, the Secretary requested congressional authority to set target prices and loan rates. The Secretary acknowledged that while some farmers would flourish under a more market-oriented U.S. agriculture, others would not, and would be forced out of farming.

Of course, it is my intention as a member of the Agriculture Authorization Committee to insure that any new farm program be designed to diminish adverse effects on as many as possible.

Representatives of major farm organizations testified during our second hearing and, as might be expected, the entire spectrum of Federal farm policy was presented. We heard some recommendations ranging from more market-oriented agriculture, to strict supply, control and income support programs.

A panel of four prominent agriculture economists presented testimony during our third hearing. Almost in unison they argued for farm programs that were more flexible and capable of being adjusted in response to changing domestic and international economic conditions. They did not hesitate to recommend that loan rates should be reduced to stimulate export sales, and target prices frozen or lowered to discourage production. They stated that the farmer-owned reserve program was not being used as originally designed, and strict supply control programs would be with us for some time.

The consumer interest in farm policies was the subject of our fourth hearing. Given the diversion of viewpoints represented by this panel of witnesses, it's a very difficult hearing to summarize. Perhaps it's sufficient to say that the administration's witness and the witness from the consumer advocacy group had very few areas of agreement. The third witness, however, presented a very interesting perspective, which he referred to as the triangle of interests of agriculture policy—the triangle being the inherent conflicts and mutually supporting characteristics of farm, food, and foreign policy objectives—all three of which must be fully recognized and effectively expressed in any future agriculture policy.

Administration officials from the Departments of Agriculture and State, and the Office of U.S. Trade Representative were witnesses at our fifth hearing—no surprise here. But one point was made, and that was that the Reagan administration must set aside and avoid counter-productive turf battles between these three government agencies—the Department of Agriculture, Department of State and the Office of U.S. Trade Representative. I repeat that because it's extremely important, and it did come out in this hearing. They emphasized that they must set aside and avoid counter-producting turf battles between these three Government agencies. By the way, all three agencies are on record in opposition to any future agriculture trade embargoes.

Agribusiness and rural communities, the unsung warriors of agriculture depression, were discussed during our sixth hearing. Production of agriculture generates 20 million off-farm jobs and is the lifeblood of thousands of rural communities. The present economic plight of America's 2.4 million farmers is truly only the tip of the iceberg.

Conservation was the focus of our seventh hearing, the critically important point was made: Agriculture's sustainability must be both economic and environmental. Continued degradation of America's resource base—that's our soil and water—will eventually make profit a moot point.

The committee's final Washington hearing—the eighth and final one—dealt with the very complex and challenging topic of financing agriculture in the 1980's. Because of agriculture's desperate financial condition, farmers have come increasingly to depend on Federal lending institutions. However, a recently completed 1979 farm finance survey performed by the Bureau of Census revealed that almost one-half of all farmers today are totally debt free.

One, of course, cannot even begin to adequately summarize the findings of eight congressional hearings in a few minutes—28 witnesses in over 20 hours of testimony—but in my mind, there was one overriding concern expressed or implied by virtually every witness. That concern was the absolute frustration over the failure to design and implement public farm policies and programs that would reflect the full competitive clout of the U.S. food production and distribution system in the international marketplace.

So, among other things, the next generation of farm policy must do that, and I'm here today to listen to your ideas in the first of six hearings to be held across the country.

As I originally anticipated, Washington has proved once again not to be the source of all wisdom. It is you, the people, business and organizations, that are directly and actively involved in agriculture, who will personally bear the consequences of farm programs and policies, who must be the primary force behind the development of these programs and policies. So I welcome and thank you all.

At this point I welcome the very distinguished young Governor of Iowa, the Honorable Terry Branstad.

Welcome, Governor. [Applause.] Please proceed, Governor.

STATEMENT OF HON. TERRY E. BRANSTAD, GOVERNOR OF THE STATE OF IOWA

Governor BRANSTAD. Thank you, Senator Jepsen.

Senator Jepsen, distinguished guests, I am pleased to visit with you today about the next generation of American farm policy. You are to be commended, Senator, for holding this series of meetings across the country to focus the attention of the Congress on the future of American agriculture. Indeed, it is appropriate that the first field hearing be held here in Des Moines, Iowa—in the middle of America's agricultural heartland.

Moreover, it is fitting that this hearing be held on July 1 which, coincidentally, is the first day of our State government's fiscal year. Just yesterday we closed the State fiscal year with an ending

balance of only one-twelfth of 1 percent of the annual State budget. Indeed, for the last 3 years State government has had trouble struggling with budget problems caused by sagging revenues. And, for the most part, those budget woes can be attributed to the slump in Iowa's agriculturally dependent economy.

Agriculture is a key part of the Iowa economy. It is estimated that at least two out of three of Iowa's workers depend, directly or indirectly, on agriculture for their jobs.

From the factories of Waterloo to the main street in Lake Mills, Iowa, where I come from, Iowans depend, to a great degree, on agriculture for their livelihood. Thus, it is not an exaggeration to suggest that when agriculture suffers, so does the entire Iowa economy.

A strong agricultural economy contributes to the economic health of all Iowans. It is also an integral part of the quality of life in this State. The family farm, with its emphasis on honesty, hard work, and helping neighbors, is part of the Iowa way of life and adds immeasurably to the quality of life in our State. A revived agricultural economy is needed to relieve the stress on family farms.

That economic stress has lasted too long. Since the imposition of the grain embargo by President Carter in early 1980, agriculture has been hit with a triple whammy: high interest rates, low commodity prices, and slumping international markets. High interest rates have increased the cost of farming; low commodity prices have reduced the farmer's income; and a weak international market has reduced the demand for agricultural products.

To compound the weak market, farmers have had back-to-back, recordbreaking crop production years. This amazing productivity has filled grain bins, but left the pockets of farmers empty. And, as a result, many farmers in Iowa and throughout the Nation have been caught in a serious cost/price squeeze.

The Federal Government, through its farm program, has attempted to ease this financial squeeze. The new Payment-in-Kind program, the PIK program, has been successful in forcing down grain production this year and forcing up grain prices. In Iowa, corn planting is down 35 percent, the lowest level in a generation. As a result, we've seen an increase in cash grain prices, with corn returning to approximately \$3 a bushel. Of course, it's higher, Senator, in your part of the State, southeast Iowa, than it is in my part of the State, northwest Iowa. That's the way the markets are.

I commend the Federal Government for developing the innovative PIK acreage reduction program. While it has adversely affected some suppliers of farm inputs, it has improved the economic outlook for many Iowa farmers.

I would caution you that the PIK program is not the solution to long-term farm problems. It is but an interim step, designed to bring supply in better relationship to the demand for grain. For the long term, the amazing productivity of the American farmer must be allowed to be unleashed without threatening the prosperity of American agriculture.

That is the goal that must be set for the next generations of Federal farm policy. And that goal makes these hearings, Senator Jepsen, all that much more appropriate and important.

I would like to suggest five topics that should be placed on your agenda as you debate future agriculture policy. These topics are not designed to cover the gamut of necessary agriculture policy initiatives, but they do represent areas that, I believe, deserve special attention.

No. 1, stimulate export demand for U.S. farm products.

A greater portion of the USDA budget should be shifted from production control programs to market demand efforts. For the first 6 months of this fiscal year, U.S. farm exports were down 8 percent by volume and 17 percent by value. Total value of feed grain shipments dropped 16 percent. Exports of animals and animal products were down 13 percent. Exports to the Soviet Union alone were off an astounding 58 percent for the first half of this marketing year. Over 37 cents on every dollar earned by an Iowa farmer comes from exports, and when exports decline, farm income shrinks.

U.S. agriculture is the most efficient and productive industry in the world, and so long as there are hungry people in the world, we should seek to feed them. Moreover, there are developing countries throughout the world who have great potential as U.S. agricultural customers. That is why we, the State of Iowa, are opening an Asian office, developing an export trading company and stepping up our State government's efforts to promote Iowa farm products.

The Federal Government should also take further initiatives to stimulate export demand. These initiatives should include: Understanding the sensitivity of farm price support levels on the world market demand for U.S. farm products; Emphasize the export of value-added goods, such as processed meats, where the United States holds a distinct competitive advantage over other nations; Search for innovative financing arrangements for farm exports;

Guarantee the reliability of the United States as a farm trading partner;

Aggressively seek to break down the protectionist trade barriers that prevent the marketing of farm products overseas; and

Continue to provide humanitarian food aid.

I am convinced that in the long run, Federal efforts to encourage demand will be less expensive and pay greater rewards than Federal supply control programs.

No. 2, maintain and strengthen the Federal commitment to soil conservation.

Iowa has lost over half of its rich topsoil in the past 100 years. Continued excessive soil erosion could threaten the productivity of American agriculture. Fortunately, Iowa has been a leader in addressing this problem and we recently increased our state commitment to the Iowa Soil 2000 Program and began an innovative soil conservation loan program. In addition, I find that most Iowa farmers are sensitive to soil erosion and want to do something about it.

But the State and the farmers cannot get the job done alone. Continued Federal technical and cost share assistance is needed to combat this nationwide problem. The next generation of farm policy should recognize the needs of the next generation of Americans by strengthening the Federal financial commitment to soil conservation while including soil conservation incentives in Federal farm production programs.

No. 3, continue Federal farm research and development efforts. U.S. agriculture is a model of efficiency and productivity. Today, every American farmer feeds 78 people—that's up over 50 percent in the last 10 years. The U.S. agriculture system is the most efficient and productive in the world. For example, an Iowa cattleman can produce a pound of beef for one-fourth the cost to a Japanese cattle producer.

That remarkable productivity is, in part, due to the rich natural resources and hard work. But it is also the result of American ingenuity and advanced technology. This technology has resulted from the substantial Federal commitment to agricultural research and development over the past decades.

The commitment to R&D must not stop. If we fail to invest in research today, we will pay the price in the future.

Moreover, I am excited about the potential for greater job opportunities in Iowa through agricultural research in biotechnology and new product development. Our region should receive its fair share of Federal agricultural research dollars.

No. 4, review Federal farm credit and disaster assistance programs.

Many Iowa farmers have experienced a real credit crunch over the past few years. Continued efforts should be made to reduce Federal deficits and interest rates. In addition, a review of the farm credit system may be in order to help assure appropriate treatment of farmers facing financial difficulties. These farmers deserve individual attention as they attempt to work their way out of financial trouble. Moreover, future farm credit programs should be structured with care to maximize the assistance granted to those in need, while minimizing the impact on the market.

Farm credit problems have been compounded by a present weakness in the disaster assistance program. I applaud efforts to move toward an insurance rather than a disaster program. However, the present program allows farmers in distress to fall through the cracks. If a disaster prevents a farmer from meeting the crop insurance planting deadlines, no insurance coverage is granted. And we had farmers in southern Iowa last year who had that happen. Indeed, only short-term loans are potentially available, despite the fact that the disaster may have exhausted the farmer's borrowing capacity. The Federal disaster grant program should be structured to fill this gap in Federal crop insurance and disaster aid programs.

No. 5, increase agricultural diversification.

Iowa must broaden its agricultural base. We need to blend more specialty, horticultural, and forestry crops with our conventional crops of corn and soybeans. Such a diversification could provide greater strength to our agricultural economy while encouraging the wisest use of our natural resources. I recently commissioned a special study of farm product diversification, and the report is encouraging. We could add millions of dollars to our economy through a properly constructed diversification program. As a result, I have asked Iowa Secretary of Agriculture, Bob Lounsberry, to lead an effort to develop a diversification program for the State of Iowa.

The Federal Government should also offer encouragement in this area. Further research and development needs to be done, and the USDA could play a leading role in getting it accomplished.

In conclusion, I believe that the payment-in-kind farm program is but a short-term solution to a long-term problem. To provide lasting strength to our farm economy, we must increase exports, protect our natural resources, develop new technologies and products, provide credit and disaster assistance and diversify our agricultural base. That is a long and challenging agenda for the next generation of farm policy. The future of agriculture depends on how we respond to that agenda.

I thank you for giving me the opportunity to visit with you, and I would be happy to answer questions.

Senator JEPSEN. Thank you, Governor, for your five points—stimulating exports, soil and water resource conservation, research and development—I might add there that the national figure of a producer in this country, a farmer feeding 78 people, puts Iowa somewhere in the neighborhood of twice that figure. Again, Iowa leads the way.

Farm credit, and increasing agricultural diversification, your fourth and fifth point in your testimony, were very interesting as well as informative and educational.

Governor, I do not have any questions at this time. You may make a closing comment or anything else that you would like to add. I thank you for taking time to testify. The fact that you did indicates, as it appropriately should in our great State, the importance given to developing this next generation of farm policy, and I express my deep gratitude to you, as Governor—to use the parlance of those in Congress—for taking the time out of your busy schedule to come here today. Thank you.

Governor BRANSTAD. Senator, I mentioned at the beginning of my remarks, and I want to underscore now, that we appreciate the fact that you chose to have this first hearing, this first field hearing, here in the heartland of America where agriculture is the mainstay of our economy in this State, and I understand—I have looked at some of the people that are on the agenda, and I think you are certainly going to have a very distinguished group of people making presentations. We are very optimistic about what we see, and we appreciate the leadership that you have provided for this, which is so important to our State.

Senator JEPSEN. Thank you, Governor. [Applause.]

The Chair now invites the Honorable Robert Lounsberry, secretary of agriculture for the State of Iowa; the Honorable Larry Werries, director of agriculture for the State of Illinois; the Honorable LaVerne Ausman, secretary of agriculture for the State of Wisconsin, and Ann Kanten, assistant commissioner of agriculture for the State of Minnesota, to come forward, please.

The Chair advises this panel—and will do so at the beginning of each panel—that your prepared statements will be entered into the record in full. The Chair also asks you to make sure that we do have two copies of your prepared statements; you are encouraged to summarize your remarks, knowing that the testimony may be entered into the record.

There have been six soil conservation hearings to date and this is the ninth hearing of the Joint Economic Committee of which I am chairman. I have had as many as 16 witnesses in 1 day—and it was a big day, but today I'm happy to advise everyone that we have over 50. We intend to continue through this evening as long as there are people who want to testify, and I want to assure you that we are here to listen. To those of you who have worked hard to prepare, I assure you you will be invited and encouraged to proceed in any way you wish. I would hope that in most instances you could summarize prepared statements, thereby leaving us time to have an exchange and ask questions and get additional information.

Larry Werries, secretary of agriculture for the State of Illinois, was recently in Washington—in fact, was it early this week?

Mr. WERRIES. Tuesday.

Senator JEPSEN. Tuesday. He appeared before the committee which I chaired, and said he was going to see me back in Iowa on Friday. So welcome, and we welcome all of you. I would guess the first witness will be our distinguished State secretary of agriculture, Hon. Bob Lounsberry. You may proceed, as you wish.

STATEMENT OF HON. ROBERT H. LOUNSBERRY, SECRETARY OF AGRICULTURE FOR THE STATE OF IOWA

Mr. LOUNSBERRY. Good morning, and it is a pleasure to be here this morning. My acknowledgements to Governor Branstad for a fine presentation, and my compliments to all those who have come here today to testify and to be a part of this hearing. I certainly want to give my thanks and appreciation to my counterparts from the surrounding States who are here on this panel this morning.

As we have already heard, the topic we are discussing this morning is an important one. It is also both diverse and complex.

The title, "Toward the Next Generation of Farm Policy," is intriguing and raises many questions. Who will be the next generation of farmers? How many farmers will there be in the next generation? What policy are we talking about? What political party will be making those policies? What policy has shaped agriculture for this, our generation? These are some of the things that I will be talking about this morning.

The Agricultural Economic Report No. 438, "Structure Issues of American Agriculture," was prepared by former Secretary of Agriculture, Bob Bergland in 1979. The section on public policy outlines eight different categories. These are: "U.S. Tax Policy"; "Ownership and Land Use Policy"; "Water Use Policy"; "Price and Income Policy"; "Issues Concerning the Level of Price and Income Supports"; "Environmental Regulations"; "Energy Use Policy"; and "Transportation Policy."

Before looking into some of these issues which will help shape the destiny of Iowa and the United States as we move into the next century, I want to emphasize a point that is paramount to me. While I hold an elected office in Iowa, I consider myself first and foremost, a farmer. What I will say today will be in general terms, and I hope to express myself as a farmer might think and look into the future. By doing so, I will leave the fine details and the intri-

cate specifics to the academic authorities and others who may testify today.

What is a farmer? He's the man who's needed. That's the title that was given by Erma Dunham, New Cambria, Mo., and her husband, a farmer. I will skip over that first quote, because it's rather lengthy. I realized that it might be, so I do have it in the prepared text that you have, and I'd like to have it put in the record because I think it describes what a modern farmer is today. He's a host of things. He has to be a businessman and all the other things, and I think her definition as "A Man That's Needed," certainly fills that bill.

We go on over to the other parts in my prepared statement of which I gave a couple copies to the staff, and it tells a little bit about our State.

Iowa leads the Nation in hog marketings, is first in all livestock marketings and is fourth in marketings of cattle and calves. It used to be No. 1 for a number of years. The massive feedlots have moved to the Southwest, which has changed that picture a bit. We still have the most feedlots, in numbers, of any State in the Union. About 26 percent of the Nation's pork supply and 12 percent of the grain-fed cattle are marketed from Iowa farms.

The value of crop production in 1982 was \$5.9 billion. Iowa ranks first in corn production, producing about 19 percent of the Nation's corn supply. It's been said that Iowa and Illinois produce 40 percent, which some years Iowa—because it had more acreage planted—produced 21 percent—I'm talking about last year—of that corn supply.

Iowa ranks second in soybean production, producing about 14 percent of the Nation's soybeans.

Collectively, Iowa farmers have \$76.9 billion invested in their business. This includes over \$60.8 billion in land, \$10.3 billion in crops and livestock and about \$5.7 billion in farm equipment.

The average farmer in Iowa is 47.2 years of age and has a farm investment in land and buildings in Iowa of over half a million dollars—\$520,289. This compares with the national average of \$337,700.

Iowa farmers spend more than \$10.2 billion each year for production expenses. This includes feed, fertilizer, repairs, maintenance and operation, so much for interest on his farm mortgages, property taxes, hired labor, and seeds. And it's estimated that for every dollar the farmer spends, it turns over seven times before it reaches its final destination.

We have set out here today looking into the future, and the generation ahead will face the problems and opportunities which we are now facing in this generation, and I'd like to spell them out—six of them I have listed.

No. 1, "Cost-Price Squeeze for Farmer." The farmer must make a profit. High costs of production have forced him to use land more intensively, including marginal lands. As a result, Iowa exports about 1 out of 4 acres of its production to countries outside the United States. But true, world food demand creates market for farm products. If this boosts income sufficiently to the farmer, pressure will be less on the farmer. However, Iowa farmers grossed \$11 billion in 1980, and yet net farm income in 1980 boiled down to

\$554 million, because of the increased and escalated costs of what the farmer was putting into that production.

No. 2, "Energy Needs and Balance of Payments." As energy imports have given the United States a negative balance of payments, food is one of the few items that the United States can export to balance imports. Also, high energy costs drive up the farmer's costs. Solutions are few and difficult. National policy and energy shortage are directly linked, and remove the problem and solution from being strictly agricultural, but the production of food is inextricably intertwined in the overall matter.

No. 3, "Land Use." Shift of prime farm lands to other users continues. World demand for food is strong. Farmers' costs are up. For every acre or prime land lost, more than one acre of more marginal land has been brought into production to maintain the same production, as the costs for production on this type of land are higher. Land use policies should be implemented. Incentive programs, tax laws, et cetera to encourage keeping as agricultural land the best that we have in the Nation. Also, can we afford to keep on developing our export markets at the expense of our own greatest of natural resources, our soil?

No. 4, "Soybeans." In the last 30 years soybean acres have increased by 400 percent in the United States and Iowa. This has shifted the land from a rotational system of 2 years grass out of every 4 or 5, to continuous row crop. Soybeans loosen the soil, making it more susceptible to wind and water erosion. Still, the world needs the product and farmers are dependent on it as a main cash crop.

Conservation tillage, no fall tillage, permanent structures can help. Government set-aside programs may help and should be encouraged with cross-compliance mandated.

No. 5, "Tillage." Tillage performed with heavy equipment, leaving no residue and performed in a manner not following the contour of the land, in the fall, magnify the inherent tendency of the sloping and marginal lands to erode.

Conservation tillage, no fall tillage, and Government set-aside programs will help with incentives.

No. 6, "Change Style of Farming." As energy and land costs escalate, and petroleum-based products become more scarce, farmers may not be able to continue to farm more land profitably.

A more diversified, more rotation-oriented agriculture may be necessary and we are encouraging alternative farming methods and research now, such as fruit and vegetable farming. This would answer some of the needs for soil conservation, fertility, less energy consumption, smaller machinery, et cetera. We can take out some of the marginal land, which is very suitable for this type of diversification in agriculture. The Governor mentioned that an agriculture diversification task force that he appointed has presented its final report to the Governor the day before yesterday. It is going to continue, and I do think that we have some good ideas for utilizing many of our State agencies, and Federal agencies are involved, in trying to put together an agriculture diversification program which will be suitable and acceptable, and it requires everything from the Agriculture Department, Conservation Commission, Iowa Development Commission, Iowa State University's Ag and Home Econom-

ics Station, Extension Service; certainly the office of program planning, department of public instruction, and the department of soil conservation.

Just yesterday we had a cadre from the department of public instruction which followed up this task force meeting, and many of us were invited to appear there and give some ideas on what the department of public instruction could do to help spread the word and disseminate information necessary to bring about the changes.

The change would also be social, and the current ethic may have to be modified, which would prove difficult for some people.

Under "Policy Statements for the Future," I've outlined seven points.

No. 1, "Taxation." Currently, Iowa property taxes are based on production capacities. The farm population has dwindled from 54 percent in this State after World War II, to 17 percent today. Nationally, U.S. farm population is estimated to be 2 or 3 percent. That's down from 27 percent following World War II. Can farmers as food producers with large capital investments protect their interests in taxation as a minority group?

Farm estate taxation reform in the Congress in recent years is giving farmers a better inheritance tax break to pass farms on to the next generation, and this policy must be protected and extended.

Social security taxes for self-employed persons and farmers keep on rising, and could force some farmers out of business.

I might ad lib a bit at this point and say that, contrary to some of the other nations in the world that we're competing with in trade, they have not reclassified their parliaments and their congresses, and the farmers in those countries, even though they're a very low percentage of the population, still have considerable clout in their parliaments in all the European Common Market countries, the Far East, Japan. They have not restructured their parliaments and congresses, since the time when about 70 percent of the inhabitants were engaged in agriculture and, consequently, they are competing with a protective policy that we certainly need to address.

No. 2, "Ownership and Land Use Policy." After World War II, Iowa had 206,000 farms. That was down from the peak of 224,000 in 1930. And now we have 117,000. About 1.5 million acres have been taken out of production and diverted to other uses, such as shopping malls, interstates and primary highways. We will need to give farmers incentives to keep farms in crop production when farm land prices start to go up again.

No. 3, "Water Use Policy." Iowa and other great food-producing States of the Midwest have been blessed with ample supplies of water. If other States are allowed to sell water from the Mississippi or the Great Lakes, we will pay a high price for this water diversion.

No. 4, "Price and Income Policies and Supports." The dairy price support program is a good example of how supply can artificially be increased to exceed demand. The grain embargo on exports to the Soviet Union which was imposed on January 4, 1980, is a good example of how the Federal Government can interfere with free trade and in the process bring financial ruin to a great many

people. Such Government interference destroys our reliability and credibility as a reliable supplier.

The payment-in-kind program has brought temporary help and helped develop a positive attitude among those of us who are producers of agricultural products, but we need a long-range program with incentives to conserve and fallow acres—with penalties for those who do not participate. This policy would reward farmers for not over-producing, and should be tempered with price supports that are cognizant of world markets, so that we can be more competitive in the world markets.

No. 5, "Environmental Regulations." The public must be protected, but no regulation should be imposed on farmers which may add to their production expenses unless the need for such regulations has been thoroughly researched and is practical as well as scientific. We've seen in recent years that sometimes environmental regulations have been pushed through without thoroughly researching to see the magnitude of the effect it would have on the industry.

No. 6, "Energy Use Policy." Alternative fuels deserve higher priority so we are never dependent on world oil production in case of an emergency. Should an emergency occur, agriculture should receive top priority for energy.

No. 7, "Transportation." Truck lengths and weights should be limited to current Federal laws to prolong the lives of our interstates. Railroads and barge traffic must remain as a viable option for our country elevators.

In conclusion, agriculture will always remain basic to our State and Nation. Many changes are here or coming—friction-proof ceramic engines, computer-controlled planting and cultivation depths, teleauctions by computer and data banks, genetic building blocks, growth regulators, field crop sensors, and electronically controlled irrigation, to name a few.

We should welcome these changes and adopt State and farm policies that complement the farmer and society. A strong agriculture means a strong America.

Thank you.

[The prepared statement of Mr. Lounsberry follows:]

PREPARED STATEMENT OF HON. ROBERT H. LOUNSBERRY

Good morning. It is a pleasure to be here this morning, Senator. My acknowledgments to Governor Branstad and his staff for a fine presentation and my compliments to all those who have come here today to testify or to be a part of this hearing.

As we have already heard, the topic we are discussing today is an important one. It is also both diverse and complex. Our topic is "Toward the next generation of farm policy." The title is intriguing and raises many questions. Who will be the next generation of farmers? How many farmers will there be in the next generation? What policy are we talking about? What political party will make those policies? What policy has shaped agriculture for this . . . our generation? These are some of the things which I will be talking about this morning.

The Agricultural Economic Report 438, "Structure Issues of American Agriculture," was prepared and published by former USDA Secretary Bob Bergland in November of 1979. The section on public policy outlines eight different categories. These are "U.S. tax policy; ownership and land use policy; water use policy; price and income policies; issues concerning the level of price and income support; environmental regulations; energy use policy and transportation policies."

Before looking into some of these issues which will help shape the destiny of Iowa and the United States as we move into the next century, I want to emphasize a

point that is paramount to me. While I hold an elected office in Iowa, I consider myself first and foremost a farmer. What I will say today will be in general terms. I hope to express myself as a farmer might think and look to the future, and by so doing I will leave the fine details and the intricate specifics to the academic authorities and others who may testify today.

What is a farmer? *He's the man who's needed.* The following remarks were written by Mrs. Erma Dunham, New Cambria, Missouri and her husband, a farmer. They were first published in the Macon Chronicle Herald, and then reprinted in the Farmland this past February.

"THE MAN WHO'S NEEDED

"By now the whole world is aware of the financial bind that farmers are caught in these days. Prices have been low for the products that farmers have to sell, but the costs of machinery, feed, fertilizer, seed, fuel and operating cash have continued to go up. All agricultural businesses have been affected.

"I ran onto the following essay that was written probably 20 years ago but which still describes the essential nature of those engaged in agriculture which keeps them going when adversities come. It was written by a modern farmer I know, my husband.

"He might be half your age—or twice your age. As he brings the big diesel rig to a stop at the end of a row, you may see a pair of boots and shirt pocket full or pencils and note pad. He's a businessman in a blue denim suit.

"There are crowsfeet at the corners of his eyes, and his skin's quite brown from the rays of the sun. But something else shows in his face: a certain set of the jaw, a level glance of the eyes. It's the independent look of the man who knows that he is needed—of the man who must be about his business, the business of feeding people.

"His investment is enormous, his hours impossible, and his returns unpredictable. He must be a combination of scientist, mechanic, economist, veterinarian, and salesman. In short, he must know more about more things than almost anyone you know. And maybe that is why, if you are older than he, or higher up in the world, you find a new note of respect in your voice when you speak of today's farmer. To tell the truth, he loves that title. It is not acquired easily and there aren't so many of them around nowadays. He spent a lot of time at an agricultural college getting an education—if he was lucky—or a much longer time at self-education if he was not, before he became a modern farmer.

"And how is the Laird today?" He smiles at the old joke and hurries on. There's another field to lay by, a lot of cattle to check, hogs to feed; and the paperwork has accumulated on his desk during the rush period. Somewhere he is needed and he must be there. He will hurry all day—and half the night, eat when he can and sleep when he has to, and even thought he's 'his own boss,' his life is never really his own. There's rarely even a weekend away from the farm. He must make good that promise to ease up and take a vacation next year. But the pressure doesn't ease up and the obligations increase. Well, maybe when the kids have finished college * * *

"All year, no matter how hard he works, he will always be behind. There's always another field, another lot of cattle to sort, another fence to fix. Sometimes, getting up while others are sleeping, he reflects on how other men his age are moving on in the world, with regular office hours, paid vacations, and guaranteed incomes, regardless of the weather, and even time to play with the kids.

"Got to get out early today: the self-feeders are almost empty, those Western calves are due on the siding and the dryer bin should be filled before nightfall. Hope the rain holds off.

"As he walks out into the dawn to start a big day, he suddenly feels a bit sorry for the men who are trapped in the asphalt jungles—men who waste eight hours a night sleeping, eight hours a day in office and in traffic. Their fringe benefits have been bought at a price he would not care to pay.

"In time, he forgets the harshness of the years, the weariness of the strain. He remembers only what all good men must remember: that it is a great thing to be needed, and when you are needed, to be there."

Having described an individual farmer, I will now define the Iowa farmer in collectively terms of economic and statistical terms and importance. Any policy which the state or Federal Government will formulate relative to Iowa, must surely consider the fact that agriculture is the basic industry in Iowa. Approximately 38 percent of all Iowa workers depend directly on agriculture for their jobs and about two out of three Iowa workers depend, directly or indirectly, upon agriculture for their jobs.

Today's concept of agriculture includes production, processing, manufacturing, servicing, utilization and consumption of agricultural products. It is this agricultural complex which is the foundation of Iowa's expanding economy. Most all new or expanding industry in Iowa is directly or indirectly related to agriculture.

Iowa farmers sell about \$10.49 billion worth of crops and livestock annually—\$6.16 billion in livestock and \$4.33 billion in crops.

Iowa leads the nation in hog marketings, is first in all livestock marketings and is fourth in marketings of cattle and calves. About 26 percent of the nation's pork supply and 12 percent of the grain-fed cattle are marketed from Iowa farms.

The value of crop production in 1982 was \$5.9 billion. Iowa ranks first in corn production, producing about 19 percent of the nation's corn supply. And Iowa ranks second in soybean production, producing about 14 percent of the nation's soybeans. Collectively, Iowa farmers have \$76.9 billion invested in their business. This includes over \$60.8 billion in land, \$10.3 billion in crops and livestock and about \$5.7 billion in farm equipment. The average farmer is 47.2 years of age and has farm investment in land and buildings in Iowa of \$520,289. This compares with the national average of \$337,700.

Iowa farmers spend more than \$10.2 billion each year for production expenses. This includes: \$1,496 million for feed; \$834 million for fertilizer; \$1,086 million for repairs, maintenance and operation of machinery, vehicles and buildings; \$659 million for interest on farm mortgages; \$348 million for property taxes; \$240 million for hired labor; and \$350 million for seeds.

In 1981, Iowa farmers produced \$3.7 billion worth of products for farm export. This is equal to 35 percent of the state's cash receipts from farm marketing. Iowa's farm exports were the largest in the nation that year. Last year, we dropped to second place and exports have declined to \$3 billion, which is in correlation to the drop in total U.S. exports.

This then is the story of today's generation of farmers and the great ability of Iowa agriculture to produce food. What about the past generation? What changes have we experienced?

Since 1950, new techniques, new equipment, and relatively high profits have brought about rapid and significant changes in farming. Fewer and larger farms, fewer people living on farms, increasing costs, higher yields, and higher product prices are only a few of the changes that have been, and are currently, taking place. Major changes have occurred in the past 33 years in Iowa's crop production.

Total acres in row crops, corn, and soybeans increased from 11.7 million acres in 1950 to 20.2 million in 1975. Corn acres increased from 9.8 million to 13.2 million acres, and soybeans from 1.9 million to near 7 million acres. By 1980, we had 22 million acres in row crops. In 1982, Iowa had a remarkable total of 25.8 million acres of cropland in production. These figures indicate the pressure Iowa farmers are putting on the soil's resources. Erosion has always been a problem in the prairie states, but it is being accelerated as more acres of row crops are planted on steeper, unprotected slopes, resulting in greater movement of both soil and water from the land.

Looking to the future, we see that the generation ahead will face the problems and opportunities which we also face now. What are they?

1. *Cost-price squeeze for farmer.*—The farmer must make a profit. High costs of production have forced him to use land more intensively, including marginal lands. The result, Iowa exports about one out of 4 acres of its production, but true, world food demand creates market for farm products. If this boosts income sufficiently to farmer, pressure will be less on farmer. However, Iowa farmers grossed \$11 billion in 1980, yet netted only \$554 million.

2. *Energy needs and balance of payments.*—As energy imports have given U.S. negative balance of payments, food is one of few items U.S. can export to balance imports. Also, high energy costs drive up farmer's costs.

Solutions are few and difficult. National policy and energy shortage are directly linked and remove the problem and solution from being strictly agricultural. But production of food is inextricably intertwined in overall matter.

3. *Land use.*—Shift of prime farm lands to other uses continues. World demand for food is strong. Farmer costs up. For every acre of prime land lost, more than one acre of more marginal land is necessary to maintain same production, and costs are higher. Land use policies should be implemented. Incentive programs, tax laws, etc. to encourage keeping as agricultural land. Also, can we afford to keep on developing our export markets at the expense of Iowa's natural resources?

4. *Soybeans.*—In the last 30 years soybean acres have increased by 400 percent in the U.S. and Iowa. This has shifted the land from a rotational system of 2 years grass out of every 4–5, to continuous row crop. Soybeans loosen the soil making it

more susceptible to wind and water erosion. Still the world needs the product and farmers are dependent on it as a main cash crop.

Conservation tillage, no fall tillage, permanent structures can help. Government set-aside programs may help and should be encouraged with cross compliance mandated.

5. Tillage.—Tillage performed with heavy equipment leaving no residue and performed in a manner not following the contour of the land, in the fall, magnify the inherent tendency of the sloping and marginal lands to erode.

Conservation tillage, no fall tillage, and Government set-aside programs will help with incentives.

6. Change style of farming.—As energy and land costs escalate, and petroleum based products become more scarce, farmers may not be able to continue to farm more land profitably.

A more diversified, more rotation oriented agriculture may be necessary and we are encouraging alternative farming methods and research now such as fruit and vegetable farming. This would answer some of the needs for soil conservation, fertility, less energy consumption, smaller machinery, etc.

However, total food production may decrease even though livestock numbers may go up. Ruminant animals could utilize some marginal lands without soil destruction. More labor costs would ensue and more management skills would be necessary to handle crops and livestock both.

The change would also be social, and the current ethic may have to be modified, which could prove difficult for some people.

POLICY STATEMENTS FOR THE FUTURE

1. Taxation.—Currently Iowa property taxes are based on production capacities. The farm population has dwindled from 54 percent after World War II to 17 percent today. Nationally, U.S. farm population is estimated to be 2 to 3 percent of the total population. Can farmers as food producers with large capital investments protect their interests in taxation as a "minority" group?

Farm estate taxation reform in the Congress in recent years is giving farmers a better inheritance tax break to pass farms along to the next generation. This policy must be protected and extended. Social security taxes for self-employed persons and farmers keep on rising and could force some farmers out of business.

2. Ownership and land use policy.—After World War II, Iowa had 206,000 farms. Now we have 117,000. About 1.5 million acres have been taken out of production and diverted to other uses. We will need to give farmers incentives to keep farms in crop production when farm land prices start to go up again.

3. Water use policy.—Iowa and the other great food producing states of the Midwest have been blessed with ample supplies of water. If other states are allowed to sell water from the Mississippi or the Great Lakes, we will pay a high price for this water diversion.

4. Price and income policies and supports.—The dairy price support program is a good example of how supply can artificially be increased to exceed demand. The grain embargo on exports to the Soviet Union which was imposed on January 4, 1980, is a good example of how the Federal Government can interfere with free trade and in the process bring financial ruin to a great many people. We also lost our credibility with our customers.

The Payment in Kind program has brought temporary help, but we need a long-range program with incentives to conserve and fallow acres, and with penalties for those who do not participate.

This policy which would reward farmers for not overproducing should be tempered with price supports that are cognizant of world markets so we can be more competitive.

5. Environmental regulations.—The public must be protected but no regulation should be imposed on farmers which may add to their production expenses unless the need for such regulation has been thoroughly researched and is practical as well as scientific.

6. Energy use policy.—Alternative fuels deserve higher priority so we are never dependent on world oil production in case of an emergency. Should an emergency occur, agriculture should receive top priority for energy.

7. Transportation.—Truck lengths and weights should be limited to the current federal laws to prolong the lives of our interstates. Railroads and barge traffic must remain a viable option for country elevators.

In conclusion, agriculture will always remain basic to our state and nation. Many changes are here or coming—friction proof ceramic engines, computer controlled

planting and cultivation depths, teleauctions by computer and data banks, genetic building blocks, growth regulators, field crop sensors, and electronically controlled irrigation to name a few.

We should welcome these changes and adopt state and farm policies that complement the farmer and society. A strong agriculture means a strong America. Thank you.

Senator JEPSEN. Thank you, Mr. Lounsberry.

In your last paragraph, you mention friction-proof ceramic engines and computer data banks, and earlier this morning we heard that we have an international bank coming into the farm loaning business here in the Midwest. The bank will have computer facilities where they press a few buttons which can approve and process a loan in 1 day. That's the direction we're heading.

Who is going to be next? We'll start with Mr. Werries, the secretary of agriculture for Illinois. Mr. Werries testified at another hearing earlier this week in Washington. I'm not sure what he's got planned, but he's been traveling around a lot and testifying quite a bit. His predecessor is now the Secretary of Agriculture—do you have any plans along those lines? [Laughter.]

Mr. WERRIES. That doesn't mean too much.

Senator JEPSEN. Please proceed, as you wish.

STATEMENT OF HON. LARRY A. WERRIES, DIRECTOR OF AGRICULTURE FOR THE STATE OF ILLINOIS

Mr. WERRIES. Thank you, Senator Jepsen, ladies and gentlemen, thank you for the opportunity to visit with you this morning to share some thoughts.

Over a period of several decades, the American agricultural industry has experienced dynamic growth and change. It has emerged into a complex, specialized, and capital-intensive business of international proportions. In the midst of this progress, sophisticated agricultural production technology and methods of processing, distribution, and marketing have simply outpaced the development of our agricultural policies. Kneejerk decisions on occasion have missed the mark in resolving basic problems and often compound problems that follow.

Admittedly, long-term planning is difficult when the most reputable experts are unable to project with any degree of accuracy what the next 2 years, much less the next decade or the next century, might bring in agriculture. However, I think that is the challenge we face today. Let me touch briefly on what I feel are some of the key areas for consideration.

In recent weeks, the Senate Agriculture Committee passed a proposal to freeze target prices. It was not a particularly popular decision in many areas. However, I think, for now, this is a vital move.

The other phase of the Senate proposal which I feel is critical is the provision for channeling of at least a portion of those funds saved in freezing the target prices into the export revolving fund, or other export-enhancement programs. Efforts of this kind are going to be very important to us in the years ahead if we are to be competitive in the world market. We need those markets, and I think it is time we begin acting like it, instead of taking the, at times, pious take-it-or-leave-it stance.

In addition to the enhancement programs, I think there needs to be a new effort in promotion of U.S. agriculture products. Cooperator programs of the Foreign Agriculture Service are producing encouraging results in opening new markets in many parts of the world and providing a somewhat unified front in those markets. However, I feel there is a need to more closely coordinate agriculture trade efforts.

I would propose there be an increase in cooperator programs with the States. States have a much better working knowledge of their particular products and their selling points, especially for the value-added products, which the Governor alluded to earlier. Most of the actual promotional efforts should be handled at the State level.

Where Federal funds are applied, I think it would be appropriate to institute some form of an export advisory board, comprised of industry experts to oversee the use of those funds. Board member terms could be overlapping and relatively short in order to provide fresh input, while maintaining the thread of consistency. Such a program would enhance the productivity of the cooperator programs and is in keeping with the New Federalism.

Let me move from the export issue now to the basic concept of the farm programs. The payment-in-kind program of 1983 was never designed to be a permanent fixture. I think it is safe to assume that what we will see in 1984 will not be nearly as attractive from the farmer's standpoint, and I think we will see our farmers facing some tough decisions about how they will utilize the lands next year. However, soil conservation should become a permanent part of any farm program of the future.

Soil conservation was touted as an important benefit of the PIK program. It did retire many acres of marginal cropland from production, but I think we need to go further. We need to include as part of any future program, economic incentives for those farmers who are using a planned conservation approach to their operation. Soil conservation perhaps is a difficult cause for us to champion, because of our continued ability to produce abundantly. We could see that change within a matter of a few years, and as stewards of the land, we must act responsibly now.

In a related issue, Mr. Chairman, you know of my stand on farmland protection, as I testified before your subcommittee of the Senate Agriculture Committee in Washington earlier this week.

Let me just again reiterate:

States should be supported by Federal authorities in their effort to protect farmland from diversion to nonfarm uses. This is an effort which requires cooperation at all levels of government, with major decisions resting at the lowest level possible. It is important that Federal agencies regulate their activities to insure that local programs to protect farmland are not negated by actions of the Federal Government. Billions of additional tax dollars and millions of acres of private property can be saved in the immediate future if the Federal bureaucracy is required to support Illinois and other States' efforts to protect their land. This can be accomplished with administrative rules and regulations as required under the National Farmland Protection Policy Act, which prohibits the proposal or evaluation of projects that consume too much farmland.

Mr. Chairman, there are many other related areas that I believe are important as we look to the future of farm policy, but we obviously don't have the time to hold an exhaustive discussion on every point in the context of this hearing. However, I suggest that, with the lineup of 50 speakers, you're going to come close. [Laughter.]

In closing, I would like to point out that there are two transportation issues which are of particular importance to Illinois and the rest of the upper Midwest. First of all, we will continue to depend very heavily upon our inland transportation system. It has served us very well in the past and will continue to do so in the future if we manage it properly. In conjunction with this, I feel that it's imperative that the second lock at the new lock and dam site on the Mississippi River be constructed to allow the timely and unrestricted flow of farm products to the market.

Second, the Illinois Department of Agriculture—and I speak for that group—is extremely concerned about the implementation of cargo preference laws. We believe that these laws are detrimental to free trade and will harm the sales of American farm products in overseas markets by raising the costs of these products to the point of not being competitive. I feel a better approach would be to revitalize the U.S. merchant fleet to keep it competitive, by using new designs and technologies to increase the production of these flag ships. When this is accomplished, the U.S. merchant marine will once again become a strong part of the total U.S. economy.

This concludes my prepared remarks, Mr. Chairman, and I'd be pleased to answer any questions.

Senator JEPSEN. Thank you, Mr. Werries.

Now we will recognize the secretary of agriculture from the State of Wisconsin, the Honorable LaVerne Ausman. Please proceed as you wish.

STATEMENT OF HON. LAVERNE AUSMAN, SECRETARY OF AGRICULTURE FOR THE STATE OF WISCONSIN

Mr. AUSMAN. Thank you, Senator.

We appreciate your coming out to the Midwest, and welcome this opportunity.

I'll skip over some of my prepared statement in the interest of time.

"Toward the Next Generation of Farm Policy" is a challenging title, to say the least, and I think it's appropriate that we look ahead. However, the current excess supplies of almost every farm commodity make long-range planning difficult at this time, and immediate remedies sometimes take precedence. The PIK program would be an example.

Farm policy encompasses many things, and I'm certain the main emphasis here may well be economic at this time, and the farm policy agenda of the next generation is going to be very broad.

You've heard a lot of the environmental area is certainly going to be a part of it. Soil and water conservation, farmland preservation, ground water, and pesticides are at the front and center today and they will continue to be, and how we deal with these will have a great economic impact. While the public has a general interest in soil conservation and should make some financial commitment to

protect our soil, there will also have to be an accompanying commitment on the part of agriculture, and I would expect a careful audit of conservation expenditures from this perspective in the future.

I'd like to add my support to some of the things that have been said here today that I think will afford us a multiplication of benefits in this area.

Cross-compliance between income support programs and conservation grant programs is one way of multiplying our results.

Directing our dollars toward areas of greatest need—which has been termed “targeting” in recent times, also does that same thing. Coupled with that, I think we ought to be directing dollars to those areas where the individual farmer cannot bear the cost alone. Most soil conservation programs are very cost efficient and effective and do not need help from the program.

Responsible use of pesticides will rest with agriculture. How we deal with that will have a major impact on the understanding that the urban community has in support of the farm community by the general public. I am not going to deal with specifics in that area.

Tax policies will have a major impact on agriculture, especially as they relate to investment credit, and those things, because agriculture is so highly capitalized and those things become exceedingly important. It has a major impact on entry into this business and, of course, your earlier press conference was dealing with one aspect of how we are going to deal with the financing of agriculture.

Specifically, I'd like to say that, you know, the current farm-home program has been under some criticism, and I believe part of that criticism rests with the fact that it's understaffed. If you are going to have a loan program designed to deal with high-risk borrowers, that requires a lot of supervision, and I don't think that's been available. I think if some of that could be changed, you'd see a lot of success in that program.

Since the advent of modernization and rapid adoption of modern production techniques, American agriculture has been involved in excess production on a regular basis. I believe we can expect periodic supply/demand problems in the foreseeable future. If we are to avoid devastating swings, some type of supply management must be available. After we've built a reasonable supply of reserves, then I think land retirement or deficiency payments might be the lowest cost method. We can only pile up so much.

There's been some talk about the importance of exports. I will only underwrite that we have to become much more active negotiators. I am not suggesting a trade war, but today we are the residual supplier for the world. We maintain the world resource supply, and yet we receive the lowest price. I think we have to be concerned about that.

I would like to deal with one specific. I guess, coming from Wisconsin, I am compelled to concentrate some of my remarks on the dairy situation, not that we're not interested in all these other things—and I can list a number of things that we're major producers of. The support price has been frozen since October 1, 1980. The industry program has been worse off than just having the price fixed. During this period, we have had extended debate on a new dairy policy. Some of this discussion involved possibilities of quotas.

The prospect of this and the protracted debate possibly encouraged some farmers to increase milk production. The most damaging aspect, I think, was the indecision that's been involved during this 2½-year period. The best decision for most farmers was to keep milking cows. In fact, in Wisconsin, where we've experienced relatively minimal increase in milk production and in cow owners, we did have 632 new entries between August 1982 and February 1983. Why? Because it was the best option out there, I suppose, and some were saying, "Well, let's get involved," because of all this discussion. It certainly has been damaging.

The current proposal, which has passed the House Agriculture Committee and the Senate Agriculture Committee, while not perfect, is workable and should be implemented, and the sooner the better, to at least resolve that indifference. I believe it will be helpful and give the dairy farmer and the dairy industry some breathing time while they take a look at a dairy program for the next generation. And that's what this discussion is about.

So on that subject, I guess I'd make the following comments:

While prosperity for feed grain, wheat and soybean producers is very much involved with the export market, the dairy producer has very little opportunity for export. Cost of production in New Zealand is below ours. The Economic Community's domestic food policy, which has created substantial surpluses—twice of what we have in the United States, and an export policy which says that they will subsidize the sale of those products around the world, makes it impossible for us to function in that world market. It is causing political problems in the Economic Community, and if we would try to implement it here, I believe it would cause even greater political problems in this country. I don't think our people are susceptible to that. It would, as well, cause some trade problems in the world if we began a major dumping of dairy products around the world. I don't think that's an option for us.

That leaves the United States dairy industry with our domestic market, plus some specialty cheeses in certain areas of the world and an opportunity to distribute some product, principally nonfat dry milk, to economic developing countries. Those things ought to be pursued, but they are peripheral at best.

Dairying is a very specialized business, with much of the equipment unsuitable for other types of agriculture. Historically, it's been a highly regulated industry through Federal milk marketing orders and health regulations. Because of this fact, the dairy industry is more interested in stability than some other farm commodities. And it's essential that they have some stability. Because of this, there have been extensive discussions in Wisconsin about a dairy stabilization program that not only addresses the surplus situation, but also does so without seriously disrupting the dairy farm structure. I believe we should move to have some of the provisions of that program in place by December 31, 1984, when the current proposal will expire.

Basically, it calls for the Federal Gov. being involved in the first 3.5 billion pounds of milk. That's a figure that is a base that we almost need to keep stability in the market. Marketings in excess of 3.5 billion pounds would be purchased with assessments received

from dairy producers. In other words, industry funds its own program, to a degree.

Individual farmers would be assigned quotas based on their historical production. Assessments would only be made against farmers who exceeded their base.

Provisions would be made for new producers. I'm not going to get into the details of all that today. You've heard a lot of it before.

But this program would reduce government costs and put the producers in control of their commodity program. This is especially important in commodities such as milk, which have a very inelastic price to the end ratio. As an example, a 24-percent decrease in the price of milk will only result in a 9-percent increase in sales. You can flip it around that if you put the price of milk up, you're decreasing sales, but it's relatively low. But that is the kind of industry that lends itself to stability.

There are many current examples of supply management in fruits and vegetables. Much of the poultry industry is involved in contracting. And I can see in the future that the livestock industry may become more involved in that. You have contracts today through the futures market and all of those things that are not available to the dairy industry.

Farm policy of the future may well see government playing a lesser role in the price mechanism, but in its place, marketing orders playing a much more important role in supply management, product research and market development.

Specialized equipment and heavy investment will necessitate a market management structure that will smooth off the peaks, fill in the valleys and remove some of the risk. Market orders with a minimal government safety net have great promise for future farm policy.

I guess what we're saying is, where we are today in the dairy industry, we need to resolve this difference as quickly as possible and then move on with some long-term solutions and programs that will work over the long basis. I think some of the things that have been discussed fit into some of the changing farm structure.

With that, I thank you for the opportunity to share these thoughts, and be happy to respond to any questions.

[The prepared statement of Mr. Ausman follows:]

PREPARED STATEMENT OF HON. LAVERNE AUSMAN

Senator Jepson and Members of the Committee:

"Toward the Next Generation in Farm Policy" is a challenging title for this hearing. It is most appropriate that we attempt to look ahead, however, current excess supplies of almost every farm commodity make long-range planning difficult. Immediate remedies sometimes take precedent. The PIK program would be an example.

Farm policy encompasses many things and, while I am certain your main emphasis will be on economic issues, the farm policy agenda of the next generation will involve many items.

In the environmental area; soil and water conservation, farmland preservation, groundwater and pesticides are front and center today and will continue to be. How we deal with these issues will have an economic impact. While the public has a general interest in soil conservation and should make some financial commitment to protect our soil, there will also have to be an accompanying commitment on the part of the agricultural community. I would expect a careful audit of conservation expenditures from this perspective.

Benefits can be multiplied in a number of ways. Some would be:

- 'Require cross compliance between income support programs and conservation grant programs.
- 'Direct dollars toward areas of greatest need--targeting.

The responsibility for the proper use of pesticides will rest on the agricultural community. In addition we can expect more active monitoring of activities in this area. How we respond will have a major impact on the overall understanding afforded the farm community by the general public.

I will not deal with any specifics in this area. I will say that it is absolutely essential that the farm community be involved in this process and, in fact, be leaders. What happens in these areas can have a major economic impact and certainly affect our competitive position on the world scene.

Nutrition and diet could influence farm policy in the future. It has clearly emerged in recent years, and we would have every reason to expect it to continue. It is one of the areas that demands attention from the research side.

Tax policies have a major impact on agriculture, especially as they relate to investment credit, capital gains,

worse off than just having the price fixed. During this period, we have had extended debate on a new dairy policy. Some of this discussion involved possibility of quotas. The prospect of this and the protracted debate possibly encouraged some farmers to increase milk production. The most damaging aspect was the indecision during this 2-1/2 year period. The best decision for most farmers was to keep milking cows. In fact in Wisconsin, which has experienced minimal increase in cows or milk, 632 new dairy farms began operation between August '82 and February '83.

The current proposal which has passed the House Ag Committee and the Senate Ag Committee, while not perfect, is workable and should be implemented and the sooner the better. I believe it will be helpful and give the dairy farmer some breathing time while they take a look at a dairy program for the next generation.

On that subject, I would make the following comments. While prosperity for feed grain producers, wheat and soybeans is dependent on the export market, the dairy producer has little opportunity for export. The cost of production in New Zealand is far below ours, and they basically set the price. The European Community has a policy which has created substantial surpluses, twice what ours are, and an export policy which sells them at greatly subsidized rates.

It is causing political problems in the EC, and I believe it would cause an even greater problem here in the United States. It also would create some problems on the world trade scene, but that could be argued.

That leaves the United States dairy industry with our domestic market, plus some specialty cheeses in certain areas of the world and an opportunity to distribute some product, principally nonfat dry milk, to economic developing countries.

Dairying is a very specialized business with much of the equipment unsuitable for other types of agriculture. Historically, it has been highly regulated through federal milk marketing orders and health regulations. Because of these facts, the dairy industry is more interested in stability than many other farm commodities. It is quite essential. Because of this, there have been extensive discussions in Wisconsin about a dairy stabilization program that not only addresses the surplus situation but also does so without seriously disrupting the dairy farm structure. I believe we should move to have some of the provisions of that program in place on December 31, 1984.

- (1) Basically, it calls for the federal government purchasing the first 3.5 billion pounds, milk equivalent, annually. Marketings in excess of 3.5 billion pounds would be purchased with assessments received from dairy producers.

- (2) Individual dairy farmers would be assigned quotas based on their historical production. Assessments would only be made against farmers who exceeded their base.
- (3) Provisions would be made for new producers and hardship cases, and the base would be a moving base so that you could in fact build base if you wanted to pay for it through lower prices. Separate bases would not be salable.

This program would reduce government costs and put the producers in control of their commodity program. This is especially important in commodities such as milk which have a very inelastic price in the end ratio. Example, a 24% decrease in price will only result in a 9% increase in sales.

There are many current examples of supply management in fruits and vegetables. Much of the poultry industry is involved in contracting, and I can see in the future that the livestock industry may become more involved in that. You have a contract today through the futures market for many commodities.

Farm policy of the future may well see government playing a lesser role in the price mechanism but, in its place, marketing orders playing a much more important role in supply management, product research and market development.

Specialized equipment and heavy investment will necessitate a market management structure that will smooth off the peaks and fill in the valleys and remove some of the risk. Market orders with a minimal government safety net have great promise for future farm policy.

I thank you for this opportunity to share these thoughts.

Senator JEPSEN. Thank you, Mr. Ausman.

It is said that the last should be first and the first should be last, and we've saved the best for the last. We welcome Anne Kanten, assistant commissioner of agriculture, State of Minnesota. You may proceed, as you wish.

STATEMENT OF ANNE KANTEN, ASSISTANT COMMISSIONER OF AGRICULTURE FOR THE STATE OF MINNESOTA

Ms. KANTEN. Thank you. Iowa is my home State, incidentally. I grew up on a farm in Iowa. I've been a farmer in Minnesota, and recently appointed as assistant commissioner.

I would, first of all, Senator, along with the other panel members, commend you for holding this type of hearing and addressing agricultural policy for the future.

Minnesota has 103,000 family farms, which ranks, I think, first in the Nation in the number of family farms. So that family farm system in agriculture is extremely important to the State of Minnesota. It's our basic foundation—40 percent of our economic base, 30 percent of the jobs in our State.

And because of the crisis in agriculture, certainly there is a crisis in State government; there is a total financial crisis across the whole agriculture producing States here in the Midwest.

As we look at the traditional farm programs, Federal farm programs, I think we need to begin by simply saying, first of all, that many of them have not worked; that we have a line of perhaps even failures in Federal farm programs. At least they have not worked from a farmer's perspective, basically because I think most farm programs begin with that basic undergirding of a cheap-food policy, which has been detrimental for both farmers and consumers.

Second, farm program changes have addressed short-term answers—quick fixes for immediate problems.

Third, farm programs fail to provide any reasonable assurance of fair commodity prices and family farm income.

We haven't really said, today, very clearly and precisely, that price to the farmer is the reason for the crisis, and that the family farm system is indeed threatened by the price structure in agriculture today.

I didn't get here for the press conference, Senator. I heard just the last words. But again, the emphasis was on credit to the large farms of the future.

President Reagan, at his last press conference, talked about 350,000 family farms in America. When these kinds of comments, I think, are made, I think it makes the family farmer feel that many times many of us are being written off.

There has been little consistency in Federal farm programs. I think farmers have felt pushed, from tight soil bank controls to fencerow to fencerow production, and back again to acreage reduction and production quotas.

Agriculture is the most important business in this Nation. With over a trillion dollar investment in agriculture, that number exceeds 80 percent more than all other industries combined in this country. And when we say that our Nation and our Midwest faces an economic crisis, the historic failure of agriculture to move earned dollars into the economy, rather than borrowed dollars, has to carry the brunt of that responsibility.

The former commissioner of agriculture in Minnesota, Mark Seetin, back in 1981 testified before the House Banking Committee in Washington, and Mark said, "When agriculture comes apart at the seams, the general economy suffers and is equally threatened with disintegration and chaos." Mark said, "Farmers in Minnesota have experienced cuts in their realized net farm income in 5 of the last 7 years." And since Mark made those statements, those losses have continued in 1981 and 1982, and we still do not know what 1983 will bring.

It was said here awhile ago that one farmer now feeds over 70 people, and yet, the other day I met with Minnesota farmers on food stamps, who cannot feed their own families.

The decline of farm income in actual expendable dollars has caused an erosion in the quality of life here in the Midwest. I won't go into all of that. It's in the prepared statement.

But I think we are witnessing two things, two crises, Senator. One is the erosion of the land itself and the other is the erosion of the culture—the family farm culture, in this Nation of ours.

The Governor of Minnesota has continually said that we will not have a healthy Minnesota until we have a healthy agriculture. And Governor Perpich has been an initiator of States moving more aggressively in addressing the price structure of our own commodities. I heard Gov. Tony Earle of Wisconsin say on the radio last week that he was weary of the Great Lakes States being treated like a foreign country. But there have been this last winter, Senator, and 2 or 3 years previous in other States, conversations with farmers, with labor leaders, with church group people, to talk about the consortium of agricultural States and how States could take a more aggressive role in addressing agricultural pricing of our own products. That, indeed, would be federalism at its finest. It is a rather revolutionary concept, but it is a necessary concept because of the basic economic failures at the Federal level.

The Public Utilities Commission of Minnesota recently laid a document on my desk, that energy companies were entitled to a 14.96-percent return on their investment in Minnesota as a fair and equitable return. I asked my statistician to figure out what's the return for agriculture, not just for Minnesota but for the Midwest consortium of States. In 1981, the last firm figures, the return

to agriculture was 1.77 percent. That is, indeed, why we are in a crisis.

I would like to make a comment, to, about the dairy program. We have a press release that is on your desk, Senator. Perhaps you have read about the debate between Senator Boschwitz and our commissioner of agriculture in the State of Minnesota. Commissioner Nichols is basically concerned because it is indeed true that during the 15 months, Minnesota dairy people will do quite well. But he's concerned about what will happen at the close of those 15 months—for a couple of reasons:

First, because if there is a 25- to 30-percent cut in milk production in Minnesota, it will mean that approximately 325,000 dairy cattle will go to slaughter. And the implications of that on red meat, on pork and poultry, will be devastating. And there are other figures in your packet, Senator, that say that the cut, production cut, that Minnesota farmers, dairy farmers, will perhaps make for economic reasons, those same economic reasons are not in place for the dairy farmers in the Southeast and in the Sun Belt, and that we could lose thousands of dairy farmers while dairying is increased a great percentage, both on the west coast and in the Southeastern part of the United States.

I think that one piece that needs to be said—and here again I commend you, Senator—is that we need to get our domestic agriculture in line. We have said that we have become dependent on international trade. I think that's very true. But we cannot look at international trade as our salvation. Exports have increased from \$6 billion in the early seventies to \$46 billion now in the eighties—a tremendous increase. And yet the family farm system is in its greatest stress now that it's ever been.

There are many more things on my testimony, Senator, but I know your time is short. I ask you to carefully go over the pieces of the testimony. One other piece that's before you is a document put together by Governor Perpich's Commission on the Farm Crisis, which will give you some insight into some particular issues and some particular directions that we recommend in the State of Minnesota.

Thank you for these moments here this morning.

[The prepared statement of Ms. Kanten, together with attachments, follows:]

PREPARED STATEMENT OF ANNE KANTEN

Minnesota Governor Rudy Perpich asked me to thank the Honorable Roger W. Jepsen, Chairman of the Joint Economic Committee of Congress, for inviting the views of this important agricultural State on future farm programs and policy for presentation at this public hearing.

It is my privilege, as Anne Kanten, the Assistant Commissioner of Agriculture for Minnesota, to represent Governor Perpich and the 103,000 productive farm families that maintain ours as the fifth leading food and fiber producing State.

Family agriculture is extremely important in Minnesota, the foundation of our entire economy, supporting more than one-third of all jobs and generating about 40 percent of the total economic activity in our State.

The stability of Minnesota's economy, therefore, depends upon stability in the farm sector. Stability has been missing from the farm sector for most of the past 5 years due primarily to Federal policy changes that have not been limited to agriculture, but which have had a tremendous impact upon agriculture. A negative impact that has maintained a fiscal crisis not merely for thousands of our family farmers,

but which has placed State and local governments under financial seige, forcing service cuts and tax increases upon already overburdened citizens.

Most of us understand the painful consequences of the energy crisis that triggered skyrocketing inflation, along with one embargo too many in our inept and ill-timed attempts to reform the policies and social policies of the world community.

Today we are to consider the effectiveness of traditional farm programs of the past for possible applications to the future generation of those who will be producing the human essentials of food and fiber.

Most of the traditional farm programs have been failures, for several obvious reasons. First, they have failed because of the basic undergirding of every farm program with the politically expedient "cheap food policy," exploiting both farmers and consumers.

Second, farm program changes are made only to address short-term answers . . . a quick fix for an immediate problem. There is no sense of long-range policy visible.

Third, farm programs fail to provide any reasonable assurance of fair farm commodity prices and family farm income. Extension of credit through price support loans is not the same as assuring the productive farmer the comparable level of price protection that the minimum wage and equal employment opportunities provide the urban workers.

Fourth, there has been little consistency in Federal farm policy. It has wandered all over the map, from one extreme to another like a pendulum on a grandfather clock. Just in the past 10 years, we've pushed farmers from tight soil bank controls to all out fence to fence production, and back again to acreage reduction and production quotas.

Agriculture is the biggest, most important industry in this Nation with over a trillion dollars in assets. That number exceeds 80 percent of all other industrial assets combined.

As a Nation and as Midwest agricultural States, we face an economic crisis. The historical failure of agriculture to move adequate earned dollars (not borrowed dollars) into our economic system must carry the brunt of that responsibility.

In 1981 before the House Banking Committee, the former Agriculture Commissioner Mark Seetin said "when agriculture comes apart at the seams, the general economy suffers and is equally threatened with disintegration and chaos. Farmers in Minnesota have experienced cuts in their realized net farm income in 5 of the last 7 years." Since Mark made that statement, losses have continued in 1981-1982 and are predicted in 1983.

The decline of farm income in actual expendable dollars has caused an erosion in quality of life that we have all witnessed.

1. As farm income deteriorates, debt-borrowed money increases and interest goes up. Minnesota farmers carry nearly a \$12 billion debt. National farm debt is approaching \$227 billion.
2. Factories close. Steel, tractors, trucks and combines don't sell. There is a direct correlation between farm income and jobs.
3. Land equity falls. There was a \$4 billion loss in Minnesota from July, 1982 to January, 1983.
4. Taxes increase and services are reduced.
5. Rural communities become gutted. As farmers leave, rural businesses leave. Rural people add to the burdens of the cities. The whole infrastructure in rural America is eroding.
6. People, whole families, are breaking under the stress and economic pressure. alcoholism and family abuse are on a dramatic increase.
7. There is visible anger and frustration as farmers feel manipulated, harassed and often humiliated by lending institutions and by creditors.

Farmers, laborers, church groups here in our beautiful productive Midwest are looking seriously at the failure of our farm programs. Governor Perpich says continually, "we cannot and will not have a healthy Minnesota economy until we have a healthy Minnesota agriculture."

Governor Tony Earle of Wisconsin was quoted on a radio news report saying he was "tired of the Great Lakes States being treated like a foreign country."

This past year (2 or 3 years in some States), there has been intense dialog by a consortium of our Midwest States (Minnesota, Iowa, South Dakota, North Dakota, Kansas, Nebraska and Illinois) with many other States requesting information initiating federalism at its finest and discussing possible ways to address the price structure on our own agricultural commodities. It is a revolutionary concept, but a necessary concept, and is increasingly difficult to address the basic economic failures in agriculture at the Federal level.

Those economic failures in Minnesota agriculture are spelled out in a report you have before you. A report that was assembled by a Governor's Commission on the Farm Crisis. It has broad implications.

We have perhaps forgotten that people on the land, hardworking, good people, have meant strength and stability to this Nation and are the best guarantee we have for a safe, stable food supply.

The economic pressure on farm families has another, almost more serious implication, and that is the quality and the future of the land itself. Land is a gift. We are to be the stewards of that gift so that it will sustain life for future generations. Economic pressure has made us producers with the gift of land, not conservers. We have not had the resources to think in practical ways about the future and building a sustainable agriculture. So we face a time when rural people and the land itself are in crisis. A situation caused by complex national and international interactions, political decisions, weather factors and plain greed.

Now, for the first time in history, the Congress and administration are attempting to impose production controls on dairy farmers, after Federal farm policy gyrations left that about the only remaining profitable sector of agriculture.

We in the United States enjoy the best, most abundant and cheapest food on earth, but we deny a fair price and income to the farmer who produces that good. According to latest Federal estimates, only about 29 cents out of the family dollar that's spent for food actually goes back to the farmer who produces that food. The lion's share of current consumer food costs, 71 cents out of every dollar, goes to the vast industrial complex and the millions of urban workers who process, package, store, transport, market and distribute the convenience food products.

Perhaps a more acute way of looking at food costs and return to the farmers is to examine the consumer price index, which shows that less than 17 percent of family disposable income is spent for all food, at home and away.

The farmer getting 29 cents out of the family dollar is actually getting less than 5 percent of family disposable income. Is there any other human essential claiming a smaller share?

Farm policy economists have continued to pursue the antiquated if not obsolete belief that farmers are making out alright because of their increased productivity. They argue that the application of the traditional parity formula to farm parity prices is invalid because of the increased productivity. They've even convinced some politicians that the parity concept ought to be scrapped entirely. The farm depression of the past 3 years driving the parity ratio to an embarrassing 50-year low, has gained that cult opportunistic converts.

Parity prices have been a tool for maintaining some sense of economic stability for our vital industry of agriculture. In a real sense, the parity price formula has been a counter against discrimination in the marketplace for farmers who are wiser on production technology than they are on marketing strategy.

When we allow, or deliberately freeze or roll back the prices of farm commodities in a further disparity against parity levels, we are, in effect, discriminating against the farmers who feed us. This is counter to the social reform commitments of the past several Federal administrations and their ambitious campaigns to end all forms of discrimination.

If policy makers insist on burying the parity measure of our farm economy, the consumer price index is a reasonable and readily available alternative. However, you will find that it reveals almost the same disparity treatment of the farm sector as does the historic parity ratio.

How about that increased productivity, and at what cost? Farm production costs have tripled in the past decade. Debt service, a minor farm cost factor until a few years ago, now is the single leading farm production cost. Farm production in that same period, while increased, has been waning in increased yields and researchers have been warning that the era of sharp gains in productivity per unit is well behind us—that future gains will be limited and slow. While farm production costs have tripled in just 10 years, it has taken nearly 70 years for Minnesota farmers to triple the average yield of corn, the principal grain crop of this State and Nation.

The current market value of a bushel of corn is only about five times the price of 70 years ago. Or, comparing to 10 years ago, the present corn price is only 15 percent higher. More pointedly, the present corn price in Minnesota is lower than it was in 1974 and as recent as in 1980. Present legislation and administration demand for freezing the farm price support loan and target prices during this period of economic crisis in agriculture is totally unjust. Not only is the advancing of this legislation discriminatory, but the way in which it was done defies all sense of democratic process . . . attached as an amendment to a dairy and tobacco bill, without hearings and despite public opposition by all except one of the major farm organizations.

National farm policy must be consistent and embrace the use of supply management, loan and target prices, conservation practices, and a reserve. Congress has locked the barn door after the horse was stolen by foreclosing the further abuse of executive power in embargoing agricultural exports. Loan rates that reflect farm production costs will be the fairest policy, and in the end result in the cheapest farm program. Loan rates should be tied to parity (or to the consumer price index) so these supports will properly float with input costs both up and down. Neither present parity or CPI indexes support either a freeze or a rollback of current grain and dairy price supports.

Loan rates geared to production costs will raise and stabilize market prices so that agriculture will be profitable and help restore health to our depressed national economy. Farm policy gyrations have hammered down the net return on investment, labor and management for American agriculture to less than 2 percent, driving thousands of farm families out of agriculture at the economic distress of the total rural community.

Agriculture is far too important to the community, State and national economic welfare to continue subject to the boom and bust cycles that have profited only the professional speculators, while dissipating the human and natural resources of this Nation's most essential industry.

Maintaining a grain reserve is essential, both for national food security and to maintain marketing options for farmers. The grain reserve concept must be renewed internationally. The United States exercised the proper initiative in establishing our national grain reserve, but we have failed to convince the rest of the world of the human importance and economic sanity of maintaining a global food reserve. A global food reserve is necessary to offset natural disasters for agriculture that contribute to the instability of international currencies as well as to actual hunger and starvation. The United States has admirably but too long been the world leader in providing the emergency as well as the commercial food supplies required by the deficient and disaster smitten nations. Other nations must join in supporting their fair share of the global food reserve along with equally fair contributions to the support of the United Nations.

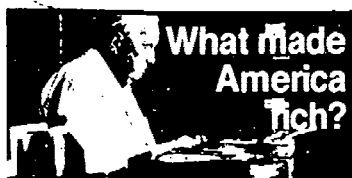
Supply management is an important component of national and global food policy. It is essential that resources conservation be required in farm production and supply management programs.

The sophisticated communities and information systems available today give us the capabilities for determining national and international food production and reserve requirements. Too much or too little results in financial chaos for farmers, for consumers, and as we have learned these past two years of bitter experience, for state and national governments as well. Farm policy most of all must be based on long-term considerations, not on the short-sighted evaluation of tampering designs and the impact upon the decision makers in the next election. Farm policy is an economic policy that must be placed above politics in the public interest, indeed in the interest of civilization itself.

We must regard domestic agriculture as our principal resource industry and focus upon the protection and strengthening of that industry with the same commitment of our trading partners and out competing nations.

International trade, while important, is not our salvation. We actually sold our agricultural soul to increase American agricultural export sales from six billion dollars during the early 1970's to a peak of 46 billion dollars in the 1980's. We undercut world market prices during that ebullient period to increase export sales volume. Then we threw away the sound principle of supply management, misdirected agriculture into full production and over-expansion that doubled the impact of national inflation upon agriculture. At the same time, the executive branch of government injudiciously began using food exports as a weapon of diplomacy, which has been responsible for billions of dollars in lost farm income and depressed prices on the one hand, while mountains of record crop surpluses have been built and maintained at an enormous public cost.

Farmers are not responsible for the present predicament in which they find themselves. National farm, economic, defense and diplomatic policies put them there. Only a wise Congress and a bold, bipartisan and long-range approach to farm and economic policy can correct the penny-wise and pound-foolish mistakes of the past.



Its farms! Wheeler McMillen, .
long editor-in-chief of Farm Journal.
Still thinks and writes about agriculture
at his home in Virginia.

Out of the energy crisis has come a whole new way of looking at the world-- particularly at its limitations. We now know that there's a limit to how much crude oil we can pump out of the ground; a limit to the ore we can mine; even a limit to the fish we can catch.

Perhaps now at last, the people of this country will finally be able to see something they have not seen, or at least acknowledged, before: that the one true source of America's wealth is its farms.

Nearly all of the original wealth from which our people have created great industries and built our populous cities has come from work done by farmers. Where else could it have come from? The earth contains only three major sources from which capital and enterprise can develop: the soil, the mines and the seas. The once-great fishing ports of Mystic, Conn., and Gloucester, Mass., are now mostly tourist sites. Ghost towns abound in the West where the mines have played out. Only farming has persisted and kept the cities growing.

It was the farm products from upstate and later from the Midwest via the Erie Canal that originally built New York City. Certainly it was grain and livestock, gathered by rail, barge and Great Lakes shipping, that built Chicago, Minneapolis and St. Louis. Cotton built Memphis and New Orleans. Timber, wheat, wool and the fields of California built our West Coast cities. Walk the streets of these cities and admire their museums, hospitals, libraries and universities. Where did the great philanthropic fortunes come from to build them? Occasionally from fish or mines. But mainly from industrialists who made the machines to produce crops; from the rail tycoons who hauled the grain and cattle; or from the manufacturers who processed the food.

The nickel, dime or dollar profits that these handlers could garner from each bushel or each hog could and, at times, did make millionaires. They not only gathered great fortunes, but they also got most of the credit for "building America." The farmer, only one of millions, got little of either.

Today, the nation is looking around for a more dependable, indeed renewable, source of wealth. Our people are recognizing at last that there is only one: the rain, sunshine and soil that make our lands productive.

Perhaps it's too much to hope. But as our people look forward to a future based on our farms, maybe they will look back a moment and realize that through all of our yesterdays, it has been the farmer's land and his labor that have produced this nation's industries and its accumulated wealth. Maybe someday the historians will mention this fact in their books.

--Wheeler McMillen

"C" 1980 by
 Farm Journal, Inc.

Reprinted by special permission
 from the December 1980 issue of the
 Farm Journal.

THE FARM FINANCIAL CRISIS

AN AGENDA

FOR

ACTION

The Report of the
Governor's Commission
on the Farm Crisis

March 22, 1983

To Governor Rudy Perpich:

I have the honor of submitting this report on the financial conditions of Minnesota farmers. In response to your request, the Commission on the Farm Crisis has worked hard and diligently during the past two weeks, reviewing reports and taking testimony from farmers, rural lenders, agricultural supply dealers, and others who could provide current information and observations about the state of the farm situation.

The report summarizes our findings regarding the problems facing Minnesota farmers and the remedies we propose to meet those problems. Our basic conclusion is that severe economic hardships are facing Minnesota farmers, and immediate emergency action is required to prevent the financial failure of a significant proportion of Minnesota farmers and to restore confidence and predictability to the farm finance situation. We, therefore, urge the immediate implementation of the recommendations contained in this report.

We hope this report will assist you and the legislature to achieve what we believe ought to be a major state goal -- to assure economic and social stability in rural Minnesota.

Marvin Hanson, Chairman
Governor's Commission
on the Farm Crisis

COMMISSION'S CHARGE

"... to investigate the current and immediate financial problems facing farmers and rural communities ..."

COMMISSION MEMBERS

Marvin Hanson, Chairman
Hallowell, Former State Senator

Bernie Thesing
Winona, Dairy Farmer

Carmen Fernholz
Madison, Farmer

Bobbi Polzine
Brewster, Farmer

Al Christopherson
Pennock, Farmer

David Duus
Tyler, Farmer

Clinton Kurtz
Norwood, Minnesota Bankers Association

Dave Kettering
St. Paul, Federal Farm Credit System

Russ Bjorhus
St. Paul, Director, Minnesota Farmers
Home Administration

John Cairns
Appleton, Dairy Farmer and Production
Credit Association Board Member

Burt Peterson
Cambridge, Feed Mill Operator and
Bank Director

PROLOGUE

During the past two weeks the Commission studied the financial problems facing Minnesota farmers. In the course of these investigations, the Commission held hearings in Marshall, Faribault, and St. Paul. In addition, the Commission spent a considerable amount of time discussing information, weighing options and determining practical alternatives for immediate implementation. Written and oral testimony was solicited from farmers, farm organizations, agricultural lenders, farm supply and equipment dealers and other experts in farm financial matters. IT IS THE CONCLUSION OF THIS COMMISSION THAT SEVERE ECONOMIC CONDITIONS TODAY CONFRONT A SIGNIFICANT PROPORTION OF THE FARM AND AGRICULTURAL BUSINESS SECTOR OF RURAL MINNESOTA. INDEED, ONE MUST GO BACK TO THE 1930'S TO FIND CONDITIONS SIMILAR TO THOSE WHICH TODAY FACE MINNESOTA FARMERS AND AGRI-BUSINESSES. This conclusion is supported both by the statistical information presented in the following section as well as testimony of those familiar with the farm financial situation.

FINDINGS OF FACT

The economic condition of Minnesota farmers can be measured by several indicators, including the growing number of foreclosures, bankruptcies, farm sales and judgments issued against Minnesota farmers. While some indicators tell a self-evident story, others are merely suggestive of the troubling economic conditions facing a significant number of farmers. These are rooted in depressed commodity prices, a decrease in the value of U.S. agricultural exports, a significant erosion in the equity value of farmland and equipment, excessively high interest rates during the past two years and other factors effecting the American economy. Specifically, the Commission has found the following:

Incidence of Farm Foreclosures, Bankruptcies, Judgments and Farm Sales

- * Farm foreclosure rates in Minnesota during 1982 were two to five times higher than the rates of the mid-1970's. While the current rates represent a dramatic increase over the 1970's, the number of farm foreclosures is relatively small.
 - Commercial banks in Minnesota, which hold 5 percent of the dollar volume of farm real estate loans in the state and 43 percent of the dollar volume of agricultural operating loans in Minnesota, commenced 36 foreclosure proceedings against real estate loans and 21 foreclosures against operating loans during 1982.
 - The Federal Land Bank of St. Paul, which holds 44 percent of the dollar volume of real estate loans in the state, commenced 104 farm foreclosures in 1982. Due to redemptions, only 46 were in foreclosure status at the end of 1982. This was three times the number in 1981.
 - The Production Credit Association, which holds 23 percent of the dollar volume of agricultural operating loans in the state, commenced 29 foreclosure proceedings in 1982 and completed 16.

- The Farmers Home Administration, which holds 6.5 percent of the dollar volume of farm real estate loans and 10 percent of the dollar volume of agricultural operating loans in Minnesota, completed four foreclosure proceedings during the fiscal year ending September 30, 1982. As of March 15, 1983, approximately 60 farm real estate and agricultural operating loans were being considered for foreclosure.
- It is not known at this time how many foreclosure proceedings or contract for deed terminations were initiated by insurance companies (9 percent of the farm real estate dollar volume) or by individuals (36 percent of the farm real estate dollar volume) in 1982 in Minnesota.
- * The number of farm bankruptcies in Minnesota also is up. According to the Clerk of U.S. Bankruptcy Court for Minnesota, there were approximately 200 farm bankruptcies filed in 1982 at the three federal court districts of the state, an average of four per week statewide. This compares to an average of four per week filed in the St. Paul office alone, which covers only 70 percent of the state, during the first seven weeks of 1983. During the 1970's, approximately 20 to 25 farm bankruptcies occurred annually.
- * A February 1983 survey of one-third of Minnesota's county sheriffs in agricultural counties in the northwestern, western, southwestern, southern and southeastern parts of the state revealed that 89 judgments had been executed against farmers.
- * The U.S. Farmers Association found that there were approximately 2400 farm sales advertised in the state during the period September-December 1982, including land, livestock, equipment and foreclosure sales. The fewest sales were advertised in November (342), the most in September (1159). In January 1983 there were 587 farm sales of all types advertised, which compares to the 534 advertised in October 1982. It is not known how many of the sales were partial or total liquidations brought about by adverse credit situations. However, the Farmers Home Administration reported 146 chattel mortgage liquidations and 34 real estate mortgage liquidations among its borrowers during the 1982 federal fiscal year.
- * Farm loan delinquency rates have increased during 1982, and the projected status of some farm borrowers for 1983 is not favorable.
 - As of February 1983, only 300 (2 percent) of the 16,732 Production Credit Association (PCA) agricultural operating loans were delinquent. However, of the loans classified by PCA during 1982, about 10 percent had "significant weaknesses," had shown no profit for years, or were considered "charge-off loans." PCA estimates a 5 percent deterioration in loan quality between 1981 and 1982, and projects that 10 percent of their operating loans look vulnerable if the farm income situation continues through 1983.
 - As of December 31, 1982, the Farmers Home Administration in Minnesota had reported an overall delinquency rate of 24 percent which breaks out as follows: 14 percent on farm real estate loans, 22 percent on operating loans, 29 percent on emergency loans, and 32 percent on economic emergency loans.

- By March 1, 1983, the Farmers Home Administration overall delinquency rate was 52 percent. The FmHA projects that for 12 percent of their 12,000 borrowers (1440 farmers), 1983 is going to be a make-or-break year. The Production Credit Association estimates that 2 to 3 percent of its borrowers (275 to 400 farmers) are in a similar position.

Farm Income and Other Financial Indicators

Put in the simplest terms, the erosion of the financial well-being of farmers reflects the failure of farm prices to keep pace with rising production expenses. USDA estimates that since 1979 total cash farm receipts have risen 9 percent while costs have climbed 19 percent. The following statistics summarize why many Minnesota farmers are facing severe financial stress.

- * Adjusted national net farm income for 1982 was forecast at about 50 percent of farm income in 1979. The unadjusted figure -- \$19 billion -- was the lowest figure since 1977.
- * USDA predicts 1983 net farm income likely will decline from 1982 levels -- the third consecutive year of sharply reduced farm income. Farm commodity prices have dropped to their lowest level, in terms of purchasing power, since the Great Depression.
- * Debt loads of Minnesota farms nearly doubled between 1978 and 1982 -- increasing by 79 percent from \$5.8 to \$10.4 billion.
- * Minnesota export sales, as a proportion of cash receipts from farm marketings, increased from 21.2 percent in 1977 to a high of 33.9 percent in 1981. During 1979, 1980 and 1981, about 1/3 of all Minnesota farm receipts came from export sales.
- * The value of U.S. agricultural exports during FY 1982 fell by an average of 11 percent. While export volume dropped only 2 percent, prices for most major commodities fell 10 to 20 percent. Receipts from corn exports declined the most, falling from \$9 to \$6 billion. The value of export sales of wheat and wheat products fell from \$8.1 to \$7.7 billion, while the value of raw soybean exports fell 8 percent. Present forecasts indicate that the value of U.S. agricultural exports will decline another 4 percent during 1983.
- * The estimated statewide average value of Minnesota farmland in July, 1982 was \$1,179 per acre, or a decline of 10 percent from the average value of 1981. This decrease in value of \$131 per acre represents a loss of farm asset valuation of nearly \$4 billion. This decline in farmland values was the first since 1960, when the statewide average value of farmland dropped one percent. The greatest previous decline occurred in the early 1920's and did not end until the mid-1930's.
- * The combined effect of lower land prices and inflation has resulted in a decline in the real value of Minnesota farmland of approximately 15 percent between July 1981, and July 1982.

Financial Condition of Agricultural Input Supply Dealers

The Commission did not gather statistical data regarding the financial conditions of agri-suppliers. However, the following generalizations can be made based upon the testimony of farm supply and equipment dealers.

- * The Minnesota-Dakota Retail Hardware Association estimated that rural Minnesota lost 80 of its 1030 privately owned retail hardware stores during 1982.
- * During 1982, several farm equipment dealers were forced to draw upon their reserves and equity to continue in business. An increase in the availability of used equipment has hurt sales of new equipment. With the implementation of the Payment-in-Kind program, the present situation is not expected to improve during 1983 for suppliers and equipment dealers.
- * The Minnesota Association of Cooperatives estimates that 33 cooperatives merged last year. This segment of rural Minnesota, which generally grants unsecured credit, has and continues to experience severe financial stress.
- * The ability of cooperative-affiliated local suppliers to service debt has been severely eroded during the last two years. The number of liquidations or bankruptcies of these institutions is expected to increase, perhaps dramatically, during the next year.

Other Findings

The Commission has found that a great deal of human stress exists behind the major financial indicators. A great deal of mistrust, uncertainty and tension exist among those directly affected by the adverse economic conditions. The tensions have led to problems within families as well as conflicts between lenders and borrowers.

A significant number of farmers indicated a need to have information regarding their rights as borrowers, a neutral party to advise them regarding financial decisions and access to legal advice.

STATEMENT OF CONCLUSIONS

Several inferences can be drawn from the previous data. The Commission has drawn the following conclusions:

- * Sufficient funds exist at this time to meet the capital operating needs of Minnesota farmers. The consensus among farm lending institutions -- PCA, FmHA and commercial banks -- is that the availability of money is not a problem. However, given the economic condition of a significant proportion of Minnesota farmers, agricultural lenders are reluctant to extend credit to these borrowers due to their economic situation.
- * The farm financial situation is neither expected to brighten significantly nor deteriorate much during 1983. There is an optimism that 1984 may see an improvement in farm income, primarily due to the Payment-In-Kind program. Given this situation, immediate and short-term assistance is required to give farmers the time and assistance they need to survive their current economic condition.
- * Farm assets, such as land and equipment, have been devalued since 1982. This has seriously impacted the loan-to-asset ratio, making it unusually difficult for some producers to obtain operating credit.
- * The overall effect of low farm prices and income, decreasing net worth and the current financial forecast for 1983 has caused the following significant occurrences in farm lending:
 - Traditional sources of financing (commercial banks, PCAs) for many farmers are adopting more conservative lending practices. This, in turn, appears to have led to an increase in FmHA applicants. FmHA has estimated a 12 percent increase in loan requests over 1982. FmHA offices, already understaffed in most parts of the state, are overburdened by the increase in potential clientele.
 - Several of the "unsecured interests" in the farm credit system -- suppliers, cooperatives, etc. -- are changing credit policies. The new policies range from cash pre-payment to extensions of credit for only 30 days.
 - A significant number of Minnesota farmers still are uncertain as to whether or not they will obtain operating capital for the 1983 planting season.
- * Foreclosure and voluntary liquidations at this time would cause the sellers of property to absorb unnecessary losses caused by the current devaluation of land and equipment.
- * The Commission has found that a considerable amount of financial uncertainty exists for a significant proportion of Minnesota farmers. Immediate action is required to lessen this uncertainty and restore confidence in the farm financial situation.

- * While immediate short-term actions are necessary to enable Minnesota farmers to remain on their land and continue operating, the major long-term solution to the financial problems facing Minnesota farmers and agri-businesses is a rebound in commodity prices. Government at both the national and state levels must assume the responsibility for legislative action which will restore the purchasing power of farmers. WITHOUT SIGNIFICANT INCREASES IN THE PRICES FARMERS RECEIVE FOR THEIR PRODUCTS, THE CURRENT FARM DEPRESSION WILL CONTINUE INDEFINITELY.

RECOMMENDATIONS

The recommendations of the Commission include both immediate and long-term proposals. The Commission strongly recommends immediate implementation of proposals I. through IV. contained in this section. The remaining proposals should be implemented as soon as possible. HOWEVER, IT CANNOT BE OVERSTATED THAT THE ONLY PERMANENT SOLUTION TO MINNESOTA'S FARM FINANCIAL CRISIS IS AN EQUITABLE PRICE FOR FARM COMMODITIES. But in view of current economic realities, the Commission sets forth the following proposals to provide financial and other relief for Minnesota farmers. We urge the Governor and the legislature:

- I. To immediately appropriate funds to allow the hiring of emergency clerks within the FmHA so that the current backlog of agricultural loan requests and renewals can be completed prior to the spring planting season. The emergency personnel would be in addition to those already employed in designated disaster counties.
- II. To immediately establish an Office of State Farm Finance Ombudsman. The major functions of the office would be to:
 - A. Provide financial advice and counsel to farmers in financial crisis and to their lenders;
 - B. Set up a system of farm financial advisors across the State of Minnesota (within each county) to work with farm lenders and borrowers.
 - C. Coordinate an intensified effort by Agricultural Extension, Adult Farm Management, Vocational-Agricultural instructors, and the private sector in providing farm financial information to farmers.
- III. To immediately enact a state guaranteed farm operating loan program. The program would do the following:
 - A. Guarantees would cover 80 to 90 percent of losses incurred.
 - B. Eligible costs would include but not exceed actual 1983 expenses for seed, fertilizer, fuel, chemicals, electricity or fuel for irrigation, first-half taxes and cash rent.
 - C. It could be used only in those situations where credit could not be obtained without the guarantee.
 - D. Loans would be made by the lender without prior approval by the state.

- E. Loan amounts approved under this guarantee program should not be counted towards the lending limits of the bank regarding individual loans.
- IV. To immediately enact a state guarantee forbearance loan program available to farmers whose real estate mortgage or contract for deed loans are in default. The program would do the following:
- A. Guarantees would cover 80 to 90 percent of losses incurred.
 - B. It would be available where repayment ability can be shown by 1985 for both the original schedule plus repayment of the forbearance loan, which would be available for no more than two years. Repayment would be based upon an amortization schedule of not more than 10 years.
 - C. Loan amounts approved under this guarantee program should not be counted towards lending limits of the bank regarding individual loans.

THE COMMISSION RECOMMENDS THAT THE PRECEEDING PROPOSALS BE ENACTED BY APRIL 15th, AND IF NOT ENACTED AND THE FARM INCOME SITUATION CONTINUES TO DETERIORATE, THEN A REAL ESTATE FORECLOSURE MORATORIUM SHOULD BE ENACTED THIS FALL.

In addition to the preceding recommendations, the Commission recommends that following recommendations be implemented as soon as possible.

- V. Because of great concern about rising farm real estate taxes, the Commission recommends that any proposed changes in the agricultural credit or homestead credit tax law provisions not place an additional economic burden upon farmers.
- VI. The Adult Farm Management Program should be expanded and changed so more farmers can participate.
- VII. State law should provide a 60-day period of written notice in all cases of farm real estate mortgage defaults or foreclosures and judgments. The provision, similar to that provided under conventional loan default procedures, would apply to all mortgages from date of enactment of the provision.
- VIII. Farm real estate foreclosure procedures should be modified to provide that a mortgage will be reinstated if the payment in default, and subsequent payments due during the period of redemption, is paid to the mortgagee prior to the expiration of the redemption period.

Paul Hasbargen, an extension farm management specialist at the University of Minnesota calculates that it takes \$7.50 per cwt. for feed, interest, veterinary and other direct costs per cow. This does not include return on labor, farm and building interest and payment, etc. Another cost not considered is the loss per cow when farmers sell the milk cows for slaughter as the Boschwitz bill proposes. Slaughter price is about \$400 per cow and replacement price is about \$1,000 per cow for a loss of \$600 each. The figures here are for about a 100 cow herd. A 30% reduction requires selling 30 cows for a loss of \$18,000.

100% production	12¢ x 13,238 cwt.	= \$158,856 -	(\$7.50 cwt. x 100 cows) \$99,285	= \$ 59,571	
70% production	12¢ x 8,660 cwt. = \$103,920 -	\$64,950	= \$ 38,970 +	\$37,110	= \$ 76,080 - \$18,000 = \$58,080 (selling loss)
		(\$7.50 cwt. x 70 cows)	(paid incentive at \$10)		
100% production	13¢ x 13,238 cwt.	= \$172,094 -	\$99,285	= \$ 72,809	
70% production	13¢ x 8,660 cwt. = \$112,580 -	\$64,950	= \$ 47,630 +	\$37,110	= \$ 84,740 - \$18,000 = \$66,740 (selling loss)
100% production	14¢ x 13,238 cwt.	= \$185,332 -	\$99,285	= \$ 86,047	
70% production	14¢ x 8,660 cwt. = \$121,240 -	\$64,950	= \$ 56,290 +	\$37,110	= \$ 93,400 - \$18,000 = \$75,400 (selling loss)
100% production	15¢ x 13,238 cwt.	= \$198,570 -	\$99,285	= \$ 99,285	
70% production	15¢ x 8,660 cwt. = \$129,900 -	\$64,950	= \$ 64,950 +	\$37,110	= \$102,060 - \$18,000 = \$84,060 (selling loss)
100% production	16¢ x 13,238 cwt.	= \$211,808 -	\$99,285	= \$112,523	
70% production	16¢ x 8,660 cwt. = \$138,560 -	\$64,950	= \$ 73,610 +	\$37,110	= \$110,720 - \$18,000 = \$92,720 (selling loss)

PRESS RELEASE ON DAIRY PROPOSAL

Proposed changes in the federal milk price support program are typical of the Washington "quick fix," providing a cash windfall in the short term to bait dairy farmers into a long term sting, warns Agriculture Commissioner Jim Nichols.

"Sure, the Senate Agriculture Committee compromise plan pencils out good for the average Minnesota and Upper Midwest dairy farmer, but only for the 15 month period the diversion payment is offered as incentive to reduce production. During that period diversion payments would provide up to 25 percent of cooperators' milk checks. "Then the roof is likely to cave in on the Minnesota dairy farmer who cut back his herd and production by up to 30 percent or more of the current output. He'll still be stuck with the nation's third or fourth lowest average milk price and an additional minimum of 65 cents in assessments, more likely \$1.15 in assessments for every 100 pounds of his reduced milk production.

"While the dairy farmer who trims his herd and production by from five to 30 percent will be able to maintain within three to nine percent of the present cash flow during the 15 months of diversion payments, a substantial cutback in Minnesota and the Midwest has scary immediate and long range implications for the whole livestock economy," Commissioner Nichols predicted.

He said that the 25 percent to 30 percent culling and slaughter sale of dairy animals that economists are predicting if Congress approves the present compromise will flood the slaughter cattle market and thus depress farm prices for red meat animals and poultry well below the present break even to loss levels. Current hog prices are the lowest in 16 months, matching the loss levels of the previous two years.

In Minnesota, a 30 percent cutback in milk production would send more than 325,000 dairy animals to slaughter in a few months. That figure represents one third of the current animal beef slaughter volume in Minnesota.

Sun belt and coastal states aren't going to cut back milk production. They have the consumer demand and get premium prices ranging up to 29 cents more per gallon than the \$1.10 that Minnesota dairy farmers are now receiving for milk. National reduction in milk production may even increase the prices paid dairy farmers in sun belt and coastal states.

He sees sun belt and coastal states gaining at Minnesota's expense, unless Congress, Minnesota's plywood senator and the Reagan administration come up with a more realistic and fair solution to the present dairy product surplus. The diversion payment incentive period should be lengthened to at least 24 months and the price slash and assessments for cooperators should be limited to 65 cents per 100 pounds of milk, Nichols argues.

Commissioner Nichols said that the proposed reductions in the milk support price, assessments of up to \$1.65 per 100 pounds or .14 cents per gallon, will leave the dairy farmer who does cut back production to qualify for a 25 percent diversion payment with a 25 percent to 27 percent smaller milk check along with a 10 percent or more loss in assets, when the diversion payments end January 1, 1985.

At the current rate of production and market prices, the average Minnesota dairy farm would gross about \$48,085 from a year's milk sales totaling 47,272 gallons.

That dairy farm, with a present herd of 89 animals, including 36 cows milking, would have to sell at least 27 of the animals probably 30 in order to reduce production enough to qualify for the 25 percent diversion payment. State-wide, the Minnesota dairy production is about eight percent above the base figure federal authorities are proposing.

Worth \$1,000 per head as dairy animals, these currently gross only about \$400 on the slaughter cow market. So culling to cut production would reduce the herd asset value from \$89,000 down to \$58,000. And the slaughter sales, while grossing perhaps \$12,000 would actually represent a \$19,000 loss in assets. Commissioner Nichols reasons that the loss and salvage values would be more seriously impacted because of the volume of Upper Midwest dairy cattle that could to slaughter in only two to three months. This probably would cut the slaughter cow price by \$50 to \$60 per head.

The average herd qualifying for the 25 percent diversion payment would gross an estimated \$10,162 from that incentive for having cut milk production by 11,818 gallons below the federal base period, or an actual 14,182 gallon cut from present production. That farmer would gross \$33,660 from his lower milk production if the combined cutting of the milk support price and the federal assessments cut only \$1.15 per 100 pounds or less than 10 cents a gallon off the current support price. His total gross of \$43,822 would be \$4,362 less than the average dairy farmer who does not cut herd or production and simply absorbs the \$1.15 per 100 pounds or dime a gallon price slash and assessments proposed.

When the diversion payments stop and 50 cents of the price slash is restored in 1985, the dairy farmer who cut back herd and production will gross \$35,822 or \$13,000 a year less than the dairy farmer who maintains current herd and production.

Senator JEPSEN. Thank you Ms. Kanten. As indicated here, we have a problem connecting individual as well as general areas of farm policy with the dairy industry. This has been much debated, and the big problem can be put in one sentence. In the past 10 years we've had a 32-percent decline in the consumption of dairy products, and we've had a 12-percent decrease in production. So that at this point in time—and I'm not judging this, just stating a fact—we are spending about \$6 million a day, or about \$4,800 every minute I sit here, buying dairy products and putting them in warehouses or storage places. In fact, we've got to go out and contract to build storage houses and warehouses to put them in.

We all need to lock arms and work constructively, as we have been doing. I know Senator Boschwitz has been working overtime on that.

I would ask the four of you leaders in agriculture in the Midwest the question that I've asked now for 4 years at the hearings held in Iowa and across the country, with regard to the Government's role in the conservation of our soil and water resources and government commodity programs.

Do you believe that there should be a requirement for some conservation and resource planning being integrated with commodity price support programs, or any government programs—FHA loans or whatever? I might make it a little more simple. Everybody understands voluntary versus mandatory. We use words like cross-compliance, but you notice I used the word "requirement," because that's what it is—that's the bottom line. Should government programs require soil and water conservation to be integrated into their programs for recipients?

The director of agriculture from Illinois, Mr. Werries.

Mr. WERRIES. There was a time, Mr. Chairman, when I thought the two should be separated, that soil conservation should be totally voluntary. I've left that position. I believe that farmers should be required to file conservation plans and adhere to those plans in order to receive the program benefits of the USDA commodity programs.

Senator JEPSEN. Mr. Lounsberry.

Mr. LOUNSBERRY. Senator, I've always felt that they should be together, and that the lack of cross-compliance—I call it cross-compliance, you call it requirement—but that the lack of it has been part of the reason for these failures over the last 30 years.

Senator JEPSEN. Mr. Ausman.

Mr. AUSMAN. Yes. I've already spoken to that issue, and only would add this. The argument has often been given that if you put cross-compliance into this, the other program won't work for you. But the problem we've had in recent years with some of our other price support mechanisms is that they have encouraged poor conservation, and we've come to a point of no return and clearly we have to look at this as a requirement.

Senator JEPSEN. Ms. Anne Kanten.

Ms. KANTEN. I very much feel that we need to emphasize conservation. And one of the basic problems, again, Senator, is the price structure in agriculture; that we're raising corn and soybeans on the hills, where corn and soybeans should not be raised, simply because that will give us an advantage in the market. And absolutely, we must look at conservation programs.

Senator JEPSEN. I thank all of you for your very interesting testimony. Telling it like it is is something Americans appreciate, and this is not always forthcoming from Washington. So it's refreshing to get outside Washington where our people are more prone, seemingly, to telling it like it is.

I appreciate your comment, Ms. Kanten, with regard to the importance of our domestic market. We are in an age of internationalization of agriculture, and that's key, very important. But I'd point out that the residents of the State of Virginia purchase as much food as the entire European Economic Community does, and that's our largest foreign customer. That gives you a little different perspective on the importance of our domestic market; when one State in this country purchases more than all of our foreign exports—foreign customers, in the entire European Economic Community.

I think we're spoiled in that we've got a quality of life and a level of food supply in this country that we think of as automatic. By working together, and with R&D, we can enlarge our markets; find better nutritional diets and even improve on the quality of life we have here.

Any closing remarks from any of you?

Mr. LOUNSBERRY. In line with that same thought, Senator, if we look at our total quantity and quality improved production over the past 25 years, I think it will take the total combination to continue to produce in quality and quantity that we are now if we're going to find markets. Either that, or we're going to have to cut back on our quantity of production.

Mr. AUSMAN. I'd just like to make a comment. I concur with what you're saying about the dairy industry. The point is, the key point we're making, is that we recognize we have a problem, and I think the industry is quite unified as to how they would like to approach it and be given that opportunity. I know, in Wisconsin, I have never seen unity such as we have between farmer organizations and all those involved in the dairy industry in attacking this. We used to debate this thing from all angles. Now we're together, in saying that we recognize we can't go on and produce at the levels we have, and have an excess supply of 10 to 11 percent. But the industry wants to be involved in a kind of different approach, and we want to be given the opportunity, and I guess that's the key to what we're saying.

Senator JEPSEN. You bet.

Thank you very much.

At this time, I'll call on panel No. 3, Don Johnson, chairman, Iowa State ASCS Committee, and Bill Brune, State conservationist, Soil Conservation Service for the State of Iowa.

If you two gentlemen will come forward.

All our panelists have been reminded to summarize their comments—each witness try to keep his oral comments to 5 minutes if possible. All of your prepared statements will be entered into the record in toto.

We welcome this panel to the hearing today.

Mr. Johnson, please proceed as you wish.

STATEMENT OF DON JOHNSON, CHAIRMAN, IOWA STATE ASCS COMMITTEE

Mr. JOHNSON. Thank you, Senator, for the opportunity to appear here today on a timely subject such as you have here, the next generation of farm policy. For us who are farmers and have sons or daughters interested in the farm operation as it is today, I think this is very much of importance.

Before recommendations can be made to correct and assure a prosperous economy of the future, I think we must recognize the problems that currently exist and the causes of such problems.

The marketing of agricultural products by farmers is the only true example of pure competition that exists in our economy today. The farmer is the only person in America today that takes his commodity to the marketplace and lets the market price determine what he will receive for his commodity on that day.

Farmers have been the victims of embargoes, real as well as implied. The marketplace recognizes embargoes instantly and farmers are required to accept an instant and dramatic loss from their products through no fault of their own. There is generally no hint of an embargo until it takes place; therefore, farmers are unable to prepare for this.

Farmers are subject to fluctuations of currency on the international monetary exchange perhaps more so than any other industry. These fluctuations, along with the violent fluctuations of precious metals, cause a direct impact on the pricing of agricultural commodities.

Since agriculture has become dependent on exports to such a large extent, their financial well-being is dependent on the economy of foreign countries more than any other industry.

Unseasonable weather, both here and abroad, causes both direct and indirect problems to agriculture and the farming community. I feel that my proposals will alleviate some of the problems which I have mentioned and completely eliminate some of those problems.

It is my feeling that the pure competitive market that is unique to agriculture must remain intact and farmers must continue to rely on the marketplace for the bulk of their income. Agriculture was founded on this principle and it must continue to prosper on this principle. It is due to this principle that the productivity of agriculture has increased more than any other industry in the last 20 years. This has enabled the American consumer to purchase his

food products for as little as 14 percent to 17 percent of his take-home pay. This is an advantage that no other consumers in the world enjoy.

In order to have a truly free agricultural economy, it is vital that Congress implements legislation that prevents the President, regardless of the administration, from implementing an embargo, real or implied, without the concurrence of Congress.

All of us in agriculture agree that embargoes and implication of embargoes are very detrimental to the markets at the time of the embargo. The psychological impact is apparent for some time. I think we are still suffering from the last embargo, especially through loss of credibility with other nations. They are greatly concerned about our reliability as a supplier. Since I am realistic enough to realize that this utopia brand of government in agriculture will never come to pass, I feel we will have to maintain viable production adjustment programs; thereby eliminating the possibility of an agriculture glut which we have at this time. This also will eliminate high storage costs to the Government, eliminate the need to provide storage for the commodity, and eliminate the need of commodity credit, continuing to sustain losses and additional expenses on takeovers.

The production adjustment program should be on the books permanently with only the degree of land that the farmer will be required to take out of production variable at the discretion of the secretary from year to year. This type of a program would enable the farmer to market the grain which they grow at the marketplace, thereby eliminating the need for takeover by the Government. In conjunction with this type of program, it would be advisable to maintain a reserve which would preferably be a worldwide reserve with all countries contributing and all countries sharing in this reserve when an emergency need arises in an individual country.

The production adjustment program could take several forms. However, the payment should be high enough for taking land out of production that it would be effective. It should have certain provisions contained in it whereby the livestock producer could take advantage of this program as well as the grain farmer. A provision in establishing a certain grain base which takes into consideration the fact that the livestock producer has devoted a large portion of the crop acres to forage—silage, legumes, haylage—should be taken into consideration. A factor of 0.625 could be used to establish the corn base, instead of the historical acres planted to corn.

The livestock farmer has a high percent of his farm in conserving use with only the minimum amount of land being planted to corn. This causes him to have a realistically low corn base, and we feel this provision will correct it.

I personally feel the 1983 PIK program was a great success and was probably the most popular production adjustment program ever implemented. It wouldn't be necessary to have too much modification from this program. However, it should take into consideration the livestock producer. In the future, farm programs should be developed by the Secretary from input from a group of farmers who are bipartisan and who represent all segments of the farming community.

This type of a program would be less costly to the taxpayer during an extended period of time, wasteful storage policies would be eliminated, annual costly storage payments would also be eliminated, farmers would no longer be required to suffer when the national economy is affected by a large increase in the dollar in relation to foreign currencies nor would they suffer from costly tariffs which are now practices of the European Community.

It is my feeling that if this type of a production adjustment program is implemented, farmers would no longer be pawns in the hands of high ranking government officials, to be maneuvered in an international trade war or other worldwide emergencies.

And we need to remember that all new wealth comes from the soil by way of crops, forestry, or mining.

The priority of all agriculture in the future and programs in general hinge on how well we use conservation of our soils.

This concern should reflect in programs of the future.

The following are some ideas to be incorporated in the farm program.

One, up to 30 percent diversion and conservation acres paid in escalating 10 percent segments, the amount to be determined at the discretion of the Secretary.

Two, modify amount of domestic PIK bushels.

Three, payments on diversion and conservation below 40 percent base of feed grains and wheat of total tillable acres, 25 percent higher payments for those cow-calf men and conservation practicing farmers. Give them a break.

Four, lower deficiency and target prices to 15 cents and \$2.65, and eventually phase out completely after 1 more year. Use this money to subsidize foreign exports either by price or expanded credit.

Five, deemphasize grain reserve and zero in on exports at any price.

Six, open for farmers in the 40 percent and under bases, full time if not granted 25 percent boost in payments. Give State committee power to establish bases after a review of cases on individual basis.

Seven, establish trade cabinet post and be aggressive, without any interference from the State or Defense Departments, hopefully the Agriculture post to be the major influence here.

Eight, conservation practices to be more or less determined by observation of directors and control of money to this rather than enhancement of land and farms for resale purposes.

Nine, FCIC looked at again very closely.

Ten, have a stable supply produced, control production each year by percentage determined by the Secretary, using figures that will be running 1 year behind. Steady and dependable supply for world markets.

Eleven, eliminate proven yields for feed grains. Use ASCS established yields furnished by SRS.

Twelve, use PIK in foreign exports, maybe 1 for 3 or 4 instead of 1 on 1.

Thank you very much.

Senator JEPSEN. Thank you.

Mr. Brune, please proceed, as you wish.

**STATEMENT OF WILLIAM J. BRUNE, STATE CONSERVATIONIST
FOR THE STATE OF IOWA, SOIL CONSERVATION SERVICE, U.S.
DEPARTMENT OF AGRICULTURE**

Mr. BRUNE. Thank you, Senator. I'm Bill Brune, State Conservationist for the State of Iowa, with the U.S. Department of Agriculture Soil Conservation Service.

Before I go into my statement, I would like to personally thank you, Senator, for your strong support for soil conservation programs. In 1981 you were successful in giving the Soil Conservation Service \$10 million for a targeted effort that now is a very successful part of getting at the soil conservation problem. I'll address that more in my statement.

Also, through your efforts, personal efforts, the special areas conservation programs was continued into 1981, and the farm bill which is now, through your efforts, being implemented for this year under a supplemental and in fiscal year 1984, we hope with some funds, which I think goes a long way in addressing our serious erosion problem.

I am a soil conservationist and an Iowan, who has long believed that soil conservation is one of the most important issues facing us today. At the same time, I believe it is one of our most underrated national priorities. So I am privileged to participate in this committee field hearing on farm policy in the future.

In Iowa, we are losing topsoil from water erosion at an alarming rate. This rate has accelerated the past couple of years on unprotected sloping cropland from heavy rains that have fallen across the State. This erosion is reducing yields and net returns to farmers, increasing the cost of production and causing downstream damage from sediment. The most serious problem is the long-range effect of gradually reducing the ability of our farmers to economically produce food for this nation, as well as the world.

The State of Iowa is an important part of the highly productive cornbelt region of the United States. This productive agriculture is made possible by large areas of high producing soils, a favorable climate, and an able farm management. The ability of Iowa soils to continue to produce excellent farm crops is dependent upon a strong soil conservation program of permanent land treatment measures that will maintain the soil resource base.

Before we broke our prairie soils and timber soils for agricultural production, we had 12 to 16 inches of topsoil over most of Iowa. Since we had less than 1 million acres of cropland and pastureland 100 years ago, we can say we had most of this 12 to 16 inches of topsoil then.

We look at our soil now and we find we have only 6 to 8 inches of topsoil left in many cases, and we have some fields particularly in southern Iowa, where the erosion has progressed to the point that it is uneconomical to raise corn and beans because of the erosion. In these cases, the land use has changed to a less intensive agriculture. We cannot afford to let this continue at the present rate.

For the Nation as a whole, erosion is a problem on over 30 percent of our cropland. In Iowa, we have a problem on over 60 percent of our cropland, twice the national average. A USDA Coopera-

tive River Basin Study recently completed in Iowa by the Soil Conservation Service, Forest Service, and Economic Research Service, shows that 57 percent of the cropland is eroding above tolerable levels. A similar study concluded that 40 percent of a 2.1 million acre area in southern Iowa will be severely eroded and unable to produce corn and beans or other crops by the year 2020, if erosion continues at the present rate. Right now, about 10 percent of that land is severely eroded. That's why most of it is in pasture and meadow. It is not easy to grow corn and beans in some of our subsoils.

While loss of another three-quarters of 1 million acres of cropland in the next 20 to 40 years may not seem like a lot, it is very serious when you consider this is happening in other spots of Iowa as well as across the Nation. The studies carried out in Iowa as part of the Soil and Water Resources Conservation Act of 1977, RCA, indicated that farmers, for the most part, realize that they have a serious erosion problem and are willing to make a commitment to address these problems.

The farmers are ready, then. What future farm policies are needed to solve these problems in the Nation as well as Iowa?

First, we need a farm policy that provides substantial cost sharing for installation of erosion control practices.

When we total the cost of treating cropland erosion, we find that we have a \$7 billion soil conservation job in Iowa alone. That's just the cost of the practices, without including technical assistance. Current cost-sharing programs, Federal, State, and county, coupled with the funds that farmers invest in conservation, total about \$40 million a year in Iowa. At \$40 million a year, it will take us 100 to 150 years to complete this job. Is this fast enough? Past experience says it's not.

We're a leading State in agricultural products, and we've lost half of our resource base on most of our sloping soils. Think of how important agriculture is to this country. It is the Nation's largest industry, and also our largest export industry, with over \$40 billion in export sales in fiscal year 1981. Each farmer feeds himself and 78 other Americans, and as a group, farmers spend more than any other business—about \$142 billion for goods and services—to produce crops and livestock in fiscal year 1981.

Agriculture is a strong basis of our economy, and the soil is the basis of our agriculture. Unfortunately, some of our soil has been mined, much like our mineral resources. Fertilizers have replaced topsoil to keep yields high—but there's a limit. We learned long ago in this country that soil is not a renewable resource within our lifetime, and time and time again civilizations have learned they'd better take care of what they have. Any cost-sharing moneys or other programs that help to do this would certainly be a benefit to our State and our Nation.

Second, we need to target technical and financial assistance to the areas where the most severe problems exist. The effectiveness of this approach has been demonstrated in Iowa's two targeted areas, where additional SCS technical assistance and ASCS cost-sharing funds have provided. As a result of this USDA targeted effort, farmer interest, conservation planning, and the application of needed conservation practices have all accelerated. This is a con-

cept in the new USDA soil and water conservation program that is working and, in my opinion, should be greatly accelerated.

Third, we need to coordinate all USDA farm policy to help achieve conservation goals. This includes commodity programs as well as trade policy. A recent example of a policy that can be very effective in promoting conservation is the payment-in-kind [PIK] program, aimed at reducing surplus commodities. Although the PIK program has aided conservation this year, future programs of this type can be made even more effective by requiring that idled acres have adequate residue and cover as a condition for program participation. Let's not miss these opportunities.

Fourth, future farm policy should include implementation of the full program called for in the recommended plan developed through the Soil and Water Resources Conservation Act. This, coupled with the implementation of the authorities in the 1981 farm bill would enhance the effectiveness of conservation policies and programs.

In the 1980's, this decade, we must stop the disastrous depletion of our finite soil resource. If we do not, we could be remembered as the self-centered, short-sighted society which squandered our soil resources.

Finally, we need a national commitment to soil conservation—one much, much stronger than we have had in the past. It's time for a strengthening of the land ethic, time for everyone to develop a sense of caring for the land. It's the right thing to do, and if we want continued food production from our land, it's the rational thing to do.

Thank you, Senator.

Senator JEPSEN. Thank you. Do you think that soil and water conservation programs can be integrated with other programs, and should they be required?

Mr. BRUNE. Well, I do not support a mandatory soil conservation program. I think it needs to continue to be a voluntary program. But I strongly support cross-compliance, where a farmer chooses to become part of the program that he be required to take care of the soil conservation aspects of it.

Senator JEPSEN. All right. You think it should be voluntary, but if he chooses to partake, he should be required to do it?

Mr. BRUNE. That is correct.

Senator JEPSEN. All right. Mr. Johnson.

Mr. JOHNSON. Well, you know, this is a hard one to answer either yes or no, but I'd like—

Senator JEPSEN. I've been trying to get a yes or no answer now for 4 years. [Laughter.]

Mr. JOHNSON. I'd like to say it this way: That with the PIK program this year, I think there's real opportunity for landowners and operators for upgrading conservation on those particular acres. I know on our particular farm, we're doing this. We're building some terraces, we're repairing tiles and helping to rejuvenate the waterways, and so forth.

So a voluntary basis is much better when we're starting to talk about these more expensive erosion control measures—terraces, waterways, are rather expensive to install. Now, when we're getting into no-till and minimum till, I can see where there should be

a cross-compliance here, to require this if a farmer participates in a farm program.

Senator JEPSEN. Looking at it on a very practical basis, I've had farmers tell me—my own brother, among others—they're going to have a hard time paying for terraces. That's the bottom line.

What I hear you saying is that where a thing is expensive we'd better stick with the "carrot-stick" approach. But in the areas where it would be a matter of no tilling we might possibly look toward the cross compliance aspect. Is that accurate?

Mr. JOHNSON. This is what I've been trying to say; yes, sir.

Senator JEPSEN. OK. Are there other portions of Iowa, Mr. Brune, which can no longer be profitably farmed due to soil erosion?

Mr. BRUNE. Yes; there's small segments, particularly in southern Iowa, where the land use has gone into pasture because it's just not efficient to raise rowcrops because of the erosion.

Senator JEPSEN. I assume that you and most people dealing with soil conservation across the country are in favor of targeting, with the caveat that it should not take away from the established programs. In other words, there should be extra funds for that.

Mr. BRUNE. I can say a strong yes to that, Senator. And the targeting approach is working in Iowa, and it has been a tremendous boon to working with farmers one-on-one to get conservation plans developed and to implement a plan.

But here again, as Mr. Johnson pointed out, the permanent practices that are needed in Iowa because of our sloping lands—we need terraces—these are expensive, and farmers need help. And I guess this is why that I feel so strongly that we should not have a mandatory conservation program, because I've worked with farmers for 35 years, and they will do it if you give them incentives. A good example is that here in Iowa, every one of the 101 soil conservation districts has a waiting list for farmers to apply conservation practices, primarily terraces, if cost sharing is made available, and every dollar of State, county and Federal cost-sharing dollars is used and still is not enough to take care of the farmers' needs.

So I think that the farmers, in conservation, are ahead of the governmental agencies in their concern for conservation.

Senator JEPSEN. All right. Thank you, Mr. Brune. Thank you, Mr. Johnson.

I want to take this time to publicly state that, as chairman of the Subcommittee on Soil and Water Conservation of the Senate Agriculture Committee, it's been gratifying to me, being from Iowa, to talk about and to hear reported across this country about Iowa's taking the lead in soil conservation. I've heard it referred to as the lead program, something to work toward and pattern after, and I've heard about delegations coming to Iowa to study it. The innovative soil conservation loan program recently brought into effect here shows that we're willing to do things.

I might add that we've got more to do than most States. We have more tons lost per acre. When I was holding hearings in Jackson, Miss., they made a point of giving me little jibes and thanking me for all the rich topsoil we send to them, that it helped them out a lot down there.

Thanks a lot for coming, and thank you for all the good work you're both doing.

Mr. BRUNE. Thank you for having us, and thank you for your continuing support of soil conservation.

Mr. JOHNSON. Thank you, Senator.

Senator JEPSEN. At this time, I'd like to call for the next panel who are, Lee R. Kolmer, Iowa State University, College of Agriculture; Kelley Donham, doctor of veterinary medicine, Institute of Agricultural Medicine, University of Iowa; Harold Guither, agricultural economist, University of Illinois; Harold Breimyer, professor of agricultural economics, extension economist, University of Missouri; and Peter Helmberger, agricultural economist, University of Wisconsin.

There are a lot of stories about economists in Washington.

Mr. GUITHER. I've heard them all.

Senator JEPSEN. You've heard them all? All right. Then I won't share any with you. [Laughter.]

I'm looking forward to hearing your testimony. I would remind you again that your prepared statement will be entered into the record, and I would advise you that I have some specific questions. I'm looking forward to having an exchange of ideas with you when you're finished.

Mr. Kolmer, being from the host State here, would you please lead off?

STATEMENT OF LEE R. KOLMER, DEAN, COLLEGE OF AGRICULTURE, AND DIRECTOR, IOWA AGRICULTURE AND HOME ECONOMICS EXPERIMENT STATION, IOWA STATE UNIVERSITY, AMES, IOWA

Mr. KOLMER. I'm pleased to be invited for my testimony.

The agricultural policy legislation that will be passed by Congress in 1985 is of critical importance to every citizen of the Nation and to a very significant percentage of the people of the world. The diverse interests of farmers, agri-businesses, rural communities, domestic consumers, foreign buyers, and the military, economic and diplomatic goals of the United States will all come into play as future agricultural policy is developed.

In the few minutes I have I will summarize the three basic policy alternatives available to us and the impact of these alternatives upon the major sectors of the agricultural industry. I will submit more detailed written testimony that has been developed by a team of Iowa State economists. They have outlined the background of the macroeconomic setting, the trade situation and policy and the potential growth in domestic demand for farm products. They have presented the three major alternative approaches to agricultural policy available to the Nation and the impacts of each of these alternatives upon consumers and taxpayers, the agribusiness and transportation complex and the structural impact on farms, on the agricultural credit system and on rural communities.

This exposition drives home the fact that there are no easy solutions to the farm price and income dilemma, but it also indicates that there is an extensive basis from which we can foresee the impacts of choices made by our Government.

Basically, we have three approaches to future farm policy available:

First, we can continue with the present policy of idling land by making the acreage reduction program terms attractive enough to secure voluntary participation.

Second, we can adopt a market-oriented policy that relies more heavily upon market prices to achieve a reasonable balance between supply and demand.

Third, we can institute mandatory government supply controls through acreage limitations or marketing allotments.

Each of these alternatives has serious impacts upon producers, agribusinesses, rural communities and our resource base. None of the alternatives will result in a competitive rate of return for all the resources presently employed in agriculture. All three will result in significant changes in farm size and composition.

The present voluntary approach, if continued, would have a detrimental effect upon the livestock industry, would result in significant disinvestment in the farm supply and marketing industries, would acceleration movement toward fewer and larger farms, and would create the largest Treasury cost.

The second basic alternative is market-oriented program with a payment limitation and lower loan and target prices. It would increase farm operator risk and farm income variability. It would bring financial failure to significant numbers of highly leveraged farmers because land values would decline. At the same time, a market-oriented approach would more fully utilize resources in the marketing and transportation complex because grain prices would decline and domestic and export grain sales would increase. Lower grain prices would stimulate livestock and poultry production, grain feeding would expand and consumer meat prices would tend downward.

Increased risk and lower crop prices would discourage expansion of irrigation and cause shifts in the use of marginal land. Those operators who can manage in the face of increased risk would tend to expand farm size and volume of output. If payment limitations were modest, treasure costs would be reduced significantly.

A mandatory supply program geared to support prices approximating the cost of production is the third basic alternative. It would result in more farm-price stability than either a voluntary diversion program or a market-oriented program. The trend toward larger farms would continue. Treasury costs would be significantly lower than present program costs, because the farm-income improvement resulting from reduced market supplies would be financed primarily through increased consumer prices. The market and transportation complex would experience essentially the same difficulties they face with the present program. If, however, the supply-control program were targeted to reduce production on the most erosive soils and in irrigated areas, the forced adjustment in these areas would result in disproportionate losses and liquidation of farms in those areas.

U.S. agricultural policymakers face difficult choices during the next several years. Nearly every sector of U.S. agriculture has excess capacity. Any agricultural policy that will shrink output and improve average farm operator income will benefit some pro-

ducers, but will also be detrimental to a significant portion of farm operators, farm supply and marketing businesses, and rural communities. A critical question for policymakers is how the costs of adjustment will be distributed among various agricultural and public sectors.

Given our present perspective on the 1982 and 1983 policies designed to manage supplies through voluntary producer action, it seems that we probably did too little to control output in 1982 and too much in 1983. The result is economic distress for the agribusiness sector and some livestock producers. In addition, the experience of recent years dramatizes the fact that we are dealing not only with a "farm" problem, but rather, we are seeking a solution for a national problem.

The United States' large agricultural capacity is a great national asset. Taxpayers, farmers and agribusiness owners have invested large amounts in agriculture over the years. We need a coherent, long-term policy that deals consistently with farm-operator incomes, resource conservation and utilization, international consumer prices and trade. The development of consistent, effective policy requires recognition of the interdependence of the input-supplying, output-processing, producing and consuming sectors of the agricultural industry.

Thank you, Senator.

[The prepared statement of Mr. Kolmer follows:]

PREPARED STATEMENT OF LEE R. KOLMER

Chairman Jepsen

and members of the committee:

Clearly U.S. agriculture has excess capacity. U.S. consumption plus foreign sales were 5-10 percent less than production in 1981 and 82. Except for massive and expensive supply control, 1983 production would similarly exceed the weak current demand. Stocks of corn and rice at the end of the current marketing year will be about 50 percent of this year's utilization. For wheat and cotton the carryover into next year will be about 70 percent of this year's disappearance.

United States agricultural capacity is a valuable national asset. Besides supplying the U.S. population, U.S. agriculture earns more than twice the foreign exchange needed to pay for all the coffee, sugar, bananas and other agricultural imports to the U.S.

However, both farmers and taxpayers find it costly to carry the large U.S. agricultural capacity through periods when it cannot be fully employed. In 1981 and 82 U.S. agriculture was allowed to fully produce and the weather provided two good crops. Between weak demand and little supply control, grain prices fell below total cost of production but were kept above variable costs by price supports. Favorable weather caused stocks to accumulate beyond expected future need. To hold excessive 1982 production off the market, the farmer-owned reserve was made attractive. In 1983 PIK was offered to control production and reduce excess stocks. This combination was the most expensive farm program in our history.

Many groups in Iowa have been hurt by weak demand, excess capacity, low farm prices and supply control. Most Iowans would prefer restoration of full employment for agriculture at prices that would cover costs of production. This solution is in the arena of U.S. and foreign macroeconomic policy.

In 1982 many of our full-time grain farmers, especially those trying to expand rapidly, found themselves dangerously short of cash--even unable to meet fixed debt obligations. In 1983 many of our livestock feeders, grain elevators and farm supply businesses will find gross margins will

not cover expenses and service debt. They will have a cash-flow shortage as a direct result of storage and supply-control policies.

II. How the Macroeconomic Environment and Macroeconomic Policies Affect Agricultural Prices and Incomes

Overview.

From the end of World War II through the 1960's, the U.S. agricultural sector operated in a macroeconomic environment which, by today's standards, was uncomplicated and highly stable:

- .. Agricultural production was predominantly directed toward the domestic market; exports through commercial channels were small.
- .. The macroeconomic policies -- monetary and fiscal -- of the federal government exhibited a great deal of consistency over time.
- .. The rate of inflation was low (except in the late 1940's and, to a much lesser extent, during the late 1960's).
- .. Business cycle contractions were generally mild and of short duration.
- .. Federal agricultural price-support programs helped reduce year-to-year variability in the prices of most U.S. agricultural products.

Since the early 1970's U.S. agriculture has operated in a much different macroeconomic environment:

- .. Exports have become a significant portion of the total demand for U.S. agricultural products and export demands have proven to be variable.
- .. Monetary policy has become erratic. At times, the money supply growth rate has been increased dramatically in order to stimulate aggregate demand and to reduce the unemployment rate. At other times, it has been reduced sharply to lower the inflation rate.
- .. The rate of inflation has generally been high by the standard of U.S. historical experience and it has exhibited a great deal of variability.
- .. Two rather long and severe business cycle contractions (1974-75 and 1981-82) were experienced. In addition, there was virtually no expansion in the aggregate real output of the U.S. economy from mid-1979 through the end of 1982.

.. Federal agricultural price-support programs were generally relaxed so that agricultural prices became more subject to the effects of short-run shifts in demand and supply.

Review of the Macroeconomic Environment from 1970 to 1978

Between 1969 and 1972, the December-to-December growth rate of the U.S. M1 money supply was increased from 3.2 to 9.2 percent per year. This was an extraordinary inflationary action by the Federal Reserve authorities. As a result, inflationary pressures in the United States became so great in 1973 that the federal government had to abandon its system of wage and price controls (which had been put in place in mid-1971). There was a general "flight from the U.S. dollar" abroad; the Bretton-Woods system of fixed exchange rates collapsed; and the value of the dollar dropped in terms of European currencies by about 20 percent.

These events plus generally poor crop production throughout the world (except in the United States) caused U.S. agricultural exports to rise sharply and U.S. net farm income (deflated by the Consumer Price Index) to more than double between 1970-71 and 1973. They also caused the U.S. inflation rate to rise into the "double digit" range.

The Federal Reserve authorities then adopted a tight-money policy. Between 1972 and 1974, the December-to-December M1 money supply growth rate declined from 9.2 percent to 4.4 percent per year. This rapid shift in monetary policy from highly inflationary to deflationary appears to be the principal cause of the longest and most severe business cycle contraction experienced by the U.S. economy in the post-World War II period (that of 1974-75). It also had its desired affect of reducing the rate of inflation. By 1976 the rate of inflation (by all measures) was less than 5.0 percent per year. It also caused the foreign-exchange value of the U.S. dollar to stabilize.

Partly due to the depressed domestic market for U.S. agricultural products and partly due to improved crops abroad, net farm income (deflated by the Consumer Price Index) fell by about 60 percent between 1973 and 1976.

Following the recession of 1974-75, the U.S. economy expanded strongly. During each of the years from 1975 through 1978, real (i.e., inflation adjusted) GNP rose by more than 5 percent and employment rose by about 4 percent. This rapid expansion was partly due to a generally permissive fiscal policy (although the federal budget was nearly balanced by early 1979), but it was mainly due to an easy monetary policy. Between 1975 and 1978, the M1-money-supply growth rate increased from 4.9 percent to 8.3 percent per year. During this same time period, real net farm income rose modestly.

The 1975-78 expansion in the U.S. economy was so vigorous that by 1978 the inflation rate was once again pushing into the "double digit" range and the U.S. dollar was rapidly falling in value in terms of European currencies.

A Review of the Macroeconomic Environment Since 1978

By early 1979, it was obvious that something had to be done to curtail the growth rate of dollar spending for the output of the U.S. economy, lest the inflation rate be pushed into the 20 or more percent range. Consequently, Federal Reserve authorities adopted a tight-money policy. Under this policy the growth rate of the M1 money supply was reduced from an annual rate of 8.2 percent in 1978 to 3.8 percent in the first half of 1982.

The purpose of the tight-money policy was to reduce the rate of inflation. But the way a tight-money policy works should be obvious to all by now. It drives up interest rates, curtails private borrowing and, thereby, curtails spending for the output of the economy.

But the reduced rate of growth of spending for the output of the economy does not immediately cause a reduction in the rate of inflation. This is because inflation takes on something of a life of its own--it gets built into human behavior concerning wage and price increases.

Consequently, when the growth rate of dollar spending drops off, inflation temporarily continues at its previous rate or even increases, while real spending for the output of the economy is curtailed and the economy generates excess productive capacity. With the rise in excess capacity and rise in the unemployment rate, the rate of wage and price increases slowly declines.

This is precisely what occurred during the 1979-82 period. The tight money policy reduced the rate of growth of dollar spending for the output of the economy, but the inflation rate responded sluggishly. Consequently, the real output of the economy remained essentially unchanged between mid-1979 and late-1982 and we experienced a short recession in 1980 and a long recession in 1981-82.

Clearly, the agricultural sector also was affected. On the one hand, lack of expansion in the U.S. economy slowed the growth of consumer incomes and thus slowed the growth of domestic demand for agricultural products. On the other hand, the tight money policy, by pushing up domestic interest rates, attracted a flood of foreign capital, which raised the value of the U. S. dollar (in terms of European currencies) by about 20 percent between 1979 and 1981. As a result, foreign demand for U.S. agricultural products dropped sharply and net farm income (deflated by the Consumer Price Index) fell from \$14.9 billion in 1979 to \$9.2 billion in 1981.

All of this was compounded by the tax cut of 1981. Tax rates were cut substantially in 1981 but there was no overall cut in the rate of growth of federal expenditures. (Indeed, the rate of growth of federal expenditures in real terms was larger under the budget proposals of the Reagan administration than was the case during the late 1970's). This has produced mind-boggling federal fiscal deficits in the neighborhood of \$200 billion (or more) per year for the foreseeable future.

The combination of an extremely easy (inflationary) fiscal policy plus a tight monetary policy produced very high real interest rates (i.e. nominal or actual interest rates less the rate of inflation). This caused the exchange value of the U.S. dollar to rise farther. By late 1982 or early 1983, the value of the U.S. dollar in terms of European currencies was up about 40 percent from its 1979 level. This has greatly depressed the demand for U.S. agricultural exports and, undoubtedly, is the major explanation for the decline in real net farm income to \$6.7 billion in 1982.

The Macroeconomic Outlook for the Future

The macroeconomic outlook for the U.S. economy and for agriculture is encouraging in the short run but discouraging in the long run.

Since mid-1982, the U.S. M1 money supply has been growing at a rate of about 14 percent per year. This will cause the U.S. economy to expand vigorously for at least another year. But unless the rate of money supply growth is cut back soon and hard, the result will be another dose of "double digit" inflation.

The current rapid rise in the money supply will likely cause the exchange value of the U.S. dollar to begin to move downward somewhat. Thus, the combination of rising real economic activity in the U.S. plus the decline in the value of the exchange value of the U.S. dollar should increase the demand for U.S. agricultural products.

But the long run outlook for the U.S. economy and the farm sector is not good or, at least, not stable. For one thing, Federal Reserve authorities appear to have learned nothing from our experience during the 1970's. We appear to be heading toward another dose of excessive growth in the money supply, with accompanying double-digit inflation. Furthermore, no real attempt is being made by the President or the Congress to reduce federal deficits below the triple-digit level.

III. Reduced Foreign Demand for U.S. Farm Products, the Major Explanation for Excess Capacity in U.S. Agriculture

The value of U.S. agricultural exports is declining this season for the second consecutive year. This news brought shock waves across the U.S. agricultural sector in 1982 and early 1983. While export earnings remain huge in comparison with a decade ago, weaker foreign demand has cut U.S. net farm income, sales of farm-supply industries, volume of grain transportation and handling, and employment of workers in rural areas and industries related to agriculture. Recent projections indicate that U.S. agricultural exports in the 1982-83 fiscal year (October-September) will total \$35 billion. That represents a 10-percent decline from the previous fiscal year and a 20-percent drop from the peak level in 1980-81.

Rising world stocks placed sharp downward pressure on world feed grain and oilseed prices in late 1982. But by spring 1983, world feed grain prices had recovered to the highest level since early 1981. Higher prices were due to heavy farmer participation in the U.S. Payment-In-Kind and U.S. Grain Reserve Programs. The Payment-In-Kind Program may reduce 1983 world grain production modestly, but with normal growing conditions, aggregate world supplies are expected to be fully adequate to meet market demand.

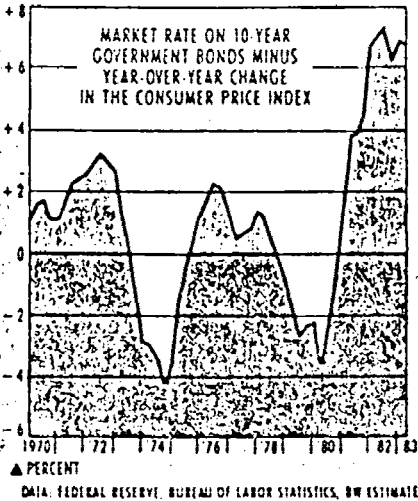
Financial Developments Restraining U.S. and World Trade

Key factors behind the recent weakness in farm product exports include (1) recent strength of the U.S. dollar and (2) debt burdens of several important grain importing and exporting nations. These developments are related to U.S. and foreign monetary and fiscal policies.

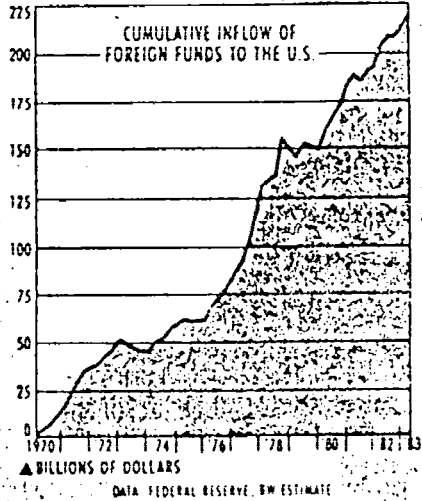
In the early 1970s, U.S. trade deficits and less restrictive U.S. and foreign monetary policies brought a shift from fixed currency exchange rates to variable rates that fluctuate with changing market conditions. This change led to a substantial depreciation of the U.S. dollar against most foreign currencies during the decade. As the dollar fell in value, foreign buyers of farm products could obtain more U.S. dollars per unit of their domestic currency than previously. That dramatically lowered the cost of U.S. agricultural products in many foreign markets, and contributed to the upward explosion of American farm exports from 1972 to 1980.

By the end of the decade, the U.S. Federal Reserve System began restraining money-supply growth in an effort to curb inflationary pressures. This restraint, the resulting high U.S. interest rates (Figure 1A), tax policies aimed at encouraging U.S. domestic investment, and other factors brought a flow of foreign investments into the United States (Figure 1B). The influx of funds has substantially strengthened the U.S. dollar against most foreign currencies in the last two and one-half years (Figure 1C). A stronger dollar increases foreign buyers' costs for purchasing U.S. (Figure 2) products thus retarding export demand (Figure 1D).

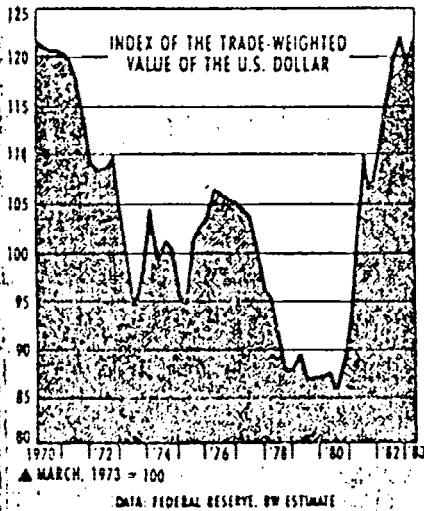
**REAL U.S. INTEREST RATES
HAVE HIT HISTORIC HIGHS...**



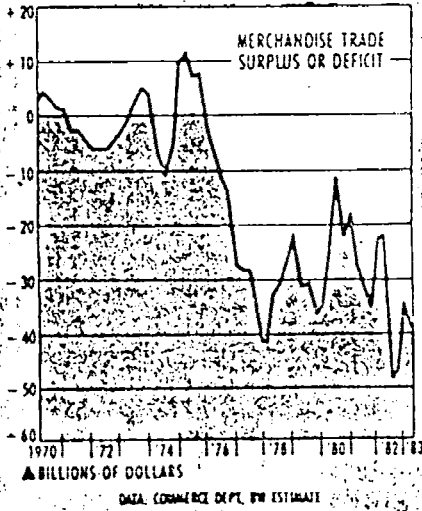
...ATTRACTING ENORMOUS AMOUNTS OF FOREIGN MONEY...



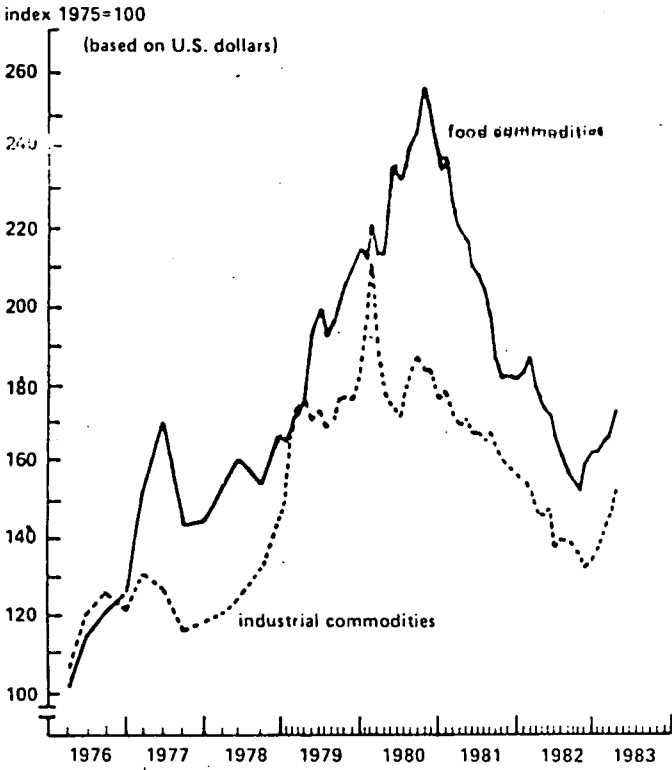
...SENDING THE DOLLAR SKYROCKETING...



...AND WEAKENING U.S. TRADE



Price indexes of major internationally traded commodities*



*Compiled by *The Economist* for 19 internationally traded industrial raw materials--excluding petroleum--and 16 food commodities.

With the stronger dollar, prices to foreign buyers have declined much less in the past two and one-half years than in U.S. cash markets. And in many foreign markets, prices to foreign users actually increased substantially while U.S. prices were declining.

In many countries, strong economic growth during the 1970s was financed by deficit government spending, with a rapid expansion of outstanding private and public debts. Both governments and private borrowers anticipated that inflated prices of their exports would meet future cash-flow requirements for debt servicing.

With global inflation slowing dramatically in the early 1980s, large outstanding debts are now limiting the ability of many nations to obtain financing for purchases of U.S. farm products. Exporting nations also are being pressured to maintain and/or increase exports to meet foreign-exchange needs for debt servicing. With sluggish global demand, these pressures are creating a trade environment where exporters attempt to use price reductions, subsidies and other means for expanding their shares of a declining total market.

Policy Issues in World Food Trade

Global food and agricultural policies will impact heavily on American farmers the rest of this decade. In fact, trade-related policies appear to be more important to U.S. agriculture now than in the past two decades. Important trade issues include monetary and fiscal policy and exchange rates, embargoes, export subsidies, import restrictions, supply management, agricultural development, bilateral trade agreements, global food security and alternatives for financing imports of developing nations. The current weakness in agricultural exports from many nations is strongly related to monetary and fiscal conditions. Attention to this area is likely to be most effective in improving the longer term performance of American agricultural exports.

Monetary and Fiscal Policies

U.S. agricultural exports are being restrained by debt burdens of several developing and middle-income nations. Numerous factors contributed to the build-up of excessive debts including (1) unrealistic expectations about future demand growth and inflation rates in developed nations, (2) substantial growth of the U.S. money supply in the 1970s and a plentiful supply of funds available for loans to developing nations, and (3) recent change in U.S. and foreign monetary and fiscal policies that have generated high interest rates, a slowdown of economic growth in industrial nations and a strong U.S. dollar.

With widespread use of variable-interest loans, high real interest rates have made developing nations' debts more burdensome than originally anticipated. In addition, developed nations are major importers of products

from the developing world. A slowdown in economic growth of major industrial nations has contributed to the debt burdens of potential foreign customers for U.S. farm products by slowing the growth in demand for foreign products.

To safely resolve current debt problems, moderation and patience will be required. It appears likely that the next few years will be a period of global adjustment and consolidation of debts, with world food trade growing more slowly than in the 1970s. World economic growth also appears likely to be less robust than in the last decade, but could accelerate in the late 1980s as debt pressures diminish. Future growth rates will depend heavily on policy actions taken in the next two years.

Embargoes

U.S. has not been the only nation to halt exports of farm products in recent years. Exporters such as Brazil, Argentina, Canada, Australia and Thailand often halt sales of agricultural commodities because of limited supplies. Exportable supplies from these nations are much smaller than those of the United States and such embargoes generally have little market impact. However, the United States is by far the largest exporter of wheat, coarse grains and soybeans, and a U.S. embargo has a substantial impact on world trade patterns. Embargoes distort market signals to the United States and foreign producers. In some cases, U.S. trade restrictions may encourage increased domestic production by importing nations. Without strong cooperation from other exporting countries, embargoes have been ineffective in restricting total imports of an individual country. For these reasons, trade embargoes are undesirable from an economic viewpoint.

Recent legislation provides U.S. agriculture with substantial protection against trade embargoes except in cases of national emergencies. This legislation is likely to reduce but not completely eliminate the possibility of U.S. export embargoes in the years ahead.

Trade Subsidies

Trade subsidies are used by some nations as a means of reducing domestic surpluses or increasing their share of global trade. With declining world-grain exports in 1982-83, surplus supplies in the European Community and the United States have generated increased pressure for use of trade subsidies. Trade subsidies can accomplish their objectives only if (1) they are targeted to countries otherwise lacking purchasing power or (2) they cause competing countries to reduce production or increase carryover stocks. Trade subsidies may create a trade war with increasing costs to taxpayers as each country matches the other's increasingly larger subsidies in an attempt to obtain a larger share of the market. In the current U.S.-EC subsidy situation, the United States has obtained substantial 1982-83 flour sales to Egypt at Europe's expense, but lost wheat sales to Europe in China.

Trade subsidy impacts on production in developing nations also should be considered. Heavily subsidized exports to developing countries can decrease incentives to expand production in recipient nations. In the longer run, large-scale use of such subsidies could hurt some developing countries. Given these potential negative impacts, it seems advisable to use trade subsidies with substantial caution. They should not be expected to solve import-export problems that stem from world economic problems.

Bilateral Trade Agreements

In 1976, the U.S. entered into its first five-year grain trade agreement with the Soviet Union. With Russia as one of the world's largest grain importers and with large year-to-year variations in import needs, potential disruptions in the grain market were ever-present. To reduce uncertainty about Soviet purchases, the U.S.-USSR grain agreement provided for specific minimum and maximum quantities of U.S. grain to be sold annually to USSR. The United States has negotiated similar agreements with Mexico and the People's Republic of China.

Bilateral agreements are intended to provide importing nations with an assured quantity of grain regardless of world market conditions. In that sense, they tend to bypass the normal market functions of discouraging grain use when world supplies are limited and encouraging use when supplies are large. As an increasing share of the global grain trade is brought under such agreements, one can expect more severe adjustment burdens in countries that rely on relatively free-market conditions to balance changing supplies with demand.

A similar impact stems from the EC variable levy and high internal price support system for wheat and coarse grains. The system to a large extent insulates EC grain users from variations in world supplies. These and other policies which reduce needed utilization adjustments by large grain users tend to magnify the adjustment burden faced by U.S. and certain developing nations. From a policy standpoint, it is questionable whether widespread global use of trade agreements is desirable for American agriculture. However, a case might be made that such agreements are appropriate with the Soviet Union because of its centralized government purchasing agency and a resulting potential for large unexpected fluctuations in its imports.

Food Security

Despite burdensome grain carryover stocks in the U.S., food security remains an important and complex policy issue for much of the developing world. The geographic distribution of inventories is important for the food security of developing nations, and also affects prices paid to producers in the U.S. and other exporting nations.

Unresolved issues in world food security include (1) the desired size of reserve stocks both globally and in individual countries, (2) methods of sharing storage costs, (3) procedures for timing the acquisition and release of reserve stocks, and (4) impacts of reserve stocks on producers in both importing and exporting nations. With the differing viewpoints of producers, consumers, exporters, and importers of food, the prospects for a large-scale unified world food reserve system remain clouded.

Trade Protectionism

The sluggish world economy, high unemployment levels and declining world trade have generated increasing global pressures for protection against import competition. In the United States, examples of protectionist pressure include recent restrictions on textile imports and discussions of further restrictions on imports of foreign autos and steel. In responding to these pressures, policy makers should note the experience with protectionism in the early 1930s. Similar world economic conditions led to passage of the Hawley-Smoot Tariff in the United States in 1930. This act provided high tariffs on U.S. imports and was one of several factors contributing to a substantial decline in global trade and economic activity. Import restrictions tend to discourage trade by restricting the ability of nations to earn foreign exchange for buying other country's products.

Other Policy Areas

It appears that most of the production adjustment to match declining world trade will be done by the United States. From a U.S. viewpoint, it would be desirable to have the adjustment burden shared by other exporting nations. But so far, no mechanism has been developed to do so. The future of food production and trade in the developing world will depend heavily on its access to financing, not only for imports but also for economic development. Developed nations and world monetary authorities face a major challenge in the years immediately ahead in finding creative ways to finance these needs.

IV. Domestic Demand for Farm Products Little Affected by Macro Policy

Domestic demand for products of the grain-livestock industry is rather stable--growing slowly with population, shifting to some extent with changing consumer tastes and preferences, dietary admonitions and relative prices of meat products, but fluctuating little with the strength of the nation's economy. Recent USDA research along with observations from the 1970s and early 1980s suggest that domestic demand for meat is slightly but not strongly influenced by the level of U.S. economic output. The quantity of meat consumption during the current recession was nearly stable, perhaps through growth of built-in U.S. income transfers such as food stamps, unemployment compensation, social security, and various feeding programs. The index of prices received by farmers for meat animals was also rather stable from 1980 through 1982.

U.S. per capita consumption of all meat has been remarkably stable throughout the business cycles of the past 12 years. In 1971, consumption of red meat and poultry was 205.6 pounds per capita (retail weight red meat and ready to cook poultry). In 1983, it will be about 204.6 pounds. The record level of consumption per capita was in 1981 at 207.6 pounds.

The consumption pattern of the last decade indicates that specific meat purchases are sensitive to relative prices of various meat and poultry products. The mix of red meat vs. poultry varies with cyclical levels of livestock production, but the poultry share has trended upward since 1971. During 1971-1983, beef consumption per capita declined 6.6 pounds along with an 8.2 pound decline in pork consumption. These declines were offset by a 15.7 pound increase in poultry consumption.

The shift from pork and beef to poultry tended to reduce domestic grain feeding, with the likely impact being about 150 to 200 million bushels corn equivalent or slightly less than 4 percent of total 1982-83 U.S. feed-grain feeding. More poultry, on the other hand, slightly increased the demand for soybeans and soybean meal. Several factors probably contributed to this trend away from red meat to poultry, including relative prices, conversion of pasture to cropland, the economic recession, changing dietary attitudes, and innovations in poultry retailing and the fast-food industry.

A strong U.S. economy and reduced unemployment would tend to increase U.S. demand for meat products in the years ahead, thus encouraging a small increase in domestic grain feeding. But with U.S. meat consumption at near-record levels of over 200 pounds per person, domestic meat demand appears likely to be much less responsive to general economic conditions than export markets.

Although the level and mix of meat consumption are major determinants of domestic grain feeding, several other factors also are important. During the 1970s the intensity of grain feeding per meat animal seemed very sensitive to meat-feed price ratios. In the last 12 years domestic corn feeding has fluctuated from a low of 3.23 billion bushels in 1974-75 when feeding

was unprofitable and corn prices averaged \$3.03 per bushel. The high was 4.52 billion bushels in 1979-80 when U.S. average farm price was \$2.52 per bushel. Amounts fed vary through adjustments in livestock slaughter weights, amount of time beef animals are on pasture vs. in feedlots, extent of culling of breeding stock, substitution of protein meal for grain, roughage feeding and other factors.

U.S. corn feeding in 1982-83 is expected to total 4.5 billion bushels, slightly below the record 4.52 billion bushels fed in 1979-80 but 13 percent above 12 years earlier and 39 percent above the recent low point in 1974-75. Combined feeding of the four feed grains is expected to be about two percent greater than 12 years ago.

In addition to the changing composition of the U.S. meat supply, domestic grain feeding has not trended upward because of (1) continued improvements in livestock breeding, (2) better management of feeding operations, (3) development of new growth stimulants in cattle feeding, and (4) increased levels of protein feeding. Soybean meal feeding in the U.S. in 1982-83 is expected to be 45 percent above 12 years earlier.

In short, macroeconomic policies contributing to a strong U.S. economy will generate only small increases in the quantity of meat the U.S. demands and hence will encourage only a small increase in grain feeding. Thus domestic increases in utilization of meat and feed grain in a recovery likely will fall far short of utilizing our current excess production capacity.

Incomes in animal agriculture, however, are very sensitive to changes in meat prices at the consumer level and to changes in prices for feed. U.S. livestock and poultry producers suffered significant income loss in 1983 as a direct result of feed prices rising rapidly in response to FOR and PIK.

Corn processing into sweeteners, alcohol, etc. has been a strong growth area and will likely expand further in future years but only if several supportive government policies currently in place remain. U.S. corn processing and seed use increased by 131 percent from 1971-72 to the current marketing year, rising from 390 million bushels in 1971-72 to an expected record 900 million this season. At the current rate of utilization, this category accounts for 12 percent of the total demand for U.S. corn, up from 8 percent 12 years earlier.

Because by-products of the alcohol-fuels industry are largely exported to the European Community and compete there with U.S. corn and soybean meal, these figures modestly overstate the net growth in demand for U.S. crops as a result of increased corn processing. Growth in the corn-processing sector appears to be relatively insensitive to the U.S. general economy. Processing corn into sweeteners is strongly influenced, however, by U.S. sugar policies including import restrictions and support levels.

U.S. sugar supports at 17 to 20 cents per pound and strict quotas on imports have enhanced the competitive position of high-fructose corn sweeteners. Corn processing into alcohol also is strongly related to federal and state fuel tax policies that encourage the use of alcohol fuels. Future growth of the alcohol fuels industry will depend not only on continued fuel tax policies but also on continued unrestricted access to the European Community by-product feed market, where many by-products of the alcohol industry are sold.

The need for storage or supply control will probably not be reduced significantly by economic recovery accelerating domestic meat consumption and grain feeding. However, if domestic policies encouraging sweeteners and alcohol-fuel derived from corn were discontinued, the need for storage and supply control would increase by nearly 1/2 billion bushels or by about 1/3 the size of the 1983 PIK corn payments.

Impact of Food Policy and Promotion

In addition to the small negative effect of national economic policies and the small positive effect of sugar and gasohol policies three other topics related to domestic demand should be examined: What is the impact of recent efforts to curtail government food assistance programs? What is the impact of dietary recommendations to reduce fat and increase cereal and vegetable consumption? Is there a significant potential role in domestic demand expansion for commodity promotional programs?

Food program expenditures (food stamps, reduced costs school lunch, etc.) for low income families totaled \$15.8 billion last fiscal year. Constraints in 1983 probably caused only a modest contraction in total domestic food demand. The food-stamp program is the largest, costing about \$11 billion. It was reduced by 3 percent. Recent reforms were instituted to tighten up administration and limit eligibility. Food-assistance additions to gross farm income in 1982 are estimated at about \$1.6 billion or about 1 percent of the \$164.8 billion total. The impact on net farm income would be larger.

It is important to note that food expenditures do not increase in an amount matching the assistance received. Recipients of food assistance increase total food expenditures by about 40 percent of the value of the food assistance dispensed. Low income recipients make a rational allocation of their limited resources and spend less income from other sources on food if food stamps are available to them and analysts estimate that \$1 billion of the slippage is from high income consumers who spend less on food because their taxes are higher to pay for food stamps.

Cancer, heart disease and obesity concerns have led to new dietary recommendations and guidelines. Farm commodity groups have protested the reduced demand for animal products they expect from these recommendations.

The impact on food demands is difficult to document and measure. Recent USDA research indicated that two-thirds of U.S. households changed diets for health or nutrition reasons during the late 1970s. Fifteen to 20 percent of households reported they believe they now consume a diet less high in fat cholesterol.

Dietary recommendations are information. Consumption choices remain matters of individual preference. Only clearly harmful additives or contaminated products are restricted from the market by the Food and Drug Administration. The role of government dietary recommendations probably is minor relative to all other information provided consumers about the implication of scientific information. Although Americans eat over 200 pounds of meat, a level that is more than adequate nutritionally, this is less than the consumption needed to fully employ all agricultural resources under current weak foreign demand.

New product development like boneless cooked ham and consumer information and educational efforts by the private food industry, such as the fast-food industry's promotional efforts for chicken, probably have more effect in expanding demand for specific products than dietary recommendations do.

It seems clear that successful promotion of a particular product may increase demand for that product, but the expansion is often a substitution at the expense of some other farm product. The net impact of additional promotional efforts on farm products probably would be very limited. The political and public-welfare consequences of public promotion of more domestic meat consumption to reduce need for supply control probably would be highly negative. Private sector product and market development efforts including exports of high value processed products probably offer some potential for expansion of U.S. agribusiness employment and foreign exchange earnings.

V. Three Policy Approaches to Managing U.S. Farm Prices and Incomes

From many statements about the farm problem and the goals of price and income policies, these four are the recurring themes. 1) Returns to factors of production in the farm sector should be the same as returns to factors of production elsewhere in the economy and the incomes of farm families should be on a par with incomes of non-farm households. 2) U.S. consumers have access to a secure and safe food supply at reasonable prices. 3) Government farm programs should accomplish goals at minimum cost. 4) Benefits of farm programs should not get capitalized into land values and should not accrue largely due to larger-than-average farms.

Only three general responses are available to the federal government to deal with excess agricultural capacity when it returns. One is to fine-tune the present legislation--voluntary supply control by public assistance to farmer-owned storage and public rental of land. A second response is to reduce government supply management, increase the role of market forces, and support farm incomes by checks from the Treasury. A third pattern is increased government regulation of production and of supply.

Alternative 1: Modifying Existing Policy

Some specific actions consistent with fine tuning of the existing legislation to reduce cost include: 1) putting an upper limit on the size of farmer-owned reserve; 2) reinstating the \$50,000 limit per farm family on land diversion, deficiency payments and payments in kind; 3) lowering the loan rate for 1984 and freezing or reducing target prices at 1983 levels; and 4) extending the PIK program but on a more limited basis.

Alternative 2: A Market-Oriented Program

The main elements of a market-oriented approach are: 1) producing in response to market-clearing prices; and 2) providing limited deficiency-payment income supplements when necessary. Implementing a market-oriented policy would require phasing out export subsidies, cost-sharing of farmer-owned reserves, land diversion payments and lower commodity loan rates. Aggressive trade promotion to expand export sales would aid in the transition.

Alternative 3: Increased Government Management of Production

The main elements of increased government management of production are 1) controlling supply of agricultural products year to year to clear markets near the cost of production. (Government-owned and controlled commodities could be used to limit season-average price variation.); 2) obtaining producer acceptance of production and price controls; and 3) accepting the fact that some agricultural resources, some land, agri-business and labor, will be idle from time to time. Overall efficiency, in terms of full use of agricultural resources, would decline.

Each alternative has costs and benefits. Each distributes these costs and benefits in different ways, and each can be implemented through various means. Each could result in similar farm prices and incomes, but would have different consumer and taxpayer costs and differing degrees of government intervention. Each poses a different set of consequences for resource conservation, farm structure, rural development, transportation, land values, networth, stability and agri-business.

VI. Impacts of the Three Alternatives

Consumers, Taxpayers and Distribution of Costs and Benefits

The appearance of agricultural excess capacity and falling grain prices since summer 1981 created the opportunity for a massive redistribution (of perhaps \$5-10 billion) of income away from producers, especially grain farmers, toward consumers. The 1982-83 storage assistance and supply control provided at taxpayers expense limited the potential price decline (and the redistribution) to less than half what it might have been. The intervention also raised domestic food expenditures relative to what they would have been. At times of world grain shortage such as 1972-1975 or at the time of strong foreign demand, as in 1979 and 1981, the process worked in the other direction and farm price increases transferred \$5-10 billion of consumers real income per year to producers. During those good times anticipation of continued high farm prices and continued high land incomes caused land buyers to bid up the value of farmland and the national estimate of equity in production assets increased by 25-40 billion per year. More than \$180 billion of new wealth was created in 1974-1979.

Large commercial farmers selling over \$200,000 per year produce nearly half of all U.S. farm output. They are low cost producers and aggressive bidders for farm land for expansion when commodity prices are strong. Some in this group are also vulnerable to cash-flow shortages when farm prices drop. Only a small proportion (about 10 percent) of the small farmers, selling around \$40,000 per year, have burdensome debts. Significant off-farm income also may help them survive during periods of low prices. As a group, small farmers have been less vulnerable to bankruptcy during the recent downturn than highly leveraged commercial farmers.

Large commercial farms receive significant benefits from price supports even if they do not participate and the benefits received contributed much to their survival in 1982-83.

By July 1982 about 30 percent of farm borrowers were loaned up to their practical limit and numerous grain farms may have faced cash-flow problems in 1983 if prices had continued at fall 1982 levels. Voluntary or involuntary liquidation affected less than 1 percent of farms in 1982.

More liquidation, especially among the highly leveraged farmers, would have occurred in 1983 without the availability of nonrecourse loans and PIK payments beginning in the fall of 1982 and 1983. The Farmer-Owned Reserve and PIK reduced costs and the need to borrow more money. The land would have been farmed in 1983, but, the value of land and rental rates would have declined. Any land released by large units probably would have been taken over by other relatively large units with machine and borrowing capacity, so the large proportion of production from large farms would have continued.

Each of the three alternative approaches has a distinctly different distribution of the unavoidable costs of carrying current excess agricultural capacity. Without some intervention, farmers would suffer almost all the burden. With current programs, the burden is shared among 1) taxpayers, 2) consumers via food prices above market-clearing levels, 3) agribusiness via supply control and 4) farmers through prices below cost of production.

With a more market-oriented policy, adjustment costs would be born by farmers or consumers depending on price levels. In low-price periods, farmers would bear the adjustment cost. In times of shortage, consumers would bear the burden through higher food prices. To the extent that direct payments ease low farmer income, taxpayers will also share in the cost.

With supply control via mandatory allotments, the cost would fall primarily on consumers and agri-business. Taxpayers costs would be minimal if agriculture would accept the discipline of more central direction of agricultural production.

Impact of Alternative Programs on Agri-Business and Transportation Complex

In 1981 farmers spent \$53.1 billion for purchases of production inputs from off-farm suppliers. This \$53 billion includes expenditures on farm machinery and trucks -- including operation and repair costs -- fertilizer, chemicals, seed, and manufactured feeds. In addition the cost of marketing the food beyond the farm gate was \$208 billion. This \$261 billion exceeds the 1981 gross farm income of \$166.8 billion by almost \$100 billion.

During the decade of the 1970s, major investments were made in the agri-business and transportation complex to handle an ever-increasing growth in agricultural exports. During the early half of the decade, most agri-business and transportation companies were cautious in their investment programs because of uncertainty over future export growth. However, growth in exports continued and even accelerated during the last half of the decade and the agri-business and transportation industries were faced with increasing demands for grain storage and handling capacity and for farm inputs including fertilizer, chemicals, petroleum and farm machinery. And there was outrage at the continuing shortage of rail cars and barges.

Encouraged by these growing demands as well as by forecasts of ever-increasing growth in grain exports and by generous federal government investment tax credits and low interest loans, the agri-business and transportation complex made huge investments in capacity. By early 1980, however, export growth leveled off and even declined in 1982 and 1983. Thus, investment decisions, of the late 1970s resulted in large overcapacity of the agri-business and transportation industries.

The farm machinery, fertilizer, railroad, and barge industries particularly were placed under great stress. The farm machinery industry has faced major labor layoffs, plant closings, mergers and near bankruptcies. For the first time in history, agriculture has the "luxury" of excess transportation capacity. About 30,000 rail grain cars currently sit idle and about 30 percent of the barges are either tied up or in slow-down operations. Some grain elevators are facing bankruptcy because of the heavy burden of monthly payments on leased rail cars that are sitting idle because of reduced grain sales. Some barge companies are hauling grain traffic below variable cost to avoid the large costs of tying up and storing barges. Given this background, what are the impacts of alternative farm programs on the agri-business and transportation complex?

PIK Program

Preliminary estimates indicate that the PIK program has resulted in the following percentage reductions in crop acreages:

Corn	28
Wheat	11
Cotton	28
Rice	33

These acreage reductions have, of course, resulted in reduced farm-input sales during the 1983 planting season. Data on input sales are not available, but bank representatives suggest that monthly financial reports indicate that sales of some inputs are not as low as had been expected earlier.

For example, preliminary data indicate the reductions in nitrogen sales are significantly less than acreage reductions because farmers increased nitrogen applications. However, phosphate and potash sales are off sharply. On balance, PIK could reduce fertilizer purchases by 12 to 14 percent. Thus, the PIK program will add to already depressed conditions in the fertilizer industry, which is operating at less than 70 percent of capacity.

Seed sales are expected to decline 13 to 17 percent; however, this reduction could be tempered somewhat by higher plant population plantings and by cover crop plantings. Declines in petroleum sales could be tempered somewhat by seeding field work and mowing of diverted acres, which are planted to cover crops like oats and legumes. On balance, energy sales are expected to decline in the order of 10 percent.

Farm machinery repair and maintenance expenditures are expected to decline 12 to 15 percent, principally because of reduced usage. However, increased farm income from PIK could temper the decline in farm machinery sales to 2 to 3 percent.

Manufactured feed sales are expected to decline as PIK results in higher grain prices which will increase the cost of manufactured feed.

On balance, the farm supply industries will face sharp reductions in income from PIK, which will add to the already depressed conditions of existing overcapacity. A second-year PIK program would further depress farm supply sales.

On the marketing side, reduced 1983 production will result in reductions in grain handling, drying, and storage income to the grain elevator industry which is already burdened with excess capacity. The extent of the decline in elevator income will depend on yields from reduced acreage.

PIK will have secondary impacts on the marketing chain. As PIK increases grain and feed prices, livestock feeding is likely to become less profitable. Eventually this will result in reduced livestock marketings and lower income for livestock-marketing and slaughter firms.

On the transportation side, PIK could provide a temporary increase in the demand for rail transportation as grain from existing stocks is moved to deficit areas. However, reduced 1983 grain production and higher grain prices will likely reduce both domestic and export grain sales. The reduced sales will translate directly into further reductions in revenues for rail and barge industries, which are already suffering from declining revenues and a huge oversupply of rail cars and barges.

In summary, the PIK program will undoubtedly have major negative impacts on the farm supply, farm marketing, and transportation sectors because these sectors in the late 1970s and in 1980, made major capacity investments in response to growing demands and government incentives.

A second-year PIK program would continue a decline in the U.S. share of world grain trade by signaling the world that the United States is willing to make adjustments in world grain supply. A declining share of world grain trade would add to the major surplus capacity problem of the grain marketing and transportation system.

Tight Government Supply Control Alternative

The impact of stronger government supply controls on the agri-business and transportation complex would resemble the impact of the PIK program but it would be even more damaging. For example, mandatory marketing quotas could reduce total agricultural output below PIK levels. This would further reduce utilization of goods and services from farm-supply, marketing, and transportation firms.

The impacts of PIK are distributed almost uniformly over all agricultural areas. But, if tight government supply controls were implemented nationally, they would target most reductions in agricultural production to areas of the highest production costs, i.e., on erosive soils and perhaps on irrigated soils. This could result in voluntary or involuntary liquidation of many farm-supply and marketing firms in these areas.

Market-Oriented Program

A market-oriented program would tend to provide some relief to the agri-business and transportation complex through lower grain prices and higher domestic and export grain sales. This alternative would use part of the overcapacity of the system. However, a market-oriented system would still face the problems of high interest rates, a strong U.S. dollar, low worldwide income growth, and major debt problems in many countries.

Financial and Structural Impacts

A continuation of existing farm programs with some modifications would insulate farmers to some degree from supply-and-demand forces. This insulation results in increased income stability for farmers and reduced risk. Consequently, farm incomes would not decline as much as they might in years of excess supply or slack demand, nor would they rise as much as would be possible in periods of excess demand and reduced supply. Because land and other fixed resource values are a function of income, the increased stability in income also would result in larger and more stable capitalized values. Capitalized resource values seem to be relatively sticky downward. Any government policy which stabilizes incomes by establishing a floor results in larger resource values. Land values adjust upward with increases in incomes, but only partially adjust downward with decreased incomes.

Any government policy, such as target prices or dairy supports, that includes escalator clauses or upward adjustments in loan rates, creates a spiral in incomes and hence in asset values. This happens because higher price supports mean higher incomes and because of reduced downside risk to income and land-value adjustment.

Analyses have indicated that the structural implication of downside security is to favor expansion of large and high-equity farming operations and to create competitive disadvantages for smaller and highly leveraged farm operators. Any support-price program that includes land values in the indexing formula could result in significant increases in land values and relatively more benefits for larger producers. Any modifications in the existing programs, such as the \$50,000 limitation on payments (declared not to be applicable to PIK in 1983) or a 10-percent lowering of the loan rate and lowering or freezing of the target prices, would reduce the price-enhancement and asset-stabilization benefits of this program. If fluctuations in incomes increased compared with current, more rigid programs, large, highly leveraged farms would be in the most difficulty.

Government payment programs also favor large farms. Only 1 percent of farmers received nearly 30 percent of direct government payments in 1978. Several other studies have shown monetary benefits of earlier public farm programs to be size related. Current price-support mechanisms, when effective, also bring benefits in relation to farm size and output. PIK payments in 1983 had no upper limits. Some very large farms thus claimed large payments, just as during the 1960s.

With market-clearing prices under a demand-driven type of government program, the potential role of market prices increases. The incomes of large operators in the agricultural sector would be expected to fluctuate significantly more than they have in the past. More market exposure in the future under such an alternative would result in increased financial risk for all agriculture but a higher failure rate on the part of leveraged farmers and much more widely fluctuating asset values. More variable and uncertain land rents and returns might be capitalized at a lower rate. If periods of decreasing prices of farm land became more likely, a much less stable, less

financially resilient agricultural economy would result. The destruction of wealth from capital losses would reduce the equity base and consequently the ability of farmers to obtain debt financing from conventional lenders. This decreased wealth and the increased risk in agriculture would result in more dependence on government credit sources, or require higher interest rates from private-sector lenders.

Market-clearing prices with limits on direct payments would necessitate recognition that financial failure in agriculture (not only on the part of the least efficient, but also on the part of many efficient farmers who happen to be highly leveraged) is acceptable from a public-policy perspective. One way to soften the impact of a policy that is more demand oriented might be to implement a government-sponsored adjustment program that would facilitate the dissolution of large farms and the outward migration from agriculture of all who encounter financial stress. Sudden transition would require them to incur substantial liquidation losses. Market-clearing prices might also mean that increased risk in agriculture may encourage less efficient production. Some high-quality, large-farm managerial resources and other resources would be allocated to risk reduction rather than to increased efficiency, and some might leave agriculture.

The third option--stricter supply control at a price level near the cost of production--would result in more stability in income and resource values than at present. It would promote the trend to large farms and more financial leverage by farmers. Resulting incomes and resource values would depend on how effective and secure the supply-management program proved to be and whether the "desirable or acceptable" level of supply and prices provided a profit.

The economic implications of either mandatory or voluntary control would be the same. Structural change in agriculture would continue to follow the impacts and trends of the current program. Financial and structural effects would not be as great as price and income effects. The increased financial stability under a rigid supply-control system would encourage private sector lenders to provide more capital to agriculture at lower rates of interest compared with the riskier environment of a demand-driven program.

Supply-control programs encourage farm enlargement particularly by farm operators with underemployed large-machine units. As they took land out of production for the direct payments associated with set-aside or land retirement programs, these farmers were inclined to rent or buy more land so they could attain a more complete utilization of their machine and labor resources. And over a period of time, farm commodity programs provided a source of capital gains to farmers, with the largest gains going to the largest farmers. Cochrane indicates that these gains amounted to \$76 billion during the period 1950-1964.

An agricultural industry composed of industrialized superfarms is now a possibility in prospect. One half of all fed cattle marketed come from 400 large feedlots and 16,000 poultry producers accounted for 90 percent of annual production in the last year. Other enterprises, which are not tied to the land, could follow a similar route. Even crop farms, which are tied to the land, have imminent prospects of "bigness." A modern four-wheel drive tractor operated by one person can pull up to 80 feet of equipment behind it.

The main increase in farm size has come from family farms that were already large. While the dialogue has been in terms of a conventional family farm, public programs have favored farm enlargement and a structural change towards ever-larger family farms.

The decline in real price of machine capital relative to labor gave rise to larger and fewer farms. Power and machine units have come in increasingly large lumps of capital. The high mechanization and industrialization of livestock production also have come to require high capital investments, and the fixed costs of farming have increased accordingly. To attain break-even and profit levels, farms and enterprises have had to grow larger, and this process is not finished. With the very high profits from farming during much of the 1970s, many farmers bought large four-wheel drive tractors, with 200 horsepower and more, and 12-row to 16-row machinery. These large units have high fixed costs and are underutilized on many farms. Thus, pressure towards further farm enlargement continues, with only high rental and purchase prices of land holding it in check. Of course, the extremely high capital-labor ratio that now characterizes agriculture prohibits all but the wealthy from beginning or expanding their farms.

Tax policy also has been structured to better allow large land holdings to be held intact. Both income and estate tax have this tendency. In a somewhat similar vein, the family farm corporation has become a legal tool for the maintenance of large farms. While farmers often point to the corporation as a threat to family farms, the vast majority of corporations in agriculture are family corporations, organized so the family can reduce inheritance taxes and maintain a large land holding.

Hence, both public developmental policies and the compensation policies of the last five decades have served as incentive encouraging larger farms. Although the preamble to the most recent farm policy legislation is laced with statements about protecting the family farm, the legislation typically, even though sometimes unwittingly, has encouraged use of more resources per farm and larger farms. Augmented by relative resource endowments and by prices and technologies that provide scale advantages, it has had the general effect of favoring bigger farms.

With a couple of large four-wheel tractors per farm, Iowa readily could be farmed with 16,000 farms, rather than its current 121,000. Predictions are for a decrease in U.S. farms to 1.8 million in 2000 but the potential exists for even fewer farms but larger farms. The nation's 50,000 largest farms represent less than 2 percent of all farms but produce more than 36 percent of the total agricultural output. If the rest of agriculture were organized as this 2 percent is, the nation's output could be produced by 135,000 farms--or an average of about 3,000 per state. Similarly, the number of farms with sales of over \$200,000 now is about 2.5 percent of all farms, but these farms produce over 40 percent of total output. If all farms were organized as this group is, the number of farms would average only 2,000 per state. The largest one-fourth of farms now produce 85 percent of total output. Coffman estimates that 125,000 farms produced one-half of farm sales in 1974 and that if current size trends continue, 70,000 farms could produce one-half of all farm output in year 2000. In other words, only 140,000 farms, an average of about 2,800 per state, would need to exist.

There are no great scale economies or cost advantages to consumers and society as farms become very large. Scale or cost advantages are largely exhausted by the time Corn Belt grain farms attain 480 acres in size or produce 2,000 swine annually. Cost advantages are small beyond these levels and are not important to society when its own food, plus a large amount for export, is produced with less than 4 percent of the nation's labor force and with less than 7 percent of its capital stock.

However, just as there are no significant cost economies for larger farms, neither are there any important reductions in economies. Hence, as farmers enlarge their units, they suffer no penalty through the market in per-unit costs and they can increase their personal incomes and capital investment. With farmland prices increasing more rapidly than inflation over the past decade, these investments have given large capital gains.

Impact of Farm Structure on Rural Areas

The structure of agriculture has impacts beyond the farm gate and into the rural community. The capital goods intensification of agriculture and the decline in the farm work force and population have been accompanied by a reduced economic and social viability of rural communities. The supply of human services in rural areas has generally declined in quantity and increased in price under the trend to fewer farms and farm families. Our own study indicated that total farm income, rural area employment and income stand to be reduced when farms are larger. The social and economic environment of typical rural communities, which lack industrialization opportunities, will deteriorate further if farm size makes the leap which is possible under current technologies and farm enlargement possibilities.

Most of the institutions and infrastructure of rural communities were developed around a large number of relatively small family farms. This infrastructure may need to be changed in the future. For example, farm-to-market roads established in the Corn Belt many decades back were oriented to 160-acre farms. Is society obligated to maintain its heavy investment in rural roads around every section of land when farms grow to 1,200 and 2,000 acres? The justification seems to melt away as farms become large industrialized enterprises. Similar questions can be raised relative to other public infrastructure investment in rural communities.

Reduced revenues have direct effect on owners and workers in agri-business and have similar but smaller effects on jobs and incomes in other local activities like services, retail, finance and transportation. Supply controls that specifically focus on marginal lands not only will have a different impact on producers in different geographic regions of the U.S. (Corn Belt vs the Southeast, for example), but also on the input supply, processing firms and rural communities in general in these regions. Concentrating production adjustments in marginal producing areas may accomplish efficiency goals, but will result in significant income-distribution and equity issues.

Impact on Natural Resources Conservation

The adequacy of soil and water resources to meet future demands for agricultural output is coming into question. Continuing erosion of topsoil resources will jeopardize the long-run productivity of many cropland acres in Iowa and across the nation. Likewise, heavy use of exhaustible water resources, such as the Ogallala Aquifer, and the rising costs of irrigating crops currently in surplus are leading to concern over the feasibility of widespread irrigation.

The choice of farm price and commodity programs has a direct impact on the use of these scarce natural resources. High farm prices from strong domestic and export demands encourage the cultivation of fragile lands and increased water withdrawals. Low prices and targeted efforts to control output may encourage the retirement of fragile and less productive cropland. Energy, soil, and water conservation could be promoted by judicious supply control during periods of excess capacity.

The following three sections concern impacts on soil and water conservation resulting from (1) continuing the current program focus, (2) expanding the federal government's role, and (3) placing greater reliance on market forces.

Continuing Current Programs

Current policy efforts both in farm commodity programs and soil and water conservation activities leave room for improvement. The 1983 set-aside paid-diversion programs probably had very limited impacts on reducing soil erosion in Iowa but might have had a large effect. Unfortunately, the PIK program announcement came too late for adequate 1983 crop planning. In Iowa, many fields had already been tilled in the fall of 1982, and soil-conserving crops were not established by many participants. In the absence of growing crops or adequate crop residue to cover the surface, soil erosion may increase on PIK acres because they are essentially fallow cropland. More timely announcement of program opportunities, requirement of residue or timely cover crops, and retirement of the more fragile croplands would be an improvement in current program efforts.

Current program efforts should have a positive, but limited, impact on reducing water withdrawals.

Efforts are underway by the administration to reduce expenditures on soil and water conservation programs, especially the cost-sharing components. Such a reduction will only serve to increase soil erosion, all other things being equal. An even more serious question involves the cost effectiveness of current programs. Approximately one-fourth of our cropland base suffers a moderate-to-serious productivity threat from sheet and rill erosion. Yet a survey indicates that about one-half of the soil conservation practices being established by ACP participants are going on land that is eroding below productivity-threatening levels. Additionally, disproportionate shares of the conservation funds are expended in regions with limited erosion problems and insignificant contributions to agricultural output.

The targeting scheme being adopted by ASCS and SCS to concentrate funding in areas with serious erosion problems is a step in the right direction, but the program is too small and too dispersed. A productivity-based targeting scheme for the 5 to 10 percent of the cropland with the worst erosion problems would be an improvement.

Although better coordination of all farm-program activities is to be applauded, cross-compliance between conservation and other programs (e.g., commodity credit) is no panacea. The main limitation is that the farmers responsible for most of the erosion are not necessarily those who would be reached by cross-compliance. For example, operators receiving certain Farmers Home Administration loans would be required to have and implement a conservation plan for their farms. First, relatively few farmers use this credit source. Second, eligible farmers on land with minor erosion problems would incur limited erosion-control costs to participate in the FmHA program. Their counterparts on erosive lands may not be able to absorb the conservation costs, thus foregoing this credit source and, conceivably, the opportunity to enter or remain in farming. Although this illustration may seem like an isolated case, careful analysis of other cross-compliance possibilities produces similar results.

Expanding Government's Role

A mandatory supply-control program will involve higher commodity prices and the idling of cropland and some agri-business resources. Higher commodity prices create a derived demand for land, tending to maintain fragile and more erosive land in the cropland base. Even though a supply-control program will idle some cropland, land retirement will typically occur proportionately over farms. Depending on the region, both erosive and non-erosive cropland will be retired.

If an expanded role for government programs is deemed socially desirable, an efficient approach would be to retire the least profitable, or marginal, cropland. These cropland acres are frequently the more erosive areas. Thus, if such a program were developed, especially with a longer term retirement provision, supply could be restrained enough to maintain commodity prices at levels attained by conventional supply-control or land-set-aside programs. The cost of such a conservation program could be considerably less than the PIK program. Farmers in regions not susceptible to heavy erosion would gain through reduced national grain supplies and higher commodity prices. However, since those regions of highly erodable soils would switch to less intensive farming and would not gain through higher market prices for grain and cotton, they would need compensation by the public to offset their income reduction.

Water-conservation efforts suffer from many of the same problems plaguing soil-conservation efforts. The proposed longer term land retirement scheme may reduce the rate of depletion of aquifers and reduce the need to pump irrigation waters.

Greater Reliance on Market

Market equilibrium prices determined in the absence of government intervention may be expected to have a positive long-term impact on soil and water

conservation. Excess supply problems would be solved by the movement of excess resources out of agriculture, a reduction in cropland tilled, and a decrease in the erosion level. More importantly, the more erosive cropland may revert to pasture or uses other than crop production. Current efforts to ensure a "fair" price for agricultural commodities have made it profitable to bring such lands into crop production.

A negative impact of the more market-oriented approach is greater anticipated fluctuations in commodity prices and net returns. Such uncertainty may discourage needed investment in soil-conserving practices. Yet, considering the wide fluctuations in commodity prices under current farm programs, a market-oriented approach may not result in any more uncertainty.

Grasslands, especially in the Great Plains region, have been converted to irrigated cropland under current farm programs. If market prices are lower under a free-market approach, some of these irrigated lands will revert to pasture. Such adjustments may reduce irrigation water demands and depletion of water supplies.

Conclusion

U.S. agricultural policy makers face difficult choices during the next several years. Nearly every sector of U.S. agriculture has excess capacity. Any agricultural policy that will shrink output and improve average farm operator income will benefit some producers but will also be detrimental to a significant portion of farm operators, farm supply and marketing businesses, and rural communities. A critical question for policy makers is how the costs of adjustment will be distributed among various agricultural and public sectors.

Given our present perspective on the 1982 and '83 policies designed to manage supplies through voluntary producer action, it seems that we probably did too little to control output in 1982 and too much in 1983. The result is economic distress for the agri-business sector and some livestock producers. In addition, the experience of recent years dramatizes the fact that we are dealing not only with a "farm" problem, but rather we are seeking a solution for a national problem.

The United States' large agricultural capacity is a great national asset. Taxpayers, farmers and agri-business owners have invested large amounts in agriculture over the years. We need a coherent, long-term policy that deals consistently with farm-operator incomes, resource conservation and utilization, international consumer prices and trade. The development of consistent, effective policy requires recognition of the interdependence of the input-supplying, output-processing, producing and consuming sectors of the agricultural industry.

Senator JEPSEN. Next, we have Kelley J. Donham, doctor of veterinary medicine, Institute of Agricultural Medicine, University of Iowa. Please proceed, as you wish.

STATEMENT OF KELLEY J. DONHAM, DVM, CHIEF, COMPARATIVE MEDICINE SECTION AND ASSOCIATE PROFESSOR, INSTITUTE OF AGRICULTURAL MEDICINE AND ENVIRONMENTAL HEALTH, COLLEGE OF MEDICINE, UNIVERSITY OF IOWA, OAKDALE, IOWA

Dr. DONHAM. Thank you, Senator.

I represent the College of Medicine at the University of Iowa, specifically the Institute of Agricultural Medicine, which is a unique institution of its kind which has been concerned with the occupational and environmental aspects of agriculture.

The primary focus of this hearing has been on production, supply, and demand of agricultural commodities. We've seen and heard that these forces have interplay with soil conservation. They also have very much of an effect—a perhaps unappreciated effect—on human conservation. I intend to address my comments on the health of the person who produces the commodities, and the economic consequences of occupational health problems and the need to consider health issues in the next generation of farm policy. There are four major points:

One, occupational and environmental health problems in agriculture are important, but generally go unrecognized. Perhaps the best or most obvious example of that is the fact that the accepted cliches that we hear or perhaps have been accustomed to, that the farmers are healthy and enjoying fresh air and sunshine, do not hold up when one examines some of the scarce information related to occupational health.

Every year, approximately, or in the neighborhood of, 2,000 farmers die of occupational accidents on the farm, and an additional 200,000 experience severe disabling injuries. With that fact alone, agriculture is one of the most hazardous occupations to work in.

Other examples, when comparing to other occupations, there are increased rates of hospitalization for farmers, increased restricted activity due to illness and injuries, increased musculoskeletal back pain and arthritis problems, and increased disability due to respiratory problems.

Two, occupational and environmental problems have a significant impact on the agricultural economy. The specifics for this are not well documented. However, one example, a 1975 survey in Iowa alone indicated that the accident portion of the problem resulted in an expense of \$4 million to the farming population. Now, that does not include even the additional illnesses that are involved.

Three, many health problems result from new technology which has been forced by economic and farm policy, one example being that with the increased emphasis on production-oriented policies back in the early seventies, we saw a significant trend in the confinement raising of livestock. Suddenly, in the past 6 or 7 years, we have seen approximately 60 to 70 percent of the 90,000 people that work in confinement buildings in Iowa alone, do have one or more types of respiratory problems. In addition to that, we have investi-

gated 14 deaths that have resulted from exposure to acute levels or high levels of gases from these buildings, and an additional 10 near deaths.

Four, agricultural health problems have not been dealt with effectively, either by the private or public sector. As we've heard, there are many agencies that do affect agriculture, but the health implications or the health issues have fallen between the cracks. USDA is primarily commodity oriented. OSHA does not pertain to the bulk of agriculture, because they pertain only to operations that have 10 or more employees.

Regulations are not necessarily needed to improve the situation of health on the farm, but we do need programs for surveillance, research, and education whereby health problems can be improved by improved engineering of machinery and buildings for environmental controls and personal protection.

I recommend that a national policy be developed where program and budget are involved for surveillance, prevention of present and future health and safety problems in agriculture. This policy must include assessment of health impact on new farm policy. There must be action to minimize the health impact of the new farm policy that's developed. Further action should include a mandate to an appropriate governmental body to carry out this policy.

Thank you.

[The prepared statement of Dr. Donham, together with exhibits, follows:]

PREPARED STATEMENT OF KELLEY J. DONHAM

I am a public health veterinarian who has specialized in agricultural occupational and environmental health. For the past 10 years I have served as a faculty member of the Institute of Agricultural Medicine, the only organization of its kind in the United States, which has as its major focus, the occupational and environmental health problems unique to agriculture. My activities have included research into several different agricultural occupational problems, directing a training program in agricultural medicine, and performing many different types of service functions for the general agricultural community. I am a member of the Agricultural Health and Safety Committee of the American Conference of Governmental Industrial Hygienists, and I am also a member of the Rural Health Committee of the American Public Health Association. I belong to the International Association of Agricultural Medicine. I have worked very closely with the USDA, the Farm Bureau, and the National Institute of Farm Safety on a variety of agricultural health problems.

Summary

The health of the farmer and the agricultural worker is directly related to farm policy, and the farm economy. There are four critical

lh63083dw

facts that focus on the need for these interrelationships to be addressed in the next generation of farm policy:

- 1) there are significant occupational health problems in agriculture that are not recognized by the general public or the pertinent governmental agencies.
- 2) these occupational problems are economically important,
- 3) many occupational problems are created unknowingly as a result of new technology that is stimulated by economic and farm policy, and
- 4) there are no preventive programs to deal with these occupational problems, and therefore they may be expected to continue to occur and their economic significance is likely to increase.

I make the following recommendations:

- 1) Congress must develop a policy to insure that:
 - a) health impact will be assessed when new farm policy is developed.
 - b) Action will be taken to minimize potential health impact of new farm policy
 - c) that a program be developed to surveil and prevent present and potential future health and safety problems in agriculture.
- 2) That a mandate is presented to an appropriate agency or committee to carry out the policy.

Introduction

I expect the focus of this hearing to be almost entirely oriented toward production, supply, and demand of agricultural commodities.

However, my comments will be directed at the health of the person who produces the commodities, the economic consequences of occupational health in agriculture, and the need to consider these health issues in the next generation of farm policy. Occupational health in agriculture is a serious problem that is often overlooked by the designers of farm policy. These problems also go largely unrecognized by most of the public and private sector. However, these health problems have a significant adverse economic impact. In fact, farm policy of ten generates serious new health problems that may not be recognized. The issue of occupational health of farm population has fallen between the cracks of the various federal and state agencies that impact on agriculture and health. An active, effective policy for occupational health in agriculture must be developed as part of the farm policy in the next generation, or the health problems may become even more significant and their economic impact may become more urgent.

Occupational and Environmental Health Problems in Agriculture are
Important, But They Generally Go Unrecognized^a

Health Status of the Farmer Relative to the General Population

Accepted cliches suggest that farmers must be healthy because good clean air, sunshine, hard work, and good food are enjoyed every day. On the contrary, when compared with those of other occupational groups, farmers have the highest rate of hospital discharges and the lowest rate of physician visits, suggesting that farmers may suffer serious illnesses more

^a See attached Exhibit I for documentation and details of the material in this section.

frequently but tend not to seek medical care for more minor ailments. Several possible reasons why farmers do not see physicians frequently include lack of convenient access to health care services, stoic behavior, and lack of sick leave or other medical benefits. Compared to the general population, farmers have significantly higher death rates from suicide, malignant skin tumors, and leukemia.

A summary of occupational disease rates in California shows that the highest disease rates are among agricultural workers. Agricultural workers have the highest number of restricted days of activity due to illness or injury, yet they have the lowest number of bed disability days. This phenomenon is probably a reflection of the numerous occupational hazards in agriculture, where medical benefits and workmen's compensation are rare, and the self-employed farmer is forced by economic constraints to work with minor ailments. One survey indicated that musculoskeletal problems account for 42 percent of the disabilities, the highest rate when compared with other occupations. These data were supported by a survey which demonstrated that farmers had the highest rates for impairment of the back and spine and for arthritis. This same survey also revealed that chronic heart disorders were more frequently reported by farmers than by those in other occupations. Other surveys indicate that respiratory and mental disorders are also significant chronic disease problems resulting in disability.

In summary, the available data suggest that farmers may not be so healthy as commonly assumed and that occupational exposures may account for many of these health problems.

Specific Problem Areas in Agricultural Medicine

Farm Accidents -

Probably the primary cause of documented morbidity and mortality among farmers is farm related accidents. Over 2,000 accidental deaths and over 200,000 disabling injuries occur annually. Farming alternates with mining and construction as the most hazardous occupation in the United States, based on occupationally-related death rates. Agricultural technology increasingly has emphasized mechanization, and machines, designed to squeeze, cut, pound, grind, pull, shake, separate, or otherwise manipulate agricultural commodities, but unable to distinguish between such commodities and human flesh, have been responsible for the majority of farm traumas.

Infectious Diseases Transmitted from Livestock or the Environment -

There are approximately 25 diseases common to animals and humans (zoonotic diseases) that are of occupational significance to agricultural workers. These diseases may be acquired through direct or indirect contact with infected livestock. Several of the diseases are maintained in the natural environment (the work place of the farmer) and may be transmitted through contact with soil, water, wild animals, or insects. Leptospirosis, for example, may be acquired through direct or indirect contact with urine from infected swine or cattle. This disease also is maintained in raccoons, mice, rats, and squirrels; direct or indirect contact with water or moist soil contaminated by infected animals of these species can result in infection.

Many zoonotic diseases including leptospirosis are difficult to diagnose because they have no diagnostic signs or symptoms and they may mimic other diseases such as influenza. Thus, few reliable data are available on the incidence of these diseases in the farming population, but evidence suggests that they are much more common than is generally recognized.

Respiratory Diseases -

The agricultural work environment, like the urban environment and many industrial work environments, is contaminated with particulates and gases that may cause acute or chronic lung disease. The farm environment is laden with pollens, mold spores, grain dusts, and animal danders, which are excellent agents for producing asthma in susceptible individuals. Because it is difficult for farmers to avoid these allergens, the most severely affected individuals are often self-selected out of the agricultural population. Thus, it is difficult to get a true picture of the significance of chronic respiratory diseases among farm workers.

Another allergic respiratory disease of farmers is hypersensitivity pneumonitis, commonly called farmer's lung. Farmer's lung is caused by inhalation of large quantities of allergenic particles less than 5 microns in diameter. Acute symptoms are manifested by a tightness in the chest, with associated pain, cough, severe malaise, fever, and an elevated white blood cell count with a neutrophilia. Spontaneous recovery usually occurs in 24 to 48 hours. Chronic farmer's lung may result from multiple exposures over a long period of time, which can cause permanent scarring of lung tissue

Livestock confinement buildings recently have been recognized as an environment that can be damaging to the lungs. Numerous irritating gases that can damage the respiratory epithelium are present, including ammonia and hydrogen sulfide. Particulate matter is important in the livestock confinement environment because particles are present in high numbers, the majority of particles are less than 5 microns and thus can be inhaled deep into the lungs. These particles may cause intense irritation to the lungs, or an allergic reaction. Also, irritating gases present in the work environment may be absorbed to particulate surfaces. A variety of acute and chronic health problems have been recognized in farmers working in livestock confinement buildings, but the problem is relatively new and its full potential is yet to be determined.

Agricultural Chemicals -

Pesticides probably have received more publicity than other agricultural hazard. Actually, the majority of hospitalized pesticide poisonings in the United States are a result of accidental ingestion or suicide attempts. Between 1971 and 1973, it has been estimated that a yearly average of 272 farmers and agricultural workers were hospitalized for pesticide poisonings out of a total yearly estimate of 908 such poisonings for the same period. For the same period, it has been estimated that an average of 8 out of a total estimate of 64 occupationally related pesticide poisonings resulted in death. Most of these occurred in citrus, grape, and cotton growing areas of the Southeast, Southwest, and Far West. Thus, in comparison with some of the other agricultural hazards, the acute health effects of pesticides are relatively minor. However, the

question of chronic health problems has not been answered, even though this has been an active area of research in recent years.

Agricultural Dermatoses -

A variety of skin problems have been recognized as occupational risks for farmers, the major causes including contact with irritating or sensitizing substances, infections, damage from the sun, and arthropod induced problems. The many chemicals common in modern agriculture have increased the risk for contact dermatitis. That the work place is outdoors also increases the risk for dermatoses induced by sun and arthropods.

Cancer -

There are certain cancers for which farmers are at greater risk than the general population. Milham noted significant increases in cancer of the stomach, brain, and kidney, and in leukemia. Burmeister noted increases in mortality in Iowa farmers due to kidney, bladder, prostate, leukemia, lymphoma, and large bowel cancers. The increase of leukemia in farmers has been noted by several authors.

The Magnitude of the Occupational Medicine Problem in Agriculture -

The agricultural subgroup of the rural population includes about 10.4 million people and is composed of farm residents, farm operators or managers, hired agricultural workers, and migrant workers. This constitutes by far the largest single occupational group in the U.S. Most

members of this subgroup (8.25 million people, 79.1 percent of the agricultural population) are farm residents. Nonfarm resident, hired agricultural workers account for 18.9 percent, or 2 million people. The migrant farm worker population is only 2 percent (213,000 people) of the agricultural population. With the exception of the migrants and a small portion of the nonmigrant hired agricultural work force, this large and very important minority group has been relatively silent relative to their health needs. Silence has been particularly true of farm residents and of nonmigrant hired farm workers who work for the smaller, noncorporate farm operations. These segments of the agricultural population have had no internal organized voice to make their concerns known, and there has been no outside group to represent them.

The importance of maintaining the health of the agricultural population is clear, yet the population's health problems have not been dealt with in any systematic way.

Occupational and Environmental Health Problems Have a Significant
Economic Impact, Which Generally Goes Unrecognized^a

The importance of the health of the agricultural population is measured not only in terms of the large number of people involved but also in terms of its economic significance. Individual farmers involved in modern commercial operations, such as those of the Midwest, may produce enough food for 350 people or more annually. An additional allotment of agricultural products has been available for export in recent years.

^a See attached Exhibit I for documentation of certain facts and elaboration of certain issues in this section.

Valued at over \$20 billion annually, agriculture exports have helped the United States' balance of trade. Agriculture compared with other industries is one of the largest employers in the United States. In some highly agricultural states such as Iowa, 80 percent of all jobs are directly or indirectly dependent on agriculture.

Three other facts characterize this population: the increasing age of the farmer, the decreasing number of farmers, and the decrease in the amount of land being farmed. The average farm owner and operator is 49.7 years old. This average age has been increasing every decade for the past 30 years. The total farm population and the total number of acres farmed have been decreasing by over 1 percent annually during the past 20 years. Thus, the United States finds itself depending on an older, smaller population to produce more food on a smaller amount of land. As these trends continue, health of the individual farmer becomes increasingly important.

Loss of productivity due to health problems is costly. We have seen instances where a swine producer has invested over a half-million dollars in a confinement building, and then finds he cannot work in it because it makes him sick. Another confinement swine producer is unable to keep employees longer than a few months at a time, because they cannot work in the buildings. Another farmer got extremely ill from inhaling mold spores while shoveling corn out of a storage bin. It took several months for him to recuperate. Still another farmer who lost a leg in a grain auger is forced with the decision of having to quit farming.

When examples such as these are repeated hundreds and thousands of times over the industry every year, the economic realities of health are evident.

An additional economic impact of health problems in agriculture is the increasing cost of health insurance. The occupational health problems have a direct effect of raising insurance premiums. Farm Bureau, the largest health insurer of farmers, is deeply concerned about the impending high costs of claims to their companies. They are considering with our Institute new options in health insurance to help stem the tide of rising health costs.

We foresee an additional economic impact from workmans compensation claims. More workers are being hired as farms are becoming larger. As these workers become more sophisticated, we expect to see an increasing number of workmans compensation claims at the state level.

Litigation regarding worker health and product liability are becoming more prevalent all the time. These claims in turn drive the insurance premiums and production costs up for farm machinery, farm buildings, and other equipment. These costs are passed on to the individual farmer, increasing his production costs.

Many Health Problems are Caused by New Technologies Which Have
Been Forced by Economic Policy^b

Farm policy beginning in the early 1970's became highly production and market oriented. This policy helped fuel the trend toward capital intensiveness rather than labor intensiveness in agriculture and a trend toward bigness and specialization. With respect to livestock production, these forces helped initiate confinement livestock systems, which have

^b See attached Exhibit II and III for elaboration and documentation of points in this section.

flourished since 1975. Confinement is an industrial approach to livestock production. Large numbers of animals are raised in a relatively small space within an enclosed structure. We have recognized a whole new set of occupational problems for people working in these buildings. Our studies have shown that nearly 70% of the estimated 90,000 Iowans who work in swine confinement buildings develop adverse respiratory symptoms. In the past few years, we have studied circumstances surrounding resulting on deaths of 14 persons and near deaths in 10 additional persons who work in these buildings. When projected to a national scene, the potential magnitude of the problem becomes ominous; we estimate nearly one-million persons are exposed nationwide when considering confinement operations for swine, poultry, veal, beef, and dairy. Meanwhile the trend toward confinement continues.

Another example of farm policy affecting health is the trend toward on-the-farm storage of grain. Grain storage structures create a myriad of potential hazards, including grain auger amputations, drownings in flowing grain, asphyxiation in airtight storage structures, grain dust explosions and a farmer's lung-like illness (pneumonia) from cleaning out storage bins.

Numerous additional examples could be cited as to how farm policy affects the health of the farmer and farm worker. These vary widely with type of agriculture and geographic location.

Agricultural Health Problems Are Not Being Dealt With in an Effective
Manner by Either the Public or Private Sector^c

Agriculture is controlled by a multitude of governmental agencies and regulations on matters pertaining to production issues, economic issues, and the use of chemicals that may leave residues in the environment or animal food products. There are hundreds of rules, regulations, ordinances, and notices enforced by a multitude of federal agencies within USDA, DHHS, USDOL, EPA, FDA, and various state agencies. Each of these agencies has their own mandate which often conflict in areas such as concern for the ecology, cost of product, or eradication of pests.

In all of this it seems an effective program to protect the health of the farmer has fallen between the cracks. While protecting the health of the industry that produces the very essentials for life, farmers and agricultural workers deserve effective protection from occupational hazards. In fact, the Occupational Safety and Health Act of 1970 mandates that every working man and woman have a safe and healthful work environment. However, achievement of this goal does not seem realistic at present. The USDA is almost entirely commodity and production oriented. OSHA does not relate to the vast majority of agriculture because an employer must have at least 10 employees before they come under OSHA regulations. Previous attempts to deal with farm health and safety by OSHA were not received well by the farm population, mainly because the agency lacked an understanding of the many unique characteristics of agriculture. Traditionally farmers are stoic and independent and tend to take pride in

^c See attached Exhibits I and IV for elaboration of points made in this section.

running an operation and making a living without outside help or interference. The agricultural community is basically unorganized, the farmer is both labor and management. For all these reasons, the agricultural community has not vocally embraced governmental programs for health and safety. Consequently any governmental programs of health and safety by NIOSH and other agencies for agriculture have been sporadic at best and have had relatively little impact.

Yet as I previously described there are very significant occupational health problems, that are not getting any better, and will have a yet undetermined economic impact upon the agricultural community, and the nation.

Regulations are certainly not the ticket to provide the needed programs, but surveillance research, and training are needed. Research that allows us to recognize, evaluate, and control the problem through safe engineering design, environmental control, or personal protection. Training is needed for health and safety professionals, as there is very little expertise across the country relative to agricultural medicine.

Conclusions

There are significant yet generally unrecognized occupational health and safety problems in agriculture that are economically significant. Many occupational problems are created unknowingly as a result of new technology that is stimulated by economic and farm policy. There is no effective program to deal with these occupational problems, and therefore they may be expected to continue and their economic significance is likely to increase.

To deal with these issues, I suggest that a national policy be developed to program and budget for surveillance and prevention of present and potential future health and safety problems in agriculture. This policy must include an assessment of the health impact of new farm policy, and provide action to minimize this health impact. Action taken must include assigning a mandate to an appropriate governmental body to carry out this policy. The mandate should include coordination of activities of the various agencies and bureaus that may relate to health and safety in agriculture. Action should also include appointment of a special multidisciplinary committee to plan the policy and action. This committee may act in the future as a third party observer to assure the intent of the policy is carried out.

Exhibit I

Agricultural Medicine: The Missing Component of the Rural Health Movement

Kelley J. Donham, MS, DVM, and Cornelia F. Mutel, MS
Oakdale, Iowa

Agricultural medicine encompasses the anticipation, recognition, diagnosis, treatment, prevention, and community health aspects of health problems peculiar to agricultural populations. Members of the agricultural population have been heretofore ignored in organized health efforts unless they happened to also be a member of a social, racial, or economic minority. However, members of the agricultural population encounter daily a variety of occupational and environmental health hazards, such as toxic chemicals and zoonotic infectious agents. The health status of the agricultural subgroup of the rural population is poorer than is commonly believed. For example, compared with other populations, members of this subgroup have excess rates of chronic illness, excess disability from respiratory conditions, and the highest death rate from occupationally related accidents. If a true improvement in the health of the agricultural population is to be realized, then its unique health problems must be recognized, and specific clinical, preventive, and community health aspects of its problems must be dealt with.

The 1960s and early 1970s were a period of intense humanistic concern throughout the United States. Problems of numerous social and racial minority groups were brought to the public's eye, resulting in the formation of movements to correct social inequalities. One such movement, the "Ru-

ral Health Movement," was directed toward improving the inadequate health care services of rural areas.

Unfortunately, as this movement developed, efforts came to be limited to only a segment of the rural population, primarily those social, economic, and racial minority subgroups such as southern rural blacks and Appalachian families. The picture presented of these groups has been that of individuals dressed in rags and living in isolated, substandard housing. Rural Health Movement advocates have capitalized on this picture in order to appeal to governmental and private funding agencies. The

From the Institute of Agricultural Medicine and Environmental Health, Department of Preventive Medicine and Environmental Health, College of Medicine, The University of Iowa, Oakdale, Iowa. Requests for reprints should be addressed to Dr. Kelley J. Donham, Department of Preventive Medicine and Environmental Health, College of Medicine, The University of Iowa, Oakdale, IA 52319.

0094-3509/82/030511-10\$02.50
© 1982 Appleton-Century-Crofts

THE JOURNAL OF FAMILY PRACTICE, VOL. 14, NO. 3: 511-520, 1982

511

Rural Health Movement also has limited itself by concentrating on rural health care delivery and by emphasizing treatment of acute episodic illness rather than elimination of causes of health problems.

This approach to improving the health of rural populations has been too limited for two reasons. First, the rural population is very complex and consists of many subgroups, only a fraction of which are socially or economically deprived or belong to a racial minority. Second, each rural subgroup may have its own peculiar set of health problems. Thus a variety of actions, not just improvement of health care delivery, is required to solve these problems.

Concern about health, not just disease, in rural populations requires examination of the total rural population in perspective. Each rural subgroup and its particular set of problems must be addressed. Health care providers must be taught how to diagnose and treat specific health problems they encounter, and how to prevent these problems on an individual and community basis.

This article concentrates on the health problems of one important rural subgroup that has received little attention: the agricultural population, including farmers, farm family members, farm operators or managers, and hired farm workers. Four topics will be discussed: (1) general characteristics of the rural population, with special reference to the agricultural subpopulation and the demographic, technological, behavioral, and sociometric factors that influence its health; (2) the health status of the agricultural population; (3) specific occupational and environmental health problems of agricultural workers; and (4) weaknesses in present training programs for rural practitioners, with suggestions for alternative training programs.

Rural Population in Perspective

A rural person is defined as anyone living in an incorporated or unincorporated area with a population of less than 2500.^{1,2} By this definition, the 1970 census indicates that 26.5 percent (54 million people) of the US population is rural.^{1,2} However, 55 percent of the rural population (30 million people) live either within or immediately adjacent to counties that are part of a standard metropolitan

statistical area (SMSA).^{*} Even though these people live in a rural area by strict definition, the surrounding area is more urban in character. Many of these people are suburbanites who may work in the nearby city. This population also includes 2.3 million farm residents who remain at the urban-rural interface to till their encroached-upon farms. These inhabitants do not suffer problems of severe isolation or lack of accessibility to health care. They do, however, have occupational and environmental health problems that differ from those of the general urban or general rural populations.

Seventeen percent of the rural population (9.2 million people) live in poverty.³ The rural poor often have several characteristics in common, including isolation, lack of power, social and cultural deprivation, and membership in a racial minority group.^{2,3} This rural subgroup is the one pictured by most people when the term *rural health* is used. Most of the attention and dollars related to rural health problems have been focused on this subgroup.

The agricultural subgroup includes about 19.6 percent (10.4 million people) of the rural population⁶ and is composed of farm residents, farm operators or managers, hired agricultural workers, and migrant workers. Most members of this subgroup (8.25 million people, 79.1 percent of the agricultural population) are farm residents.⁷ Nonfarm-resident, hired agricultural workers account for 18.9 percent, or 2 million people.⁸ The migrant farm worker population is only 2 percent (213,000 people) of the agricultural population.⁸ With the exception of the migrants and a small portion of the nonmigrant hired agricultural work force, this large and very important minority group has been relatively silent in the Rural Health Movement. Silence has been particularly true of farm residents and of nonmigrant hired farm workers who work for the smaller, noncorporate farm operations. These segments of the agricultural population have had no internal organized voice to make their concerns known, and there has been no outside group to represent them.

The importance of this subpopulation is measured not only in terms of the large number of peo-

^{*}An SMSA is an arbitrary demographic unit that is designed to designate an area of metropolitan character consisting of a central city of 50,000 or more plus surrounding counties that are economically and socially integrated with the central city.

ple involved but also in terms of its economic significance. Each farmer annually produces food for an average of 54 people.* Individual farmers involved in modern commercial operations, such as those of the Midwest, may produce enough food for 350 people or more annually. An additional allotment of agricultural products has been available for export in recent years. Valued at over \$20 billion annually, agriculture exports have helped the United States' balance of trade. Agriculture compared with other industries is one of the largest employers in the United States.* In some highly agricultural states such as Iowa, 80 percent of all jobs are directly or indirectly dependent on agriculture.*

Three other facts characterize this subpopulation: the increasing age of the farmer, the decreasing number of farmers, and the decrease in the amount of land being farmed. The average farm owner and operator is 49.7 years old.¹⁰ This average age has been increasing every decade for the past 30 years. The total farm population and the total number of acres farmed have been decreasing by over 1 percent annually during the past 20 years. Thus, the United States finds itself depending on an older, smaller population to produce more food on a smaller amount of land.

The importance of maintaining the health of the agricultural subpopulation is clear, yet the population's health problems have not been dealt with in any systematic way by the Rural Health Movement.

Four major aspects influence the health of the agricultural population: (1) the diverse nature of agriculture, (2) the dynamic nature of agricultural technology, (3) the behavioral patterns of the agricultural population, and (4) the nature of agricultural work.

The Diversity of Agriculture

From orange groves in Florida to wheat farms in eastern Washington, agriculture varies tremendously with changes in topography, climate, economy, and social factors. Health problems vary as well, with specific health problems being related to specific agricultural practices. It is therefore important for all rural health practitioners to be familiar

with agriculture in their local area. For example, one common problem with the use of pesticides in midwestern agriculture is skin sensitization to herbicides used to control weeds in row crops. Although insecticides also are used a great deal in the Midwest, insecticide poisonings are not common when compared with the number that occur in the Southeast, Southwest, and Far West, where systemic poisoning results from contact with foliage of citrus trees or other fruit crops sprayed with insecticides. Herbicides are seldom used in these locations.

Dynamics of Agriculture

Technologic advances are occurring in all areas of agriculture, with health problems common to older technologies rapidly being replaced by new problems. For instance, in the past a common corn harvest injury was massive crushing or amputation of hands or arms resulting from a farmer getting his hand caught in snapping rolls or the husking bed of a compicker. "Cornpicker hand" is now rare. Today, most corn is harvested by combines, the primary hazard being "combine fingers," occurring when people get their fingers in the V-belt drives of the machine, which then lacerates or amputates one or more fingers.

Behavioral Characteristics of the Farmer

Farmers make very little issue of their health problems individually or collectively. They are stoic and independent, accepting that there are certain risks associated with their occupation. Work comes first; illness and injury are just part of farm life.

Nature of Agricultural Work

When compared with industry, agriculture has a unique set of characteristics resulting in health problems entirely different from those seen in other types of employment. These characteristics, listed in Table 1, are a result of many factors, some of the major ones being economics, the seasonal nature of farming, the farmer's self-employment status, and lack of a unified representative body. It

*Personal communication, Earl R. Glover, Agricultural Research Service, Peoria, Ill, December 1981.

is crucial that the differences and related concepts are realized by personnel at all levels of rural health care delivery and planning systems.

Health Status of the Farmer in Relation to That of the General Rural Population

If one looks at data comparing the general health status of the urban population with that of the rural population, very little difference can be detected. This is primarily because the diversity of the rural population dilutes unique health problems of the rural subpopulations such as the farm population. Also, there are very few data available on specific health problems of farmers.

Accepted clichés suggest that farmers must be healthy because good clean air, sunshine, hard work, and good food are enjoyed every day. On the contrary, when compared with those of other occupational groups, farmers have the highest rate of hospital discharges and the lowest rate of physician visits,¹⁰ suggesting that farmers may suffer serious illnesses more frequently but tend not to seek medical care for more minor ailments. Several possible reasons why farmers do not see physicians frequently include lack of convenient access to health care services, stoic behavior, and lack of sick leave or other medical benefits.¹¹ Table 2 lists standard mortality ratios for causes of death in agriculture. Any figure above 100 indicates a risk greater than that of the general population. Underlined maladies are those with a statistically significant difference, with accidents, suicide, malignant skin tumors, and leukemia showing the greatest risk.¹² A study by Milham (Table 3) comparing proportionate mortality ratios for various types of agriculture supports the evidence of an excess of leukemia among farmers.¹³ This study also points out that different agricultural subgroups have different risks.

A summary of occupational disease rates in California shows that the highest disease rates are among agricultural workers.¹⁴ Agricultural workers have the highest number of restricted days of activity due to illness or injury, yet they have the lowest number of bed disability days. This phenomenon is probably a reflection of the numerous occupational hazards in agriculture, where medical benefits and workmen's compensation are rare, and the self-employed farmer is forced by

Table 1. Important Characteristics of Agricultural Work

1. Women, children, and elderly in farm family are exposed to occupational and environmental hazards
2. Difficult to change jobs if medically not suited to farming
3. Farmer not medically selected for jobs
4. Emergency medical services distant
5. Farmer often works alone
6. Rehabilitation often left to the individual
7. Very few personal hygiene facilities
8. No limits to work hours, which are often erratic and affected by weather and machinery breakdowns
9. Little formal training; most farmers self-taught
10. Farmers usually must do own repairs
11. Vacations limited
12. Migrant or seasonal labor force also included
13. No particular person to look after health problems
14. Medical benefits and workmen's compensation rare

From Berry CM: Rural employment. *Am J Public Health* 12:2474-2746, 1971

economic constraints to work with minor ailments. One survey indicated that musculoskeletal problems account for 42 percent of the disabilities, the highest rate when compared with other occupations.¹⁵ These data were supported by a survey which demonstrated that farmers had the highest rates for impairment of the back and spine and for arthritis.¹⁶ This same survey also revealed that chronic heart disorders were more frequently reported by farmers than by those in other occupations. Other surveys indicate that respiratory and mental disorders are also significant chronic disease problems resulting in disability.¹⁵

In summary, the available data suggest that farmers may not be so healthy as commonly assumed and that occupational exposures may account for many of these health problems.

Table 2. Excessive Causes of Death in Agricultural Workers, 1950

	Standard Mortality Ratio	
	20 to 64 years	25 to 59 years
Diseases of blood and blood forming organs	114*	114*
Diseases of the heart (other than arteriosclerotic heart disease and hypertension)	113*	107*
Congenital malformations	111*	105
Accidents	115*	113*
Suicide	136*	139*
Malignant neoplasms of the skin	125*	120*
Leukemia and aleukemia	116*	114*
Hodgkin's disease	105	112*

From Milham S (1976)¹³
 Note: Figures above 100 indicate a risk greater than that of the general population
 *Statistically significant

Specific Problem Areas in Agricultural Medicine

Farm Accidents

Probably the primary cause of documented morbidity and mortality among farmers is farm related accidents. Over 2,000 accidental deaths and over 200,000 disabling injuries occur annually.¹⁶ Farming is the most hazardous occupation in the United States, based on occupationally-related death rates.¹⁶ Agricultural technology increasingly has emphasized mechanization, and machines, designed to squeeze, cut, pound, grind, pull, shake, separate, or otherwise manipulate agricultural commodities, but unable to distinguish between such commodities and human flesh, have been responsible for the majority of farm traumas.¹⁷

Farm accidents present a unique challenge to the emergency medical system. The farmer often works alone, and many times an accident victim may not be discovered until hours after the accident. The accident often occurs in a field, barnyard, or some place not easily reached by conventional

emergency rescue vehicles. Equipment and knowledge of the emergency medical team may not always be adequate to get a person out from under a tractor or to release a part of his body from a machine.

Farm accidents also present a unique challenge to the practicing rural physician. The physician may be called directly to the accident scene to help rescue a person and is often involved in primary treatment of the accident victim. Open wounds may be severely contaminated from contact with soil or manure. Often the physician must accept the brunt of the rehabilitation effort because other rehabilitation services are not available. In many instances the farmer will start working as soon as possible after an accident, often sooner than normally would be recommended, and the physician must prescribe treatment regimens with this fact in mind. Rehabilitation may extend to helping the person return to work with a prosthesis or even counseling the patient in changing jobs, which often is very difficult for the farmer to do. The physician can become involved in accident prevention activities by conversing with patients

	Table 3. Proportionate Mortality Ratio and Cancer Deaths for Agricultural Subgroups in the States of Washington and Oregon					
	Proportionate Mortality Ratio					
	Stomach	Pancreas	Lung	Kidney	Brain	Leukemia
Farmers	117					
Orchardists			133			
Nurserymen		258				
Cattle ranchers				211	176	
Dairy farmers	143				187	
Wheat farmers						147
Poultry farmers						269

From Milham S (1976)¹³
 Note: Only those excessively high and significant (P = .05) are recorded

as they are examined, by promoting community educational programs, or by consulting with governmental agencies or industry.

Infectious Diseases Transmitted from Livestock or the Environment

There are approximately 25 diseases common to animals and humans (zoonotic diseases) that are of occupational significance to agricultural workers (Table 4). These diseases may be acquired through direct or indirect contact with infected livestock. Several of the diseases are maintained in the natural environment (the work place of the farmer) and may be transmitted through contact with soil, water, wild animals, or insects. Leptospirosis, for example, may be acquired through direct or indirect contact with urine from infected swine or cattle. This disease also is maintained in raccoons, mice, rats, and squirrels; direct or indirect contact with water or moist soil contaminated by infected animals of these species can result in infection.

Many zoonotic diseases including leptospirosis are difficult to diagnose because they have no pathognomonic signs or symptoms and because they may mimic other diseases such as influenza. Thus, few reliable data are available on the incidence of

these diseases in the farming population, but evidence suggests that they are much more common than is generally recognized.¹⁸⁻²⁰

Respiratory Diseases

The agricultural work environment, like the urban environment and many industrial work environments, is contaminated with particulates and gases that may cause acute or chronic lung disease. The farm environment is laden with pollens, mold spores, grain dusts, and animal danders, which are excellent agents for producing asthma in susceptible individuals.²¹ Because it is difficult for farmers to avoid these allergens, the most severely affected individuals are often self-selected out of the agricultural population. Thus, it is difficult to get a true picture of the significance of chronic respiratory diseases among farm workers.

Another allergic respiratory disease of farmers is hypersensitivity pneumonitis, commonly called farmer's lung. This is differentiated from asthma by involvement of the alveoli rather than the bronchioles and by occurrence of acute episodes four to six hours after exposure rather than immediately following exposure. Farmer's lung is caused by inhalation of large quantities of allergenic particles less than 5 μm in diameter. Spores of the mold

genera *Micropolyspora* and the bacterium *Thermoactinomyces* commonly have been incriminated.²¹ Acute symptoms are manifested by a tightness in the chest, with associated pain, cough, severe malaise, fever, and an elevated white blood cell count with a neutrophilia. Spontaneous recovery usually occurs in 24 to 48 hours. Chronic farmer's lung may result from multiple exposures over a long period of time, with interstitial pulmonary fibrosis as a sequela.

Livestock confinement buildings recently have been recognized as an environment that can be damaging to the lungs.²² Numerous irritating gases that can damage the respiratory epithelium are present, including ammonia and hydrogen sulfide. Particulate matter is important in the livestock confinement environment because particles are present in high numbers, the majority of particles are less than 5 μm and thus can be inhaled into the alveoli, and the particles are antigenic. Also, irritating gases present in the work environment may be adsorbed to particulate surfaces. A variety of acute and chronic health problems have been recognized in farmers working in livestock confinement buildings, but the problem is relatively new and its full potential is yet to be determined.

Table 4. Zoonoses Occupationally Significant to Agricultural Workers¹⁸

Brucellosis
Leptospirosis
Toxoplasmosis
Rabies
Tetanus
Anthrax
Erysipeloid
Q fever
Histoplasmosis
Blastomycosis
Ringworm
Equine encephalitis
Newcastle disease
Pseudocowpox
Vesicular stomatitis
Contagious ecthyma
Staphylococcal infections
Echinococcosis
Colibacillosis
Tularemia
Acariasis
Pasteurellosis
Rocky Mountain spotted fever
Sporotrichosis
Balantidiasis

From Donham (1975)¹⁸

Agricultural Chemicals

Pesticides probably have received more publicity than other agricultural hazards. Actually, the majority of hospitalized pesticide poisonings in the United States are a result of accidental ingestion or suicide attempts. Between 1971 and 1973, it has been estimated that a yearly average of 272 farmers and agricultural workers were hospitalized for pesticide poisonings out of a total yearly estimate of 908 such poisonings for the same period.²³ For the same period, it has been estimated that an average of 8 out of a total estimate of 64 occupationally related pesticide poisonings resulted in death. Most of these occurred in citrus, grape, and cotton growing areas of the Southeast, Southwest, and Far West.²³ Thus, in comparison with some of the other agricultural hazards, the acute health effects of pesticides are relatively minor. However, the question of chronic health problems has not been answered, even though this has been an active area of research in recent years.

Agricultural Dermatoses

A variety of skin problems have been recognized as occupational risks for farmers,²⁴ the major causes including contact with irritating or sensitizing substances, infections, damage from the sun, and arthropod induced problems. The many chemicals common in modern agriculture have increased the risk for contact dermatitis. That the work place is outdoors also increases the risk for dermatoses induced by sun and arthropods.

Cancer

As a whole, cancer rates are low in farm populations because the most common cancers (lung

AGRICULTURAL MEDICINE

and breast) are less common in farm populations than in the general population. There are, however, certain cancers for which farmers are at greater risk than the general population. Milham noted significant increases in cancer of the stomach, brain, and kidney, and in leukemia.^{1,2} Burmeister noted increases in mortality in Iowa farmers due to kidney, bladder, prostate, leukemia, lymphoma, and large bowel cancers.²⁵ The increase of leukemia in farmers has been noted by several authors.²⁶⁻²⁹

Education of the Rural Practitioner

Special health problems demand special education for the physicians dealing with them. For several reasons, few physicians entering rural practice have received training in how to deal with agricultural health problems. Most future physicians are trained in tertiary care units in urban centers. Agricultural workers with health problems unique to their occupation and rural residence are not seen in such centers unless these problems require sophisticated diagnostic procedures or intensive care. Few instructional materials on agricultural health problems are presently available; even medical journal articles on such problems are sparse. Although several programs in recent years have provided firsthand patient contact experience in rural areas, such experience is only part of the answer, for in most cases these programs tend to result in application of urban practice techniques and philosophies to rural areas. To be most effective in actually improving the health of a rural community, the practitioner must take a comprehensive view of health and disease and learn to consider the interactions of the patient, the patient's family, the community, and the environment. Training physicians to do this demands a major change in educational emphasis.

To meet these educational needs, the University of Iowa initiated a Rural Health Training Program in 1974. The program is the only one of its kind in the United States. The Rural Health Training Program will be described as a model of the type of educational program which could be profitably adopted by other medical schools that con-

centrate on training physicians for rural areas.

The program applies practical philosophy and didactic material relevant to agricultural health problems to the traditional medical curriculum. Preventive and community medicine are emphasized. The trainee is encouraged to go beyond the traditional one-to-one relationship between physician and patient to view a patient in the context of his or her environment. The trainee then is encouraged to apply preventive and community medicine techniques to agricultural health problems, using available local, regional, and national resources.

The program is founded on three concepts that differentiate a rural physician from one in a specialized urban practice. First, a rural physician needs to understand the occupational and environmental roots of agricultural health problems. This need is especially pronounced when dealing with zoonotic diseases. Since mild cases of many of these have protean and nonpathognomonic symptoms, they may mimic influenza. Correct diagnosis frequently depends on analyzing the circumstances under which the disease was contracted. This in turn depends on a knowledge of occupational exposure to specific zoonoses. For example, a physician dealing with an influenzalike illness might suspect Q fever if the patient were a dairy farmer or brucellosis if the patient were a swine farmer. Medical training must include life cycles of zoonotic infectious agents and mechanisms of transmission to humans in addition to symptoms, signs, laboratory confirmation, and treatment of zoonoses. Only with this complete profile will a physician be able to take a meaningful patient history.

Second, a rural physician needs to keep abreast of emerging agricultural technologies and anticipate new health problems that may develop. Agricultural workers are continually exposed to new chemical substances and new technologies, such as the livestock confinement system described previously. The physician who understands the exposures of confinement-house workers will be able to trace complaints of confinement-house workers to their source and recommend corrective measures to the worker. Thus, the preparation of physicians for rural practice should include fundamentals of modern agriculture and information on how to keep informed about changes in agricultural practices that may result in human health hazards.

Third, the rural physician needs to expand his or her role beyond diagnosis and treatment of a specific disease or lesion to involvement with the total patient and the rural community. The many needs for such extended involvement are outlined in the section on Farm Accidents: simply stated, the rural physician is called on to assist in rehabilitation of the patient and assist in readaptation to farm work because the physician is the only one in the rural environment to do this. In addition, community programs on preventive medicine often exist only if initiated by the local physician. Such extended involvement requires instilling in medical students both motivation and specific skills. Students must understand the agricultural work environment sufficiently to trace health problems to their roots and then recommend preventive measures. They must understand what personal protective devices can be used by farmers and how to use available community resources to obtain additional information. Often these efforts must be made even though the rural physician may have fewer resources to rely on: there may not be a local health department, adequate social services, occupational health specialists, and the like.

How can these concepts be incorporated into medical training? The University of Iowa has adopted a four-pronged approach in its Rural Health Training Program. First, a preceptorship is offered to medical students between their freshman and sophomore years, which is a student directed research effort designed to introduce the student to specific agricultural health problems. The student is given an overview of the problems and a description of present ongoing research at the Institute of Agricultural Medicine and Environmental Health, a branch of the University's Department of Preventive Medicine and Environmental Health. The student then picks a topic of his or her interest to pursue in a research effort. This program is intended to work in cooperation with the Medical Early Community Orientation Program,* which also is offered to second-year students.

*The Medical Community Orientation Program (MECO) is designed to give students exposure early in their training to clinical medicine at the community level by placing them in small offices, clinics, or hospitals.

Second, a course titled Rural Health is offered for senior medical students. This course covers specific information on unique agricultural health problems. Emphasis, however, is on discussing the roots of these health problems (ie, environmental exposures, peculiar behavior of farmers, agricultural practices and technologies, and mechanism of transmission of zoonoses). The philosophy behind a comprehensive approach to rural medicine, including preventive and community aspects of rural health problems, is discussed. Although the course is oriented toward midwestern agriculture, it is conceptual in nature so that the prospective physician can apply many of the principles regardless of the particular area of the country in which he or she chooses to practice.

Third, a rotation is offered for family practice residents. Residents spend one month at the Institute of Agricultural Medicine and Environmental Health getting specific training in health problems unique to agriculture. Major areas covered are toxicology of agricultural chemicals, infectious diseases transmissible to humans from nature and livestock, farm accidents, agricultural respiratory diseases, and occupational medicine. The training method is by case and field study. Cases of specific agriculturally related illnesses are identified through the University Hospitals, one of the rural model offices of the Department of Family Practice, one of the community hospitals in the state, or referral from a practicing physician in the state. Each case is studied by in-depth patient interview, physical examination, and collection of appropriate laboratory data. A field trip is made to the patient's farm to investigate the environment where the illness was contracted or injury took place. The resident is encouraged to design preventive procedures for each case and, when appropriate, to recommend them to the patient.

Fourth, family practice residents have the opportunity to complete their required research project on a specific agricultural health problem using the facilities of the Institute of Agricultural Medicine and Environmental Health. Institute faculty provide guidance for research projects.

An outgrowth of the Rural Health course has been the Rural Health Series, a set of 16 autotutorial, self-instructional presentations on health problems of agricultural workers. The complete set of presentations constitutes a solid core of information for construction of rural health courses

AGRICULTURAL MEDICINE

at other medical schools. Presentation of salient information in a self-instructional format also makes it possible for students unable to attend scheduled class sessions to learn the course content. The presentations, which qualify for credit hours in Category I toward the Physician's Recognition Award of the American Medical Association, can be used by rural practitioners to brush up on health problems of their local area. (These materials are distributed at minimal cost through the National Library of Medicine, National Audiovisual Center, General Services Administration, Order Section/MM, Washington, DC 20409.) In addition to the audiovisual series, a text that describes factors involved in rural practice, designed for second-year medical students, is in preparation, with publication expected in 1983. Additional information on the series or text can be obtained from the authors.

References

- 1970 Census of Population: General Social and Economic Characteristics, United States Summary. In Bureau of the Census (Suitland, Md): Department of Commerce, publication No. PC(1)C1. Government Printing Office, 1972
- Copp JH: Diversity of rural society and health needs. In Hassinger EW, Whiting LR (eds): Health Services: Organization, Delivery, and Use. Ames, Iowa State University Press, 1974, chap 2
- Reynolds RC: Rural America and health care: A brief perspective. In Reynolds RC, Banks SA, Murphree AH (eds): The Health of a Rural County: Perspective and Problems. Gainesville, University Presses of Florida, 1976
- Califano JA: Rural health: A crisis of our time. *Rural Health Commun* 2(4):3, 1977
- Sparkman J: Establishing an office of rural health in the United States. *Rural Health Commun* 2(6):7, 1977
- Farm population of the United States for 1976. In Bureau of the Census (Suitland, Md): Current Population Reports, series P-27, No. 49. Government Printing Office, 1976, pp 1-17, 27
- Smith LW, Rowe G: The hired farm working force of 1976. Department of Agriculture, Economics, Statistics, and Cooperative Service: Agricultural Economic Report No. 405. Government Printing Office, 1978, pp 1-18
- Banks VJ: Farm population estimates for 1976. Department of Agriculture, Economic Research Service: Agricultural Economic Report No. 383. Government Printing Office, 1978
- Communications Division, Iowa Farm Bureau Federation: Facts on Iowa Agriculture. Grundy Center, Ia, Iowa Farm Bureau, March, 1978, p 36
- Current Estimates from Health Interview Survey: 1973. In National Center for Health Statistics (Hyattsville, Md): Vital and Health Statistics, series 10, No. 95. DHEW publication No. (HRA) 75-1522. Government Printing Office, 1974
- Berry CM: Rural employment. *Am J Public Health* 12:2474, 1971
- Guralnick L: Mortality by occupational and cause of death among men 20-64 years of age, United States, 1950. In National Center for Health Statistics (Hyattsville, Md): Vital and Health Statistics, Special Report, vol. 53, No. 5. Government Printing Office, 1963
- Milham S, Washington State Department of Social and Health Services: Occupational Mortality in Washington State, 1950-1971. National Institute for Occupational Safety and Health (Rockville, Md), Research Report, vol. 1. DHEW publication No. (NIOSH) 76-175-A. Government Printing Office, 1976
- Department of Industrial Relations, Division of Labor Statistics and Research: Doctor's First Report of Work Injury. San Francisco, State of California Agriculture and Services Agency, 1974, p 5
- Haber LD: Disabling effects of chronic disease and impairment. *J Chronic Dis* 24:482, 1971
- Accident Facts. Chicago, National Safety Council, 1981, pp 23-24, 85-88
- Knapp LW: Agricultural injury preventions: *J Occup Med* 7:545, 1965
- Donham KJ: Infectious diseases common to animals and man of occupational significance to agricultural workers. In Proceedings of Conference on Agricultural Health and Safety, Iowa City, Iowa, September 1974. Washington, DC, Society for Occupational and Environmental Health, Environmental Sciences Laboratory, 1975, pp 160-175
- Steele JH: Occupational health in agriculture: Animal borne diseases. *Arch Environ Health* 17:267, 1968
- Smith IM, Donham KJ: Rural infectious disease hazards: The zoonoses and systemic mycoses. *Cont Educ Fam Physician* 5:26, 1976
- Kammermeyer J: Some special aspects of pulmonary disease in a farm setting. In Proceedings of Conference on Agricultural Health and Safety, Iowa City, Iowa, September, 1974. Washington, DC, Society for Occupational and Environmental Health, Environmental Sciences Laboratory, 1975, pp 44-52
- Donham KJ, Rubino MS, Thedell TD, et al: Potential health hazards of agricultural workers in swine confinement buildings. *J Occup Med* 19:338, 1977
- National Study of Hospital Admitted Pesticide Poisonings, Environmental Protection Agency, Office of Pesticide Programs, Human Effects Monitoring Branch, Epidemiologic Studies Program. Government Printing Office, 1977, p 27
- Zuehlik RL: Common cutaneous problems in agricultural workers. In Proceedings of Conference on Agricultural Health and Safety, Iowa City, Iowa, September, 1974. Washington, DC, Society for Occupational and Environmental Health, Environmental Sciences Laboratory, 1975, pp 54-67
- Burmeister LF, VanLier SF, Isacson EP, et al: A comparison of cancer incidence and mortality in Iowa farmers. *Am J Epidemiol* (in press)
- Fasal E, Jackson EW, Klauber M: Leukemia mortality and farm residence. *Am J Epidemiol* 87:267, 1968
- Milham D: Leukemia and multiple myeloma in farmers. *Am J Epidemiol* 94:307, 1971
- Donham KJ, VanDerMaaten MJ, Miller JM, et al: Seroepidemiologic studies on the possible relationships of human and bovine leukemia: Brief communication. *J Natl Cancer Inst* 59:851, 1977
- Donham KJ, Berg JW, Sawin R: Epidemiologic relationships of the bovine population and human leukemia in Iowa. *Am J Epidemiol* 112:80, 1980

Exhibit II

Dr. Donham received his BS and MS degrees in environmental health from the University of Iowa and his DVM from Iowa State University. He has been with the Institute of Agricultural Medicine, College of Medicine, University of Iowa since 1973.

Human occupational hazards from swine confinement†

KELLEY J. DONHAM, D.V.M. and NIM E. GUSTAFSON
Institute of Agriculture Medicine, College of Medicine, University of Iowa

Introduction

The past ten years have seen dramatic changes in agriculture in the United States. A variety of economic, political, social, and technical forces have been in effect, such as 1) inflation; 2) low profit margins; 3) extremely high land prices; 4) decreasing availability of farm labor and decreasing ability of the farmer to pay competitive wages; 5) tax incentives for new farm buildings and equipment; and 6) advances in mechanization in farming. Major consequences of these forces have been in larger, fewer, and more specialized agricultural operations. Agriculture has evolved from a labor intensive to a capital intensive industry. With respect to these forces on livestock production, the confinement system was initiated and has flourished.

The confinement system is an industrial approach to livestock production. Large numbers of animals are raised in a relatively small space, within an enclosure structure. Normally, these animals remain indoors throughout their productive life span. These buildings are equipped with mechanized systems for ventilation, feeding, watering, and manure removal. We have recognized many potential occupational hazards for people working in these buildings. A detailed review of these potential problems, plus a description of the design of these buildings has been reported elsewhere.⁽¹⁾

In this paper, the potential respiratory hazards associated with working in swine confinement buildings will be described. Swine producers are the main users of the confinement system in the midwest. The use of swine confinement is growing in the southeast and near west. On an empirical basis, swine confinement seems to account for greater occupational concerns than confinement systems for other livestock species or poultry. Poultry confinement does not

seem to elicit adverse symptoms in workers nearly as severe or as frequently as swine confinement.⁽²⁾ Beef cattle and dairy confinement systems are still relatively uncommon in comparison to swine confinement.

The potential respiratory hazards will be discussed first on an empirical basis, summarizing accumulated clinical impressions and occupational histories of confinement workers. Secondly, the environmental surveys that have been taken will be described. Thirdly, the exposed population and acute respiratory symptoms they experience will be described quantitatively, based on a survey of workers. Finally, environmental investigations of acute toxic situations that have been developed will be discussed.

Methods and materials

Clinical data and occupational histories have been collected over a period of four years on swine confinement workers. These cases were drawn to our attention by requests for consultation from practicing physicians throughout the midwest (from Indiana to Colorado), and from the medical staff at the University of Iowa hospitals and clinics. There have been approximately 40 such cases from which empirical clinical impressions have been based.

Environmental evaluations were performed in four swine confinement buildings. Gas samples were measured with Draeger colorimetric tubes or by an Interscan electronic direct reading H₂S detector, and respirable particulates were measured by the filter method, using MSA Model G air pumps with and without cyclone separators. Aerodynamic particle sizing was determined by cascade impaction with Andersen and Gehman air samplers.

A geographically stratified random sample of swine producers (2459 persons) in Iowa were mailed a pre-tested questionnaire in September of 1979, requesting information about their farm operation and

† Research supported in part by NIOSH Grant No. 1 R01 OH00825.

health status. The returned questionnaires were coded and punched by trained technicians, then analyzed by computer assistance.

A number of acute deaths of confinement workers were brought to our attention during the past four years. These cases were investigated by our staff to determine the behavioral, facility design, and environmental factors that entered into these acute deaths. Environmental measurements were taken when feasible.

Results and discussions

Clinical observations

From our clinical observations, and occupational histories, the respiratory symptoms experienced by swine confinement workers have been divided empirically into three major classifications: acute respiratory symptoms, delayed symptoms, and acute toxic conditions. A high percentage of the patients interviewed complained of cough, tightness of chest, excess sputum production, wheezing, and shortness of breath experienced from working in swine confinement buildings. The severity of these symptoms ranged from mild to severe. The length of exposure time resulting in symptoms varied from a few minutes to three hours. Approximately 12% of these cases reported rapid onset of symptoms, while the majority reported symptoms which developed after two to three hours of exposure. All of the individuals indicated they improved after 24 to 48 hours of absence from the building. Approximately 10% complained of episodes of flu-like illness with fever four to six hours after working for several hours in these buildings. Muscle aches and pains, headaches, cough, and tightness of chest, along with fever, were reported in those with delayed symptoms. Several patients were interviewed who suffered such severe symptoms that they had to quit working, or severely limit their work in the buildings. We have not been able to characterize any particular chronic respiratory condition in these latter individuals. In those affected most severely, use of dust masks seemed to help.

A number of accidents have been investigated where deaths or near deaths have occurred from exposure to gases from liquid manure storage tanks. These acute situations are associated with agitation of the liquid manure, which results in sudden release of high levels of H_2S . People in close proximity to these tanks, or those persons entering these tanks, especially just after agitation, are at risk. Unfortunately,

the circumstances often result in multiple deaths because of improper rescue attempts.

Environmental measurements

Previous environmental measurements within swine confinement buildings have shown that one or more of the fixed gases common to anaerobic digestion of organic material (H_2S , NH_3 , CO_2 , CH_4 , or CO), may exceed the threshold limit value.⁶¹ Other research⁶² has shown particulates commonly exceed the threshold limit value. Our measurements of dust were somewhat lower than those reported elsewhere. On four different farms, particulates were measured in 17 buildings. Dust levels ranged from 1.19 to 6.75 mg/m^3 (median = 3.4, $N = 17$) for total particulates, and 0.23 to 1.20 mg/m^3 (median = 0.48 mg/m^3) for cyclone separated samples. The mean for percent respirable particulates was 15.5%. Perhaps our measurements were somewhat lower because they were taken in relatively mild weather when ventilation rates are higher. Most buildings' ventilation systems are controlled by thermostats, and the colder it gets outside, the worse the internal environment becomes. We intend to repeat measurements during colder months.

Aerodynamic sizing of particulates in swine confinement buildings has not been reported previously in the literature. By cascade impaction, the average mass median diameter of particulates in these buildings was found to be 11 microns. The aerodynamic behavior of this particulate matter is similar to that reported for dust in grain mills. Although the exact makeup of confinement house dust is unknown, the data shown here suggest that a major component is probably grain dust. Other suspected materials include dried fecal material, dander and broken bits of hair from swine, bacteria,⁶³ and bacterial endotoxins.⁶⁴ At any rate, the particulate load seems to be an important contaminant in the work environment that could produce acute or chronic respiratory diseases.

Surveys of swine producers

A total of 1100 or 45% of the mailed questionnaires were returned. Although there was no systematic procedure carried out to compare the responders and the non-responders, the reported symptoms compared quite favorably to a previously surveyed non-random group of 450 swine producers.⁶⁵ Data on the business aspect of the livestock farms gave us a good picture of the extent and trends of swine confinement buildings used in Iowa agriculture. A total of 51% of the

Donham and Gustafson: Human Occupational Hazards from Swine Confinement

estimated 55,000 Iowa swine producers have confinement buildings, that is 28,050 farms.¹⁷ Swine confinement operations have approximately three persons per operation working, totalling about 164,150 exposed individuals. Of the 1173 veterinarians in Iowa, 40% (468) are estimated to have occupational exposure to swine confinement buildings. Thus, it is estimated that nearly 85,000 people are occupationally exposed to the swine confinement environment in Iowa alone. To project this figure to the United States in general, it was taken into account that Iowa raises 25% of the U.S. pork,¹⁸ and assumed husbandry characteristics were similar in other states. It is estimated that about 338,472 people are exposed to the swine confinement atmosphere in the U.S. It is not known how many people work in confinement poultry, beef, or dairy units. Based on a general knowledge of the livestock industry, it is assumed empirically that this industry is similar to the swine total. As a very rough estimate, around 700,000 people are occupationally exposed in livestock or poultry confinement buildings in the U.S.

The confinement operations raised 73% of the total swine inventory in Iowa, with a mean swine inventory of 689 animals per confinement operation, compared to 254 for non-confinement operations. This suggests that confinement workers have a more concentrated exposure to swine than non-confinement workers.

The fact that 91% of the confinement units have been built since 1970 signifies how new this system is. At the time of the survey, there were 1.7 confinement buildings per operation, but 34% of the present confinement operations planned to build new build-

ings within the next five years. Twelve percent of the non-confinement swine operations are planning to build confinement buildings within the next five years.

These data provide a window to the industry illustrating the facts that a large number of people are exposed to the confinement atmosphere, and that more people will be exposed as the trend toward livestock confinement continues. The survey also showed that the majority of confinement operations are family businesses. Thirty-nine percent of the confinement operations had spouses who worked in the building, and 50% had children working. In addition, 36% of the units had hired employees.

Swine confinement worker symptoms

Adverse symptoms were reported frequently by swine confinement workers (Table I). The frequency and distribution of these symptoms are quite similar to surveys we have done in two other non-probability sample groups of swine producers and veterinarians.¹⁹ Sixty-seven percent of the population reported cough. The most frequently reported symptoms were related to the respiratory tract.

To quantify the pulmonary symptoms, a "pulmonary score" was calculated, which was determined by the number and frequency with which an individual experienced pulmonary symptoms. Cough, production of excess sputum or phlegm, tightness of chest, shortness of breath, and wheezing were scored cumulatively, one to four points each, depending on whether they experienced the symptom rarely, occasionally, often, or very often. Table II indicates the pulmonary score was positively correlated with the swine inven-

TABLE I
Symptoms of Swine Confinement Workers*

	% of Total	% of Category Reporting Symptoms		
		Smoker	Ex-Smoker	Non-Smoker
Cough	67	80	68	63
Sputum or phlegm	56	53	63	54
Tightness of chest	36	36	35	36
Shortness of Breath	30	33	33	27
Wheezing	27	32	33	23
Scratchy throat	54	46	52	56
Runny nose	45	43	46	47
Headaches	37	33	32	40
Burning or watering eyes	30	31	31	43
Muscle aches and pains	25	27	31	23

* N = 466

TABLE II
Factors Affecting Prevalence of Acute
Pulmonary Symptoms in Swine Confinement Workers

Positive Correlation	
	Number of swine raised*
	Smoking history
No Correlation	
	Age
	Number of hours/worked per week
	Type of building
	Type of operation

* Spearman correlation coefficient = 0.12
P < 0.05

tory, indicating a crude dose-response relationship. Smoking history (Table II) was also an important factor affecting the symptoms experienced. There was a positive correlation between present smokers or ex-smokers and the cumulative pulmonary score (Table III). Each of the five acute pulmonary symptoms scored were individually correlated positively with smoking status (Table IV). There was no evidence that giving up smoking decreased the pulmonary symptoms experienced. The mean pulmonary score was higher for both smokers and ex-smokers, as compared to non-smokers. The data is quite suggestive that smoking increases the frequency and severity of pulmonary symptoms, but the effect seemed to be an all-or-none effect. There was no correlation between pulmonary score and the length of time and amount the person had been smoking (pack-years), nor the time period after cessation of smoking.

Although smoking complicates pulmonary symptoms in swine confinement workers, the work environment itself also causes adverse symptoms. A high proportion (63%) of non-smoking workers experienced cough, and the pulmonary score for non-smokers was only one point lower than the pulmonary score of smokers or ex-smokers.

Swine confinement buildings have many different designs. The four most common designs (relative to the degree of confinement and method of manure handling), and the major intended use of the building (farrowing, nursery, or finishing) were compared and no correlation to pulmonary score (Table II) was found.

One rather unexpected finding was the lack of correlation between number of hours worked per

week in the building and pulmonary score (Table II). This does not support a linear dose-response relationship. Perhaps there is an exposure time-threshold level, beyond which acute symptoms are seen. Empirical observation based on case histories of swine confinement workers, suggests symptoms usually are not seen unless workers spend at least two to three hours at one time in the building. In the present survey, data could not be collected on total length of time the person had worked in the facility, but a previous survey suggested there was little influence on acute symptoms experienced.⁶⁾

There did seem to be a compounding effect of certain concurrent chronic disorders and acute symptom experiences. There were positive correlations found in that the pulmonary scores were higher in people reporting hay fever, bronchitis, heart trouble, and allergies (Table V). However, there was no correlation found between asthma or emphysema.

Acute toxic situations

In the past four years, we have investigated circumstances surrounding eight deaths and six near deaths associated with livestock confinement operations. The cases were associated with acute exposure to gases liberated from liquid manure storage pits. Our studies have shown liquid manure undergoing anaerobic digestion can hold very high levels of hydrogen sulfide in solution or suspension. Agitation of the liquid manure, usually associated with emptying the pit, can result in rapid release of very high levels of hydrogen sulfide gas. Workers who enter a manure pit or enter a building which has the pit under it, may be exposed to lethal levels of hydrogen sulfide. The following brief case history exemplifies these cases.

An Iowa farmer and his 21-year-old son were attempting to empty the liquid manure from a storage pit associated with their swine confinement operation. They had lowered a high volume pump into the pit and

TABLE III
Correlation of Smoking History to
Respiratory Symptoms of Swine Confinement Workers

	Non-Smoker	Smoker	Ex-Smoker
Pulmonary SCORE	4.1	4.0	5.0

P = 0.0378

Difference between non-smoker and ex-smoker, P < 0.05

N = 1100

Donham and Gustafson: Human Occupational Hazards from Swine Confinement

operated it in the recirculating mode to agitate the materials and force the solids in suspension. There was an apparent malfunction in the pump and the son lowered himself into the tank to investigate. He suddenly collapsed and fell to the bottom of the pit. The father called to a second son who was nearby, and then lowered himself into the pit to attempt rescue. He too soon collapsed. The second son ordered a hired worker nearby to go to the house and call for help. In the interim, the second son entered the pit to attempt rescue. He rapidly collapsed. The local volunteer fire department arrived on the scene. With the use of self-contained breathing gear, they were able to recover all three bodies.

Resuscitation attempts were not successful, and all three were pronounced dead on arrival at the local hospital. There was no autopsy or clinical chemistry done. Reenactment of the circumstances leading up to the deaths revealed atmospheric levels of H_2S of greater than 400 ppm could be produced rapidly by agitation of the manure in the pit. All of the evidence available indicates the H_2S was the probable toxic agent in this case. It is felt that this is the major problem seen in the majority of sudden deaths of this nature associated with liquid manure pits.

Summary

Confinement buildings are a relatively recent innovation in livestock production. The buildings have created new potential respiratory hazards for the farmer and agricultural worker, primarily from the presence in the work environment of gaseous products of anaerobic digestion of manure, and high levels of aerosolized particulates. Acute respiratory symptoms were reported by a high percentage of swine confinement workers. A smaller percentage of workers

TABLE V

Correlation Between Current Chronic Conditions and Respiratory Symptoms in Swine Confinement Workers

Condition	Pulmonary Score	
	Yes	No
Fly fever*	5.1	1.3
Bronchitis**	7.3	4.1
Heart trouble**	7.0	4.3
Allergies**	6.0	1.0
Asthma	5.1	1.3
Emphysema	6.3	1.1

* $P < 0.05$

** $P < 0.01$

reported delayed symptoms with fever. The symptoms experienced by the majority of these workers are suggestive of chronic bronchitis. There are many similarities between symptoms experienced by swine confinement workers and symptoms reported by grain handlers and cotton workers. The delayed symptoms reported are similar to those reported with hypersensitivity pneumonitis, atypical farmer's lung, or grain handler's fever. However, the specific etiology and pathophysiology of these symptoms await more detailed epidemiological clinical studies.

Implications for potential chronic lung damage cannot be inferred from this study. However, the environmental evaluations, plus the high frequency of acute symptoms, and the number of persons exposed, suggest this is an important area for future occupational health research.

We have recognized an emerging occupational health problem in agriculture. More in-depth industrial hygiene studies are required for evaluation and control of the problems associated with the livestock confinement work environment. The study of the problem requires a multidisciplinary approach. We hope that these studies may continue so that the work environment may improve, preventing potential chronic respiratory disease in these agricultural workers.

Acknowledgments

We acknowledge Greg Machitelli and the Environmental Investigation Branch of NIOSH for assistance in environmental evaluation, and Leon Bumeister, Ph.D. and Pat Hu, M.S. for data management and statistical consultation.

TABLE IV
Correlation Between Smoking and Respiratory Symptoms of Swine Confinement Workers

Symptoms	Spearman Correlation Coefficient	P-Value
Wheezing	0.157	0.001
Shortness of breath	0.155	0.001
Cough	0.139	0.002
Sputum/phlegm	0.123	0.006
Tightness of chest	0.094	0.015

Agricultural Respiratory Hazards

References

1. Donham, K. J., M. Rubino, T. D. Thedell and J. Kammermeyer: Potential Health Hazards to Agricultural Workers in Swine Confinement Buildings. *J. Occup. Med.* 19:363-367 (1977).
2. Donham, K. J., B.M. Leistikow and K.E. Grelsson: Unpublished data.
3. Curtis, S.E., J.G. Drummond, D.S. Grunkoh (et al): Relative and Quantitative Aspects of Aerial Bacteria and Dust in Swine Houses. *J. Animal Sci.* 41:1512-1519 (1975).
4. Budny, D.S., T.E. Hazen and L.H. Sodeholm: Dust Control in a Swine Confinement Unit by a Corona Discharge. *Proc. of Intl. Livestock Environment Symposium*, St. Joseph, Michigan, pp. 358-363 (1973).
5. Thedell, T.D., Industrial Hygienist: Personal communication, Colorado Fuel and Steel, Pueblo, Colorado.
6. Donham, K.J.: Respiratory Hazards of Livestock Confinement Workers. *Proc. of VII Intl. Congress of Rural Med.*, Salt Lake City, Utah, September 17-21, 1978, pp. 224-234.
7. *Iowa Agricultural Statistics Iowa Crop and Livestock Reporting Service*, Iowa Dept. of Agriculture, Des Moines, Iowa (1980).

Acute Toxic Exposure to Gases from Liquid Manure

Kelley J. Donham, M.S., D.V.M.; L. W. Knapp, M.S.; Russell Monson, B.S.; and Kim Gustafson, M.S.

Liquid manure storage is a common component of confinement systems for swine, beef, dairy, and veal operations. A mail questionnaire to a sample of swine producers indicated that more than 85,000 people in Iowa and an estimated 500,000 in the United States work in livestock confinement systems that use liquid manure storage. Deaths and illnesses in people with acute exposure to toxic gases emanating from the liquid manure have been recently reported. This communication reports results of the investigation of six such incidents. Hydrogen sulfide appears to be the main toxic substance involved, and agitation of the liquid manure is important in creating an acutely severely toxic environment. Preventive measures must include worker education and limitation of human exposure through control of environmental and human factors.

During the past 15 years, livestock production in the United States has undergone a dramatic evolution characterized by fewer, larger, more specialized and more capital-intensive farms. An industrial approach to livestock production, the confinement system, wherein many animals are raised in a small space in an enclosed structure has been developed. With this new technology a series of occupational health problems for workers in confinement buildings came into being.¹⁻⁴

An important element in the confinement rearing of livestock is the management of wastes (feces and urine) in a liquid or slurry form, which are usually stored in pits or tanks, either under the livestock building or outside. The aim is to have sufficient storage capacity (four to six months) so that the manure can be applied to the ground during spring and fall when the ground is not frozen or when crops are not in the field and farm labor requirements are minimal.

When liquid manure is stored, the activity of anaerobic

and facultative microbes results in the production of various gases as metabolic by-products. Literature reviews by Muehling⁵ and Nordstrom and McQuitty⁶ have noted the presence of about 150 different gases, many of which are potentially toxic. The so-called fixed gases — methane (CH₄), ammonia (NH₃), carbon dioxide (CO₂), and hydrogen sulfide (H₂S) — are produced in systems where anaerobic digestion of organic material occurs. In sanitary sewage treatment this microbial activity is a very important part of the treatment process, and the relevant technology is well developed in municipal treatment systems. In most livestock production operations, however, the wastes are merely stored, and uncontrolled anaerobic digestion occurs.

We have found that ambient levels of the fixed gases within many confinement buildings (with the possible exception of CH₄) commonly exceed current threshold limit values (TLVs).⁷ Although there have been a few isolated reports of explosions from CH₄, it is not felt to be a cause of acute toxicity as it is not a highly toxic gas and it is rarely detected in these buildings.

Carbon dioxide may result in asphyxiation of animals in the buildings if the ventilation system fails for six to eight hours, but it is highly unlikely to be a cause of acute toxicity in confinement workers.

NH₃ is commonly found at levels sufficient to produce irritation of the eyes and the respiratory tract, but it has not been recognized to be present at levels high enough to be severely toxic.

Ambient concentrations of H₂S are commonly found at 10 parts per million (ppm) or less, at which levels it acts as an irritant similar to NH₃. However, under certain conditions, manure pits create extremely high levels of H₂S (> 500 ppm) that can result in acute toxic effects to humans working in the vicinity. Agitation seems to be a key factor resulting in the generation of high levels of H₂S. To deal with the tendency of solids to accumulate at the bottom of the storage structure various methods to agitate the liquid systems were introduced so as to suspend the solids for pumping purposes.

Carbon monoxide (CO) has also been recognized as a potential health hazard in livestock confinement buildings.^{8,9} However, the major source of this gas is the combustion of hydrocarbons (usually propane) in heating systems in the building, rather than liquid manure.

The objective of this article is to review the acute occupational hazards associated with toxic gases emanating from liquid manure storage systems.

From the Comparative Medicine Section (Dr. Donham, chief and associate professor) and the Accident Prevention Section (Dr. Knapp, chief and professor), Department of Preventive Medicine and Environmental Health (Mr. Monson, research assistant, and Ms. Gustafson, trainee), Institute of Agricultural Medicine and Environmental Health, College of Medicine, University of Iowa, Oakdale.

Address correspondence to Comparative Medicine Section, Institute of Agricultural Medicine and Environmental Health, College of Medicine, University of Iowa, Oakdale, IA 52319 (Dr. Donham).

This investigation was supported in part by grant 1 R01 OH 00825 from the National Institute for Occupational Safety and Health, Centers for Disease Control, Department of Health and Human Services.

Methods

A mail survey was conducted to determine the extent of occupational exposure associated with liquid manure storage facilities in Iowa. The survey was limited to swine producers since they have been the major users of such systems in Iowa and since the porcine is the primary livestock species in Iowa. However, swine confinement operations are becoming very common throughout the greater Midwest and southeastern United States and veal, beef, and dairy operations are also adopting liquid manure handling systems.

A probability sample (stratified by county and size of operation) of 2,459 people was selected from owners or operators of the 55,000 farms in Iowa on which swine are raised. These people were mailed a questionnaire relative to certain characteristics of their operation. On the basis of a 44% response rate, it was determined that 51% of the swine producers had one or more confinement facilities on their farms. As liquid manure storage is an integral component of the livestock confinement concept, it was assumed that all confinement farms had liquid manure storage. These operations reported an average of 3.0 workers per operation (including family members). Using the foregoing figures and on the basis of a reported figure of 55,000 swine producers in the state, it can be estimated that Iowa has 28,050 swine farms with liquid manure storage systems and an exposure potential of 84,150 persons. Transposing this to nationwide figures, and including the many beef, dairy, and veal operations also using this system, the number of individuals exposed to liquid manure in agriculture may reach well over a half million.

Case Studies

The following case studies highlight the emerging severe occupational hazards associated with liquid manure storage on the farm.

Case 1. — In May, 1976, an Iowa swine producer and his partner noted a manure storage tank outside their 600-sow farrowing complex was about to overflow. There was assumed to be a block in the sewage line leading to a sump pit, from which the liquid was normally pumped into a lagoon. The manure tank wagon was used to pump and back flush the liquid waste into the pit in an attempt to dislodge the blockage. When this procedure failed, the producer removed the concrete cover from the 3 x 6-foot underground sump and lowered himself into the pit to investigate. He was standing on a ledge in the sump trying to unclog the line when, after a few minutes, his partner (who was outside the tank) noted that he was having a difficult time breathing. The partner grasped him and called to a third person working nearby. They both tried to pull him out, but he "went limp" and slipped free, falling into the bottom of the tank. The first inclination of the two rescuers was to enter the pit too, but they changed their minds and went to summon the emergency medical service from the nearby town. An emergency team arrived after about 30 minutes and started to enter the tank but the partner stopped them, warning of the need for respiratory protection. After an additional 30 minutes of delay, they obtained respiratory protective equipment and entered the tank to retrieve the owner. Resuscitation attempts were fruitless and he was pronounced dead on arrival at the local hospital.

The only significant finding on autopsy was extensive pulmonary edema in all lobes. No clinical chemistry studies were performed. The medical examiner's report indicated the patient died of "asphyxiation from methane." It was not possible to take environmental measurements in this case.

Case 2. — In May, 1977, a Wisconsin farmer entered an outdoor septic tank (dry well) that had recently been pumped out. After

only a few minutes, he collapsed into the bottom of the tank and his mother, who was nearby, ran out to the road to flag down a motorist for help. The motorist entered the tank to attempt rescue and also collapsed. The mother went back to the road to flag down a second motorist who also entered the tank and collapsed. The emergency medical service was then summoned. The three men were retrieved from the tank, but resuscitation attempts were unsuccessful, and all three were pronounced dead on arrival at the local hospital.

The autopsy reports indicated massive pulmonary edema as the only important finding. The medical examiner reported the cause of death as "asphyxiation by methane." No environmental studies were performed.

Case 3. — In May, 1977, a 4-year-old boy died in a manure storage pit while visiting his grandparents in northeast Iowa. The boy, who had been accompanying his grandfather doing chores around the farm, was discovered to be missing. After a 15-minute search, he was found face down on the surface of the liquid in a manure pit under the slatted floors of a swine building. A section of the slats over the pit had been pulled up to facilitate emptying. The boy had apparently fallen or had intentionally entered the pit and had been overcome. He was retrieved from the pit, but resuscitation attempts were unsuccessful.

The individuals from the fire department and rescue unit who performed mouth-to-mouth resuscitation noted that only "a very small quantity of liquid was withdrawn from the victim's mouth and lungs." No autopsy or clinical chemistry procedures or environmental measurements were performed. The medical examiner listed the cause of death as "... a combination probably of drowning and suffocation from the toxic fumes from the manure pit..."

Case 4. — In November, 1979, a 23-year-old farmer and his 18-year-old brother were attempting for the first time to empty the manure pit under their new swine confinement building. They inserted a high-volume liquid manure pump into the pit from an outside port and activated the pump in the recirculating mode to suspend the solids. The farmer opened the door of the building and noticed that half the animals in the building were lying on their sides in obvious respiratory distress. He ran into the building to investigate and soon became "very dizzy, unable to breathe, nauseous, and nearly blacked out." His brother, who was outside, noted his trouble and ran in to assist. He immediately became "very dizzy, sick, and almost passed out." He was able to reach his brother and helped him out without collapsing. The farmer did not see a physician but was too ill to work for three days. For over two months he was "short of breath and was just not feeling well." His brother recovered more rapidly.

Of the approximately 400 swine in the building, 200 collapsed during the episode and 60 of these died. The ventilation fans on the walls of the building had been in operation during the episode but the pit ventilation had been inoperative.

Approximately two weeks later, an environmental investigation showed ambient gas levels within the building to be: H₂S, 3 ppm; NH₃, 3 ppm; CO₂, 10,000 ppm; CO not detected. Because of the fear of killing additional pigs in the building, no attempt was made to agitate the pit to see if the gas levels would increase.

Case 5. — In April, 1980, an Iowa swine farmer was emptying the manure storage tank under his new confinement building for the first time. He inserted the high-volume pump into the pit, loaded the manure wagon, and then put the pump into the recirculating mode to agitate the slurry while he went to the field to spread the first load. After returning, he noticed a peculiar odor and looked in the building to see all the swine lying on their sides. He rushed into the building to turn on the ventilation fan, as only one fan had been in operation during the pumping. He noticed a "peculiar odor" when entering the building, and, after a few seconds, had "a very hard time getting his breath." He became "light-headed," stumbled through the door, and collapsed outside, where he lay unconscious for several minutes. He regained consciousness and made his way to the house where his wife took him to the hospital. The only abnormal symptom or clinical sign at that time was tachycardia. Blood gas values and the chest roentgenogram were within normal limits. All the swine (24 sows and 200 piglets) died in the end of the building where the manure was being agitated.

Environmental air samples within the building taken three days later showed ambient levels of NH₃ and CO₂ at 50 ppm and 2,000

ppm, respectively. H_2S and CH_4 were not detected. Agitation of the pit was not done for fear of killing pigs in the other end of the building.

Case 6 - In August, 1980, an eastern Iowa farmer, two of his sons, and a hired man were attempting to empty an outside liquid manure pit. The liquid was too thick to pump so they drew about 2,000 gallons of liquid into a manure tank wagon from the top of another nearby storage pit and attempted to unload it into the first pit while agitating the slurry with a high volume pump that had previously been placed through the 3x3-foot opening in the top of the pit. They could not empty the diluting liquid into the pit as there was an apparent blockage in the line from the tank wagon. The 21-year-old son entered the pit by climbing down the pump shaft to investigate the situation. He came back up, mentioned that the gases were strong, and asked for a hammer. He suddenly collapsed and fell from the pump shaft into the 3 feet of liquid manure in the tank. The father called to the second son who was nearby, then entered the tank to attempt rescue. He also collapsed. The son called to the hired man nearby and told him to go to the house and summon the local fire department. On returning to the scene, the hired man discovered the second son had also entered the pit and collapsed. The volunteer fire department arrived in about ten minutes. One volunteer proceeded into the tank wearing a self-contained breathing apparatus and managed to retrieve all three men in about ten minutes. Resuscitation attempts were initiated and continued on the way to the hospital, but were unsuccessful. No autopsies or clinical chemistry procedures were performed. The medical examiner reported the deaths were caused by "asphyxiation and drowning."

On the following day, air samples were taken and levels of CO_2 at 10,000 ppm and NH_3 at 50 ppm in the pit were detected 3 feet above the level of the liquid. H_2S and CH_4 were not detected.

Approximately one month later, an attempt was made to reenact the accident situation. Air samples were taken while the liquid was agitated first by removing manure from the pit with the tank wagon, and then by operating the high-volume pump in the recirculating mode. H_2S rose from 0 to 20 ppm to greater than 400 ppm as the manure was increasingly agitated. CO_2 also rose from 3,000 to 5,000 ppm, but NH_3 and CH_4 remained undetected. The H_2S levels remained high while the pump was in operation, then slowly dissipated to about 25 ppm one hour after the cessation of pumping. The dissolved H_2S levels in the liquid manure averaged 75 mg/l.

Discussion

Recent reports of four events of exposure to liquid manure accounted for six deaths and six illnesses,¹⁰⁻¹³ and the additional six events reported herein, resulting in eight deaths and three illnesses, account for a total of 14 deaths and nine illnesses reported since 1975. Most probably these cases represent only a portion of the total, since many are probably not reported, and no formal case finding has been attempted to our knowledge.

Despite the limited descriptive data, our interpretation of the available evidence leads us to conclude that H_2S is the primary agent involved in these acute intoxications. The symptoms are compatible with acute H_2S toxic reaction in that the gases caused rapid unconsciousness with relatively little forewarning.^{14,15} The autopsy information was compatible in that the major finding was extensive pulmonary edema.^{14,15} There have been other reports in the literature describing a greenish tint to the viscera in people severely poisoned with H_2S ¹⁶; however, this was not noted in any of the cases reported herein. Although no data were available on atmospheric H_2S levels at the time the short-term exposures occurred, measurements made in one instance during reinstatement of the accident showed H_2S levels to be well in excess of 400 ppm. Subsequently, measurements of dissolved sulfides in several manure pits suggested that, acutely toxic levels of H_2S could be released

into the immediate area.

Multiple fatalities in a dairy confinement building event in Utah during the fall of 1980 lend further credence to the fact that H_2S is the main toxic substance in these rural accidents.¹² In that case, three persons sequentially entered a recently emptied manure storage pit to attempt rescue of a person who initially had gone in to retrieve a section of the pit cover that had accidentally fallen in. Three of these people died, and one survived after receiving intensive care for three weeks. Blood sulfide ion determinations in the three deceased victims were found to be extremely high (5.0 mg/l; 3.6 mg/l, and 0.8 mg/l), compatible with acute H_2S poisoning.^{15,17}

Morse, et al., recently described a 16-year-old farm worker who was overcome and died of fumes emanating from a liquid manure storage tank that was associated with a confinement calf barn.¹⁸ The autopsy revealed pulmonary edema as the primary finding, as was noted in our cases 1 and 2. Another similarity is that, as in the Wisconsin and Iowa cases, the liquid manure had been agitated just before the poisoning event. Although no environmental measurements were taken at the time of the accident, a later attempt to reenact the accident by agitating the liquid manure produced levels of H_2S beyond the measuring limits of instrumentation (60 ppm). The authors strongly believed that H_2S was the primary toxic agent involved.

Pomeroy¹⁸ has recognized that many deaths in sewer workers have been incorrectly attributed to asphyxiation or drowning. He indicated that lack of oxygen is not often a problem, but that high levels of H_2S is. He indicated that agitation of a slurry containing 2 mg/l of dissolved sulfides can release H_2S into the surrounding vicinity to well above 300 ppm. Our research has indicated that dissolved sulfides are commonly present at concentrations greater than 25 mg/l in animal-waste pits, indicating a high potential for release of toxic levels of gas.

Nearly all of the cases were associated with agitation of the liquid manure through emptying or agitation of the pit prior to emptying. Dissolved gases are normally released from the liquid to the atmosphere at a relatively slow rate, according to the Lewis and Whitman¹⁹ model of mass transfer kinetics. Agitation of the liquid manure dramatically increases the release rate of gas to the atmosphere. These increases are primarily due to (1) altering the mass kinetics of the system by increasing the surface area of the liquid phase and enhancing diffusion of the gas phase away from the liquid phase of the system; (2) releasing gases entrapped in bubbles in the more viscous portions of the slurry; and (3) disruption of the scum layer that often forms over the surface of liquid manure. Consequently, if the trend in the industry is to further increase agitation for more effective emptying of the pit, then such trends obviously have dangers associated with them.

The other critical factors associated with these acute exposure situations are the enclosed or confined space associated with the partially emptied tank and the structure built over a manure pit. Both situations require engineering modification and owner education to alter the hazardous situation created.

Prevention

If a building is constructed above the liquid manure

storage area, control of gases in the building is dependent on the maintenance and regulation of the mechanical and/or natural ventilation systems when the building is in a normal operating mode. However, when the liquid manure pit is in an abnormal gas-producing condition due to agitation for emptying (pumping) purposes, which usually occurs at least twice a year, depending on storage capacity, the normal ventilation mode is inadequate to disperse these excess toxic gases.

Little recourse is left to the operator of a building that is constructed over the manure storage area but to maximize the building ventilation capacities, and, when emptying the manure storage area, to remove the animals if at all possible. If the animals cannot be removed, then efforts should be made to minimize the agitation of the liquid manure. Ideally, and from a new construction viewpoint, outside manure storage, above or below ground, should be considered so as to eliminate the hazards associated with storage within the building. There should be no chance for gases to move from the outdoor storage back into the building, which apparently happened in a Wisconsin case.¹⁰ Daily removal of wastes directly to a lagoon has safety advantages over storage in a pit or tank, but because of odor problems (particularly in colder climates) and other environmental and economic concerns, this measure is not commonly used.

Dangers to human life from entry into a building with a manure pit under it or entry into the manure pit area are the same whether the storage area is under or outside the building and whether it is below or above ground. Similar occupational hazards in various industrial settings have been described with respect to working in a confined space.²⁰ Entry into these areas should never be attempted without a breathing apparatus that can supply oxygen or fresh air to the worker. A rescue harness should also be worn by the worker so that he can be expeditiously removed from the hazardous work area if he is accidentally injured or if his breathing apparatus fails.

Openings and/or access areas to manure storage pits should have safety guards and/or fences to limit entry. The openings through which pumping equipment is moved or lowered into the manure storage area should be of sufficient size and shape to permit quick and easy removal if repairs or adjustments are needed. It is important to prevent the unnecessary entry by workers into the storage area for the purpose of checking, adjusting, or making repairs if a pump is malfunctioning.

Covers or lids to manure pits, where used, should be designed and/or anchored by hinge or chain to prevent their being dislodged and falling into the storage area thus necessitating human entry into the toxic environment to effect recovery.

Educational information regarding hazards associated with the manure storage area must be specific. Building designers, equipment manufacturers and installation contractors all have a role in alerting users of confinement housing systems to health and safety hazards. Decals and safety-warning signs should be affixed in appropriate locations on the equipment and structures. In addition, warning statements should be printed in the promotional and operational literature. Traditional educational avenues for the dissemination of safety and health information to the

farmer using these systems needs to be made more effective. New ways of motivating the farmer to adopt safer work practices and to use personal protective equipment must be found.

There is a challenge and a responsibility on the part of health and engineering professionals to recognize the problems so that proper diagnosis and treatment are rendered to exposed persons. Work methods, facilities and machines must be designed or changed to reduce the hazards to man and livestock associated with the storage of liquid manure.

References

1. Donham KJ, Rubino MJ, Thedell TD, and Kammermeyer J: Potential hazards to agricultural workers in swine confinement buildings. *JOM* 19:383-387, 1977.
2. Donham KJ: Respiratory hazards of livestock confinement workers. Read before the Seventh International Congress of Rural Medicine, Sept. 17-21, 1978, Salt Lake City.
3. Donham KJ Gustafson KE: Occupational hazards from livestock confinement. Read before the Symposium on Agricultural Respiratory Hazards, Kansas City, Mo. Jan. 13-15, 1981.
4. Donham KJ: Human health hazards associated with occupational exposure to swine confinement buildings. Read before the meeting of the American Association of Swine Practitioners, Kansas City, Mo. May 17-19, 1981.
5. Muehling AJ: Swine housing and waste management: A research review. In: *Cooperative Extension Service*. University of Illinois, 1969, pp 65-78.
6. Nordstrom GA, McQuitty JB: Manure Gases in the Animal Environment . . . a Literature Review (With Particular Reference to Cattle Housing). Research Bulletin 76-1. Edmonton, Alberta, Canada: The University of Alberta, Department of Agricultural Engineering, February 1976, pp 9-12.
7. Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment. Cincinnati: P.O. Box 1937, 1980 American Conference of Governmental Industrial Hygienists.
8. Carson TL, Donham KJ, Dominick MA, et al: Carbon monoxide induced abortion in swine: An update. Read before the American Association of Veterinary Laboratory Diagnosticians, Louisville, Nov. 3, 1980.
9. Donham KJ, Carson TL, Adrian BR: Carbon monoxide-induced abortion and stillbirths in swine: The relationship of environmental levels of carbon monoxide and blood levels of carboxyhemoglobin. *Am J Vet Res*, to be published.
10. Morse DL, Woodbury MA, Rentmeester K, et al: Death caused by fermenting manure. *JAMA* 245:63-64, 1981.
11. Hockaday T: The day Laird Schumm cheated death. *Farm Safety Review* (National Safety Council) 34:5-6, 1976.
12. Osbern LN, Crapo RO: Dung lung: a report of toxic exposure to liquid manure. *Ann Intern Med*, 95:312-314, 1981.
13. Deaths associated with liquid-manure systems - United States. *Morb Mort Weekly Rep CDC* 30:152-157, 1981.
14. Criteria for a recommended standard . . . occupational exposure to hydrogen sulfide. DHEW (NIOSH) Publication No. 77-158, U.S. Gov't Printing Office, May 1977, pp 22-64.
15. National Research Council, Committee on Medical and Biological Effects of Environmental Pollutants: Hydrogen Sulfide. Baltimore: University Park Press, 1979, pp 47-66.
16. Adelson L, Sunshine I: Fatal hydrogen sulfide intoxication: Report of three cases occurring in a sewer. *Arch Pathol* 81:375-380, 1966.
17. McAnalley BH, Lowry WT, Oliver RD, et al: Determination of inorganic sulphide and cyanide in blood using specific ion electrodes: Application to the investigation of hydrogen sulfide and cyanide poisoning. *J Analyt Toxicol* 3:111-114, 1979.
18. Pomeroy RD: Lethal atmosphere in sewers, in: Deeds and Data. Water Pollution Control Federation, October 1980, pp 14-15.
19. Lewis WK, Whitman WC: Principles of gas adsorption. *Indus Eng Chemistry* 16:1215-1220, 1924.
20. Working in confined spaces: Criteria for a recommended standard. DHEW (NIOSH) Publication No. 80-106, 1980, pp 80-106.

Solomon's baby — the farmer . . .

Agriculture, perhaps more than any other sector of our economy, is controlled by a multitude of governmental agencies and regulations. The farmer could be aptly compared to the disputed infant in the biblical story of Solomon. When two women in this story both claimed a child as theirs, Solomon proposed to solve the dispute by cutting the infant in half, knowing with his wisdom that the true mother would deny her motherhood to protect the life and health of her child. The agriculture "infant" is claimed by many government "mothers," but one wonders whose wisdom will protect the health of the farmer or agricultural worker.

Agriculture typifies an industry where cooperation between governmental agencies is essential in order to prevent unnecessary, inconsistent and overburdening regulations. There are literally thousands of rules, regulations, ordinances, notices, waivers, exclusions, and other modern-day "commandments" enforced by a multitude of federal agencies within USDA, DHEW, USDOL, EPA, DOT, as well as various state agencies. Each of these agencies has their own mandate which often conflict, such as concerns for quality, quantity, or cost of the product, for the ecology, for the regional control or eradication of pests, or for the protection of worker health and safety. A classic example would be the formulation of pesticides — an OSHA responsibility if conducted in a plant and an EPA responsibility if conducted in the field, unless the state has an agreement with either of the above agencies, in which case these responsibilities may be transferred to some combination of state departments of health, industrial relations, food and agriculture or even to local governments.

While protecting the "health" of the industry which produces "the staff of life" is a vital national and human concern, agricultural workers also deserve effective protection from occupational hazards. Traditionally, farmers are considered stoically independent, self-sufficient, and proud of their ability to live and make a living largely without the help (or hindrance?) of others.

As a result, the agricultural community does not vocally embrace governmental programs for health and safety. Nonetheless, the industry faces some unique occupational hazards such as farmer's lung, tularemia, and histoplasmosis, as well as hazards common to other industries such as nitrogen dioxide thought to be responsible for Silo-Fillers disease, pesticides, inorganic and organic dusts, heat, noise, and vibration. Control efforts are complicated by the isolated nature of the operations and by the variability of exposure conditions with season, crop, and size of employer. Their "employees" are often their family or neighbors who may be overexposed out of ignorance or expeditious convenience. Where migrant or full-time workers are employed, their lack of economic and organized labor strength limits their knowledge, concern, or power to address hazards associated with their employment.

For industrial hygiene, agriculture represents an open frontier. Parochial criticisms, adherence to tradition, "novel work schedules," variable and "short-term exposures" are barriers which have been dealt with in general industry in the past and which must be dealt with in agriculture now. To date we have failed to apply many existing occupational health techniques and programs used in general industry to agriculture or to develop innovative approaches for their special problems. Even simple sampling and exposure documentation is only rarely done and then its purpose is primarily for research. Perhaps consideration should be given to supportive industrial hygiene consultation and education through the existing USDA County/Agriculture Extension Service. A formal liaison body may also be necessary to coordinate activities both within and between governmental agencies. Industrial hygienists at all levels have the opportunity as well as an obligation to be the motivating force to implement these programs. We must act with the wisdom of Solomon to guide all agencies toward a coordinated and effective program of health and safety for agriculture.

ACGIH Agriculture Health and Safety Committee

Senator JEPSEN. Thank you, Dr. Donham.

Harold Guither is an agricultural economist from the University of Illinois. Please proceed, as you wish.

STATEMENT OF HAROLD D. GUITHER, PROFESSOR OF AGRICULTURAL ECONOMICS, UNIVERSITY OF ILLINOIS, URBANA, ILL.

Mr. GUITHER. Thank you, Senator.

I think, in looking ahead to the next generation of farm policy, one of the biggest issues will be who is going to control the farm policy agenda and what subjects will be on it?

Now, for the last 50 years probably, we've been talking about what I think of as the old generation of farm policy, the old agenda. And this, of course, has been the issues of commodity marketing, influencing crop supply, supporting prices, providing adequate financing for farmers. And, of course, this has been the agenda that's been brought by what we might think of as the establishment in farm policy, the farm organizations, the committees of the Senate and the House, the Department of Agriculture and, to some extent, the land grant universities that you have represented here today.

But I think now we have a new agenda coming in. A new agenda, such as the idea of food prices, including dairy products, and how we're going to keep them down; the idea of food assistance programs, both at home and abroad. Much of these are placed on the agenda by nonfarm groups, concerned about human hunger and food for the poor. We have the question of reducing costs of the Government farm programs, that we find coming from the Office of Management and Budget and other concerned groups, about large Government deficits.

We have the concerns about use of agricultural pesticides placed on the agenda by conservationists and environmental groups; the questions about land ownership by corporations and foreign investors placed on the agenda frequently by farm workers, by minority groups, and others without land to farm and control; the questions of raising livestock and poultry in confinement, and using animals in research, brought on by animal welfare and animal rights groups.

These are issues that are really issues that many of our farm organizations traditionally would like to avoid, but they are here. And if we look at the evidence of this increasing number of groups concerned with farm policy, the numbers and types of witnesses that came before the House and the Senate Agriculture Committees, for example, in 1981 there were 180 different organizations that came before the House committee and almost that many before the Senate. We have the numbers of registered lobbyists that are published about four times a year in the Congressional Record. There are about 184 of those in one recent quarter that we checked.

There are a number of groups and organizations that are being formed to support favorite candidates for Congress, about 112 agricultural interest groups, environmental interest groups, supporting candidates for Congress just in the agricultural area alone last year.

So what we really have is a much larger stage of competition for our traditional farm groups trying to influence the direction of agricultural policy. And this increasing competition, of course, is going to mean that producer groups are going to have to work very hard to keep their position and keep their influence in this due process of generating farm policy.

Probably their most successful strategy—and I've detailed this a little more in the detailed paper; there's many things that they can do—but their most successful strategy is probably going to be to try to develop areas of common ground and compromise and work and cooperate with some of these new groups forming coalitions to accomplish what they want to do.

Now, despite these potential conflicts between producer and non-producer groups, producers are not really unanimous about what they want, themselves. We were involved a couple years ago, 2 years ago, with about 10 other States, 10 States, in surveying what farmers really wanted, prior to preparation of the 1981 act. I think it's interesting to note that we found the farmers themselves preferred the idea of cross-compliance on soil conservation, which was mentioned here earlier this morning. We found that some farmers would like to do away with target prices, which was one of the issues that came up in 1981, but they were restored and kept in the bill.

So that, with these differences of opinion, farm groups are going to have to work with these other groups to qualify and to conduct and to achieve what they would like to do.

I think the point that I'd like to summarize in saying is that agriculture has lost some of its unique qualities, compared with 50 years ago when farmers were more isolated, were producing more of their own inputs. We have an industrialized agriculture. With this industrialized agriculture, we have agriculture as a business, much like many other small businesses, in terms of buying certain raw commodities and producing a product which then is moved on and, hopefully, is produced at a profit.

So consequently, with this loss of uniqueness in agriculture and the increased number of organizations trying to come in with a new agenda for agricultural policy, I think this points to further changes in this next major legislation cycle that Congress is going to face in 1985.

[The prepared statement of Mr. Guither follows:]

PREPARED STATEMENT OF HAROLD D. GUTHER

In looking ahead to the next generation of farm policy, one of the biggest issues will be who is going to control the farm policy agenda and what subjects will be on it?

Many people follow with interest the alternative solutions to agricultural and food issues that are on the agenda. However, Don Paarlberg, former director of agricultural economics in the U.S. Department of Agriculture has pointed out that the most important question is how the agenda itself comes into being. As he has astutely observed, agricultural and food policy has an old agenda and a new one.^{5/}

For many years the old issues have been before us: (1) How do we improve agricultural efficiency, a concern for more than a hundred years, (2) How do we control production and support prices of farm products -- on the agenda since the first AAA of 1933, (3) How do we make sure that farmers have adequate credit -- an issue that dates back to 1916 when the Federal Land Banks were established and to 1933 when Production Credit Associations were organized.

This old agenda is concerned primarily with commodity marketing, influencing crop supplies, supporting prices, and providing adequate financing -- mostly in the interest of the producer.

Paarlberg calls this the agenda of the agricultural establishment: the farm organizations, the agricultural committees of Congress, the Department of Agriculture, and the land-grant universities. While these groups do not see all issues alike, they do agree that they should be farm policy decision makers.^{5/}

But now there is a new agenda for agricultural policy that will get increasing attention in the future from policy makers. It includes: (1) food prices, including dairy products, and how to keep them down --

placed on the agenda by consumer groups;(2) food assistance programs at home and abroad -- placed on the agenda by groups with concerns about hunger and food for the poor;(3) reducing costs of agricultural and food programs -- placed on the agenda by the Office of Management and Budget and conservative citizen and business groups who want to reduce federal deficits;(4) use of agricultural pesticides -- placed on the agenda by those concerned with the environment, toxic wastes, and wildlife preservation;(5) land ownership by corporations and foreign investors -- placed on the agenda by farm workers, minority groups, and others without land;(6) raising livestock and poultry in confinement and use of animals in research -- placed on the agenda by animal welfare and animal rights advocates. There are many other issues concerning food, agriculture, and rural life of interest to non-producer groups.

Most of these issues on the new agenda are placed there ~~for~~ the protests of producer groups. And producer groups will face more competition for the time and attention of the policy makers who will make future agricultural and food policy decisions.

The evidence of this increasing number of actors on the stage of agricultural policy making is shown by examining the numbers and types of witnesses who appear before the House and Senate Agricultural Committees when major farm legislation is considered, as in 1977 and 1981, by the number of registered lobbyists who have concerns with food and agriculture, and the number of groups now actively courting candidates for Congress with contributions through Political Action Committees. See Tables 1, 2, and 3.^{1,2/}

This increasing number of organizations exhibiting their interest in agricultural, food, and rural issues indicates a substantial expansion of the power cluster for agriculture and food. Ogden defines the power

cluster as an issue or communications network established by participants in each field of public policy.^{4/}

The producer and business groups have been part of the agricultural and food power cluster for many years. The citizen, consumer, environmental, and public institutional interests have moved into the agricultural and food arena most noticeably in the last 10 to 15 years. Their involvement can be expected to continue.^{1,3/}

The Meaning For Producers

The increasing competition which producer groups face as they try to influence the future direction of agricultural and food policy suggests a need for a reassessment of their strategies to influence policy decisions.

Some producer groups may continue their usual approaches to influencing policy. They may pretend that they are still the dominant force in influencing agricultural and food policy decisions. Such an approach is not likely to be successful.

Another way to deal with those who want to add new items to the policy agenda is to confront those with different views, defend the status quo, and oppose any changes in policy direction. Such a strategy may only produce greater controversy and antagonism between the groups involved.

A more successful strategy will be cooperation and compromise with groups that have concerns in the agricultural and food policy field. Although producers and consumers will not always agree, there are frequently opportunities for common ground and agreement on some issues.

Coalitions comprised of groups with similar views on a single issue frequently have worked together to present testimony, lobby for a single bill, and persuade members of Congress that their position is in the public interest. When the work is finished on that bill, the coalition

may disband and form again when common interests bring them together on another issue.

Coalitions are viewed as carrying more weight since they speak for a larger membership. Formation of a coalition involves an evolution of thinking that moves opinions toward the center of the range of issues. It can reach understanding on a common issue and seek a broader range of people to support it.

It must be recognized, however, that producer-consumer group coalitions will often be difficult to form because of the conflicting interests of consumers who want abundant supplies of food at stable prices and producers who want higher incomes and relief from rising costs in the face of shrinking profits. More frequently producers may find more common interests with business firms and industries that supply important equipment and supplies employed in production or that buy and process farm commodities into the form that consumers want to buy.

Some producer groups have already recognized the need for education and accurate information about farms, costs of farm production, risks in farming, and returns to farm labor. Creating better understanding with the nonfarm public is an important step to maintaining communications and working out differences on agricultural and food issues.

Conflict and Compatibility of Issues on the New Agenda

Despite potential conflicts between producer and nonproducer groups on agricultural and food issues, producers are not unanimous in their views on all issues. Surveys among farmers in 10 states conducted in the fall of 1981 before the 1981 Act hearings and debate illustrate some of these differences.

Price and income support programs, for example, have more support in the Great Plains states than in the Corn Belt. Twenty-five percent or more of the farmers in Illinois, Indiana, Ohio, and Oregon favored elimination of all price and income programs. In each of the ten states where surveys were taken (Illinois, Indiana, Michigan, Minnesota, Nebraska, North Dakota, Ohio, Oregon, Washington, and Texas) more farmers stated that the farmer owned reserve program had been a good program for consumers than indicated it was a good program for farmers. On the issue of continuing target prices, farmers were strongly divided with about one-fourth having no opinion. However, more farmers favored eliminating target prices than keeping them in Indiana, Michigan, Minnesota, Nebraska, Ohio, and Oregon.

On the issue of requiring each farmer to follow soil conservation measures to qualify for price and income support, more farmers agreed with this concept than disagreed in Illinois, Indiana, Michigan, Minnesota, Nebraska, North Dakota, Ohio, and Oregon.

The division on certain issues that are traditionally producer oriented suggests that future farm policy decisions may often be made by a compromise by certain producer groups working in coalition with nonfarm groups that have a common interest on specific issues -- environmental and conservation groups, taxpayers and business groups, consumer and hunger oriented groups. 7, Part 1, pp. 286-313/

As we look ahead to the next generation of farm policy, we must recognize, as Paarlberg described the situation a few years ago, that agriculture is losing its uniqueness. The industrialization of agriculture has hastened the process by which the farm operator has lost most of his isolation from the rest of the economy. Farmers more and more are thinking and acting like nonfarmers. Like other businessmen, they borrow

money, rent land and capital equipment, and hire labor. More and more of their production inputs come from nonfarm sources. Farm families have entered the mainstream of American economic, social, and political life.^{6/}

Although agrarianism with its sociological, philosophical, and political concepts is still strongly emphasized by some groups, there can be little doubt that the strong distinctions between farmers and non-farmers are harder to identify today than 50 years ago.

Consequently the loss of uniqueness in agriculture, and the increased number of organizations and groups with new agenda items for food and agricultural policy points to further changes in the next major legislation that Congress will face in 1985. The old agenda items will not completely disappear. Many will still be needed if policy makers are persuaded that the public interest will best be served by a large number of dispersed family held farming operations. But the new agenda items will get greater attention and larger appropriations than the old.

Table 1. Organizations and Witnesses Testifying, House
Agriculture Committee and Subcommittees for
the Agriculture and Food Act of 1981

Type of Organization	Groups (Number)	Witnesses (Number)
General Farm Organizations	6	47
Commodity Organizations	32	39
Farmer Cooperatives	17	22
Farm Wife Groups	2	12
Other Producer Groups	5	5
Agricultural and Related Business	41	44
Consumer and Citizen Groups	33	41
State and Local Government and Public Institutions	40	50
Research and Information	<u>4</u>	<u>4</u>
	180	264

Source: (7)

Table 2. Registered Lobbyists With Agricultural, Food and Rural Interests, 2nd Quarter, 1982

Type of Organization	Organizations		Total Receipts	Total Expenditures
	Number	Individual Lobbyists		
General Farm Organizations	5	24	\$ 390,395	\$ 210,578
Commodity Organizations	25	27	85,576	20,703
Cooperatives (Not commodity related)	9	36	277,180	57,324
Other Producer Organizations	11	14	52,866	7,344
Business and Industry	93	189	344,231	147,896
Consumer, Environmental, Labor	35	94	1,824,762	546,836
Institutional and Professional	6	5	3,308	2,371
	<u>184</u>	<u>389</u>	<u>\$ 2,978,318</u>	<u>\$ 993,052</u>

Source: Congressional Record, August 20, 1982

Table 3. Agriculture-Related Political Action Committees, Number and Average Disbursements, 1977-78 to 1981-82

Type of Organization	Number			Average Disbursements ^{a/}		
	77-78	79-80	81-82	77-78	79-80	81-82
General Farm Organizations	2	9	13	\$ 8,495	\$18,220	\$27,471
Commodity Organizations	30	39	43	80,202	80,113	53,189
Cooperatives	12	13	15	24,191	19,416	41,558
Other Producer Groups	4	6	2	19,471	36,439	8,444
Agriculture-Related Business Associations	30	36	34	26,311	42,464	40,193
Citizen, Consumer, Environment, Labor With Agriculture Interests	3	3	2	28,938	45,512	32,845
Professional	<u>1</u>	<u>2</u>	<u>3</u>	1,800	9,478	8,361
Total	82	108	112			

^{a/} Preliminary, through September 12, 1982

Source: Federal Election Commission

REFERENCES

1. Guither, Harold D., *The Food Lobbyists*, Lexington, MA: Lexington Books, 1980.
2. Guither, Harold D., *Political Action Committees and Agriculture*, Staff Paper No. 83 E-251, Department of Agricultural Economics, University of Illinois at Urbana-Champaign, April, 1983.
3. Guither, Harold D., "Citizen and Consumer Groups in Policies Affecting Farm Structure", in Brewster, David E., Wayne D. Rasmussen, and Garth Youngberg, Editors, Farms in Transition, Iowa State University Press, 1983, pp. 87-102.
4. Ogden, Daniel M., Jr., *How National Policy is Made*, paper presented at a seminar, Cooperative State Research Service, U.S. Department of Agriculture, January, 1983.
5. Paarlberg, Don, *The Farm Policy Agenda*, paper presented at the National Public Policy Education Conference, September, 1975. Published in Increasing Understanding of Public Problems and Policies -- 1975, Farm Foundation, Chicago, pp. 95-102.
6. Paarlberg, Don, "Agriculture Loses Its Uniqueness", American Journal of Agricultural Economics, 60:5, December, 1978, pp. 769-76.
7. U.S. House of Representatives, Committee on Agriculture, Hearings, Ninety-seventh Congress, First Session, General Farm Bill of 1981, Parts 1 through 9.

Senator JEPSEN. Thank you for your comments.

Fifty years ago, the Agriculture Department in Washington, D.C. was substantially more powerful than it is today. In fact, they ran the show.

Mr. GUITHER. Yes.

Senator JEPSEN. Without any question. Without any hesitation. It's an absolutely historical fact that they did. A lot of folks don't realize that's not true today, even though they've got large numbers.

Let's welcome Mr. Breimyer, professor of agricultural economics and an extension economist, from the University of Missouri. Welcome to Iowa. You may proceed, as you wish.

STATEMENT OF HAROLD F. BREIMYER, PROFESSOR OF AGRICULTURAL ECONOMICS AND EXTENSION ECONOMIST, UNIVERSITY OF MISSOURI AT COLUMBIA

Mr. BREIMYER. Thank you, Senator, I am glad to be here.

I'm an economist. I don't know whether it's a credential or not, but I'm also the veteran on this panel, or most panels. When you remarked that 50 years ago last month President Franklin Roosevelt signed the Agricultural Adjustment Act, 50 years ago next month I began to work with the Agricultural Adjustment Administration.

Agriculture has been in this kind of spot, its present situation, several times before. It's not new at all, and it's not new for me. I've been here three, four, or five times previously. The issue now is the same as it's been earlier, I put it in terms of whether agriculture wants to accept a certain kind of collective discipline—call it program design or program system, program authority—it's the same issue. There's nothing really new. It's what agriculture wants to do internally, and also what kind of public support it can get from citizens and from taxpayers.

One thing we're certain of is that the future programs will not be PIK, but that's been said several times. What hasn't been said is that one of the negatives or flaws about PIK is that it rewards most the high-cost producer and rewards least the low-cost producer—and that is not good.

As to programs, there's no mystery. There's a stairstep progression, from the weakest to the strongest. The weakest program is the kind we had in 1982, merely voluntary with eligibility for price supports, and so on. The tightest program, if farmers want a tight program, the quantity marketing quotas that some types of tobacco use. In between, there's every degree, voluntary and mandatory, the allotments.

The only point I want to make there is that it's got to be consistent. If farmers are willing to accept relatively low price supports, then they don't have to accept or impose upon themselves very tight production controls. If they want more attractive price supports, then they've got, these days, to accept some kind of effective production controls. It's a tradeoff. And there's no other way around it.

My next comment, very quickly—I'm making these bulleted to save time—in my judgment, we hear a lot these days about international trade, but I suggest it's not the only game in town. We shouldn't forget that three-fourths of the products of American agriculture go to America, and one-fourth go abroad, and we shouldn't delude ourselves that there's some way that we can get exports to solve all our farm problems. It can't be done.

After those rather conventional remarks, I have two that are more far out. The first one might be a bombshell. No one has said it before. If we want to use government activity to restrain production, one of the first things we should do is stop the tax writeoffs in the Tax Code that become so much of a stimulation to production. On the one hand, we pay farmers to reduce and on the other hand, we subsidize them with a tax writeoff to increase production. If we continue to use agriculture as a tax shelter, we will get a considerable stimulus from that crowd, and I think we ought to face up to it. No one else has said it. Someone should say it.

And my last comment, Senator, is the question that you've raised so often. It's in my prepared statement. Unequivocally, if we are serious about soil conservation, farmers who are getting program benefits should at least be prohibited from the worst damage to their own soil. I think I can say, in the State of Missouri there is a very considerable sentiment that farmers who are being helped through price supports, and so on, ought to be asked to at least carry out the minimum kind of soil conservation.

Thank you very much.

[The prepared statement of Mr. Breimyer follows:]

PREPARED STATEMENT OF HAROLD F. BREIMYER

A DESIGN FOR AGRICULTURE

There's nothing new under the farm policy sun.

Everyone close to the farm scene knows that basic decisions in agricultural policy will be made within the next couple of years. A search will be on for an almost magic new idea, an original scheme by which agriculture can be restored to prosperity without breaking the U.S. Treasury.

None will be found. Nothing new remains to be invented. We will act on what we already know.

The question at issue is whether agriculture will accept collective discipline in pursuit of goals for itself and for its role in the economy, and what form that discipline will take. As of now, in my judgment, neither agriculture nor the other interests associated with agriculture are prepared to resolve that question.

A comment confined to a couple of pages can only restate principles. I offer a few.

One, the farm program of the future will not be PIK. I will not take a stand on whether Secretary Block was justified in setting up PIK, under the circumstances that prevailed in the winter of 1982-83. But PIK cannot be a pattern for the future. It is certain to get an increasingly bad press. One of its biggest flaws is that most of the gain to individual farmers comes from saving of production cost. The farmer with the biggest cost gets the biggest bonanza. That is not the kind of principle on which to build a sound program.

Two, insofar as crop acreage programs are relied on, a stair step sequence can be described beginning with the weakest, least effective, and ending with the most effective. Least effective is the kind we had in 1982, namely, voluntary acreage reduction, crop by crop, where the only attraction is a farmer's eligibility for crop storage loans and deficiency payments. The program suffers from its implicit contradiction, which is that if it is successful the nonparticipant gains more than the participant. Paid diversion, the next step, is a little more effective.

If programs are to have any punch to them they must call for cross-compliance and require that any acreage reduction for one crop become a net reduction in total

cropped acreage. The most effective program in quantity marketing allotments, as now applied to one or more types of tobacco.

Various intermediate programs can be sketched. Generally, though, supply control can be truly effective only if acreage or quantity allotments are applied to all farms.

Three, I am not plugging for mandatory allotments. But neither do I hold promise that the taxpaying public will subsidize farmers grandly to carry out big voluntary acreage programs. Anyone who believes that \$15 to \$20 billion a year will be available for that purpose is dreaming. This is one reason why I pose the overall issue in terms of collective discipline.

Four, a program must be internally consistent. If price support levels are to be at an absolute minimum, little acreage control is needed. If supports are appreciably higher, acreage control must be tight.

Five, much is still to be said for keeping the Commodity Credit Corporation loan rates relatively low and using deficiency payments as supplement to incomes. But payments must be factored down for largest farms.

Six, the first five points omit all mention of the international scene. It is certain to be mentioned often at this hearing. One quick comment is that we are not even close to deciding how we want our farm programs to relate to our international trade policy. But I also point out that foreign trade is not the only game in town. Three-fourths of our farm products go to our own domestic markets. Let's not get too carried away with engaging international issues.

To repeat, lots of experience has been gained the last 50 years in applying these principles.

I use my remaining time to invite, even challenge, the leaders of U.S. agriculture to think in more forward-looking terms, to consider what kind of agriculture we want in our Nation.

I particularly have two ideas in mind. The first is whether we want farm programs to work in favor of a decentralized agriculture of modest-sized family units, or whether the programs are to continue to favor, however inadvertently, larger sized and more capital-intensive units.

But I emphasize even more the urgent need to make farm programs fit with goals of conserving the soil resources of our Nation. At the least, program benefits should be denied to any farmer who palpably damages his soil. But I challenge our leaders to go one statesmanlike step further. It is to abandon historical commodity bases, or at least make them subordinate, and design programs to conform to good land use. To make even partial progress toward such an exalted goal would be a heroic achievement. Ought we not give thought to the kind of agriculture we want to build for the future, and bring our farm programs appropriately into line?

Senator JEPSEN. Thank you for your very stimulating, brief, and very interesting statement.

There's a story about a general in the Civil War who, coming out of a closed meeting, was accosted by the press. And they said, "We're asking for comments; tell us what went on." He said, "I can't tell you." They kept after him, and he finally said, "Well, get your pencils out and I'll tell you what happened."

He said, "There were some things that were said that were new. There were some things that happened and were said that were true, but," he said, "the things that were new weren't necessarily true, and those things that were true weren't necessarily new." He says, "Thank you, gentlemen," turned around, and walked out. [Laughter.]

And I kind of got that feeling from your opening remarks here.

I did some quick arithmetic while you were talking. When you told me you started working in the agricultural area a few months after the Agricultural Adjustment Act was signed 50 years ago—if I figure it correctly, you've got to be pushing 75. I want to talk to you later on your formula for staying young and fit.

Mr. BREIMYER. I joined the wheat program in the summer of 1933. A little later, I went to Washington I'm one of the veterans of

the farm program. And the scene is very similar; hasn't changed much.

Senator JEPSEN. You've survived well.

Mr. Helmberger is an agricultural economist from the University of Wisconsin. Welcome to Iowa. Please proceed, as you wish.

STATEMENT OF PETER HELMBERGER, PROFESSOR OF AGRICULTURAL ECONOMICS, UNIVERSITY OF WISCONSIN, MADISON, WIS.

Mr. HELMBERGER. Thank you. I appreciate the opportunity to appear before you and the distinguished members of the audience to share some of my views on farm policy.

My prepared statement centers on some aspects of national dairy policy, and I will try here to be brief in summarizing some of the major points of the written statement.

National dairy policy is a three-legged stool. One of these consists of import quotas on a wide array of manufactured dairy products and, because of the subsidized exports of other nations, particularly the subsidized dairy exports, and because historically U.S. prices have been well above world prices, the import quotas are not very controversial. They are probably here to stay, although there will be some controversies from time to time regarding what I would call a tuning up, as, for example, in the case of casein.

The second phase of dairy policy consists of the system of Federal milk marketing orders and counterpart State milk control programs that use or facilitate price discrimination in the pricing of fluid milk. These programs have become very entrenched, economically and politically, and I'm afraid that for one to suggest the termination would be rather like jousting with windmills. But I would pause here to say that recent researchers, I believe, are calling into question the need for continuation of Federal milk marketing orders, and they also point out that this system tends to distort the geographic price pattern across the Nation and, in particular, the system tends to make prices for milk in the Midwest less than in other parts of the country. And, of course, this facilitates the production of milk in other parts of the country.

The third leg of national dairy policy is the price support program for milk, and it is this leg that is, at the moment at least, the most wobbly and the most in need of repair. For this reason, I will focus my attention in my remaining remarks pretty much on the program for—the price support program for milk.

Much has been said about the nature of the surplus, why has it risen, the magnitude of the surplus, and this is discussed in my prepared statement so I will pass over that.

I would point out that if one looks at the indexes of the price for milk, the price for feedgrains and hay, and the price for steers and heifers, using 1960 as a base, one will find that the indexes of these commodities moved along very nicely together up until about 1977, when the index of the price of milk took off and rose well above the indexes of the prices for feedgrain and hay, and for steers and heifers. And until those price relationships are brought back into balance, we're going to have excess production capacity in the dairy industry.

The recent history of—

Senator JEPSEN. May I interrupt? The index took off? What is the index?

Mr. HELMBERGER. The index of prices for milk received by farmers, in 1977 began to rise quite substantially relative to the index of prices for hay and feedgrains and relative to the index of prices for steers and heifers.

Senator JEPSEN. Why?

Mr. HELMBERGER. There were a combination of reasons for this. I think that around 1977 or so the demand for cheese became very strong and was a buoyant force in the dairy industry. And I believe that following on the heels of this increasing demand for cheese, the price support program for milk—and, in particular, the 80-percent minimum which was established for a number of years—has tended to make the price of milk move out of line relative to other prices. And, after all, we do have excess productive capacity. There's an explanation for it, and I believe—this is not the sole explanation, but I believe it's an important part of it.

The recent history of the price support program for milk raises an interesting question. It teaches us an important lesson, and has elicited several policy options for the future. The question raised by the recent history is why is the Federal Government leaning toward the use of deductions instead of simply lowering the price support of milk? It's a very interesting question.

Consider a 50-cents per hundredweight deduction versus a 50-cents per hundredweight cut in support price under highly inelastic demand conditions. That's what we have for milk. The tax burden will be far more with the deductions than it will be with the 50-cent cut the support price. It's a tax-saving device. But the benefits to farmers, with minor qualification, will be about the same; whether the 50-cent deduction is imposed or whether the support price is cut by 50 cents.

What is the implication of this? The implication is that a lower level of benefits is going to be financed more through a food tax than through an income tax, if we resort to deductions as opposed to reductions in the support price. And, of course, we all know that higher prices for dairy products, which amount to a food tax, tend to be progressive.

The lesson that we've learned from recent experience, it seems to me, is the following: By choice, the U.S. Government has chosen not to dump large quantities of surplus dairy products systematically on the world market. We have not followed the precedent established by the EEC, and I think for very good and fairly obvious reasons we have not done this. In the absence of production controls, and given our sort of self-imposed constraint on surplus disposal in foreign markets, the outlets for surplus milk or surplus dairy products acquired under the support program are very limited, consisting mainly of school lunch.

That being the case, the ability of the Federal Government to raise the price to the dairy farmer much above market clearing level is extremely limited. And efforts to do that, even though they may be encouraged by farmers, I believe has serious long-run consequences.

I believe that if we stick by the kind of program that we've used in the years since World War II, it will be imperative that the price support level for milk be kept in fairly close alinement with the market clearing price for milk. Perhaps this means the Secretary of Agriculture should be given more discretion in terms of determining the price support program for milk.

As I indicated earlier, the recent flap over the price support program for milk has elicited several different responses, policy responses, policy options, for the future. One of these, of course, is making its way through Congress now. It involves paying farmers not to produce milk.

First paying the farmers to establish excess capacity, and then paying them not to produce, will surely strike the cynic as being amusingly absurd. Be that as it may, there's a real question whether the bill now in Congress will diminish excess capacity by the end of 1984, in the 15-month period. It can be used to produce reduction, but if it does not reduce excess capacity, then the dairy farmers are going to be facing the painful proposition of having to adjust production capacity, and they will be faced with lower support price, and they will know something that economists have known for a long time—which is that pricing the dairy price well above market clearing levels is not necessarily favorable to the dairy industry in the long run.

There are some other programs that have been proposed by various interest groups pertaining to the dairy surplus problem. I will only touch very briefly on one of these. It has to do with production control.

We have avoided production control mechanisms in dairying up to this point. If we're going to have a fairly tight production control program in milk as in any other product, we will doubtless involve the establishment of production rates. To make it work, they're going to have to be negotiable, whether they're attached to the arm or the farmer, and if they're negotiable, they'll take on market value. That's almost certain. And as a long-run proposition, this means that people are going to have to pay money to enter the industry. We've all been reading, I expect, in the Wall Street Journal and the New York Times about the tobacco and peanut programs, where growers—mind you—where growers must pay nonfarmers for the privilege of growing tobacco and peanuts. This, to me, is the ultimate obscenity of government response to farmer demands for income protection.

And with that, I'll close.

[The prepared statement of Mr. Helmberger, together with attached charts, follows:]

PREPARED STATEMENT OF PETER HELMBERGER

My name is Peter HelMBERger and I am a professor of agricultural economics at the University of Wisconsin, Madison. I appreciate this opportunity to appear before the Joint Economic Committee. My statement is limited to certain aspects of national dairy policy.

National dairy policy is a three legged stool. One leg consists of import quotas on a wide variety of imported dairy products. Given subsidized exports on the part of other nations, particularly those belonging to the EEC, and a long history of relatively high U.S. domestic prices, this part of national dairy policy appears secure. A second leg of national dairy policy is the system of federal milk orders plus counterpart state control programs that use or at least facilitate price discrimination as a vehicle for raising prices to producers of fluid grade milk. Federal milk orders are so entrenched politically that proposing their termination is as unpromising as jousting with windmills. Here I pause merely to note that in my view recent researches both call into question the need for federal milk orders and establish the likelihood that orders are inimical to the interests of Midwest producers who rely heavily on the market for milk for manufacturing.

A third leg of national dairy policy is the milk price support program. Briefly, the price support program establishes a minimum farm price for milk used in manufacturing. This minimum is assured through CCC offers to buy carlots of butter, cheese, and nonfat dried milk at

announced prices. It is this leg of dairy policy, the price support program, which appears at the moment to be the most wobbly and the most in need of repair. Price supports will therefore be given major attention in what follows.

From the viewpoint of economic analysis, national dairy policy, like most farm price and income programs, is best construed as an income redistribution policy. Income is transferred from taxpayers and consumers to the dairy sector, with short-run benefits heavily concentrated among the largest, most well-to-do farmers and with long-run benefits likely accruing mainly to land owners. A study completed at the University of Wisconsin (Hutton and Helmberger) provides some idea of the magnitudes of the income distribution effects of national dairy policy for the year 1977, a year more-or-less typical for the period since WW II. It was found that termination of both milk orders and price supports, with import controls left intact, would have caused a \$1 billion dollar annual loss of benefits to the milk industry and a similar gain to consumers after all production and consumption adjustments had been completed. Tax savings would have amounted to about \$500 million dollars. Farm losses would have amounted to roughly \$677 per farm for farms with less than 29 cows, \$3,460 per farm for farms with between 30 and 49 cows, and \$9,129 per farm for farms with 50 cows or more. The latter size class of dairy farms would have accounted for nearly 60 percent of total program losses.

Price Support Program For Milk

The Agricultural Act of 1949 requires that the price of milk be supported at such levels between 75 and 90 percent of parity as will

assure achieving various legislative objectives including an adequate supply of milk. In carrying out the program, the Commodity Credit Corporation (CCC) offers to buy carlots of butter, cheese and nonfat dry milk at announced prices. Importantly, the method of price support for milk is indirect. Government net withdrawals from commercial channels tend to increase the farm-gate demand for milk and to increase the farm price through the operations of supply and demand.

Net government withdrawals of dairy products on a large scale is expensive and feasible for short periods of time only. Building up government stocks is obviously no long-run solution. Short of dumping surplus products in the world market, the constraints on surplus disposal are very severe. Historically, donations to the U.S. school lunch program and to programs for the needy have been the dominant outlet for butter and cheese. Major outlets for nonfat dry milk include foreign donations and noncommercial export sales to foreign governments and other agencies for school lunch and welfare.

Why the Present Controversy?

Over the 30 year period from 1950 through 1980, the support price for milk as a percent of parity has ranged from the minimum level of 75 percent in several years to the maximum of 90 percent in the single year of 1952-53. CCC purchases averaged \$247 million per year.

Legislation enacted in 1977 and 1979 amended the 1949 Act and required a minimum support of 80 percent of parity through September 1981. USDA net market removals as a percentage of total production rose suddenly from less than 1 percent in 1978-79 to 6.4 percent in 1979-80, 9.6 percent in 1980-81, and 10.2 percent in 1981-82. (The marketing

year for milk begins on October 1.) In spite of stepped-up donations of butter and cheese to school lunch, unprecedented sales of dairy products to New Zealand, and cheese give-away programs for the poor, government stocks on July 1, 1982 were up 178 percent from July 1, 1980. Net expenditures on dairy price support and related programs have soared to about \$2 billion annually in recent years. The timing of these budget outlays is less than felicitous given the current administration's effort to trim taxes and nondefense spending.

This is not the first time in the history of milk price supports that net removals have approached 10 percent of production, however, but the recent government response has been unlike that of the past. In 1953-54, net removals as a percentage of production equaled 9.3, up from 3.1 percent the previous marketing year. The government responded by slashing the support price from 89 percent of parity in 1953-54 to 75 percent in 1954-55. Net removals as a percentage of production fell to 4.2. This experience was repeated in the early 1960's. In 1961-62, net removals as a percentage of production equaled 8.87, up from 2.7 percent the previous year. The support price was cut from 83 percent in 1961-62 to 75 percent for the four year period 1962-63 through 1964-65. By the latter year net removals as a percentage of production had fallen to 2.4 percent.

The government response to the recent increases in net removals, CCC held stocks, and program expenditures has been slow in developing and ineffective in implementation. A problem of excess supply was clearly in evidence in 1979-80 yet the support price was set at \$13.10 per cwt. (80 percent of parity) throughout 1980-81. This support price was maintained for almost all of 1981-82 but during this latter period,

\$13.10 amounted to only 72.5 percent of parity. The recent on-and-off again 50 cent deduction per cwt. has caused confusion and uncertainty but the support price has been frozen at \$13.10 per cwt. this level amounts to about 65 percent of parity.

Contrary to previous historical experience, however, surplus production appears to be continuing unabated in spite of the decrease in support levels. This has led some people to argue that farmers respond to price decreases by increasing production. The available statistical analyses offer convincing evidence that the short run supply function for milk, though inelastic, is upward sloping. Other things held constant one would expect that a cut in the support price for milk would not only discourage milk production by some small amount but would, at the same time, encourage milk consumption.

For an explanation of the continuing excessive levels of milk production one need look no further than at the indexes of prices received by farmers for milk, for feedgrains and hay, and for steers and heifers. With 1960 as the base year, the indexes moved together until about 1977. Since then, the index of milk prices has risen well above those for feedgrains and hay and for steers and heifers. Until these price relationships are brought back into balance, through increases in feed prices and/or decreases in milk prices, the problem of excessive milk production capacity will not go away.

Implications For Future Dairy Policy

The recent history of the milk price support program has raised a question, taught us a lesson, and elicited several new policy alternatives. The question is why a 50¢ cent deduction, say, instead of a 50¢ cut in the support price? Since the demand for milk is highly

inelastic, taxes will be reduced further through a 50¢ deduction than through a 50¢ cut in the support price. With minor qualifications, the loss of benefits to producers is the same in either case. This means that the financing of a reduced level of benefits via a deduction is based more on a "food tax" and less on the income tax in comparison with a cut in the support price.

The lesson to be learned from recent experience is that in the absence of production control and systematic dumping of surpluses in world markets, the outlets for surplus dairy products is extremely limited, consisting mainly of school lunch. This being the case it is absolutely essential that the support price is not allowed to rise much above the market clearing level. Perhaps the Secretary of Agriculture should be given greater discretion in determining the appropriate level of support. In this instance ideology would have little to do with program decisions. An alternative that might appear more radical than it really is would be a program which mandates government purchases of dairy products in appropriate quantities for donation to school lunch and to programs for the needy both here and abroad. The notion of a price support level could then be dispensed with entirely.

As noted, the recent flap over milk price supports has engendered a flurry of policy proposals for the future. It is possible that maintaining the support level at \$13.10 would in time alleviate the problem of surplus production. It is clear, however, that the government is seeking more effective remedies. There has even been speculation that the price support program might be done away with entirely. At the same time various dairy leaders and interest groups

are pushing for new programs not only to protect dairy farm income but also to safeguard the principle that the government has a responsibility to protect dairy farmers from the rigors of unfettered competition.

The compromise dairy legislation now working its way through Congress appears to be an effective means for curtailing production. Without going into details, this legislation authorizes payments to farmers to reduce milk output below historic levels. Subsidizing milk producers to first develop excess capacity and then subsidizing them again not to use it might strike a cynic as being amusingly absurd. Be that as it may, the question remains whether the proposed program would reduce productive capacity as opposed to production. Much depends on the weather and on the effectiveness of PLK in elevating feedgrain and hay prices. If input prices rise sufficiently and the support price remains frozen, then farmers might have sufficient incentive to reduce capacity. If by January 1, 1985, excess capacity still exists, however, and milk producers are then asked to bite the bullet, they will soon know that government efforts to raise the milk price well above the market clearing level may be no favor to the milk industry.

In conclusion, several dairy policy options for the future will be briefly identified and discussed. First, a two-price plan that entails a high domestic price with surpluses sold systematically in the world market would do little to further the leadership role of the U.S. in urging freer international trade. One may moreover question the wisdom of using farm resources to produce a commodity (milk) which can only be sold at cut-rate prices when those same resources could just as well be used to produce commodities for which we have a competitive advantage such as wheat, soybeans, and feedgrains. Second, the effects of strict

production control as a policy alternative can best be appreciated through study of the programs for tobacco and peanuts. To my mind the money farmers now pay to nonfarmers for the privilege of growing tobacco and peanuts without stiff government penalties is the ultimate obscenity of government response to the farm demand for income assistance. Finally, economists tend, I believe, to favor direct payments as opposed to net market removals as a means for supporting prices. There are many arguments in favor of direct payments not the least of which is that the subsidy is out in the open for everyone to see. Unfortunately, when demand is highly inelastic, as it is for milk, the farm benefits per tax dollar is greater if the taxes are spent removing commodities from commercial channels of trade than if used to mail checks directly to farmers.

FIGURE 1
AGRICULTURAL PRICE INDEXES AND RATIOS
1948=100

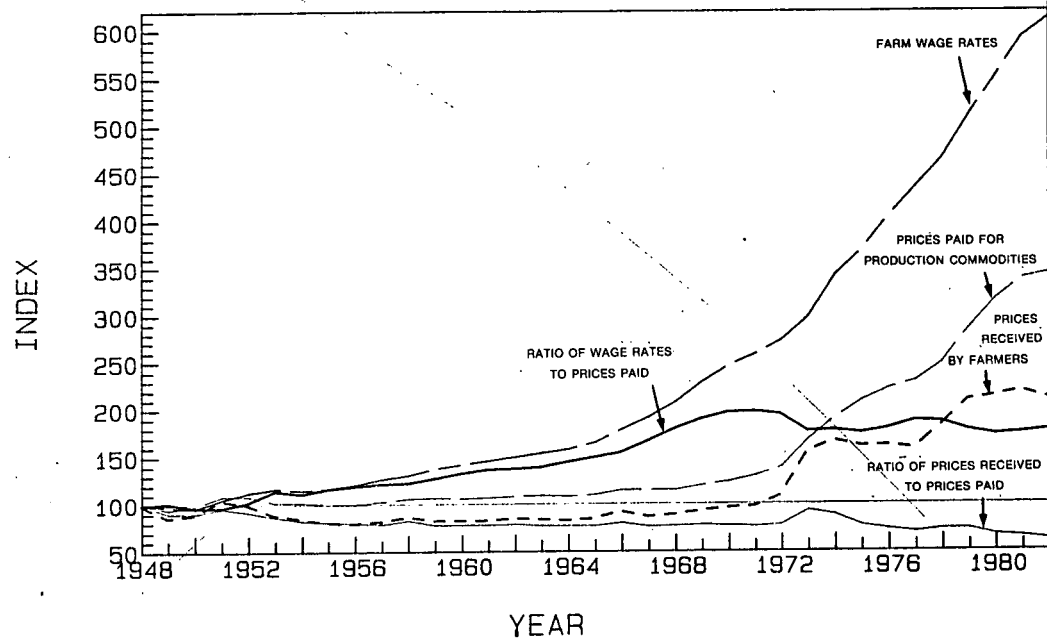
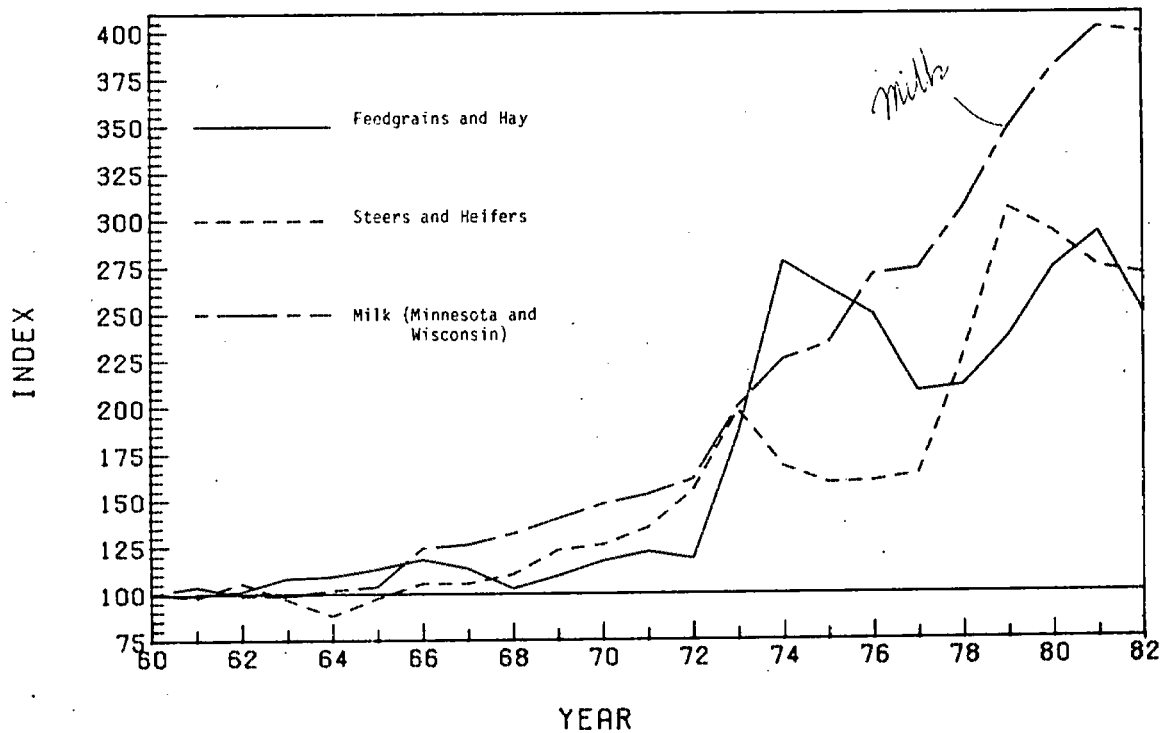


Figure 2

INDEX OF PRICES RECEIVED BY FARMERS FOR SELECTED COMMODITIES 1960=100



Senator JEPSEN. Thank you for your statement. It's been very interesting.

Mr. Helmberger, you mentioned casein—or someone did——

Mr. HELMBERGER. Yes, I did.

Senator JEPSEN. Casein always comes up. As you know, we had it in the committee hearing just a week or a couple of weeks ago, and they want to prohibit its use—or those in the dairy industry say, "We must stop all casein imports."

What is your opinion of this?

Mr. HELMBERGER. Well, I have mixed emotions. It is true that casein imports tend to damage the interests of the American producer. Many of the casein imports come from New Zealand, I should point out, and New Zealand is a country that has a comparative advantage in the production of products, of manufactured dairy products. On the other hand, it's also true that casein is increasingly coming from the Common Market countries, where dairying is very, very heavily subsidized.

I guess, on balance, I'm reasonably in favor of some limitations on the amount of casein that's brought in. If we're speaking of the same bill, Senator, that involves something like a 50 percent cut in casein imports over the last several years, given the total situation confronting the dairy industry here, as well as things that are going on abroad, I guess I'm reasonably in favor of that.

Senator JEPSEN. How do you respond, then, to the fact that we don't make casein in this country? What would we do with our glue, our paint, our pizzas and our fast food—and I can go down a whole laundry list. If we don't make it, what do we do?

Mr. HELMBERGER. Well, we still hope to sell our dairy products in the form of cheese, butter——

Senator JEPSEN. Pharmaceuticals.

Mr. HELMBERGER. Pharmaceuticals, yes.

Senator JEPSEN. I'm put on the spot. I'm probably the only Senator in the U.S. Senate who has an indirect family interest in dairying. I've said, "We've all got to take our share. We've got to get this thing under control. We've got to do something. If we don't, the other 98 percent of the folks in this country are going to come along, and are we going to have anything?"

I believe there to be some reasonable rationale, but I have been laced pretty hard for some of my stands and my vote, which has been consistent, on casein. I believe that until such time as we provide it, we're misleading the dairy farmers in this country—as do some of their national representatives in Washington—by saying, "Oh, that's going to answer your problem, if we just stop importing casein," without going into the specifics of it. Since we import casein, no one has ever gone into the specifics of the issue, but I wish we would make it. I'd also like people to drink an extra glass of milk a day. I'm all for the dairy farmer. Senator Proxmire gets up and talks about the fact that he'd been on a dairy farm one time for 8 hours, and he got up and milked in the morning. I told him I'd done it 17 years, and I also knew a little bit about it.

The fact is that casein is key to the dairy industry, and we do not provide it. So someone should address that.

Mr. HELMBERGER. I suspect this is a very good reason why we should not eliminate the imports of casein entirely.

Senator JEPSEN. Do you think if we did limit them that we would develop a casein industry?

Mr. HELMBERGER. That, I'm not sure of, Senator. I'm not close enough to this particular problem.

Senator JEPSEN. The market orders, you noted that there was maybe some room for reviewing that?

Mr. HELMBERGER. I believe; yes. There is plenty of room.

Senator JEPSEN. When we have \$13.10 per hundredweight as the base out of Chicago, and in Florida they get \$19. We've got winter, we've got mastitis, we've got mud, and we've got lots of humidity here in the Midwest. And they've got blue, clear skies in Florida. So that when they get \$19 and we get \$13, I think something's wrong with that.

Mr. HELMBERGER. Well, the problem that Florida faces is that they have a lot of hot weather, and the cows don't like to give milk down there. As a consequence, their cost of production is a great deal higher than ours in the Midwest. Even so, one can wonder whether price differentials established under Federal orders are needed in this day and age of super highways, new technologies, new methods of transport of milk, electronic systems for coordinating shipments from one market to another.

Senator JEPSEN. Well, I thank you for the exchange. Actually, I think it has been constructive. You and I have brought out the fact that it isn't as simple as it may, at first glance, seem to be, and that there are a lot of things that have to be taken into consideration. In addition to the fact that the milk end product is unique, it is perishable and very quickly goes sour. I would point out—and I haven't heard anyone from the dairy industry mention this—that we now have containers into which we can put the milk and leave it in the cupboard and forget about it for 6 months, take it out and it will be as fresh as the day we put it in. We ought to be talking about some of those things, these new technologies. We can solve all these problems if we're willing to work together. That's why we're having these hearings.

I have a question for the panel. We can't let all the economists get away without having some input. My question is: What, if anything, can the Federal Government do during the next year to stabilize agricultural markets and get stability and sustainability into the agricultural economy? Is there anything you could direct right now? Without issuing an ultimatum and memorandum, saying "Do this," what could we do?

Mr. BREIMYER. There's nothing the Government can do in the next year that would do anything more than kind of hold things just reasonable stable. You couldn't do anything drastic without changing the 1981 law. We're not going to make \$15 to \$20 billion available every year in the PIK-type programs. So I think what you do is you muddle along, enforce the 1981 law, and maybe you'll look a little bit toward some credit assistance. I think anyone would be foolish to look for any major resolution of these issues within the next 12 months.

This hearing is more forward looking. What I'm hoping for is that we use the interval between now and 1985 to think in longer terms of, as Dean Kolmer put it, a more coherent farm program, what kind of support we want to give to the agricultural sector.

Senator JEPSEN. Mr. Guither.

Mr. GUITHER. I think what we see in the 1981 act is that it's very difficult to write a farm bill for 4 years, because the conditions have changed.

I agree with Mr. Breimyer that the immediate year has been very difficult. The PIK program obviously was one means to cut back production so we don't continue to build up our stocks. But I think that, as has been pointed out, is a temporary program. Reducing the target prices from increasing would be more consistent than raising target prices at a time when we want to reduce production, rather than increase it. So I think that's probably one step in the direction of not only cutting back on the potential costs, but also at least discouraging increased production at a time when we want to decrease it.

But the domestic market itself—and that raises not a 1-year, but a long-range program, of trying to find increasing uses for agricultural products, perhaps in non-agricultural uses, in addition to the export market. Certainly, the export market becomes an outlet, but it's, again, not the only solution.

Senator JEPSEN. Mr. Helmberger.

Mr. HELMBERGER. Well, I have a response that may not be very directly related to your question, but I believe it's to another question that's close to yours, and I think very important. In the period following 1972, when farm prices began to gyrate wildly, and they have ever since, because of the increasing importance of export markets, and this is likely to continue on into the future, the wild price gyrations caused many agricultural economists to claim that we needed a government program to stabilize prices, that the market mechanism could not be relied on to do it. Out of this came the farmer-owned grain reserve system, which we now have in place.

I believe that there is a serious drawback of the farmer-owned grain reserve system, in that it's a great deal more fun to put grain into the reserves than it is to take it out. Farmers can be counted on to support putting grain into reserve. They can be counted on to object strenuously when it's taken out, and to plead for set-aside programs as an alternative to glutting the market.

I think that a very interesting alternative that ought to be considered by Congress as a means of helping to stabilize prices in the future, would be a program that merely subsidizes the storage of commodities that allows the management of stocks to be entirely in the hands of farmers, elevators, and other storers of commodities. I believe this would have the effect of increasing, on the average, the stocks carried by the private trade, but it would allow the trade itself to determine when stocks should be built up and when they should be drawn down. I think the result would be more stable prices.

Senator JEPSEN. Mr. Kolmer.

Mr. KOLMER. Given the experience and the capacity for survival that my colleague, Harold Breimyer, has demonstrated over the last 50 years, I probably should defer to him.

I think what Harold says is the same place I come down, because we have over the past recent years built a very substantial excess capacity in the agricultural industry. And in the short run, we are

not going to take care of that problem with a stroke of the pen and there's going to be a substantial pain and distress as we move from where we are to something that's more in line in terms of the market capacity.

I would hope, like Harold says, that what we do in the coming year will be thoughtful and deliberate in terms of moving us from where we are to a more balanced, more coherent, more consistent policy for the future. But even beyond that, as we move into 1985 and later, the transitional question of going from where we are to something that's more in line with the realities in the market, in production, is going to take a lot of thought and is going to be a tough set of decisions to make, because not everybody is going to come out clean, not everybody is going to come out whole, in the question of where and how is the cost of transition to be distributed. It becomes a very important question, not just for the farmer and the agribusiness person, but for the productive capacity of agriculture for quite some time to come.

It is a tremendous asset that we have, this capacity, and if we manage it in the way I would hope, then we preserve the capacity and preserve the intent and the ability to be really a gigantic food production resource in this world. We just can't use all of it every year. We've got to figure out how to manage it.

Senator JEPSEN. Dr. Donham.

Dr. DONHAM. I think the only comments that I could make here—and again, my comments relate to the health of the individual who produces the commodities—if we don't try to do something to maintain or improve certain health conditions on the farm, we do lose more farmers to the health conditions. Whereas the general trend in agriculture has been, over the past 50 years, that we have fewer farmers on larger operations, if we enhance that trend by losing additional farmers, that perhaps this will have more of an unstabilizing force in the market picture.

So I guess that would be my concern.

Senator JEPSEN. Just before we dismiss this panel, I would like to ask you as a doctor of veterinary medicine at the University of Iowa, to comment on this movement by some on the tethering of animals and the fact that we have put sows in pens to keep them from laying on the pigs to keep them warm, and other such things that farmers do—what is your opinion of those that say farmers are being cruel to animals?

Dr. DONHAM. Well, most of the concern from the welfare groups has been directed at caged poultry and veal-calf operations at this point, although I think the welfare groups have started to look at all confinement type of livestock production.

We tend, as humans, to put human values on animals. It's really difficult for us to know whether or not a tethered sow is happy or unhappy. There are some studies ongoing, to try to determine stress levels, which probably will not get at the root of the problem, and I'm not sure whether we ever will.

I guess my concern is that we do what we can to improve the environment that animals are raised in at present. There's a lot to be done in terms of environmental control within buildings, which involves some additional engineering research and environmental research. I guess my point here is that if we can improve the envi-

ronment for the animals, we will also improve it for the people that work in there, and we will also, hopefully, increase production capacity.

We've seen in Iowa, anyway, and I think this is a general trend at least in swine production, since confinement became a really important force in terms of overall livestock production, that we have had somewhere between three to four percent increase in death losses in livestock. And I think part of this might be due to the increased engineering and environmental management that needs to be undertaken in confinement-type operations.

So we have health issues; we have welfare issues. I think we should admit that there is some additional information, some additional research, some improvement in the technology that needs to be done, and let's strive toward that and, hopefully, we can answer all the issues, or at least approach answering all the issues that involve not only the welfare, but animal attitudes and health.

Senator JEPSEN. Thank you for that, and I thank the panel.

Is there anyone who has a closing statement or anything they'd like to say in addition?

Thank you very much. It's been very interesting.

We'll have a 15-minute recess, and it is the intention of the Chair to continue without anything other than maybe a 5-minute break this afternoon, until we conclude all the hearing.

So at this time, we'll take a 15-minute recess.

[A brief recess was taken.]

Senator JEPSEN. At this time I would like to invite the next panel, consisting of Dean Kleckner, president, Iowa Farm Bureau; Ross Mintle, legislative chairman, Iowa State Grange; Philip Lehman, vice president of Iowa Farmers Union; Richard Steffen, president, Iowa National Farmers Organization; and George Holl, president, Iowa American Agriculture Movement, to come forward.

Gentleman, welcome. I do have two specific questions that I will be asking after your testimony, together with any others that may be brought out. At this time we will start with the way the names are listed on the sheet; Dean Kleckner will be first, followed by Ross Mintle, Philip Lehman, Richard Steffen, and George Holl.

Mr. Kleckner, welcome. You may proceed as you wish. Your prepared statement will be entered in the record, so you may summarize.

STATEMENT OF DEAN KLECKNER, PRESIDENT, IOWA FARM BUREAU FEDERATION

Mr. KLECKNER. Thank you, Senator, I appreciate the opportunity to make this statement to the Joint Economic Committee on behalf of the 150,000 member families of the Iowa Farm Bureau Federation. I serve as president of this organization. I farm near Rudd, Iowa, in Floyd County. We raise corn, soybeans, and hogs.

I compliment the committee for attempting to look into the future for a fresh approach toward the next generation of farm policy.

What after PIK, is the question?

With PIK we have bought time to address questions pertaining to farm policy. I think it just gives us some breathing time. The

conditions that created the need for PIK have caused us Farm Bureau members to seriously ask why current farm policies have gone so wrong that an extensive production control program is necessary.

To us, it's obvious that current farm programs have been out of touch with market reality. They have encouraged production completely out of line with market demand. Government-set prices at levels higher than the market will bear have given us producers clear signals to increase production, and at the same time the equally clear signals to cut usage have gone to those that buy our farm products.

We've got a program that tends to price us out of the market and at the same time, encourages other countries to increase production. We're the only country that I know of that's cutting back voluntarily, trying to cut back. All the other nations that I know of are producing more because we're cutting back.

We've got some charts here that I'd like to show at this time.

The two crops grown in the Midwest—or all three of those, corn, wheat, and soybeans, are grown in the Midwest, but two crops, corn and wheat, which the government has attempted to defend at a price higher than the domestic and world markets will bear, have accumulated huge stocks.

But with soybeans, the one on the right there—my right, where loans have been at protective levels, and also at below market clearing levels, very little stock buildup has taken place. Charts of these three crops, showing market prices and Government-defended prices in the form of loans and deficiency payments—that's the Government-defended price—give a clearcut picture of what has happened. When the Government-defended price goes up significantly above the market price, the stock buildup begins, as we can see with corn and wheat. With soybeans, where the crop has not had the loan rate from the Government-defended price, had the farm average price, it has not worked that way.

In other words, soybeans are a crop that's worked right, and we have to use that as an example. Corn and wheat have been programs that have worked wrong, and we ought to get away from that.

I have two more charts that I think will be significant, concerning exports.

I think it's significant to note what has happened with farm exports with these three crops. Total farm exports grew rapidly until 1980-81, in that trade year, and the drop in the last 2 years has been very sharp, as is indicated.

Not only have total exports dropped in the last 2 years, the U.S. share of world exports has also dropped for corn and wheat. So our share of world market has dropped for corn and wheat. But the soybeans, where the market determines price, our share of the world market has increased in the last several years.

U.S. farm commodity stocks grew because farm program reserve policies were designed to hold farm prices up to legislated income support levels, without regard to long-term market damage. And I'd like to point out that that's usually at the expense of the concept of the small family farm.

Senator, I don't really think this is thought about very much, what we're doing to the family farm through the encouragement of getting away from the market and the guarantees. It has really led to much larger farms, and cutting down on small family farms.

To reduce taxpayer costs and to improve farm income, we must once again learn to produce for consumption, not for storage. We cannot store our way to farm prosperity.

In my prepared statement I point out a number of factors that are contributing to our current economic difficulties in agriculture. And it isn't just the overproduction. Weak world economy, unfair trade practices, a stronger dollar, past embargoes—there are a number of things that certainly enter into it.

I also point out that our best opportunity for market expansion is overseas. I don't believe we have reached our farm export limits yet, that some have suggested we have.

Before we can reach our export potential I believe we've got to freeze farm program target prices and loan rates to signal to our competitors—I'm talking about our overseas competitors, the rest of the world—that we have adjusted our farm policies to the realities of changing world conditions. Our need to remain competitive internationally must not be overlooked in writing and administering new U.S. farm programs.

If we haven't learned that lesson yet, now, I don't know when we're going to learn it.

Our farm policymakers, I think, have to realize that we are not isolated or immune from the effects of the nation's economy.

Again, in my prepared statement, I point out a number of things there in our economy. It is only in a healthy general economic climate, I think, that agriculture is going to prosper.

And I point out that deficits—and they are a problem today, but they must be reduced without tax increases. I don't think that can be emphasized too strongly. I frankly think it's about as hard to spend yourself rich as it is to drink yourself sober.

In the interest of time, I'll summarize. I really believe that there are two separate and distinct directions for farm policy to take at this time, and I think we're at about that fork in the road right now where we've got to make that decision.

One way, one option, is greater reliance on the marketplace to set prices and regulate production, with some government assistance—and government does have a place in this, I want to point out—areas like market development, foreign credit, research, protection from embargoes—we could probably underline that—and domestic economic improvement is certainly very important. That's one route, or one way we can go.

The second route that we can take at this fork, I believe is continued reliance on the Government to set farm prices and regulate production. And we might as well admit, that's one of the options.

We believe, the Farm Bureau, that the former, the first option—greater reliance on the marketplace—will allow us to use our production and marketing advantages in a world market. It's going to reduce taxpayer costs. It's going to put production in line with consumption, and improve farm income.

The second choice, continued reliance on the Government, will have our country continuing to spend billions of dollars per year on

a complex set of programs of stock accumulations, followed by programs of stock disposal similar to PIK. It'll be build storage, fill them up, and have PIK; build storage, fill them up, and have PIK. And we can't afford that. Eventually, I believe this route may well reduce us to the status of a public utility, complete with production controls and marketing quotas.

Senator, I'm very positive about the future of agriculture, if it can be guided by the marketplace—not Government. This will be best in the long run for family farms as well as for the Nation.

Senator, I didn't address soil conservation or dairy, but would be happy to respond to any questions. Let me say that I agree wholeheartedly with what Mr. Helmberger said this morning in relation to dairying.

Thank you.

[The prepared statement of Mr. Kleckner follows:]

PREPARED STATEMENT OF DEAN KLECKNER

I appreciate the opportunity to make this statement to the Joint Economic Committee on behalf of the 150,000 family members of the Iowa Farm Bureau Federation. I serve as president of this organization. I farm near Rudd, Iowa, in Floyd County. We raise corn and soybeans on our 600-acre farm and raise hogs in a farrow-to-finish operation.

I compliment this Committee for attempting to look into the future for a fresh approach toward the next generation of farm policy.

What after PIK? Can we expect continued price supports and loan rates above market clearing levels, followed by PIK II and numerous sequels? Are Americans willing to pay billions and billions for this type of agricultural policy over the next decade? Is such a policy in the best interest of agriculture?

With PIK we have bought time to address questions pertaining to farm policy. It gives us breathing time to reexamine and redevelop farm programs. The conditions that created the need for PIK have caused Farm Bureau members and leaders to seriously ask why current farm policies have gone so wrong that an extensive production control program is necessary. Questions need to be raised about farm program effects on the long-term economic health of agriculture and the national economy.

To us it is obvious that current farm programs have been out of touch with market reality—they have encouraged production completely out of line with market demand. Government-set prices reaching ever higher levels, and at levels higher than the market will bear, have given producers clear signals to increase production. At the same time, equally clear signals to cut usage, to look for substitutes and to look for other sources have gone to those who buy U.S. farm products. We've had a program that tends to price us out of the market and, at the same time, encourages other countries to increase production.

The two crops grown in the Midwest—corn and wheat—which government has attempted to defend at a price higher than the domestic and world markets will bear, have accumulated huge stocks. But with soybeans, where loans have been at protective levels, and also at below market clearing levels, very little stock buildup has taken place. Charts of these three crops showing market prices and government defended prices in the form of loans and deficiency payments give a clear-cut picture of what has happened. When the government defended price goes up significantly above the market price, the stock buildup begins.

It is significant to note what has happened in farm exports with these three crops. Total farm exports grew rapidly until they peaked in the 1980-81 trade year. The drop in the last two years have been quite sharp.

Not only have total exports dropped in the last two years; the U.S. share of world exports has also dropped for corn and wheat. But with soybeans, a crop where the market determines the price, the U.S. share of the market has actually increased.

U.S. farm commodity stocks grew because farm program reserve policies were designed to hold farm prices up to legislated income support levels without regard to long-term market damage. This approach encourages farmers to farm more and more land, and usually at the expense of the concept of the small family farm.

To reduce taxpayer costs and to improve farm income, we must once again learn to produce for consumption, not for storage. We cannot store our way to farm prosperity.

There are, of course, a number of factors contributing to our current economic difficulties in agriculture. In addition to the oversupply caused by current farm programs, the weak world economy, unfair trade practices, a stronger dollar, past embargoes and other factors have contributed to this problem. Although we will never be able to control all the variables affecting agriculture, we need to work together on those which we can influence in order to attain a position of strength with our world competitors.

If we are to be a growth industry, we must, like any industry, be efficient, forward-looking and competitive. We must examine the potential for increased markets everywhere, while realizing that our best opportunity for market expansion exists overseas. We have not reached our farm export limits as some now suggest.

Before we can reach our export potential, we must freeze farm program target prices and loan rates to signal to our competitors that we have adjusted U.S. farm policies to the realities of changing world conditions. Our need to remain competitive internationally must not be overlooked in writing and administering new U.S. farm policy.

Farm policymakers must also realize that farmers aren't isolated or immune from the effects of our nation's economy. One of the most important elements for an improved agriculture is a strong and stable national economy. Such interrelated factors as massive deficit spending, high interest rates and the prospect of increased inflation must be successfully addressed. It is only in a healthy general economic climate that agriculture can prosper.

Deficits must be reduced without tax increases—an action we're convinced is essential to paring down interest rates and to an extended general economic recovery. This, combined with sound monetary policy, is the major force involved in reducing and stabilizing inflation.

Failure in the fight against inflation is one of agriculture's biggest concerns. By the end of the 1970's inflation cut deeply into farmers' income by increasing their production expenses and reducing consumers' purchasing power. Any rapid inflation that encourages speculative land investments does not allow for necessary growth in productive investments.

Agriculture, a large and diverse industry, is affected by many other factors. For example, U.S. agriculture can only expect to grow to the extent that the world economy grows and more people have money to spend on more food. In turn, the world economy will grow only to the extent credit is available to efficient borrowers, and if markets are accessible to world trade.

In addition, protectionism in industrial goods and service industries must be repealed. Without access to our markets, potential food importers will not have the currency they need to buy from us.

In summary, I believe there are two separate and distinct directions for farm policy to take:

1. Greater reliance on the marketplace to set prices and regulate production with government assistance in such areas as market development, foreign credit, research, protection from embargoes and domestic economic improvement.

2. Continued reliance on the government to set farm prices and regulate production.

We believe the former will allow us to use our production and marketing advantages in a world market. It will reduce taxpayer cost, put production in line with consumption and improve farm income.

The latter will have our country continuing to spend billions of dollars per year on a complex set of programs of stock accumulations, followed by programs of stock disposal similar to PIK. Eventually, it may well reduce us to the status of a public utility complete with production controls and marketing quotas.

I feel positive about the future of agriculture, but the best future for this industry lies in an agriculture guided by the marketplace, not the heavy hand of government. This will be the best in the long run for family farms as well as for the nation.

Senator JEPSEN. Thank you, Mr. Klecker.

We welcome Ross Mintle, legislative chairman, Iowa State Grange. Please proceed as you wish.

**STATEMENT OF ROSS MINTLE, FARMER, POWESHIEK COUNTY,
IOWA, AND CHAIRMAN, LEGISLATIVE COMMITTEE, IOWA
STATE GRANGE**

Mr. MINTLE. Senator Jepsen, we, of the Iowa State Grange appreciate this opportunity to present our views on what future farm policy would most benefit our Nation's family farm operators and community welfare.

Any future congressionally enacted farm legislation encompasses possible commodity loan, price support and set-aside features, but the subject of the implications of farm tax policy and the erosion of our soil and water resource base are closely related issues. Addressing any one of these three factors without regard for the total future agricultural scene would be shortsighted and not in the best interest of our Nation's present and future farm people.

No. 1. Entitled "Production Controls, Commodity Loans and Price Supports."

I believe that production controls should be in terms of bushels, tons, or bales instead of acres, as in the past.

Price support should be on a diminishing scale as the volume of production increases with no Government price protection guaranteed to those who acquire more land either by rental or purchase or try to beat the system by producing more on less acres. We do not have a market for all that we produce now and in the foreseeable future. We should not expect our taxpayers to come to our rescue every time we overproduce.

The commodity loan should not be so high that the commodity is tied up for several years, causing increased storage costs, lower quality products, and forcing our Government into a losing giveaway situation, while we lose our foreign markets.

A rotating minimum reserve would be advisable to help famine stricken or third world countries as the need arises.

No. 2. Entitled "Federal Farm Tax Policy."

Prof. Earl Heady tells us that, "unless public policy is changed soon, family farms as most people know them may disappear completely from agriculture." He says, "Our Government has the power to turn the tables to encourage individual family farms."

Present tax advantages to corporate investors, wealthy farmers, and those seeking to shelter income from taxation are leading to a concentration of landholdings, livestock production, and feeding units so that beginning and individual farm operators, who must average a margin of profit for their family's labor, cannot compete and improve their standard of living and retire debt.

Former Secretary of Agriculture, Bob Bergland, says:

Farmland values are driven by factors having nothing to do with farming: By speculators, public trusts, pension funds, persons with big incomes looking for a tax shelter. Currently, the monied interests are grabbing the farm from family operators while they enjoy the benefits of subsidies masked by the dignity of tax code. Take away the tax concessions and there is no way the corporate investor could compete with the hard-working farm family.

On May 13, 1983, the National Council of Churches came out with a tax policy statement labeling investment tax credits as applied to agriculture as a "superfluous subsidy to capital which invites unneeded investments by tax-motivated investors in areas of agriculture already sufficiently capitalized." The resolution then

called for elimination of the use of investment tax credits for specialized livestock buildings and for the purchase of irrigation equipment used to irrigate marginal land. I think the church as a whole is concerned with the deterioration of community life and the moral consequences.

Harold Breimyer, University of Missouri, says, "Tax deductions and the tax code are geared against the family farmer," and that "We must increase capital gains taxes, not reduce them. Capital gains must be increased and tax writeoffs eliminated, or it will do no good to balance the Federal budget."

Prof. James Rhodes, University of Missouri, says that "Vertical integration has eliminated the small poultry farmer," and he fears that the same thing is happening to the pork producer. Asked if he thought it is too late to turn the plight of individual pork producers back to a debt retiring enterprise, he said, "I don't know, but if we don't do it in the next 2 or 3 years, we probably never will." He made that statement 3 years ago.

The Center for Rural Affairs of Walthill, Nebr., has worked for several years to explain how tax subsidies reduce profit for individual farmers and how tax laws redistribute farm income in a negative way. They cite:

First, tax-induced land price increases hurt small and beginning farmers.

Second, investment credit-accelerated depreciation encourage investment in larger-scale facilities beyond what is economically justified.

Third, capital gains exemption. Land purchase. The 40 percent of capital gains which are claimed as gross income, are easily offset by the 100 percent deduction on such costs as interest, property taxes, irrigation costs and land leveling. In hog confinement farming complexes, by using cash accounting and using gilts for one farrowing, 100 percent of the cost of raising the gilt is deducted while 40 percent of the sale price is taxed.

Fourth, reduction in corporate tax rates. This allows farmers with net incomes in the \$30,000 to \$100,000 range to avoid the effect of progressive individual rates and stay in lower brackets.

Fifth, estate/inheritance tax. The 1981 inheritance tax changes will speed the trend toward a "landed gentry," resulting in fewer opportunities for small and beginning farmers.

Professor Michael Beohlje, Iowa State University, says there is little indication that farm tax code benefits agricultural investors more than industrial investors or investors in other enterprises. This is our meeting, and we should be concerned about the consequences for future farm people.

No. 3. entitled "The erosion of our soil and water resources."

I am a member of the SCS committee in our country, and I see firsthand the disregard for soil loss. Our country was cultivated very little 140 years ago. We had virgin sod. Now, the rolling land is seen in early spring as yellow, orange and light grey. The true condition of the soil is camouflaged during the growing season because we use so much fertilizer.

For every ton of export grain and soybeans, we are losing 2 tons of soil. The worst offenders are the large operators, often renting additional whole farms for \$100 to \$150 per acre per year cash

rent. Absentee owners are not concerned about the loss of our resources or loss of community values. My, how we have abused our heritage in these 140 years. Most of the soil loss has come in the last 70 to 80 years, and the rate is accelerating.

I feel that future farm programs should reward those who care for our resources and denied to those who are so engrossed in the annual gross sales that they have no regard for our natural resources.

My comments do not necessarily reflect State and National Grange present policy.

I think leaders and executive directors of farm organizations and commodity groups should study the unbiased writings and words of those who have given much time and thought to the long-range consequences of farm policy and farm tax code. Individual back-home farm organization members are naturally reluctant to give up moderate tax breaks. If meetings were held explaining the total picture followed by leader's editorials, we might be surprised at the resolutions that might surface at local, State and national annual meetings.

Finally, future farm legislation should be on a 5-year basis, announced 6 months in advance of planting time. Short-term farm programs are hard to administer and result in too many uncertainties for crop and livestock production planning.

Thank you, Senator Jepsen.

Senator JEPSEN. Thank you, Mr. Mintle.

I welcome Philip Lehman, vice president, Iowa Farmers Union, please proceed, as you wish.

STATEMENT OF PHILIP S. LEHMAN, VICE PRESIDENT, IOWA FARMERS UNION

Mr. LEHMAN. Thank you, Senator Jepsen.

On behalf of Iowa Farmers Union president, Peter T. Croghan, and the officers and members of our organization, I'd like to thank the Joint Economic Committee for holding this hearing.

The topic to be discussed today, as defined in Senator Jepsen's newsletter, is soil conservation and the future of farm programs. This linkage appeals to us, because we believe that good soil conservation is closely tied to a sound farm program that provides for fair support levels and appropriate supply management. Many farmers are being squeezed to the breaking point economically at the current time, and it is difficult for them to devote sufficient resources to proper soil conservation practices.

The farm programs of the past several years have provided price supports below full production costs, poor supply management incentives, and have basically resulted in farmers literally capitalizing their soil to survive. The estimates vary, but it is generally accepted that the loss of soil in Iowa due to erosion is one to two bushels of soil for each bushel of corn that is exported.

Mining our soil to supply cheap food at the expense of the soil is foolish, shortsighted policy that must be changed. Exports are important to farmers and to the country in terms of the balance of payments, but blind reliance on exports hurts U.S. farmers, farmers in other nations, underdeveloped countries, and the production

base. The mentality that exports will solve all problems has not only created volatile commodity prices, but it has also exacted a heavy toll on the soil.

An idea that has received much attention in recent years is to require good soil conservation practices as a condition of eligibility for farm programs. Although this sounds good on the surface, the policy ignores one important fact. Installing soil conservation practices today is expensive, and farm programs have not provided support levels to even return normal production costs, let alone those for conservation. To penalize farmers by denying CCC loans and other benefits for failure to enact these practices would only add insult to injury.

Since farm prices have been low for several years, there is strong logic for the Government to provide more assistance to farmers to encourage soil conservation. Yet, the administration has cut back funding, and it is expecting farmers to foot the bill at a time when they are least able to afford the additional costs.

This doesn't mean that the idea is bad, but it does mean that terms must be provided by lending agencies to permit farmers to make improvements in practices, without penalizing them economically.

When profitability is restored to agriculture, the use of disincentives might have to be used to force some farmers to conserve soil, if they fail to do so on their own. As I say, most farmers prefer conserving their soil but with the economics they face, they can't at this time. In the meantime, cost-sharing programs have more appeal than penalties, and education programs are also needed in this area.

While the Iowa Farmers Union favors the incentive approach to soil conservation, we are opposed to using tax credits. Farmers who currently can't afford to enact programs are hardly in need of more tax breaks. Tax credits would cost the Treasury more money, even though such losses are less visible than direct expenditures, and in this case it would help larger, established farmers more than medium and small farmers. Creating more tax inequities is not the solution, and it is doubtful that the approach would achieve soil conservation where it is really needed.

A soil conservation program must be made a part of a broader food and fiber policy. Conservation is one parameter in the total economic equation, and an important one; but the long-term economic health of agriculture will ultimately be determined by the soil, whether it's used or abused.

The payment-in-kind program in effect this year represents a radical departure from traditional farm programs. Few would argue the need for dramatic action, but the crop/swap was hastily conceived and difficult to administer. It is estimated that the PIK program could cost as much this year as all previous farm programs combined since the Agricultural Adjustment Act was enacted in the 1930's. And even in the face of these massive expenditures, there is still little long-term price protection for farmers.

In addition to the high cost, the program releases previously insulated stocks on the market with no price floors, and it waives the current \$50,000 payment limitation. Because CCC corn stocks will be released without consideration of the statutory price level, about

\$3.50 a bushel, and because the reserve stocks will also be released without consideration of the trigger level, the price impact is decidedly bearish. When these stocks are released in October, prices could drop to the loan level in eastern Iowa and well below that level in western Iowa. A large harvest could compound that problem.

The high cost of the PIK program and the large windfalls that will be received because of the payment limitation waiver will make it increasingly difficult to pass a good farm program in the future. If the administration had provided adequate incentives to reduce production in the 1981 reduced acreage program, the large buildup in stocks would not have occurred. If the PIK program proved nothing else, it showed that farmers will participate in a farm program when adequate incentives are provided. PIK just proves the failure of the 1981 program.

The administration and the U.S. Senate are now skillfully using the PIK program difficulties as an excuse to freeze target prices, destroy the reserve program, and possibly roll back CCC loan levels. The Senate Agriculture Committee has already consented to the target price freeze, and the talk is increasing about a freeze or rollback in loan rates. This clearly shows that the administration and the Congress are expecting little price improvement this fall, or they would not be afraid of the prospect of paying deficiency payments.

It appears that the Congress is willing to give the Secretary of Agriculture even more power than he already possesses. Until the Congress is willing to come to grips with a long-term farm bill, with some teeth, we will continue to have the boom-and-bust, roller coaster pricing in agriculture. We will continue to lose thousands of farmers each time the roller coaster hits bottom.

A long-term food and fiber policy is needed which looks into the future for 10 years. It should provide for fair price support levels, good supply management mechanisms, proper soil conservation practices, profitable export development, and other measures. I might underline the profitable export development. It doesn't do the farmer any good if he can't get a price he can live with. The hue and cry of market-oriented agriculture is a farce, so long as farmers must sell at wholesale and buy at retail.

Farmers are still relatively independent business people who must buy from and sell to relatively noncompetitive corporations. The Government must live up to its responsibility of providing balance if the family farm system is to survive.

We hope that this committee will take this responsibility seriously.

Thank you.

[The prepared statement of Mr. Lehman follows:]

PREPARED STATEMENT OF PHILIP S. LEHMAN

Senator Jepsen, other members of the Joint Economic Committee:

My name is Philip S. Lehman, a farmer from Slater, Iowa, and vice president of the Iowa Farmers Union. On behalf of Iowa Farmers Union President, Peter T. Croghan and the officers and members of our organization, I would like to thank the Joint Economic Committee for holding the hearings. It is our sincere hope that the Committee will use its influence to shape an agricultural policy that will provide some income stability and protect our valuable soil.

The topic to be discussed today as defined in Senator Jepsen's newsletter is "soil conservation and the future of farm programs." This linkage appeals to us because we believe that good soil conservation is inextricably tied to a sound farm program that provides for fair support levels and appropriate supply management. Many farmers are being squeezed to the breaking point economically at the current time, and it is difficult for them to devote sufficient resources to proper soil conservation practices.

The farm programs of the past several years have provided price supports below full production costs, poor supply management incentives, and have basically resulted in farmers literally capitalizing their soil to survive. The estimates vary, but it is generally accepted that the loss of soil in Iowa due to erosion is one to two bushels for each bushel of corn that is exported.

Mining our soil to supply cheap food at the expense of the soil is foolish, short-sighted policy and it must be changed. Exports are important to farmers and to the country in terms of the balance of payments, but blind reliance on exports hurts U.S. farmers, farmers in other nations, underdeveloped countries and the production base. The mentality that exports will solve all problems has not only created volatile commodity prices, but it has also exacted a heavy toll on the soil.

An idea that has received much attention in recent years is to require good soil conservation practices as a condition of eligibility for farm programs. Although this sounds good on the surface, the policy ignores one important fact. Installing soil conservation practices today is expensive, and farm programs have not provided support levels to even return normal production costs, let alone those for conservation. To penalize farmers by denying CCC loans and other benefits for failure to enact these practices would only add insult to injury.

Since farm prices have been low for several years, there is strong logic for the government to provide more assistance to farmers to encourage soil conservation. Yet, the Administration has cut back funding, and it is expecting farmers to foot the bill at a time when they are least able to afford the additional costs.

To be sure, some funding has been available, but it is so small as to barely impact the problem. Ironically, the Farmers Home Administration has been making loans available for soil conservation practices at the same time it gives farmers farm ownership and operating loans, but the policy had often compounded the farmer's economic difficulties. Not only have many farmers not been able to repay the conservation loans because of the low commodity prices and high interest rates, but many have suffered temporary yield problems while terracing and other drainage are being done.

This doesn't mean that the idea is bad, but it does mean that terms must be provided by lending agencies to permit farmers to make improvements in practices without penalizing them economically.

When profitability is restored to agriculture, the use of disincentives might have to be used to force some farmers to conserve soil if they fail to do so on their own. In the meantime, cost sharing programs have more appeal than penalties, and education programs are also needed.

While the Iowa Farmers Union favors the incentive approach to soil conservation, we are opposed to using tax credits. Farmers who currently can't afford to enact programs, are hardly in need of more tax breaks. Tax credits would cost the treasury more money, even though such losses are less visible than direct expenditures, and it would help larger, established farmers more than medium and small. Creating more tax inequities is not the solution, and it is doubtful that the approach would achieve soil conservation where it is really needed.

Soil conservation program, like farm programs, should be long range. Although reduced tillage offers some protection from erosion, it is only part of the total answer. Last spring in some areas in Iowa, soil, cover and all was washed into the fences during floods. A soil conservation program should be adopted on the basis of at least a decade in order to insure continuity, minimize economic disruptions and define farmers' and government's commitment to soil conservation. Soil conservation must also be kept out of the arena of partisan politics.

Secretary of Agriculture John Block has moved away from this goal by firing a professional director of the Soil Conservation Service, Norman Berg, and replacing him with a crony with little experience in these matters. The Congress must insist that the Soil Conservation Service be kept independent so that it can concentrate on conservation instead of political back-stabbing and in-fighting.

It seems foolish for the government to be putting nickels and dimes into soil conservation while it is spending like a drunken sailor on armaments which are either doomed to obsolescence, or if used, can threaten the entire human race. Until the spending binge on arms is halted, the government will not have the financial re-

sources to put into the food system. The reason that high technology is such a rage is that it has an immediate application in the military-industrial complex. We should heed the sensible warnings of Dwight Eisenhower on the political power of the military-business machine, and insist that other priorities be considered.

Soil conservation programs must be made a part of a broader food and fiber policy. Conservation is one parameter in the total economic equation, and an important one, but the long-term economic health of agriculture will ultimately determine how the soil is used or abused.

The Payment-in-Kind Program in effect this year represents a radical departure from traditional farm programs. Few would argue the need for dramatic action, but the Crop/Swap was hastily conceived and difficult to administer. It is estimated that the PIK program could cost as much this year as previous farm programs combined since the Agricultural Adjustment Act was passed in the 1930's and even in the face of these massive expenditures, there is still little price protection for farmers.

In addition to the high cost, the program releases previously insulated stocks on the market with no price floors, and it waives the current \$50,000 payment limitation. Because CCC corn stocks will be released without consideration of the statutory price level about \$3.50 a bushel, and because the reserve stocks will also be released without consideration of the trigger level, the price impact is decidedly bearish. When these stocks are released in October, prices could drop to the loan level in eastern Iowa and well below that level in western Iowa. A large harvest could exacerbate the problem.

The high cost of the PIK program and the large windfalls that will be received because of the payment limitation waiver will make it increasingly difficult to pass a good farm program in the future. If the Administration had provided adequate incentives to reduce production in the 1981 Reduced Acreage Program, the large buildup in stocks would not have occurred. If the PIK program proved nothing else, it showed that farmers will participate in a farm program when adequate incentives are provided. Unfortunately, the aberrations which have resulted will work counterproductive to the traditional purposes of farm programs.

The Administration and the U.S. Senate are now skillfully using the PIK program difficulties as an excuse to freeze target prices, destroy the reserve program, and possibly roll back CCC loan levels. The Senate Agriculture Committee has already consented to the target price freeze, and the talk is increasing about a freeze or rollback in loan rates. This clearly shows that the Administration and the Congress are expecting little price improvement this fall, or they would not be afraid of the prospect of paying deficiency payments. If the market price is about the target price, which would have been just above \$3 a bushel for corn if the increase provided by the 1981 Farm Act were allowed to go into effect, there would be no deficiency payments. It would be a sad commentary if the PIK program fails to improve prices to the \$3 a bushel level for a period of time.

It appears that the Congress is willing to give the Secretary of Agriculture even more power than he already possesses. Until the Congress is willing to come to grips with a long-term farm bill with some teeth, we will continue to have the boom-and-bust, roller coaster pricing in agriculture. We will continue to lose thousands of farmers each time the roller coaster hits bottom.

If many farmers are to be able to recover from the three years of severe recession, there must be a period of stability. If agriculture policy is to continue on a crisis-to-crisis basis, it will result in a farm structure which is unpalatable socially and ineffective economically.

A long-term food and fiber policy is needed which looks into the future for ten years. It should provide for fair price support levels, good supply management mechanisms, proper soil conservation practices, profitable export development and other measures. It must also address the oligopolistic practices of farm suppliers and the oligopsonistic nature of the marketing system. The howl and cry of "market-oriented" agriculture is a farce so long as farmers must sell at wholesale and buy at retail.

Farmers are still relatively entrepreneurial business people, who must buy from and sell to relatively noncompetitive corporations. The government must live up to its responsibility of providing balance, if the family farm system is to survive.

We hope that this Committee will take this responsibility seriously.

This concludes my testimony. Are there any questions?

Senator JEPSEN. Thank you, Mr. Lehman.
Mr. Steffen, please proceed, as you wish.

**STATEMENT OF RICHARD STEFFEN, PRESIDENT, IOWA
NATIONAL FARMERS ORGANIZATION**

Mr. STEFFEN. Thank you, Senator.

My name is Richard Steffen, and I'm a livestock and grain farmer from Dunkerton, Iowa. I am currently serving as president of the Iowa National Farmers Organization.

I welcome the opportunity to speak here on behalf of the Iowa National Farmers Organization.

Our organization has been very involved over the years in testifying on those issues that affect farmers and ranchers of this Nation. We feel that farm programs have tremendous consequences, both pro and con, on their economic health.

Under the slogan of "Bigger is Better," and singing the song of "Feed the World," millions of acres of marginal land has been brought into production, further aggravating the problems of over-production, low price, wind and water erosion, and a general decline in the natural beauty of the countryside has resulted.

Bankruptcies of individual farmers and economic difficulties in the agricultural community are the result of this short-term economic gain.

If there ever was a time when Government and society should be willing to hear the plea of the farmer, it is now.

We have been painfully slow to realize that any farm program that does not meet the economic needs of farmers is disastrous for society in general and for the farmer in particular.

If we want to have prosperity in our presently inflated economy, reputable economists tell us the farmer must receive twice as much for his crops as the prices that now prevail in the market.

How did we get into this mess? With farmers trying to muddle through on prices that are below the average cost of production. A couple of reasons are, commodity prices supported by Government programs at too low a level, dependence on export markets, and inflation.

In the National Farmers Organization we believe that broad acceptance and support for our bargaining concept would make farm programs operated by the Government unnecessary.

The 1981 Farm Act is inadequate to protect producers' income on the major farm commodities. Double-digit interest rates, rising costs of operation, falling farm prices and declining farm real estate values point to a very unfavorable farm economy in the foreseeable future. Believing that a new approach is needed, we will continue to push for a program that:

One, should not force us to depend on the U.S. Treasury for farm income.

Two, should encourage producers of the major grains, oilseed and fiber crops to plan production, bargain for better prices and maintain at their own risk such inventory as they wish to carry over as income assurance in case of crop failure in the following year.

Three, should be designed as permanent legislation.

Four, should be administered by a bipartisan board of producers appointed by the President.

Such a program can be devised, using the following elements:

One, a minimum price arrangement comparable to the minimum wage provisions now established by statute. Such a minimum price adjusted for quality and location differentials should be set at 80 percent of parity.

Two, national marketing orders as the means of administration, with producers referendums to implement the programs.

Three, a price supporting nonresource loan program restricted in availability to owner operators and tenants whose primary source of income is farming. A limited farmer-owned reserve concept could be continued as reassurance to the general public; nonfamily corporations, conglomerates, foreign owners and institutions should not be eligible.

We place our faith in the bargaining process to obtain profitable prices for our products over and above the minimum price levels necessary to avoid economic disaster in the farm sector of our national economy.

We would favor the same storage payment to farmers for grain in the grain reserve programs as the average rate that is paid to warehouses.

Today we have an economic dilemma not at all unlike it was 50 years ago. Oversupply of commodities, low prices, farm foreclosures, widespread unemployment, et cetera.

The Agricultural Adjustment Act was signed by President Franklin D. Roosevelt in May of 1933. This legislation, in my opinion, did more than anything else to improve the situation at that time.

Those programs that followed that served us quite well for many years, but in modern times they have proven ineffective in reversing the severe economic deterioration of the farm sector.

From that, we know that sound and responsible farm legislation is beneficial to farmers in particular and society in general. We ask, why hesitate? Why wait?

We here today recognize what took place 50 years ago. We know what is happening today.

When will the Congress of the United States face up to the fact that the farm picture is continuing to deteriorate? When will they stop putting the blame on the past? What is the Congress doing to reverse this situation?

Senator, I, on behalf of the Iowa National Farmers Organization, appreciate your obvious interest in hearing our opinions today. Thank you.

Senator JEPSEN. Let's welcome George Holl from the Iowa American Agriculture Movement, please proceed, as you wish.

STATEMENT OF GEORGE HOLL, PRESIDENT, IOWA AMERICAN AGRICULTURE MOVEMENT

Mr. HOLL. Thank you, Senator, for inviting me to this panel. I'm representing the members of American Ag of Iowa.

We have a little different philosophy. We think we need higher loan rates, 90 percent of parity. In fact, when we had the amendment after World War II, the farm program actually made money for the Government instead of costing.

We don't need target prices, but we do need a mandatory farm program, and produce for what we need plus a good grain reserve to protect the farmer-owned grain reserve and protect the consumers. We've just had too much of this up and down gyrations of prices, depending upon the world. If Russia doesn't have a good crop, our prices go up, maybe.

In 1974, we had 72 percent of the Russian grain sales. But in 1983, we had 18 percent. That kind of shows part of our problem there.

But on this 90-percent loan rate, parity loan rate, we know we get good participation, because the PIK program proves the farmers are willing, if the prices are right, to set ground aside. This would end up costing the Government very little, because that would be the floor. We produce and sell about 70 percent of the world's corn. So why can't we establish a price for our product?

I guess that's about all I've got to say.

Senator JEPSEN. Thank you, Mr. Holl.

I'd point out that in my opinion, this panel and the next panel represent just about every producer in Iowa, and I will ask the same questions of the next panel that I ask of this one.

On the first question, I'd like to have you just give a one-liner, if you could, starting from my left and your right.

Mr. Lehman, Secretary Block has asked the Congress for more authority to adjust target prices and loan rates. In your judgment, should he be given such authority? Yes or no.

Mr. LEHMAN. No.

Mr. STEFFEN. No.

Mr. KLECKNER. Yes.

Mr. HOLL. No.

Mr. MINTLE. I didn't hear the question, Senator.

Senator JEPSEN. In your judgment, should Secretary Block, who has asked the Congress for more authority to adjust target prices and loan rates, be given that authority?

Mr. MINTLE. No.

Senator JEPSEN. Now, starting from my right and going to the left, Mr. Mintle, I appreciated your comments, the obvious preparation, and the way they came from your mind and your heart—you mentioned that you thought that production controls should be in terms of bushels, tons or bales instead of acres, as in the past. I'd appreciate hearing your views on two things:

First, mandatory as opposed to voluntary supply control programs. Then—and you've already answered this second part—should they be on acreage, or should they be on production? On the basis of your testimony, the answer to that last part would be, on production.

Mr. MINTLE. I'm not familiar with support in the deep South, so perhaps we already do have bales as a basis of production down there. I don't know. But I know here in the Midwest, I would favor production on bushels and tons instead of on acres, and I think it would go a long way toward solving our problems.

Senator JEPSEN. George Holl.

Mr. HOLL. I'd agree with that statement. We've been in favor of marketing quotas, which have further stabilized prices.

Senator JEPSEN. Mr. Kleckner.

Mr. KLECKNER. It's certainly a very valid option I think we ought to talk about. That lays out the two choices: The strict production control route, which would be bushels, pounds, bales, gallons, and so forth. That's one option. And if we go that route, let's not kid ourselves; here we're talking about a voluntary 10- or 20-percent diversion of acres to attain it. We're talking about writing off the world market. We're talking about using that route, supporting prices at much above the world market, shrinking the agricultural plant to supply this country, the domestic market. I'm talking about a 40-percent, perhaps, reduction in production and using the strict production controls that we're talked about to attain that, writing off the world market, and just produce for this country. That's one of the options. Let's just say that's one of them.

The other option is going the market system, competing with the world for what they want, not putting our price supports at above level where our foreign competitors can just come in under them, as they're doing now.

Think back to 1969. I was farming then, as I am now. The support price on soybeans was reduced 25 cents a bushel, 10 percent—or from \$2.50 to \$2.25. The screams from some people and organizations were heard from here to Heaven. But it worked. It signalled the world that we were going to compete on soybeans and oilseeds. And we sold the world. We can do the same thing again today. That's the other option.

There isn't much in between. I think what we've got now is not a viable option for very much longer. We're on the one fork or the other fork, as I said in my talk.

Senator JEPSEN. As Mr. Lehman mentioned, the PIK program is really a testimony to the failure of these commodity programs; the way they've been either established, administered, or both. I believe you said that, didn't you?

Mr. LEHMAN. Yes. Right.

Senator JEPSEN. Getting back to this specific question, without giving the rights or wrongs of the commodity programs, should there be some formula, and if so, should it be on acreage or production? I think we're getting at what farmers—and I speak as a farmer—do very well. When the first programs came out, they said to set aside some acres, thereby becoming eligible for the commodity program. So we did. But we moved our rows closer together and did more fertilizing, and came up with greater production—a lot of folks did.

Now I'm not talking about rights and wrongs. I'm just saying that's a fact. So it didn't work.

Mr. KLECKNER. We're going to keep doing it, as long as we have that opportunity to do it, put on more fertilizer and do a better job.

Senator JEPSEN. Richard Steffen.

Mr. STEFFEN. I guess I would view it in this light: Neither, as far as acreage or production sort of thing. I'd sooner see quotas established on a—based on a good land practice. I didn't talk particularly about soil conservation in what I had to say here, but this would contribute back to that. In other words, if quotas were established on a good land practice, then, x number of bushels could be marketed, or bales, or whatever, per unit, per farm, in a given marketing year. Now, if the producer produced above that, he would still

only be able to market—let's say he produced 1,200 bushels of grain, but his quota was 1,000 bushels. He'd only get to market that 1,000, at a reasonable price. He'd have to carry over that 200 bushels into another marketing year. Or if you doubled it, and he produced 2,000 bushels, he could only market 1,000 bushels based on that quota.

I think that would contribute to soil conservation, good land practice. However, obviously, if he produced 2,000 bushels in a given year, he obviously put his whole acreage into production. So, the next year he'd either just see himself piling that grain up, or else he'd be taking his land completely out of production that year.

But that's what I would feel it should be based on—good land practices.

Senator JEPSEN. Well, I hear what you're saying, but let me add this dimension in the form of a question to you, and just air it a little bit:

Talking about a form of cross-compliance, there are quite a number of folks who, over the years, have been doing all these things—taking care of the land, without being part of all these requirements. Now, what do we do with those folks if the erosion isn't so bad on their land; in fact, they've already got terraces installed, and have had them since the late fifties. Now they come along, and want to be considered eligible for one of these programs; What do we do with those folks?

Mr. STEFFEN. Well, it seems to me that it would not affect them, inasmuch as what I'm talking about—

Senator JEPSEN. Would they be eligible, though?

Mr. STEFFEN. Sure. They're already practicing good land practices, so we wouldn't view—or give them a quota based on their past crop history. They've already established their good land practices. They're already adhering. They don't have to establish it. That's the way I would respond to that.

Senator JEPSEN. Mr. Lehman, the commodity programs we have, should they be tied to acreage or production?

Mr. LEHMAN. I personally would say production. I haven't worked through that, myself, to make a knowledgeable judgment on that, but it's always been my thought that production, rather than acreage, just to avoid the problem you've mentioned.

Senator JEPSEN. OK. I guess, I have a general consensus, and rather than get into questions—if we picked this apart, we'd be here the rest of the afternoon. But I might ask the question: The benefits of Government payments, whether it be loans, storage payments, paid land diversion, deficiency payments, or PIK payments, are these all going to reach the most deserving farmers? Then I suppose one would ask "What do you mean by deserving farmer?" As I say, we'd be here most of the rest of the afternoon.

But if anybody wants to comment on that, if we could do it briefly—

Mr. KLECKNER. Could I comment? I'll try to do it briefly.

You're highlighting an excellent question, but I think when we go beyond it, are we talking about these payments as welfare or for participating and doing something in the program?

Frankly, even limitations at a certain level smack of welfare. For example, a 1,000-acre farmer, really interested in getting land out

of production, he ought to be as eligible to take out his acres as ten 100-acre farmers. Or are we going to limit him and say at some point you can't participate, by payment limitation, or whatever.

So he does what he has to do. He farms the whole thing, his whole farm.

Do you get the point? Are we talking about welfare, or are we—

Senator JEPSEN. I get the point. However, concerning the PIK program, some of the cattle grazers and feeders and a whole lot of other folks, have different answers to the question of Federal farm programs reaching the farmers in greatest need of assistance. They'd say:

Well, I don't think the one you have has really been very fair. What about us? You're talking about putting land aside, and putting in conservation. We've got grazing land that's pretty good conservation cover. It's been in grass a long time. But we find we are ineligible for the PIK program—our base isn't anything like some of the other folks'. How about us?

Mr. KLECKNER. Yes. Again, does everybody deserve some largesse from the Government? If they do, the program is not fair. We ought to revise it and, as Maurice Van Nostrand suggested, just send checks to boxholders, and everybody gets a check. And as the boxholders decreased, the less checks would go out. He was being facetious, incidentally, when he said that.

But is this welfare, or are we sending checks for participation in a program? And I guess I'd suggest that what we're doing is not too far wrong. Maybe it isn't as fair as it could be. No program is ever what it should be.

Senator JEPSEN. Well, I'd like to ask one more question of the entire panel. I think it was Mark Twain who said, when asked if he was going to make a speech, "Well, I don't know. How long do you want me to talk?" They asked him, "What difference does it make?" "Well," he said, "it makes a big difference. If I'm going to speak for a couple of minutes, I've got to have a couple days to get ready. But if you want me to speak for an hour, I'll go with you now." [Laughter.]

I'm just making the point that I wish we had more time. Perhaps you get the feel now of what happens when we get into committee meetings, and after the meeting we're still debating among ourselves. Then add the staff, bright young folks, most of them with master's of Ph. D. degrees, that research and come up with all kinds of points, little things you never thought of before. And you get it all stirred in together, and you shake your head. But let's pose a simple question:

Will the Federal Government continue to play a direct role in agriculture in the long run? And if it does, what do you think that role should be? We're talking about the next generation. Is the Government going to play a role in agriculture, and what should it be?

Mr. Lehman.

Mr. LEHMAN. Our position is that it's a proper function of Government to take a role in agriculture, because like almost any other country in the world that has a halfway reasonable approach to the problem, it's a problem for all people. It's not just a farmer problem; it's a consumer problem.

Senator JEPSEN. What should it be?

Mr. LEHMAN. To assist the farmer in doing things that he can't do for himself—no more.

Senator JEPSEN. All right. Mr. Steffen.

Mr. STEFFEN. It should be a positive role, as far as helping agriculture, so it is beneficial to the rest of the general economy. Carefully, government is going to be involved in agriculture, either directly or indirectly, and it should be a positive role, that would be of benefit.

Senator JEPSEN. Dean Kleckner.

Mr. KLECKNER. Will they, politically? I say yes, they will. Should they? It should be very limited. It should be in the areas of strictly doing things that farmers, as organizations and individuals, can't do. That would be forbidding embargoes; seeing we have good transportation; forbidding dock strikes, for example; areas of research, disease control, and so forth. That's government control: Government control is not in the area of farm income and farm income enhancement, except under very isolated conditions.

Senator JEPSEN. When you started there, I thought you and Lehman were going to agree. [Laughter.]

But it didn't end up that way.

Mr. KLECKNER. We do agree on some things, but it never makes the newspapers when we do, Senator.

Senator JEPSEN. George Holl.

Mr. HOLL. I think the Government has a definite role, because we've got to have a reliable supply of food and fiber, and the only way to do it is with Government controls. It can be done without too much cost if it's done properly, with production and marketing controls.

Senator JEPSEN. Mr. Mintle.

Mr. MINTLE. I feel that there's a place for government in agriculture. I agree with Dean on the various aspects, but when you get down to production of commodities and making it attractive so that outside investors get in the act to the detriment of the family farms, I don't think we can have our loan price or support prices, these various farm programs, so attractive. I think it should be on the basis that you can get along until the price reaches a plateau or level that is commensurate with the production, volume of production. But I don't really feel that we should have high support prices. I think there's a place—I've been on ASC committees, and I feel that the township or community committee should have the leverage or the option, or maybe the responsibility, to help the man who has conserved his soil, has a lot of pasture or hay ground, and give him a fair established base, rather than cut him clear out of any farm program.

Senator JEPSEN. I thank you.

Once again, I'd like to ask, and this goes back to my first question.

In your judgment, regardless of who is Secretary of Agriculture, should he be given more authority to adjust target prices and loan rates, or should he have any direct independent authority? Again, forget about Secretary Block—regardless of who was Secretary—how do you feel about it?

Mr. LEHMAN. I'd feel exactly the same way. It hasn't worked in the past.

Mr. STEFFEN. No.

Mr. KLECKNER. Yes. They've got to be given that authority.

Mr. HOLL. Just by Congress only.

Mr. MINTLE. No.

Senator JEPSEN. Well, you see, what that did was put a framework around it. So we're totally consistent in the answers—No, no, yes, yes, no. [Laughter.]

Mr. KLECKNER. Well, whether it's Block or Bergland, they need the authority.

Senator JEPSEN. You're right in the center.

Does anyone have anything they'd like to say in closing? This panel, probably represents—more than any other panel, except the next one coming up—every producer in Iowa. I appreciate your candid comments. That's the way we accomplish things.

Do you have anything in closing, Mr. Lehman?

Mr. LEHMAN. Yes. This business of putting our prices at the world price, our feeling is that the world price is established by us, and farmers all over the world suffer because of what we do. Canada, the United States, and Australia have 50 percent of the exported commodities, and we're the ones that are responsible for this mess. They're willing to cooperate whenever we talk to them. Just for example, beans went up 25 to 30 cents, I understand, yesterday. That was because of a 5-percent reduction in the supply figure, as I understand it. It's not that difficult a thing to do, I mean, if it's administered properly and proper guidelines are set up to do it.

Senator JEPSEN. Mr. Steffen.

Mr. STEFFEN. I really have no further comment on that, Senator. Thank you for being here.

Senator JEPSEN. Thank you. You're pretty close to where I hail from, up around Cedar Falls.

Mr. KLECKNER. Senator, thanks for holding these hearings. It's necessary. We need to change the direction we're going, and I think the hearings that you've held in Washington—eight or nine of them—and the four or five that are being held around the country, ought to point us in a new direction. We've got a little time now with PIK, and if we don't change where we're going, we're going to have another PIK in another couple years, and we're going to hear the taxpayers of this Nation saying no, as I believe they will.

So we must use this time to change directions.

Senator JEPSEN. George Holl.

Mr. HOLL. I think that on any future programs, instead of having it established on corn base, it should be on percent of tillable acres, so that cattle feeders aren't being cheated, who are taking good care of these lands. It should be a percent of the total crop acres, instead of establishing it on corn base.

Senator JEPSEN. Ross Mintle.

Mr. MINTLE. I was to have been at an ASCS meeting this morning to go over applications for cost sharing. We've had a tremendous increase because of the PIK program. It's a wonderful opportunity to get in there and do some work, terracing, silt dams, and

so forth, erosion control. And as I understand it—of course, I couldn't be there—but as I understand it, we have applications far more than we have money to go around.

Senator JEPSEN. We're trying to work on that. You're correct. We talk about long-range planning and stability, but I'm not very pleased with the fact that we came in with the PIK program, and now we are talking about the conservation cover and the opportunities that we have. I can assure you that my staff and I will do everything possible to insure that the next PIK is a modified PIK, and that PIK-II, or whatever we come up with, is announced on a timely basis and that it includes the conservation requirements we just mentioned, together with the option and the incentive for some longer term conservation practices, and so on. This is the time to integrate it.

Mr. MINTLE. The PIK program has been a windfall to soil conservation. It has done more to reduce soil loss than anything we have done for years.

Senator JEPSEN. I'm just sorry that we weren't up front in doing a lot more. It came out very quickly, but as you know, there are people that were going to leave ground grow anyway. I mean they were going to alternate the year, and the cover. The decision to be made is this: Is that good enough ground cover to leave for conservation?

Mr. MINTLE. I think any future program should mandate that the cover crop be established. I don't like to see soybean stubble or cornstalks laying out there.

Senator JEPSEN. That's my point.

Thank you very much for coming.

Our next panel represents the various producers in Iowa. Let's welcome Thurman Gaskill, past president, Iowa and National Corn Growers Associations; Raymond Heck, president, Iowa Soybean Association; Joe Fahn, president, Iowa Pork Producers Association; Russell Christensen, president, Iowa Cattlemen's Association; and Earl Baudler, president, Iowa State Dairy Association.

When you get to a point where you include the corn growers of Iowa and the soybean growers of Iowa and the pork producers of Iowa and the cattlemen of Iowa and the dairymen of Iowa, there aren't many missing—or much left.

I welcome all of you. As I've indicated before, and I repeat again, your prepared statements will be entered into the record in full. You may proceed any way you so desire; but if they're summarized, it will give us more time for exchange.

As with the last panel, I intend to spend a little more time on exchange, because I find in the Congress that the producers are on the firing line. The processors and all the other folks think agriculture has their own individual and collective groups, and so on and so forth. One thing I want to make sure of is that here, away from Washington, we hear from those folks who are doing the work and paying the bills and marketing the products, milking cows, as my nephew does at 10 a.m. every morning and 10 p.m. every night, 365 days out of the year.

Let's welcome Thurman Gaskill, again; you happen to be in the center and you happened to be the first here, so you may proceed as you wish.

**STATEMENT OF E. THURMAN GASKILL, PAST PRESIDENT, IOWA
AND NATIONAL CORN GROWERS ASSOCIATIONS**

Mr. GASKILL. Senator, I'd just as soon just make a general statement and then turn it over to the rest of my colleagues, and then perhaps have a dialog a little later, just in the interest of time here.

My name is Thurman Gaskill, and I'm a grain and livestock producer from Corwith, Iowa, in north central Iowa. I have served as president of the Iowa and National Corn Growers Associations, and USC Grain Council, which is the marketing arm of the corn-growers.

I think today, as I have heard all of your discussion since lunch and a little prior to lunch, that everything has been pretty well touched on, except maybe each one has his own version.

We look at the short-term and the long-term agricultural policy of this country. The short-term is currently the PIK program, and what's after PIK in 1984 and the long-term policy which is coming up in the farm program in 1985. I am more concerned about the long-term currently right now, and I defer the mechanics on all these to people like yourself and your colleagues in Congress to work out some of the minor details.

So I am more interested in the long term, the effects of market development programs, the effects of the dollar on agriculture in this country, and how we view agriculture in this country as a whole. Why do we seem to have problems of generating funding for a farm program in this country, where in the EEC and in Japan much more of the consumer dollar goes for food? And I guess that brings us back to the policy after World War II where they had a shortage of food on their shelves, and this country has never experienced a shortage of food on their grocery shelves. And perhaps this is one of the problems we have in agriculture today, that we've had such an abundance of agricultural supplies in this country that we take it for granted, and that somehow, some way, we elevate that up to the some level as defense is in this country. When we talk about MX missiles and submarines and F-15, 16 and 18 fighters, that perhaps we talk about PIK and price support programs and target programs in the same breath.

That's what I'm concerned about. That's what I would like to pass on to you. And we'll talk about some of those things later on in our exchange.

So I'll defer—and you have a copy of my prepared statement—to my colleagues.

[The prepared statement of Mr. Gaskill follows:]

PREPARED STATEMENT OF E. THURMAN GASKILL

Mr. Chairman, my name is Thurman Gaskill and I am a grain and livestock producer from Corwith, Iowa, which is located in the north central part of the State. I am here today representing the corn growers of the Midwest and I have served as president of the Iowa and National Corn Growers Associations.

I first want to recognize the efforts of the Joint Economic Committee for the leadership role that you have demonstrated by calling for input into our future farm program needs. I want you to know that we appreciate the efforts of the Committee because the one thing that agriculture needs is a consistent and long-range plan for the future.

Each time I pick up a newspaper or major news publication I become very concerned as to where agriculture is headed. The recent headline stories aimed at the cost of the Payment-in-Kind program concern me greatly because we in agriculture are at a crossroads. We can either go forward with emphasis on new demand or we can regress towards supply-side management and an ever-smaller agricultural base.

It has occurred to me that there may be a very basic reason as to why we have had such a difficult time establishing a long-range agricultural policy. And that is, the United States has never been hungry.

We in this country take agriculture for granted. Our grocery store shelves have never been empty. I contrast this with countries in the European Community who have experienced this far many more times than they would like, or Japan, or many of the other nations in the world who have a far greater demand for food than what they can meet. Almost every other nation in the world spends a much higher percentage of their disposable income and invest a much higher portion of their gross national product to assure themselves of a plentiful supply of food for their people.

In the past few years, and even more specifically, since the 1980 grain embargo, agriculture has had to just get along with a few dollars to try to adjust to the horrendous problem that we have. I offer to you today that we wouldn't have the billions spent on a Payment-in-Kind had we addressed the problem squarely and directly as the problem was occurring through 1980, 1981 and 1982. Given the situation and restrictions placed upon the USDA, the Payment-in-Kind program was probably the best alternative and may still be, with some modifications, our best alternative to help align supply with demand.

Fortunately, this country has two alternatives available regarding agricultural policy. It can focus its primary efforts on building increased demand or on curtailing production. Isn't it rather unique that this country has devoted its more recent efforts on curtailing its productive capacity, while the majority of the rest of the countries in the world are trying to stimulate their production capabilities?

Let me get back to those alternatives—supply or demand. At the last National Corn Growers Association meeting one of the study groups concentrated on the potential new demand that is available to the corn industry. There was a regular brain-storming session, with everything from new alcohol production and utilization, fructose usage, carbohydrate petroleum replacements, to food stamps, offered as ways to stimulate new demand for our corn and corn products. The surprising thing was that the total potential demand created if those changes were implemented over the next five years could feasibly be one-half of our current U.S. average corn production.

I'm sorry to say that at this time I can't itemize those figures for you today, as they are currently being reviewed and studied. But I would appreciate an opportunity to submit those figures to the Joint Committee at a later date.

The important point is not the numbers that those new demands represent, but that we do have an alternative. We do not have to have a farm program on to infinity that continues to reduce supply. The potential for new demand is out there, and we must develop programs that allow us to compete for it.

I'm sure you are asking at this point, where does the government fit in? What is its role in this arena? I think that at some point, maybe not immediately, but at some point the Federal Government needs to take a look at all its programs and determine where and how agriculture can play a role. As an example, the Federal Government needs to examine the federal exemption for an alcohol-containing fuels as a way of accelerating demand. Additionally, a reexamination of its priorities for various food groups in its food programs, such as the school lunch program, are ways of sending the government message that it has a commitment to agriculture.

There is no way agriculture can be singled out as a separate entity and adequately be administered. Agriculture serves as a base for the economics of this country and has an effect upon all sectors of the economy.

Another potential area for government involvement in stimulating agricultural economy is the adequate funding of the export revolving fund. This is a convenient off-budget item that can continue to roll over and over to create new demand and to bring new markets. We, in agriculture, have to come back to every station in Congress to ask for money to do our market development and export work.

Another area that has a lot of potential is some fine-tuning of Public Law 480. When we study the history of Public Law 480 and the various titles under it, we find that one of the real success stories is the country of Korea. What did we do in Korea that was any different than other places in the world? The one thing that was different is contained in Title III, that portion of Public Law 480 that allows for soft currency to be used by FAS and other marketing groups to do market development work in that country. To help those people plan the dock facilities, to help

plan and bring into being the infrastructure that it takes to move products from the docks back into the production areas of that country, are all efforts that need to be accomplished if that country is to be a long-term U.S. purchaser. Public Law 480 needs to be examined and revitalized to make it a true arm of our export policy in this country.

Additionally, the government needs to take a good hard look at agricultural product utilization research. As an example, the USDA Lab in Peoria, Illinois, has had its priority changed several times in the last few years, and has had its staff cut. It has been directed to look at long-term potential demand for agriculture products and spun around and then said, "Look for a quick fix." This is not a productive investment in research.

Looking at research from an overview, one has to wonder why the investment in total federal research in 1940 was approximately 37 percent for food and food products, and today that percentage of federal research is less than three percent.

At the same time we have had this research cutback, we're involved in a running battle with statements like, "What's good for you," and "What isn't good for you." "What's safe to eat," and "What isn't safe to eat." We truly need not only increased research on what is a proper diet, what does lead to a more healthful and productive society, but we also need to take a good hard look at our food safety laws. Most of these laws have not changed appreciably since the 1940's. Technology has come a long way since the laboratories of the 1940's.

We need some type of forum of consumers, producers and industrial representatives to effectively weigh the risk and benefit that goes along with the introduction of any new product in the food production system.

As cases in point, I simply remind you of the cranberry scare, the bacon scare, the saccharin scare, and all of those other impossible situations, where government bureaucracy failed to adequately address consumers of food safety and yet assure them of the plentiful supply of food available to them. Governmental statements regarding this country's food supply can have devastating effects upon these producers of the food supply. We do need a hard look at the way we decide how our food is produced and how its quality is insured.

One other area of vital importance to the next generation of farm programs is the area of market access to foreign markets. The access to foreign markets pertains not only to the ability to move the product or merchandise it in that country, but also the ability to maintain an economic relationship between currencies. The ability of one country to warp its exchange rate out of proportion to the true relative strengths of the two economies is just as much a deterrent to international trade as that of high tariffs. We must resolve the problem we have with the EEC and Japan at this time. The resolution of this problem will make it much easier for the financial community of the world to service the debt problem of the lesser developed countries.

In conclusion, let me say that agriculture is and will always be the base of the economy in the United States. The failure to address its problems in a timely fashion is pennywise and pound foolish. Agriculture desperately needs a long-term farm plan, one that makes a provision for a continuous program. Farmers are not just in this for four years. For most of us, it is a lifetime commitment to food production. We really need a farm program that allows us to make long-term decisions in order to capitalize on true efficient agriculture production.

This short time frame does not allow me to go into very many specific items that are needed in the next generation of farm programs, and we would surely welcome an opportunity at a later date to further discuss the specific things that are critical in a future farm program.

Thank you.

Senator JEPSEN. Thank you.

Next is Raymond Heck, president of the Iowa Soybean Association, please proceed as you wish.

STATEMENT OF RAYMOND HECK, PRESIDENT, IOWA SOYBEAN ASSOCIATION

Mr. HECK. I'm Raymond Heck, and I'm a farmer near Perry, where I raise soybeans and corn, and I'm here today in my capacity as president of the Iowa Soybean Association. I also serve as a director of the American Soybean Association.

ASA is a national, volunteer, nonprofit, farmer controlled, single-commodity association, organized to assure the opportunity for a profitable soybean industry. ASA has over 24,000 dues-paying members and is supported by over 450,000 soybean producers who voluntarily invest in ASA programs through 24 separate soybean checkoff programs. Iowa membership is currently above 5,600 and as you may know, Iowa farmers recently registered their strong reaffirmation of the checkoff program by voting to increase their support from one-half cent to 1 cent per bushel by 78 percent.

Throughout all of the activities of the American and Iowa Soybean Association, soybean farmers seek to maintain soybean profits through its foreign market development, research, government relations, and producer and public relations information programs.

ASA and ISA have traditionally been opposed to Government controls in the soybean sector. Supply management schemes have not worked well and, in fact, have often created other problems. Even though the relatively free market approach has its problems, we feel that it is still the best approach. ISA agrees with ASA policy positions which illustrate that point:

First, freedom from controls.

ASA favors keeping soybeans free of acreage allotments, marketing quotas, target prices, and set-aside programs.

ASA opposes any grain or oilseed crops being produced on designated set-aside acreage.

ASA is opposed to Commodity Credit Corporation or any Government agency becoming the negotiator or sales agent for export sales of U.S. soybeans and other agricultural commodities.

Second, Government and international grain reserves.

ASA opposes a federally financed soybean reserve.

ASA also opposes the inclusion of soybeans in a U.S. Government-held strategic or national grain reserve. ASA urges the Commodity Credit Corporation to continue a farm storage facilities loan program to encourage more storage on the farm. ASA also urges that the farm storage facility loan program be available to soybean farmers.

ASA urges that other nations build sufficient stocks to meet their needs.

Third, limiting payments.

ASA endorses the principle that every U.S. farmer be allowed full participation in all Government programs, including any Government payments, without discrimination based on size, and recommends repeal of current payment limitations based on size.

Fourth, loan program.

Soybean farmers have traditionally favored a free market for soybeans. ASA recommends that the soybean loan rate as established by USDA or Congress be set at a level that assures against economic disaster to soybean farmers, but which does not result in stock building and excessive production in the United States or in increased competition abroad. ASA urges that we be consulted before a loan rate is established, and that there be the option of renewing loans.

In order to prevent a buildup of Federal stocks of soybeans assumed under the soybean loan program, ASA urges USDA to im-

mediately market any acquired soybeans at the highest local price available in the marketplace.

With specific reference to the PIK program, ASA has some definite feelings we would like for you to consider. First, under the 1981 farm bill, the Secretary is prohibited from requiring "participation in any production control program for soybeans or any other commodity as a condition for eligibility for price support for soybeans." Thus, the Secretary could not offer a soybean PIK without a change in the soybean loan law.

Second, on January 14, 1983, the Commodity Credit Corporation owned only 14.2 million bushels of soybeans. Assuming the same payment rate in effect for corn—80 percent of established yield—and a national average soybean yield of 32 bushels per acre, the CCC stocks have been sufficient to "buy out" only 554,687 acres, 0.7 percent of U.S. soybean acreage in 1982. With today's CCC stocks of 20.7 million bushels, only 808,594 acres of soybeans could be set aside.

Another factor to consider is that compared to corn, wheat, cotton, and rice, soybeans are not in critical surplus.

Based on the most recent information available from USDA, the carryovers projected for this fall, expressed as a percentage of annual demand, for corn, wheat, cotton, rice, and soybeans are:

Corn, 45.4 percent; wheat, 63.2 percent; cotton, 76.4 percent; rice, 43.1 percent; and soybeans, 20.9 percent.

As you will recall from my earlier comment, ASA soybean farmer delegates have developed and approved policy which specifies "ASA favors keeping soybeans free of acreage allotments, marketing quotas, target prices and set-aside programs." Since the PIK is a paid set-aside program, ASA would have opposed a soybean PIK had it been proposed by USDA.

ASA is unaware of any interest ever being expressed by USDA to include soybeans in the current PIK. ASA President B. B. Spratling, Jr. attended Secretary Block's earliest discussion meetings on the PIK and at no time was a soybean PIK proposed. After consideration of the items noted above, USDA decided not to offer a soybean PIK program.

Without the PIK program, the United States would next year be carrying over a 166-day supply of corn, a 230-day supply of wheat, a 279-day supply of cotton, and a 157-day supply of rice. However, the projected carryover of soybeans is only a 76-day supply.

Thus, a PIK is not justified for soybeans. If corn, wheat, cotton, and rice were in as good a supply-demand situation as soybeans, USDA would never have offered a PIK program for those crops.

One other issue which remains of great concern to soybean farmers in the issue of cargo preference.

Cargo preference and other maritime subsidy programs have failed their original objective of providing the United States with a modern merchant marine capable of supporting a war effort when needed. Supporters of more subsidies must believe such programs have been successful, or they would not press for increased Government protectionism. The United States as a nation can never subsidize its merchant fleet into efficiency. Instead, Congress should force U.S. flagships to compete with nonsubsidized fleets. Only then will the U.S. Merchant Marine have strong incentives to innovate,

reduce operating and construction costs, and move toward becoming truly competitive in the world shipping fleet.

Thank you for this opportunity to present our views. I will be pleased to respond to any questions you might have.

Senator JEPSEN. Thank you.

Now, Joe Fahn, please proceed as you wish.

STATEMENT OF JOE FAHN, PRESIDENT, IOWA PORK PRODUCERS ASSOCIATION

Mr. FAHN. Thank you, Senator Jepsen. My name is Joe Fahn and I am a pork producer from Portsmouth, Iowa. I farm 400 acres and produce over 1,400 hogs annually. As president of the Iowa Pork Producers Association, I am here today representing more than 30,000 members statewide. On behalf of the association, we appreciate the opportunity to comment on the impact of Government policies on our members and hope our comments are useful in formulating future farm programs.

Before addressing specific parts of any future farm program, we feel it is important to address the major shortcomings of past farm programs and at least philosophically discuss where the pork industry operates most efficiently.

Agriculture and particularly the pork industry is a business operating on long-term business decisions. Capital outlays for land, buildings, equipment, and labor are large. To make long-term decisions with short-term programs and policies is not only inconsistent, but a financial nightmare.

Second, with short-term farm programs being announced so late in the year for many producers, the program has been an unmanageable situation. They have already committed to crop rotations, fertilizer, and futures marketing. By announcing these programs earlier and with more concern for the long-term nature of the business, not only will farm programs be more available to all producers, but ultimately more effective.

The Iowa Pork Producers Association strongly supports every effort to increase the price of grain. It is no secret that as the price of corn falls, more grain producers look to alternative ways of marketing that grain, and primarily feeding hogs. As the price of grain continues to fall into a nonprofitable situation, this results in even less risk for the grain producer to market his grain through livestock. This all results in a large oversupply of hogs and additional losses for the livestock producer. This is essentially where the hog market has been for most of the past 4 years.

The reaction of Iowa pork producers is very positive to the current payment-in-kind program for putting grain back into a profitable situation. We feel the program will be of great benefit to the general farm economy and eventually to pork producers. While PIK may be a short-term solution to grain in the reserve, it raises many questions about future farm programs.

What will they include?

What will be the direction?

How will they affect the livestock industry?

For these reasons and others, the Iowa Pork Producers Association would recommend the following priorities:

First, expand exports: This is the main problem we face, and we need to address it in earnest. Since the embargo, the only true signal the United States has sent that we want to truly do business is a \$150 million subsidy for Egypt to buy wheat. We would urge:

Greater cooperation between the Agriculture and State Departments. Food as foreign policy has applications.

Greater use of extending credit to countries who want and need products must also be instituted. Several would-be customers are lost due to a lack of encouragement or a better deal elsewhere. We must become aggressive.

Funding subsidies for export. While we dislike the concept, it may have to be used. We are forced to compete in a false market. Unfortunately, this tool should be used on many of our so-called allies, just to show them we are serious.

One, barter systems: While many countries have economic problems and no money, they do have products. Mexico is an oil-rich country in such a predicament, but they could use American technology and know-how, and our grain.

An international products exchange, if not run by the government, at least encouraged by the government, should be investigated.

Two, trade restrictions: Before you can have free trade you must fair trade, and we must admit we are sacrificing the American economy to many countries who will not let American business compete. The Agriculture and State Departments must address this. Trade restrictions will no doubt have to be threatened and probably imposed.

Agriculture is our most efficient industry. Other countries import because of their natural efficiencies in labor, materials, and technology. These trade dollars must be balanced.

Second, research: American know-how to solve problems is one of our most effective tools in solving problems. This should be unleashed. More dollars are needed for product development, byproduct usage, development of value-added products and production-disease controls to reduce costs. We would also urge the Agriculture Department to change past policies of limiting competitive research grants to plant species and require similar funds be available for mainstream livestock production.

While these approaches are being initiated, we realize limitations in production may have to be presented in order to keep sliding back into the over-supply situation. Use of cash incentive payments with set-aside acreage and soil banks is what we would like to recommend. We feel, however, whatever is offered should be a firm contact and contain much more risk for producers who do not participate, particularly in following year farm programs.

We hope the administration and Congress will evaluate the current U.S. stance in opening up world markets and the current cost of the payment-in-kind program. By assisting U.S. agriculture through extending credit, funding subsidies, barter and foreign aid, our association believes it is possible to increase the United States posture in world affairs, balance the trade deficit, and improve the economy at home. It will also allow U.S. agriculture to do what it does best—efficiently produce food and fiber.

Again, on behalf of the Iowa Pork Producers Association, I thank you for the opportunity to express these comments.

Senator JEPSEN. Thank you.

Next, Russ Christensen of the Iowa Cattlemen's Association; please proceed, as you wish.

STATEMENT OF RUSSELL CHRISTENSEN, PRESIDENT, IOWA CATTLEMEN'S ASSOCIATION

Mr. CHRISTENSEN. Thank you. My name is Russell Christensen. I am a farmer and cattlefeeder and producer from Royal, Iowa. I am currently serving as president of the Iowa Cattlemen's Association. I am speaking here today on behalf of 15,253 members of our association.

As we look to future farm policies, the Iowa Cattlemen's Association feels that less, rather than more, Government involvement in the marketplace would be advantageous. The Government cannot and should not be the market for all products. Obviously, from time to time the Government has felt compelled to become involved through farm programs such as have been implemented over the last 2 years. When this occurs, it is essential that Government involvement does not strengthen one segment of agriculture at the expense of another.

The Iowa Cattlemen's Association feels strongly that current farm programs discriminate against beef producers. This philosophy will be detrimental in the long run, as it should be remembered that the livestock industry is still the largest consumer of U.S.-produced feedgrains. Foreign nations will not be able to purchase all of the grain we produce. If current programs discourage livestock production, we'll get into a vicious circle with no end as domestic grain consumption by livestock continually decreases.

If the USDA and other Government agencies are to play a useful role, it would be to insure that we have a market-oriented agricultural policy. The United States is the breadbasket of the world. We produce food more efficiently than any other nation. Yet, the United States has a deficit of trade. This is hard to rationalize.

Other nations that we deal with protect their agricultural producers. It will take concerted efforts to open these markets for U.S. agricultural products. Governmental negotiators need to take a much tougher stand in letting these nations know that we will not tolerate these policies. The United States should not continue to purchase manufactured goods and oil from these nations while allowing them to impose trade barriers on the U.S. agricultural products they import. More concerted efforts in this area will do more for U.S. agriculture than practically anything else that could occur.

The beef industry is not asking for Government subsidies. We don't want them. Those that develop farm policy must be careful that we do not subsidize inefficient production. At the same time, we do not want to be discriminated against. Recent Federal farm programs directly discriminate against beef producers and thus, in our opinion, discourage the production of a "value-added" commodity and a natural soil conservation tool.

Most cattlefeeders, and producers raise crops other than feed grains on some of their tillable acres. Primarily, these are forage,

grass and small grain crops to produce feedstuffs for their cattle. We could debate whether this is done primarily for economic or conservation purposes. The fact remains that the cattle producer raises soil-conserving crops that have both a long- and short-term impact on helping conserve our topsoil. This is done without public funding. Yes, without tax dollars. We feel that soil conservation should be directly tied to receiving farm program benefits.

In the Federal farm program a feed grain or corn base is established on each farm unit. This is determined by previous cropping history. A farmer that has planted every available acre to corn over the last 2 years receives a corn base equal to his average corn acreage of the previous 2 years. This occurs even if a portion of his acreage is not entirely suitable for corn production and is subject to erosion.

The cattle producer who is utilizing some of his acreage for other than corn production receives a much smaller corn base if he has not grown corn on his marginal acres. This discourages cattle producers from participating in farm programs and encourages them to plow up their forage or pasture acres so that in the future they, too, will receive a large corn base and be eligible for Government handouts of grain and payments. Why should others be paid a premium to do what the cattle producer has been doing voluntarily? Farm programs should encourage farmers not producing soil-conserving crops to do so, rather than discouraging those who do raise soil-conserving crops to discontinue this practice.

Alternatives should be developed to rectify this situation. The Iowa Cattlemen's Association feels that partial credit for pasture, hay or small grain crop acreage should be included in each farm unit's corn base. We are not suggesting that this be done on permanent pasture on nontillable acres. However, rotated pastures, meadows and small grain crops on tillable acres are contributing to the well-being of agriculture by reducing feed grain surpluses and by conserving soil.

Our recommendation for adjusting these other crops to contribute toward a corn base would be to use a TDN—total digestible nutrients—factor. For example, if corn is 80 percent TDN and alfalfa or pasture grasses are 50 percent TDN, the alfalfa or pasture acres would be given 0.625 credit per acre toward the corn base.

The livestock industry is placed at another disadvantage. Each farm has a projected yield assigned to its feed grain acreage. Farmers who have marketed cash grain can easily prove a higher yield by submitting settlement sheets on their grain sales. Cattlefeeders or any livestock feeders who have fed even a small portion of their grain do not have this opportunity. The cattle producer and feeder thus gets a corn base and an assigned yield that in most cases is lower than his neighbors' who are cash grain farmers. A cattle producer is not allowed to use livestock weight gains as proof of corn yield. However, we doubt if this is any more questionable than some methods of providing settlement sheets. Alternatives in this area should also be developed. The proven yield concept should be eliminated unless it can be made more workable.

Cattle producers make the same commitment to participate in farm programs as do others. Yet it costs the cattle producer more to participate. In my own operation, I harvested 300 acres of corn

for silage in 1982. At 150 bushels per acre, this is 45,000 bushels on which I could not receive loan privileges. At a differential of about 80 cents a bushel, my gross income on corn acreage was reduced by \$36,000. This seems to be a rather severe penalty to be in the cattle business.

Recently we have even heard questions about the morality of taking land out of production when there are needy people in the world. Current farm programs encourage grasslands to be converted to row crops and then producers are paid to cut production. Shouldn't farm programs be encouraging just the opposite? By converting row crop acres, particularly those subject to erosion, to grass and forage production to be utilized by beef cattle, we are not becoming nonproductive. We would be encouraging soil conservation and employing American workers as a "value added" high quality foodstuff is produced.

A long-range plan must be developed. A gradual withdrawal from current programs is needed. More emphasis must be placed on breaking down trade barriers imposed by foreign nations. Future farm policies must encourage sound soil conservation practices. The Iowa Cattlemen's Association feels that the beef industry is one of the best soil conserving alternatives available. Farm programs must treat all segments of agriculture equitably. The farm programs of the last 2 years have not done this.

America's agricultural producers are the most efficient food producers in the world. Something is wrong when there is a world need for food, and yet we are encouraged to cut production. A market-oriented approach emphasizing "value added" products is a must.

Thank you for allowing us to present our views.

Senator JEPSEN. Thank you.

We welcome Earl Baudler of the Iowa State Dairy Association, please proceed, as you wish.

STATEMENT OF EARL J. BAUDLER, PRESIDENT, IOWA STATE DAIRY ASSOCIATION

Mr. BAUDLER. Thank you, Senator.

My name is Earl J. Baudler. I live in Fontanelle, Iowa. I serve as a corporate director on the board of Associated Milk Producers, Inc., and this testimony is presented on behalf of the 31,000 dairy farmers who are AMPI members.

I also serve as president of the Iowa State Dairy Association. Both organizations are aware of the urgency of stabilizing and balancing total agricultural output with total demand. Serious dairy problems will be with us as long as we have such excessive production capacity throughout agriculture as we now have.

The economic crisis in American agriculture is a very serious one and should be the concern of every American. The payment-in-kind program is a welcomed stopgap measure that has bought some time for us, but there should be extreme urgency about developing a national farm policy to be implemented in place of the payment-in-kind program.

There will be uncertainties about the level of carryover stocks of the PIK commodities until the 1983 crop is in. Already, however,

we know that in spite of the PIK program we will have a tremendous wheat crop. Iowa corn prospects are certainly not the brightest we have had at this time of year. It is my understanding that anything like normal yields in 1983 for all commodities will result in carryover stocks too high to hold farm prices for commodities at levels that will keep producers solvent, so that there must be some continuation of effective production restraints for the 1984 crop. PIK-83 and PIK-84 must be regarded as crash programs to get stocks down to levels that will permit price recovery to reasonable levels.

In my opinion, we are years behind in the research necessary to adjust our farm policy to the new international market situation that came about suddenly in 1973-74. There seems to be quite general agreement that one of the results of the new emphasis upon export markets in greater price variability due to wide fluctuations between volumes that can be sold for export from year to year. We are not equipped to deal with that variability.

Our agricultural program—without PIK—is one that essentially demands that individual farmers produce at near maximum levels. The aggregate result of all these individual management decisions will be for a greater quantity of agricultural output than can be manageable, for most years. If we are geared to meet peak-year demand, it follows that there will be too much in the other years.

I think that the choice that is squarely placed before the American public is whether we are to continue our efficient commercial agriculture or whether we will revert to a production system that is much more labor intensive and with much higher per unit cost. The interim years of surplus production between the good export years will not sustain the high investment associated with modern mechanized agriculture.

If the general farm problem of excessive output of all agricultural products is not resolved, in view of the high cost of PIK it seems a real danger that taxpayers will be unwilling to continue high-cost stabilization programs. We could be missing a real opportunity by weakening this strong dairy proposed program for farmer-financed paid diversions.

I had had some hopes that the user fee principle could be demonstrated successfully through the dairy compliance plan, and to give some impetus to consideration by other commodity groups of self-financed stabilization programs. If Government program costs are unacceptable, it seems that effective supply management might be carried out on a self-supporting basis. But, of course, this too, requires governmental approval and administrative involvement, involvement that will be difficult to achieve if there is continuation of the antiproduction restraint philosophy that was so strong prior to implementation of PIK.

It is my opinion that a free-market, unrestrained-production policy is disastrous with respect to the interest of both consumers and producers. Consumers will be best served if Government programs can stabilize markets at prices high enough to bring reasonable returns to efficient producers.

If the impact that the agricultural depression is having and can have upon the total economy was generally known, the public would quite willingly continue to support farm product stabiliza-

tion programs. I doubt if reliable information is available on that total impact. For example, we do not really know the public costs associated with the stepped-up erosion by both wind and water as a result of our fence-row-to-fence-row planting to which we reverted in the mid-1970's. We probably do not know the public cost of unemployment, lost tax revenues, and increased expenditures by Government as a result of the recession throughout agriculture and agribusiness.

We probably do not have well defined national goals with respect to a desirable role for agriculture to meet needed objectives for domestic food and fiber security, food and fiber prices, export quantities, and balance of international payments.

We probably do not know whether there is some critical point beyond which it would be against the public interest for farms to continue to become larger and larger. There may be other factors more critical than continued reduction in real costs of food and fiber to consumers, an achievement of our food production system that has been the most outstanding in world history, achieved in a 50-year period during which 65 million acres of land were idled for most of the time, through various Government programs.

We probably have only a vague notion as to the importance to the public of the agribusiness firms that are eliminated during farm depressions. Is their survival a matter of important public interest?

Can we expect prompt reestablishment of those businesses in case of need?

Is it safe to rely upon foreign suppliers for critical supplies and services for agriculture?

Is there a continuing need for the contributions of agribusiness to further farm production efficiencies?

We probably do not have enough insight into the effect of rural blight upon our rural society. We probably have no good projections of trends toward industrialization in our rural areas nor toward the structure of rural society that will result without stable agricultural opportunities.

We probably do not have adequate information with respect to the effect of federally sponsored credit upon aggravation or relief of the overall farm problem.

We probably do not have a good idea as to the public impact of agriculture commodity prices in this country that have been altered by the subsidy and dumping policies of other countries.

The impact of artificially priced, Government-subsidized imports of agricultural commodities into the United States has probably not been objectively measured.

Government policy decisions made for the public good, but that are adverse to domestic agriculture, are costly to farmers, agribusiness and rural America. We continue to have such decisions made by Government outside of agriculture, passing the cost and risks directly to farmers, and we have no mechanism for equitable cost sharing.

While we cannot ignore the appropriate role of price in determining what is to be produced and who is to produce it, we have no way to identify the point below which commodity prices are no longer a reliable indicator of long-term supply-demand conditions

for an agricultural commodity. There is such a point. We were at such levels for the PIK commodities prior to PIK, and we will return to such prices quickly unless a new production restraint program is implemented once PIK gets stocks down to reasonable levels.

We suspect that most analyses of Government stabilization programs have been approached with an adversary purpose, and that those analyses generally have not objectively measured results against the situation as it would have been without the program in question. A fresh new example of this is probably a forthcoming USDA study of Federal milk orders that is now due for announcement.

The challenge today is to rethink and reestablish a farm and food policy that is in the public interest, both in the near term and sustaining through many future shifts between political parties. Through interim periods of prosperity, justifications and defenses must continue, so that programs can remain in place for implementation as needed. While agricultural policy must appropriately note and be guided and limited by market supply-demand signals, sound policy must also provide for early warning recognition of such disastrous breakdowns as those of the early 1980's and the 1930's and perhaps many other times throughout our economic history.

Until we learn and effectively communicate much more than we now know, farm policies will be determined almost day to day by unqualified decisionmakers on the basis of political expediency and such misinformation as might be at hand. That is why I would urge this committee to find ways to coordinate the research efforts of our land-grant university system in a high-priority effort to adequately answer such questions as I have raised in this paper. Such research must be long term and continuing, even through prosperous times. It is of such nature that it is probably not possible to contribute much to the 1985 farm bill, but a beginning must be made. At least the fallacy of a fence-row-to-fence-row planting policy can be exposed and avoid a major pitfall for the 1985 legislation.

I think it is dangerous to assume that this most successful food production system in the history of the world will continue to provide adequate low-cost food regardless of the level of profitability to producers. I would point out that the high investments required and the high rates of cash flow can eliminate today's efficient commercial farms much more quickly than in times past.

I want to thank the committee members for considering my opinions.

Senator JEPSEN. Thank you.

How many dairy producers do we have in Iowa, in the ball park. Do you know?

Mr. BAUDLER. No, I don't, Senator. I should.

Senator JEPSEN. The only reason I asked, I was a guest of the Hershey Co. in Pennsylvania and spoke to a group there last week, and they buy one and a half million pounds of milk, every day from about 1,400 dairy farms. I suggested they ought to open up a branch in Iowa. We could solve our dairy problem overnight.

Well, I thank the panel. I would ask this quick question. Regardless of who the Secretary of Agriculture is—I won't have to ask it

twice this time—regardless of who the Secretary of Agriculture is, would you give more authority to the Secretary to adjust target prices long range?

Mr. BAUDLER. No.

Mr. HECK. No.

Mr. GASKILL. Yes.

Mr. CHRISTENSEN. Yes.

Mr. FAHN. At the present time, yes.

Senator JEPSEN. At the present time, yes. There's always one on every panel. I'm not going to ask you why you say that.

All right. Representing both domestic and international interests, as we have in all of our areas in Iowa, this panel covers soybeans, grain, corn, cattle—I met with eight or nine of the key Japanese agriculture folks the other day back in the Senate for about an hour, talking about the import quota problems, and they say have wide open beef import quotas. They really don't but they say they do. And it was most interesting to hear their reasoning on some of their restrictions.

We told them we were going to begin with a list of 15 things that we were concerned about, and they were very excited. The room just got filled with conversation—none of which I understood. But lots of it. [Laughter.] And finally, when everything settled down, they explained that they didn't want to do that, they wanted to talk one on one, because they knew that they would probably lose on some of these restrictions in the GATT and that, in turn, would cause them to lose some face with some of their political supporters in Japan.

So they wanted to know why we couldn't just talk one on one. Senator Hawkins from Florida was quite direct. She said, "Yes, let's talk one on one. You want to sell us trains. We'll put your trains here. We want to sell you grapefruit. We'll put our grapefruit here [indicating]. And we'll talk about grapefruit and trains. Let's talk." [Laughter.] And the air got full of a lot of talk again.

But I really got a firsthand feel for what negotiations would be like in some of these things. We've got lots of things to learn, even though we're getting better, in the negotiating area.

During the last 4 years the U.S. share of the world grain market has declined from 56 to 50 percent, and is projected to continue declining this year.

From your perspective, what has caused this decline, and what actions would you support to reverse this trend?

Mr. Heck, of the Soybean Association?

Mr. HECK. Well, I think it's been mostly the policies of the State Department that's caused the decline. It sure hasn't been the Agriculture Department.

Senator JEPSEN. Do you have ideas how we could improve the policies? Of course, the Soybean Association, as has been pointed out, does a good job. You sell to some countries that don't buy anything except American soybeans. However, you're facing competition from sunflower seeds and other commodities in Europe now, as you know. Have you got plans to keep ahead of that?

Mr. HECK. We sure have. We're working all the time on promoting our product and telling the superiority of it, and trying to keep a free—as near as we can—trade policy. And we think a free trade

policy would benefit agriculture more than any other industry, and that it might help cut down the growth of that sunflower industry.

Senator JEPSEN. That's the other side of the coin. A little while ago a member of the panel suggested that maybe we ought to give them a dose of their own medicine. But I tell you, every time we talk about that, you soybean people get worried, because you manage to export without any restrictions, pretty much around the globe, don't you?

Mr. HECK. As far as I know we do.

Senator JEPSEN. You bet. And the textile folks got to talking not too long ago, and they didn't even get to the point where they reached a conclusion. They just got to arguing and breathing heavily, and China rattled the cage and said, "You'd better watch out, or we're going to lay it on your soybeans." And that gets the soybean people's attention, you can bet.

So when you talk about protectionism, it depends upon what group you're visiting with as to how excited they get about the situation.

Well, that just brings out another point.

On government commodity programs, should the standards or guides be on acreage or production costs? Mr. Baudler.

Mr. BAUDLER. It should be on an acreage cost.

Mr. HECK. You're just assuming now that we're going to have a program that—

Senator JEPSEN. I'm saying if we do. They've been on acres all these years. It hasn't been working that well. But forgetting about that for a minute, let's talk about the programs we're going to have, in some form at least, for a while. Should we continue on acreage, or should we go on production?

Mr. HECK. Acreage.

Mr. GASKILL. Acreage.

Mr. CHRISTENSEN. I would say acreage.

Mr. FAHN. Acreage.

Senator JEPSEN. You know, we're involved in PIK now, and we're waiting for an early announcement about whether we're going to modify PIK next year or have another type of program. Briefly, each one of you, from right to left this time, if we may, what can the Federal Government do during the next year to stabilize agricultural markets and get the agriculture economy under complete recovery? What if you were in the position to make a declaration and have the government hop to it, what would you have them do?

Mr. FAHN. One of the things I think would be of great advantage right now is if an announcement of the program, whatever it may be, would be early enough that the farmer or producer could adjust his plans accordingly before it gets too late in the season.

Mr. CHRISTENSEN. I would think that initial steps could be taken in the direction of a little less government within our production system, and that government's role should be more in the way of assisting us in marketing or research development, transportation needs, or whatever.

The secondary things are, I would say that, knowing that we are already deeply embroiled in farm programs, I do not recommend a sudden withdrawal.

Mr. GASKILL. I think an early announcement, as soon as possible, Senator, and to continue along with the current program. We have the two concepts, either cutting production or controlling production. Other countries in the world control their production, and this country cuts it. And I think if we can develop a longer-range farm policy—as I have said in the past—and coordinate it with the rest of the world, I think, since we produce such a large portion of the total agricultural production of the world, that if we'd set a longer-range policy, the rest of the world will fall in. Maybe we won't agree with what they do, but we'll have a general idea then of what the rest of the world is going to do in agriculture.

Senator JEPSEN. Mr. Heck.

Mr. HECK. You're talking about just for next year?

Senator JEPSEN. The next couple of years.

Mr. HECK. I'd have to go along with what Thurman said, with one addition. Let's get a policy and let's get our act together between the State and Agriculture Department, and all the other departments, and let's not be talking about two or three different policies to the world, but put up a united front.

Mr. BAUDLER. I think we should expand our export markets. Up until a few years ago, we didn't have the problem of what kind of a signal that meant to somebody or somebody else. If they wanted to buy it, we sold it to them. And I think we should get back to that policy. If we've got something they want or something they can trade for, I think we should get right after that. Relax some of the rules and trade some of the products we have so they don't sit here and build up any more cost and be more detrimental to the farmers.

Senator JEPSEN. Sell them everything they can't shoot back at us?

Mr. BAUDLER. Well, butter won't hurt us too much. Soybeans in Saudi Arabia; they could use some, I think.

Senator JEPSEN. Do you also support a separate department of trade? Do you want to set up another bureaucracy?

Mr. BAUDLER. Sir, I didn't say that.

Senator JEPSEN. I didn't mean to ask it that way, because frankly, I support the department of trade proposal to coordinate our trade sector. The problem is that when you go to do that—I thought I just heard you say that we've got to do a better job of exporting, get the government out of the act, relax the rules. And so if we want to expedite all these things, we ought to coordinate them. We don't want any turf battles going on between the State Department and Secretary Block's Department of Agriculture, and the Department of Commerce. They've all got a hand in it. The President recommended that we have a separate, centralized department to work on trade. In talking with Messrs. Baldrige, Block, and others, and asking "What do you think about it?" Their answers were, with the exception of Secretary Baldrige, that they thought it was a tremendous idea, as long as it didn't include them. [Laughter.] USDA, after all, has 27 or so experts—they've got offices all over the world, and they know what they're doing in agricultural trade and with sales and so on. They want to be left alone. But the State Department says, "Now you've got to understand that we must have a free hand—It's all right for those other guys."

And Baldrige says, "I made a living before I came here and I could go back and do better than I'm doing here, so I'm all for it." He was the only one in favor of the proposal.

Well, I asked a question and then I started talking about it. I didn't mean to do that.

Well, what do you say? You started to say you didn't think so much of that, but—

Mr. BAUDLER. You almost convinced me that maybe it would work. [Laughter.]

But I'd hate to have another department standing over here by itself, saying, "Here's what we're going to do," and the State Department says, "No, you're not."

I think we should coordinate, somehow, the efforts that we have.

Mr. HECK. Well, I think they can be coordinated. I don't think they need another agency. But at least Agriculture should be represented in State Department decisions, and vice versa.

Senator JEPSEN. Mr. Gaskill.

Mr. GASKILL. Senator, I kind of supported the concept in the beginning. It sounded good. But then you get everybody fighting for a little bit of the turf. I find out that once you get over into STR and Commerce, you know, Mike Homegarden over in STR, and he seems to have about as much knowledge about agriculture as anybody. And McDonald has been doing quite well. Then we get to the National Security Council, and I really have some problems when we talk about that. And I think Jack Block holds his own really well in the Cabinet. But when you get over to the Security Council, who represents agriculture? Someone like yourself, who speaks out and asks who does, and challenges who represents agriculture. That's the best we've got, is somebody like yourself. And at the White House you have a few of the staff people trying to contact you gentlemen to ask for your input. But there's no one there that carries the ball at the White House, at the National Security Council, at the Department of Commerce, or at STR, for agriculture—and that's what concerns me—other than people like yourself. And you can't ride herd on all of those.

Mr. CHRISTENSEN. Well, I think there have been tremendous good things done from the system we have. But I think the same as the other speakers, that they don't seem to be always coordinated in their efforts. And surely someplace there needs to be—at the present time we would look to the administration, I suppose, to make the ultimate decision, but it doesn't always seem to come. And somewhere we need someone who has that last word.

Senator JEPSEN. Mr. Fahn, do you have any last words?

Mr. FAHN. Well, it's been pretty well said, Senator, but I believe we have enough expertise in the departments that we have, and if we could get people to dig a little deeper into their expert wealth of knowledge and get them to jell it together, I think we'd have the people there to do that job.

Senator JEPSEN. Before we go on to our next panel, does anyone have anything to say?

Mr. BAUDLER. No. Thank you, Senator.

Mr. HECK. No.

Mr. GASKILL. Senator, I might add, we talk about what more can be done for agriculture, and I want to compliment the Congress

and the Senate for the Export Credit Corporation. That's relatively come on strong revolving credit, revolving fund program. I hope we can find some money someplace to fund. That is so important. You know, we want to do more for exports. I've heard it here all day long, we've got to increase our exports. That's true. But how do we go about it? And you have made tremendous strides toward it. We no longer use gold as a standard anymore; the dollar seems to be the basis of world finance. And currently what's hurting us is the strong dollar.

So now let's look at the world as a whole. That's hard for us to do here in landlocked Iowa, but when we look at the world as a whole, we have to have the rest of the world with some kind of currency. And we can devise all of the export credit programs there are, and down the road, sure, our government is probably as well off financially as any government in the world. And we can stand up beside the EEC and Japan and take them on with export credit policies until we have all of the world market.

But in the end, I think that we have to develop agriculture in the rest of the world so those countries can help themselves and develop a taste for our red meat and our agriculture. And so once they peak out in their production, we can come in and we have the world market.

And if you go back during the seventies, how many acres were brought into production in this country, in agriculture? Around 55 million acres. And we have an unlimited—I shouldn't say unlimited, but we have an excess capability out there that I think is beyond the rest of the world's capacity, of what we can do if we really put our minds to it.

So let's encourage China, rather than putting on quotas on our textile industry, let's encourage China to export to this country so they can generate the currency to buy our feedgrains. And the next time the EEC starts raising their sugar policies, when we meet with the economic ministers of the EEC—and that's a country that encourages production because at one time their supermarket shelves were empty; they encourage production to their producers—let's get them to cut back on their sugar so they don't capture the world sugar market through subsidies and take it away from the Caribbean countries who produce sugar, who then generate the currency to buy our exports.

Senator JEPSEN. What you pointed out there is the equivalent to the knee bone's connected to the thigh bone, the thigh bone's connected to the hip bone.

Mr. Christensen do you have anything?

Mr. CHRISTENSEN. Thank you, Senator.

Mr. FAHN. Thank you, Senator, for asking me to be part of your hearing.

Senator JEPSEN. Thank you very much, members of the panel.

We'll now go to our next panel, which deals with promotion and development. We welcome Ed Tubbs, chairman, Maquoketa State Bank; Dean McKee, director, Market Economics Department, Deere & Company; R. W. Fischer, president, Soypro International, Inc.; David Tremmel, vice president, Iowa Export-Import Trading Co.; Lynette Broders, Iowa Development Commission; and Howard Mueller, chairman, Iowa Corn Promotion Board.

The Chair has been advised that Ed Tubbs does have to leave early. So we will start with your testimony, Mr. Tubbs, and I understand you will leave immediately.

Mr. Tubbs was the first to start the program this morning, at the press conference about the Rabobank. You've got to be careful about how you say that. People might be thinking you're saying "Rob a bank." I think this was quite an announcement. He's very excited about it.

You may proceed, and, as I indicated, we anticipate you will have to leave—you don't have to, but I understand you will.

Mr. TUBBS. I have a plane waiting. Thank you very much, Senator.

STATEMENT OF EDWARD L. TUBBS, PRESIDENT, MABSCO AGRICULTURAL SERVICES, INC., AND CHAIRMAN, MAQUOKETA STATE BANK, MAQUOKETA, IOWA

Mr. TUBBS. I'm here today representing MABSCO Agricultural Services, Inc., which is owned equally by 12 State bankers' associations representing some 6,000 banks in those 12 States. I'm also a community banker who is heavily involved in agricultural lending, and my family is involved in a diversified farming operation.

As we look at the future survival and prosperity of agriculture, I think we need to examine the resources that will be necessary to keep the industry viable in the world economy, and the means of providing those resources.

Since the mechanization of farming began, there have been numerous discernible trends taking place that have permanently altered the basic nature of production agriculture. Among the most remarkable of these is the substitution of capital for labor, resulting in a relentless increase in the size of farming units and their individual credit lines.

We need to acknowledge the fact that the only real prosperity for American agriculture must come from selling competitively in the domestic and world marketplaces. The challenge is to identify the factors that limit or threaten our ability to control production and marketing costs and to recognize that we are inevitably destined to perform in the international area.

From 1979 through 1982 in one of Iowa's farm business associations operating expenses increased by some 21 percent. At the same time, interest costs increased by a whopping 50 percent. Total credit for farming needs has increased steadily and dramatically. Short-term credit lines of half a million dollars are not unusual.

My comments today will describe an effort now underway to make capital available to farm borrowers, large and small, through the 6,000 banks we represent. The rates will be competitive with those rates that are available anywhere in the world.

Credit, of course, cannot be substituted very long for income, but it is an increasingly important ingredient in the production process.

As we look at the farming sector today, we see total debt in excess of \$200 billion, on target with projections made by leading economists in 1980. Extending those same estimates to 1990, those

same economists expect total farm debt to triple in this decade, perhaps to a total of \$600 billion.

If this prognosis proves accurate, the cost of capital may very well become the limiting factor in agriculture's efforts to stay competitive in the marketplace.

Now, we're excited—justifiably, we believe—about an innovative new program conceived and developed by the banking community in response to the challenge of providing for the capital needs of agriculture in 1990 and beyond. We believe it is a prime example of an industry attempting to anticipate and solve a potential problem with initiative from the private sector.

The organization administering the program is MABSCO Agricultural Services, Inc., which we will call MASI, and it's owned equally by 12 Midwestern State bankers associations.

Briefly, the stimulus for this came from the fact that banking was being deregulated, cost of deposits was unpredictable and was certain to increase. So our perception is that we need another source of capital, perhaps with a more reliable cost, that is available to rural banks to make loans to farmers. As the largest provider of short-term credit, nobody has a greater stake in the economic welfare of agriculture than the local bank. The size of the credit lines is simply increasing faster than the local banks' capacity to handle them.

After a thorough process of elimination, MASI contracted with a large Dutch agricultural bank, Rabobank Netherlands, and together we have worked almost 2 years in developing a program that is now available to all banks in participating States that are committed to agriculture.

Our program is designed for those that are really serious about staying in the agricultural lending business. We have the utmost respect for the Farm Credit system. We don't believe a monopoly in available sources of capital is necessarily in the best interests of agriculture. Community banks have served agriculture well. We want to continue to do that, even if our farm customers outgrow their local bank.

The way our program works is that a farmer will typically come to the local bank and request a loan, for example, for \$200,000. The local banker perhaps has a legal lending limit of \$100,000. He calls our office here in Des Moines. He arranges to sell the \$100,000 to our organization, which, in turn, sells it on through to Rabobank, which is one of the largest banks in the world with access to the money markets all over the world.

The rates have been very competitive.

The telephone call to the company's information is then translated through a computer to New York, and the commitment is made—the payment is made the same day.

Three rates are quoted every day—1 month, 2 to 6 months, and 6 months to 1 year.

The local banker then proceeds to make his loan, and he can sell up to 80 percent of it to Rabobank, through MASI.

The rates, incidentally, over the past 8 months have averaged 10.8 percent. They're very, very competitive.

We acknowledge with thanks the encouragement and support we've had from you, Senator, your office and your staff, during the evolution of this program. It has not been simple.

We also want to acknowledge the contribution of Rabobank. It's been a tedious process in gaining regulatory approval, which we now have.

Since Holland is the second largest purchaser of U.S. farm commodities, their involvement in this program is particularly appropriate. They understand agriculture and are dedicated to making this program successful. Their role is strictly as a wholesale provider of funds. They do this through their Triple-A rating, which gives them access, with very favorable terms, to all of the world's money markets.

MASI is now a corporation with 13 directors in 12 States, and is entering its initial marketing program. We have the approval from FDIC and the Comptroller of the Currency.

It was our intention to create a program that is simple, that would benefit agriculture, and it's an attempt to help ourselves and our rural communities. If used properly, it can provide a viable alternative source of funds and help local banks retain a key role in providing for the capital needs of agriculture.

In the process, it may also play a major role in controlling the cost of credit, and thereby assist Iowa and Midwest farmers in remaining competitive in the world markets for agricultural commodities.

I appreciate being asked to participate, Senator, and with your permission, I will meet my plane which is waiting.

Senator JEPSEN. Thank you, Mr. Tubbs, for coming, and for your contribution.

[The prepared statement of Mr. Tubbs follows:]

PREPARED STATEMENT OF EDWARD L. TUBBS

As we look at the future survival and prosperity of agriculture, we need to examine the resources that will be necessary to keep the industry viable in the world economy, and the means of providing those resources.

Since the mechanization of farming began, there have been numerous discernible trends taking place that have permanently altered the basic nature of production agriculture. Among the most remarkable of these is the substitution of capital for labor, accompanied by a relentless increase in the size of farming units and their individual credit lines.

As we look at the farming sector today, we see total debt in excess of \$200 billion, on target with projections made by leading economists in 1980. Extending those estimates to 1990, those same economists expect total farm debt to triple in this decade to a total of \$600 billion.

We're excited, justifiably we believe, about an innovative new program conceived and developed by the banking community in response to the challenge of providing for the capital needs of agriculture in 1990 and beyond. We believe it is a prime example of an industry attempting to anticipate and solve a potential problem with initiative from the private sector.

The organization administering this new program is MABSCO Agricultural Services, Inc., which we refer to as MASI, owned equally by 12 midwestern State Banker's Associations. Beginning about two years ago, a task force started to research a method for community banks to gain access to the money market. It was apparent that additional funds would be needed to supplement

local deposits, which have traditionally provided the capital for making agricultural loans. As the banking industry is de-regulated, local banks face fierce rate competition for available investment dollars, with the possibility that increased cost of deposits might force loan rates higher than competition will permit or farmers could afford to pay. As the largest provider of short-term credit to farmers, nobody has a greater stake in the economic welfare of agriculture than the local bank.

Iowa is fairly typical of the 12 MASI states. A total of 621 of Iowa's 654 banks have total assets of less than \$100 million. Excluding the state's five largest banks, 649 Iowa banks average \$32 million in assets per bank. There are 126 Iowa banks with assets under \$10 million, with an average lending limit per borrower of \$77 thousand. In the \$10 to \$25 million category, there are an additional 277 banks who can loan a maximum of \$142,000 to each borrower. Iowa's 621 banks with assets under \$100 million have an average loan limit of \$192,000. In the four years from 1978 through 1981, Iowa banks increased their portfolio of farm production debt from \$2.8 billion to \$3.4 billion, a 21 percent increase, while at the same time, their market share decreased from 71 percent to 60 percent.

It is interesting to note that banks under \$25 million in assets extend 31 percent of the total agricultural credit held by banks, and banks under \$100 million in size account for over 70 percent of the total. So it is clear that farm lending is essentially a small bank business, and a vast majority of these small agricultural banks are located in the MASI states.

It follows that small banks also provide most of the expertise in managing credit, which is critical to the financial health of farm borrowers.

During the period 1979 to 1982, the average size of the 290 farms in one of Iowa's Farm Business Associations increased from 479 acres to 562 acres, or 17 percent. Total resources managed increased to \$1.25 million from \$998 thousand per farm, up 25 percent, while interest cost increased a whopping 50 percent. Assuming these farms have an industry-average debt to asset ratio of 20 percent, they are each borrowing around \$250 thousand. But other data suggests that commercial farms belonging to business associations are not average or typical. Composite results from another Iowa state-wide recordkeeping service involving 3,600 farms indicates average liabilities per farm of 45 percent of assets, or, in that case, an average credit line of \$490,000.

Comparing these figures to the lending limit of most Iowa community banks, the problem is obvious. To provide the credit needed by most farm operations, a reliable, reasonably priced secondary market for farm production loans is a critical need now, and will be even more so in the future.

The twelve MASI states represent about 6,000 banks, and five other states have expressed an interest in participating. The potential loan volume dictated that we investigate all available channels to the money market. These included the Farm Credit System, insurance companies, large domestic banks, trust funds, and foreign banks. After a thorough process of elimination, MASI contracted with a large Dutch agricultural bank, Rabobank Nederland, and together we have worked almost

two years in developing a loan program that is now available to all banks in participating states that are committed to agriculture. Most banks in Iowa are involved in agriculture, but not all are committed. I use the analogy of ham and eggs--the hen is involved, but the pig is committed. We are looking for the pigs who are serious about offering their farm customers an alternative to the Production Credit Associations. We have the utmost respect for the Farm Credit System, but we don't believe a monopoly in available sources of capital is necessarily in the best interests of agriculture. Community banks have served agriculture well. We want to continue to do so, even if our farm customers outgrow their local bank.

After nearly a year of negotiations, we have arrived at three agreements. We call the first one a Master Participation Agreement, which will be signed by the local bank and Rabobank, specifying the terms under which participations will be sold and accepted. The rules have to be quite specific to protect both parties. In this agreement, Rabobank obligates itself to purchase 80 percent participations in eligible loans made by originating banks to agricultural producers. The agreement runs for three years, during which time MASI will be obligated to offer the right of first refusal to Rabobank. If Rabobank does not accept the loan, MASI could then participate with other lenders. Loans of \$250,000 or less can be committed by MASI through our Des Moines office. Larger advances require prior approval by both Rabobank and MASI. Commitments can be made for up to seven years on a one-year variable rate.

Typically, an originating bank will contact our Executive

Vice President, Jim Potter, at MASI's Des Moines office for a quotation of the interest rate to be charged by Rabobank on the participation. Three rates are quoted daily--for one month, from two to six months, and six months to one year. The originating bank may then charge whatever rate they wish to their borrower. Rates over the past year have been consistently below market rates.

The telephone notice of a participation is taped for future reference. If the loan is determined to be eligible under the established criteria, MASI wires funds to the account of the originating bank, either same day or the following day. Documentation will then follow and be cross-checked with the telephone information provided earlier.

Servicing the loan will be done entirely by the originating bank. It is also the responsibility of the originating bank to monitor the loan, make periodic inspections, retain all documentation, and forward payments on schedule. The agreement further provides that if there is misrepresentation or failure to perform as agreed by the local bank, that a repurchase can be required. As far as the credit quality is concerned, the loan is sold without recourse. That is, if the borrower can't pay and becomes insolvent, the local bank and Rabobank share the loss pro-rata according to their exposure.

The second agreement is between the originating bank and MASI. This provides that MASI can represent Rabobank in the transaction and will be the contact for the local bank.

This agreement also provides for capitalizing MASI. Because of various state laws in the twelve states, it was finally determined to use capital notes instead of issuing

stock. The amount of these notes will be determined by the deposits of the bank. The amount of the loan will vary from \$5,000 for the bank of \$10 million in deposits or less, up to a maximum of \$14,750 for a large bank. The cost of participating is very nominal when it is compared to the \$250,000 capital which would probably be required to start an ag-credit corporation to discount with the Farm Credit System.

We acknowledge with thanks the encouragement and support we have received from Senator Jepsen and his staff during the evolution of this program. We would also be remiss if we failed to mention the contribution of Rabobank in the tedious process of development and gaining regulatory approval. Roger Barr is here representing Rabobank and will describe for you the reasons for their interest in becoming involved in midwest agriculture. Their role is a wholesale provider of funds, and they have agreed to a non-compete clause in our contract. They will not solicit retail lending in our area. The research and development process was long and expensive, both in terms of time and money.

MASI is now a corporation with 14 directors representing twelve states and is entering its initial marketing program. Liquidity in banks at the moment is not a problem, as it has frequently been in the past, but those who ignore history will undoubtedly be victimized by it. The primary source of participations at this time will be bank overlines. It is our intention to proceed slowly, and to retain the flexibility to adjust to situations that may arise.

Well, where are we now? We have processed seven million dollars of loans from six states. We have our equipment in

our Des Moines office; that is, an Apple computer with programs that communicate with the computer in New York, and our procedures work. We have legal opinions from counsel in all 12 states, as well as approval from FDIC and the Comptroller of the Currency. I have had calls from all over the United States inquiring about the program. There is a great interest.

The success of the program depends entirely on participation by the banks and the maintenance of quality in our loan portfolio. Loans are accepted only if they meet established criteria. It was our intention to create a program that is simple, and that will accrue to the benefit of agriculture. This is a banker's program designed by bankers for bankers and their farm customers. It is an attempt to help ourselves. The alternative might be to let ag-lending go by the board, and then, as circumstances change, fight to get it back as I recall banks did years ago with auto loans. If it is used properly, it can provide a viable alternative to the Farm Credit System and help local banks retain a key role in providing for the capital needs of agriculture.

Senator JEPSEN. We welcome Dean E. McKee. Please proceed, as you wish.

STATEMENT OF DEAN E. McKEE, DIRECTOR, MARKET ECONOMICS, DEERE & CO., MOLINE, ILL.

Mr. McKEE. Mr. Chairman, I am Dean McKee, chief economist for Deere & Co. I appreciate this opportunity to participate in this panel concerning trade development issues as they relate to future farm policy. This is a subject of vital concern to us at Deere, as our business and employment are very much influenced by economic conditions affecting agriculture.

I am pleased to see agricultural trade receive the special emphasis of a separate panel at this hearing. I firmly believe that a strongly competitive, internationally oriented position for U.S. agriculture is a key element in a healthy future for Deere's farmer customers. The importance of a strongly competitive American agriculture in world markets can, in my view, be clearly seen in what has happened to the U.S. position in world trade in agricultural commodities.

During the decade of the seventies, world agricultural trade increased 245 percent. U.S. agricultural exports over the same period of time increased 400 percent. Today, U.S. farmers depend upon foreign markets as an outlet for the production from about one-third of their harvested cropland. In the future, foreign markets will be even more important, as crop yields continue to increase.

Since 1980, however, with the onset of worldwide recession, the growth in world agricultural trade has come to a halt and actually declined. The impact has been most pronounced in feedgrains, where the United States is the dominant world producer and supplier. World crop supplies in relation to consumption are now relatively abundant. It's a buyer's market.

There are, of course, still food short areas of the world. But they face special problems which keep them from enjoying the fruits of abundant output. Competition in commercial markets is intense and the United States share in world grain trade has declined from a peak in 1979-80 of 58 percent, to an estimated 51 percent in 1983-84.

These facts prompt several observations. First, foreign markets have taken on much greater importance in overall agricultural policy considerations. Second, we must fully and carefully consider foreign responses to our domestic agricultural policies.

Our own system of supporting domestic prices with loan rates, combined with the reserve system that isolates a large portion of our production from the market, serves to provide a price umbrella over world commodity markets. This system, together with our strong dollar, encourages foreign producers to expand production. But current market conditions should be encouraging production cuts.

So while we cut production, they expand. If our cuts eventually improve world prices, as we expect, we will see the benefit on a smaller output, but they will enjoy the benefit on their larger production.

Foreign buyers have responded, as well. They have broadened their purchases to other suppliers as world trade and production have expanded. And they have also, with the same signals, expanded their own domestic agriculture.

A third observation is that monetary and fiscal policies importantly affect the price foreign purchasers must pay for U.S. products through their influence on the value of the dollar in foreign exchange markets. When the dollar increases relative to other currencies, U.S. products become more costly to foreign buyers and that, of course, cuts demand for our exports.

During much of the 1970's, the gains in U.S. agricultural exports that I described came not only from the strong pace of world economic growth, but also from a weak dollar, following the shift in the international monetary system from a fixed to a floating exchange rate system. The trade weighted value of the dollar dropped by 28 percent from 1970 to 1980, as indicated in the charts. This was also, of course, a period of surging worldwide inflation. Efforts to control inflation were left mainly to monetary policy, which resulted in soaring interest rates, particularly in the United States.

Although interest rates have since declined, they are still historically high in real terms. Our own relatively low inflation and high real interest rates have led to a strengthened dollar, hurting the competitive position of U.S. agricultural exports. Since 1980, the trade-weighted value of the dollar has increased 33 percent, regaining nearly all of the loss incurred over the preceding decade.

The U.S. loss in share of world trade in agricultural products since 1979 has been widely attributed to the lingering effect of past embargoes on agricultural exports and the use of export subsidies by competing exporters. These have certainly been factors that have contributed to the loss of share. However, the strength of the dollar on foreign exchange markets has been a less well recognized and probably more important cause of the loss of share we've experienced. In the current world market environment our products are simply being priced out of the market.

These facts and observations lead me to conclude that future farm policy must take greater account of how the U.S. economy relates to the rest of the world and be designed to provide greater flexibility to accommodate changing world economic as well as agricultural conditions. Specifically, farm policy concerns must be broadened.

For one thing, the United States must continue to pursue a strong anti-inflationary policy. Control of domestic inflation contributes to the ability of the United States to compete in world markets.

Increased effort to restrain Federal expenditures to reduce Federal budget deficits is an essential part of this approach. Success on this front would allow the Federal Reserve greater latitude to relax its restrictive hold on money growth. This, in turn, would improve the competitive alinement of the dollar in foreign exchange markets.

Also, overall trade policy must be developed with keen recognition of its impact on U.S. agriculture. We must keep in mind that if we do not buy from abroad, we cannot sell in foreign markets abroad. This is particularly important if the United States is to

help in improving the lot of the less developed countries. Coordinated trade policy is essential—we cannot separate agricultural and nonagricultural trade issues. A recent example is a loss of agricultural exports to China as a result of our limiting Chinese textile imports.

The General Agreement of Tariffs and Trade [GATT] needs reform to more fully encompass international trade in agricultural products. Such issues as export subsidies, import quotas, exchange controls and cargo preferences, can only be resolved through international negotiations, an arduous and tedious task to be sure. Thus far there has been a reluctance to discuss domestic commodity programs in multilateral negotiating sessions, with the result that agricultural products have largely been omitted from GATT.

If we are to keep American agriculture in a strongly competitive, market-oriented position, our commodity loan rates must be set at levels that recognize competitive conditions in world markets.

Finally, it is important that we continue and strengthen our efforts at overseas market development and refrain from the use of embargoes that have damaged our credibility as a reliable supplier to export markets.

Thank you.

[The charts referred to by Mr. McKee follow:]

CHART 1
U.S. EXCHANGE RATE
TRADE WEIGHTED INDEX

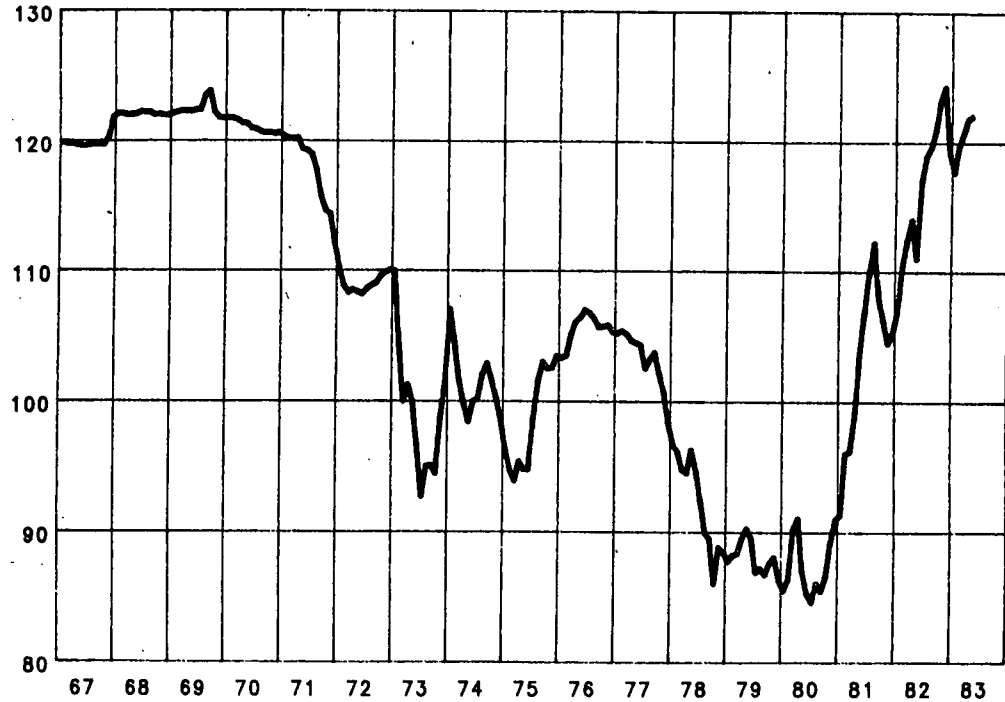
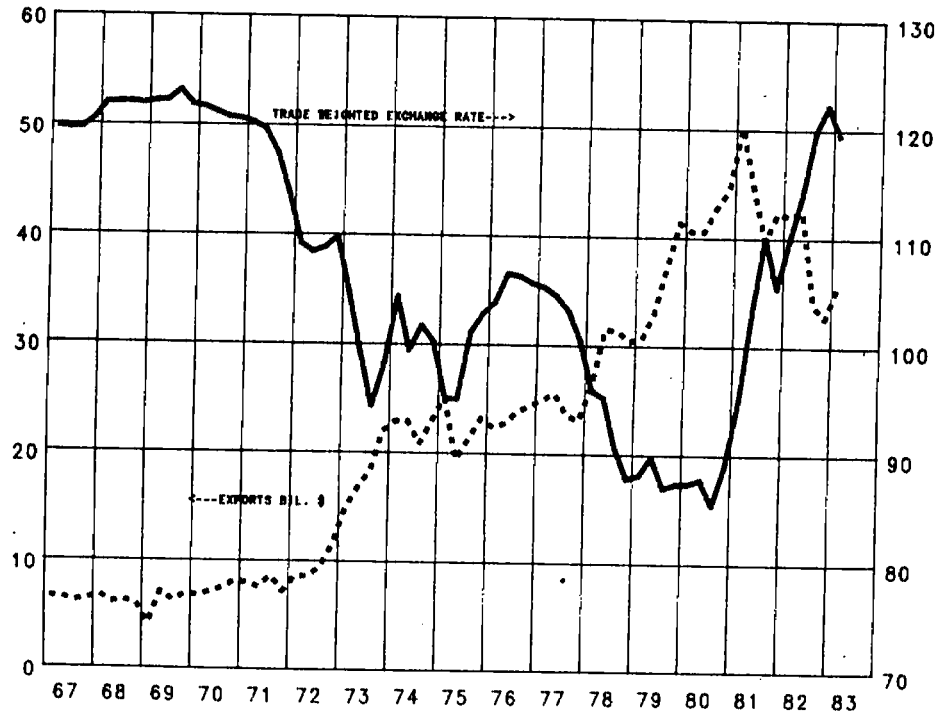


CHART 2

U.S. DOLLAR EXCHANGE RATE VERSUS
U.S. AGRICULTURAL EXPORTS



Senator JEPSEN. Let's welcome R. W. Fischer, president of Soypro International, Inc., from Cedar Falls, Iowa. Please proceed as you wish.

STATEMENT OF R. W. FISCHER, PRESIDENT, SOYPRO INTERNATIONAL, INC.

Mr. FISCHER. Thank you, Senator.

I'm going to repeat a thing that's been said here many times today, Senator, and that is that we very much appreciate the opportunity to speak to the great Joint Economic Committee of the Congress, which we recognize to be one of the truly powerful committees in the Congress and in the world.

Knowledgeable Iowans are delighted, Senator, that our own senior Senator is chairman of the Joint Economic Committee and, I might add, we're gratified with the track record that you've established in that position. We appreciate the hard work and the results that you're obtaining. It is a rather singular honor for the State of Iowa, Senator, to have you in that position.

Senator JEPSEN. Well, you can have all the time you want. [Laughter.]

Mr. FISCHER. I was about to change the subject.

Senator, you're hearing a great deal about the budgetary impact—in your hearings in Washington—about the budgetary impact of the Federal programs that are related to agriculture.

Now, members of the committee already know, but I suggest that you may need to keep reminding others that the agricultural industry is, by far, the largest industry in the United States. It employs about 24 percent of our work force and our population. It's also, by far, the largest consumer of the products of our depressed and some of our not so depressed industries, including steel, rubber, aluminum, copper, electricity, automotive equipment, petroleum, and many others.

Now, 50 years ago, it was common knowledge that major depressions were farm led and farm fed. It's just as true today as it was then. So programs to bolster American agriculture in times of distress are, perhaps more than any other Federal activities, programs designed to support and restore the entire national economy.

Put another way, the multiplier effect of the Federal programs to agriculture is demonstrably higher than through almost any other channel, and this is the factor which needs to be considered at all levels in the Congress and in Washington.

The second point I want to address, I have it on the best of authority that a number of both major and minor barter arrangements of U.S. surplus agricultural commodities for strategic materials are being held up, Senator, by the senior interagency group of our Government. We have a substantial shortfall of certain and major strategic materials in our national stockpile which is a matter of concern to our defense posture. Foreign countries are ready to offer these materials in exchange for our surplus, at world market prices. Our strategic materials people, I can tell you, want to make the deals; they want to make the trades. Our Commodity Credit Corporation people also want to make the trades. But these trades require clearance at the Cabinet level by the interagency

group, and there they're being stopped, partly by financial types who think the only way to do business is through the monetary system.

I commend this matter to the attention of the Joint Economic Committee.

Senator JEPSEN. You've got it.

Mr. FISCHER. The third point I want to make is related, and it relates to a point that Thurman Gaskill made so well, but let me make it a little further.

The truth of the matter is that the world economy today is hung up at dead center by a huge international debt and by the lack of monetary liquidity to conduct trade. Half of the merchant fleet of the world is idling at quay while surpluses of the world's goods pile up in storage bins and warehouses everywhere.

Once again, as it has many times in the past, the monetary system itself has defaulted on the people it serves, because, Senator, it is fundamentally flawed.

Sixty years ago, Lord Keynes recognized the flaws and diagnosed them reasonably well. But he was unable to prescribe a long term and viable solution to the problems.

In our financial and our academic institutions, I can tell you, there are many high priests of finance who regard the monetary system itself as sacrosanct. To their minds, it came down from Mount Sinai or at least was handed down by the pharaohs. Well, it wasn't.

The major part of our present-day monetary system developed from the charter and practices of the Bank of England, which was established about 1816, and which was a result of a royal commission which was impaneled in around 1810.

Mr. Chairman, I have recommended to President Reagan that he call together a highly qualified, top level commission to study the monetary system of the free world, and to recommend changes which would prevent these periodic excruciating declines. I have suggested to the President that most of the commission be well qualified, young minds, who are not locked into the institutions and the traditions that are failing us.

I have also suggested to the President that this country has a great tradition of dealing with the most fundamental problems of human institutions, a tradition which was implemented by a small group of relatively young men who met together in Philadelphia, and who developed a system which would maintain this society of order, without tyranny, for the first time in 2,000 years.

Mr. Chairman, I recommend that this Joint Economic Committee join with the President in establishing such a commission, and in giving it free rein to meet the single most pervasive and perhaps most pressing problem of the 20th century.

Thank you.

Senator JEPSEN. Thank you, Mr. Fischer.

Now we welcome David Tremmel, vice president of Iowa Export-Import Trading Co. Please proceed, as you wish.

**STATEMENT OF DAVID L. TREMMEL, VICE PRESIDENT, IOWA
EXPORT-IMPORT TRADING CO.**

Mr. TREMMEL. Senator, distinguished guests:

Our trading company was recently formed by several major Iowa companies for the purpose of bringing exporting expertise and assistance to smaller Iowa companies, dealing primarily in the agricultural sector. For this reason, we appreciate being given the opportunity to present our views to your committee.

Before addressing our specific viewpoints, I would like to make a few general comments.

We must continue in our efforts to bring the Federal budget under control and to maintain our fight against inflation in order to insure steady economic growth for our country.

Our leadership in these efforts is absolutely vital in bringing about a general improvement of the world economy. Such recovery is especially important to our agricultural sector.

We must also strive to achieve a more realistic balance in the relative value of the dollar vis-a-vis other currencies. The current strength of the dollar is, undoubtedly, one of the greatest negative factors affecting our competitiveness in world markets.

Regardless of the form of our farm policy, the most important factor in achieving health lies in our ability to expand our markets for agricultural products. And to do that, we must continue to rebuild our name as a reliable supplier of these products to the world.

Therefore, recognizing the importance of expanding our export markets, we would like to make the following points:

One, trade barriers: Our efforts toward bringing down trade barriers around the world must continue; however, not in a protectionist sense. To do so, we cannot risk global trade wars. We do support efforts such as we have seen recently when the United States threatened massive subsidized sale of farm goods to meet EEC competition.

Two, export trading companies: The passage of the Export Trading Company Act last October came as a very positive step in the process of U.S. export expansion. Many smaller U.S. companies produce products which can be sold in foreign markets, but are unable to accomplish this on their own. Export trading companies can provide one-stop export services for many of these companies.

Opportunities exist in marketing of smaller quantities of grain. Often, overseas buyers find it difficult to purchase amounts of, say, 5 or 10 thousand metric tons of feed-grains. The large grain marketing companies tend to deal in amounts much larger than that.

Further encouragement, perhaps tax incentives, should be considered for export trading companies dealing primarily in agricultural products. The Department of Commerce could consider assistance to export trading companies for overseas trade shows. Currently, booth costs at trade shows can run as high as \$2,000 or \$3,000 per company. Since export trading companies can handle the products of many companies, a concession in this area could be meaningful.

Assistance in transportation of staff and products to these trade shows could also be helpful.

Three, AID and CCC documentation: We feel the complex nature of documentation required by these agencies discourages many smaller firms from participating in otherwise attractive export opportunities.

Four, transportation of agricultural products. The problems stemming from cargo preference must be addressed. Many countries require that imported products be carried on their own vessels. This must be viewed as another trade barrier that we must continue to fight against. Also, any efforts to lighten the burden of transportation costs related to the export sale of agricultural products would be very beneficial.

Five, export financing. Efforts continue to increase the percentage of Eximbank's loans and guarantees that would be set aside for small businesses. However, it is a fact that with only 4 months left in the current fiscal year, Eximbank had utilized only \$20 million of the \$100 million allocated for the small manufacturers discount loan program. Therefore, I think more emphasis should be given to informing business about the funds available and providing assistance in qualifying for such funds.

Six, boycott legislation. We must continue to review our stand on boycott regulations. Fines for improper reporting are very common. Cumbersome reporting procedures such as this tend to become very discouraging for the small exporter.

In closing, I would like to state that the formulation of farm policy as it relates to commodities must take into account its effect on other segments of the industry, such as livestock and agricultural equipment. The entire agricultural complex must be healthy in order for us to achieve our export potential.

Senator JEPSEN. Thank you, Mr. Tremmel.

Next we have Lynette Broders, director, Agricultural Development and Promotion Division, Iowa Development Commission. Please proceed, as you wish.

STATEMENT OF LYNETTE BRODERS, DIRECTOR, AGRICULTURAL DEVELOPMENT AND PROMOTION DIVISION, IOWA DEVELOPMENT COMMISSION

Ms. BRODERS. Thank you, Senator Jepsen. I appreciate the opportunity to speak before you today, and I'm pleased to be able to address the topic of farm policy, since the agricultural sector is so important to the State of Iowa and the Iowa Development Commission.

The Commission's mission is to stimulate economic growth in this State.

Probably the most significant aspect of farm policy is keeping agriculture production in balance with the demand for agricultural products. Obviously this must be addressed in times such as this, when we have, for example, a corn usage of seven billion-plus bushels and a production and carryover last year totaling in excess of 10 billion bushels.

Either the supply must be limited or demand increased. In previous years, farm policy has utilized both alternatives. However, it is the feeling of the Iowa Development Commission that the most favorable solution to the problem of a favorable agricultural econom-

ic situation is, indeed, the opportunity to increase the demand for our agricultural products.

We feel there are three areas in which the Federal Government could stimulate increased demand for agricultural products.

First, continued attention to the livestock industry of this Nation. We must be mindful of the impact that any farm program will have on our livestock producers. Over half of all the grain produced in this State is used in the livestock industry. Therefore, by upgrading diets, by utilizing more meat, egg, and dairy products, both domestically and overseas, we will simultaneously be alleviating our agriculture surplus and problem.

The second area to address is to increase usage of grain for industrial purposes. Presently, the corn wet-milling industry uses in excess of a half-billion bushels of corn per year. The two primary industrial uses are currently corn sweeteners and alcohol fuels. However, several of the wet-milling firms have explored other uses for corn, such as plastics. The A. E. Staley Co. recently opened a facility to convert corn to chemicals. The U.S. Department of Agriculture lab in Peoria has done much to help develop corn and also other commodities used in this State. Possibly more resources expended for research would substantially increase the future use of our agricultural products.

The third area to address, with most likely the most rapid return, is the export market. The State of Iowa has supported this effort to increase exports by establishing an office in Europe, and we currently are in the process of establishing an office in Asia. Additionally, both the Iowa Development Commission and the Iowa Department of Agriculture aid Iowa businesses by sponsoring trade missions, market intelligence, contacts, and other assistance, to increase export business.

Many Iowans have had to look beyond this Nation's borders to capture a portion of the world agriculture market. They have aggressively and innovatively utilized the tools at hand to market their products abroad.

A little over 10 years ago, the value of Iowa agricultural exports was a bit over \$515 million. Today that same value has grown to almost \$3.8 billion, all by using the tools at hand. We feel these tools should be reviewed with an eye to increasing this State's and this Nation's share of the market.

We suggest that future farm policy be generated keeping a few hard facts in mind:

One, the strength of the U.S. dollar, which is tied to the growing U.S. budget deficit, has been a negative force on world trade. The dollar's strength has made an impact on this country's competitive viability.

Two, our export situation has not been helped by the proliferation of nontariff trade barriers. These protectionist tactics have closed markets for our goods, stifling growth.

Three, we encounter the opinion that the United States is an unreliable supplier, that the United States often ties business decisions to political issues. This perception of the United States affects us even today, undermining the marketing efforts of U.S. businesses.

Four, and our final fact is that the U.S. Congress can take action which affects trade and the profits from trade. Pending today before Congress are more than 121 bills which can be crucial to the success of Iowa's exporters, covering such topics as cargo preference, U.S./foreign practices, the Export-Import Bank, the Federal Government's jurisdiction over export trade, the Domestic International Sales Corporation, and barter trade.

Actions by Congress in these and other areas will be crucial in maximizing the marketing potential presented to our Iowa farmers in the international marketplace.

All of these issues deserve priority when determining policy of the future. The problems we, as an agricultural state, face are not insurmountable, but a commitment must come forth from all involved sectors to keep an eye to the future, to not be content with the way things have been, to realize the changes taking place in agricultural marketing, research and production, and create a farm policy which responds to change and opportunities at home and abroad.

Thank you.

Senator JEPSEN. Thank you, Ms. Broders.

Welcome to Howard Mueller, chairman of the Iowa Corn Promotion Board. Please proceed, as you wish.

STATEMENT OF HOWARD MUELLER, CHAIRMAN, IOWA CORN PROMOTION BOARD

Mr. MUELLER. Good afternoon, Senator.

My name is Howard Mueller and I am a corn producer from Waverly. I'm currently serving as chairman of the Iowa Corn Promotion Board and vice chairman of the U.S. Feed Grains Council. Both organizations are vitally interested in increasing markets for the vast amounts of feedgrains we produce.

Senator, my comments today are not as a representative of those groups, but are those of a grain producer who has a keen interest in this country's grain export potential.

This country has long viewed itself as the major supplier of food and grains to the rest of the world. In January 1980, though, we sent a strong message to the rest of the world that perhaps the days of the United States continuing to play the role of a reliable grain supplier might come to an end.

The message that was sent has now been interpreted by many nations in many different ways. Fortunately, our valued world customers know of our commitment to be their reliable supplier, but many new customers have not been able to see us demonstrate that commitment.

In the situation that exists today with a recovering world economy, a stronger U.S. dollar and inconsistent policies on U.S. foreign trade, those new customers for U.S. agricultural products look very carefully to what signals the U.S. Government is giving its producers. If those signals indicate that the United States is wanting to cut its production capability and is not making gestures or commitments to increase its marketing ability, then I think we can all agree to the conclusions that they would reach—the United States no longer wishes to be the major supplier for the world.

The U.S. agricultural economy depends very heavily upon export expansion for its profitability. This is true for the corn, soybean, sorghum or wheat producer and the livestock producer as well. The health of the livestock sector will become even more dependent upon exports in the future, and thus so will the grain producer, due to the market fact, as Lynette just stated, that the livestock industry still provides the major demand for the grain produced in this country.

As a producer, I have to admit that curtailing our grain production system this year has helped to bolster grain prices. Corn prices have moved from about \$2.60 a bushel up to just below the trigger level. That's good news for my friends and neighbors, but it's not so good for their world customers. It means about a 25 percent increase in the price those customers have to pay for U.S. corn. When you combine those higher prices with the continued strength of the U.S. dollar against foreign currencies, some foreign countries will be paying 30 to 40 percent more for U.S. corn. They're going to buy less.

I have already received notice that one valued customer of this country has announced its intentions to purchase less U.S. grain this next year, primarily due to that increase. In the past 10 years this country has steadily increased its purchases of U.S. grains. This concerns us. It should concern all of us.

Of even more concern is how this will affect our trade with developing nations, who look to the United States as their source of food products. These countries represents our growth and expansion potential for the next 10 years. There's every reason to believe that the same growth potential exists that we experienced in the seventies, but in different countries—as was mentioned, China, Central and South America, and Africa.

The population base for these countries is there. The potential of those economies to industrialize and grow is there. When that happens, the demand for more food results, thus creating a demand for U.S. agricultural products.

This potential can only be realized if we are willing to make a commitment that we want to have a share of those markets. Markets and countries are not built on short-term promises or actions. Long-range planning is required if an economy is to grow and prosper.

The situation that exists in the countries I described as market opportunities is not much different than that facing the United States or this committee today. The major question is: Are we willing to make a long-term commitment to insure that the United States will be the major supplier of food to the rest of the world? If so, let us all recognize that it requires a long-lasting commitment based not only on words, but actions as well.

U.S. corn is being sold to a world market today, not just an Iowa or U.S. market. For 1980-81, the U.S. share of the world market was 78.4 percent. Obviously, any country that has more than a 70 percent share of the world's exports will be the major player.

While we have increased our production to a record 8.3 billion bushels of corn, we have steadily lost our share of that export market. The Argentines have increased their acreage 23 percent since 1980, and all estimates point to the fact that they will contin-

ue to expand. The Australians and others have also increased acreage, and we'll see the European Economic Community continue to expand both acreage and export subsidies to move their surpluses.

The implications are clear. U.S. grain producers have such a significant role in both the production and trade components of the world commodity system that their markets and prices are clearly linked to the health of the world economy and almost all policy changes in countries around the world. Any action taken to stimulate demand, domestically or worldwide, must therefore be analyzed with an understanding and recognition of the potential impact on the global economic and political system.

I'd like to digress from your printed matter, for the moment. The world comprehensions of U.S. agriculture programs and the problems that agriculture in the United States faces needs to be addressed. The Government can be most useful in this regard.

We've got to improve education and communication. Two examples:

Knowing of your concern regarding soil conservation and the knowledge that, indeed, all good farmers feel stewardship for this finite resource, much progress has been made in addressing the erosion problems we've had in the last decade. Tremendous changes have occurred. But we're not telling our constituency or our friends overseas that, indeed, changes are being made.

The Japanese are scared. We were in Japan 3 weeks ago on an FAS trip, and they're asking repeatedly—they're wondering if, indeed, the United States can supply their needs in the next decade. They have read that, indeed, Iowa is going down the Mississippi. They are extremely vulnerable, because they import most of their food from us. Somehow, we've got to tell them, yes, we're frightened about our erosion, but we're doing something about it; and, yes, we will be able to supply you. The Government can be useful in that regard.

Another case is China—I'm very excited about that potentially colossal market for agricultural production. As was stated by Mr. Tremmel, we must buy from them in order for them to buy from us. The Chinese are very intelligent people. They will not go deeply into debt. But China does not want to buy value-added products. They've got plenty of people to make jobs for in that country. But they don't have basic commodities, like our feed grains. Yet, they want to develop and improve their animal agriculture to improve the meat diets for their people.

So I can get excited about the potential for Iowa corn growers in the next decade in that market. But it is most difficult to explain, sir, to some most cautious Chinese, through interpreters, just what the U.S. agriculture program is, and how PIK works. I hope we do develop a simpler version.

The Government is the farmer's partner. Neither farmers nor the Government can afford to focus on only part of the agriculture community or world commodity system. The next generation of farm programs must provide a competitive environment, where members of the system are rewarded for their increased productivity.

I wish to commend the Joint Economic Committee for their commitment to improving the agricultural policies in existence today;

Senator, for your great personal leadership, and today, for your endurance. I look forward to future opportunities for Iowa farmers to share with the committee or its members ways that the next generation of farm programs may be the best, the fairest, and the last that this country has to create.

Thank you.

Senator JEPSEN. Thank you, Mr. Mueller.

I'd like to ask this panel whether or not anyone has any particular comments about the possibility or desirability of developing a new U.S. Department of Trade.

Mr. MCKEE. It depends on how that new department is defined. If it's just another element in the layer of bureaucracy in addition to what we already have, it wouldn't contribute a great deal and would complicate the matter. But if it properly draws together elements of the existing organizations in the administration in dealing with trade issues in a more coordinated manner, it would be a positive move. But it's important in how that is accomplished.

Senator JEPSEN. Let me ask the question this way:

Is there a need to develop a centralized focal point in the U.S. Government where all aspects and all problems of foreign trade are brought together. A place where someone could go and work with and through these people?

Mr. MCKEE. It would be helpful.

Senator JEPSEN. I understand, Mr. Tremmel, that you attended the Cedar Rapids Export Trading Co. conference that I sponsored 4 or 5 months ago.

Mr. TREMMEL. Yes.

Senator JEPSEN. And shortly after that, you formed the Iowa Export-Import Trading Co.

I couldn't make that meeting, but I congratulate and commend you for your activities in this venture. I think Iowa has a little bit of an advantage at this point in continuing with this, and we want to do everything we can to expand and to facilitate it.

I am impressed by the interest the Iowa Development Commission has always shown—and the additional action it's showing now. What stage are you in with your Asian office?

Ms. BRODERS. We're currently studying the best location for that office.

Senator JEPSEN. Should I guess what department you're talking about? Is it the NSC or State Department or both, or neither one?

Mr. FISCHER. In what connection, Senator?

Senator JEPSEN. Well, the senior interagency—

Mr. FISCHER. No, you don't need to guess. I'll tell you, very directly. The Treasury Department is dragging its feet. There's a bunch of people in Treasury who don't understand anything about money. Money only represents something else.

So part of the problem is the Treasury Department, and part of the problem is the Defense Department, and part of the problem is the State Department. The other boys are ready to do the deals.

Senator JEPSEN. Secretary Regan will be in Des Moines this month. We will have lunch, and you are cordially invited, and I'd like to sit and discuss this.

Mr. FISCHER. Thank you very much. I'll be there.

Senator JEPSEN. All right. Mr. Mueller, concerning corn promotion. Do you think the Payment-In-Kind program ought to be extended through 1984?

Mr. MUELLER. As a corn producer, I would have to comment, as I think the previous production group did, I would encourage the development of another PIK program for the coming year. There's no way of solving the surplus production problem in 1 year. I fear Mr. Stockman is going to have a good deal to make hay of. I don't know how to resolve this, however.

So I think we just continue it in some form.

Let me respond to the first question that you posed, on the trade position.

As a farmer and as an agriculturist, I'm somewhat reluctant to agree. I can see in theory that it would be most efficient to have all trade concentrated in one area. By the same token, just listening to Mr. Fischer's statements, I feel the Secretary of Agriculture has done magnificently in our behalf, in trade. You, as a knowledgeable Senator, knowledgeable in the needs of agriculture, have done a tremendous task.

I'm reluctant to turn over some of that power and responsibility to one trade office.

Senator JEPSEN. Does anyone else have any closing comments?

Mr. FISCHER. I've got a couple closing comments, but first I'd like to address that trade office issue.

I agree with Mr. Mueller, and I guess I'd come down with Secretary Block: I think it's a great idea for everybody except Agriculture. But there are some real sound reasons behind that, as a matter of fact.

We do need more coordination between the Commerce Department and Trade Office and particularly the trade influence of the State Department.

A trade department which pulled those things together from the different departments, under one roof, particularly for the industrial sector, would probably be effective. I have failed to find people in any of those departments except the people in the Trade Office—Bill Brock and his associates—who really understand agricultural trade.

But I think it would be a mistake for agricultural trade issues to be taken out of the Department of Agriculture.

Senator JEPSEN. Any other statements you want to make?

Mr. FISCHER. I think there are two or three things that need attention, Senator, and we've talked about some of these briefly.

First of all, the Export Administration Act, I think, will be in conference committee shortly. It expires, I believe, September 30 of this year, and needs to be redone. It's been in markup in House committees. I don't know what action has been taken on the House floor, but I urge to you that it is extremely important for the Export Administration Act this year, now, to be so written that it will not be possible for the President to impose embargoes or limitations on the export of agricultural products, except in times of national emergency which directly affect the military security of the United States.

The other thing I would like to recommend is that the Government undertake a massive program to facilitate barter exchange of

farm commodities, not only for strategic materials but for other things, worldwide. This could probably best be done under a separate title and under the expansion of the Public Law 480 program.

As a matter of fact, probably the most economic thing we could do with reference to our agricultural problem right now would be to travel the authorization under Public Law 480 to extend Public Law 480 to China forthwith, and to mandate that 5 percent of the title I funds under Public Law 480 be used for market development, through the commodity organizations.

A recent study, a very competent study, indicated that that type of program authorization on a net basis cost the Federal Treasury nothing.

Senator JEPSEN. Do any of you have any closing statement that you'd like to make?

Mr. TREMMEL. Senator, first of all, thank you for your comments on the formation of the trading company.

On the Trade Commission issue, I, too, fear the formation of another trade department. I do think a lot could be done on coordination, and I think that perhaps foreign trade representatives of the various agencies need to sit with the others when they do make decisions.

I'd like to make one comment on the foreign debt problem. It is a very serious one, and it's very important that we do not panic. And I think the best thing we can do is to insure that our economic recovery continues, because we need to lead the economic recovery of the world, and work through this.

Senator JEPSEN. Mr. McKee.

Mr. McKEE. No, I have nothing further to add.

Ms. BRODERS. Nothing, Senator. Thank you.

Senator JEPSEN. I thank the panel. It's been very interesting.

I would state that in this whole area of combing departments, there has been some discussion about the State Department. But I'll tell you who really fights back, and that's the U.S. Department of Agriculture. And they do so because they feel it would dilute the power of the Secretary of Agriculture in negotiations. And they're probably right.

So there we are, back to "Go."

Thank you very much, all of you, for your contributions.

Now, welcome to Michael Reagen, commissioner, Iowa Department of Social Services; The Most Reverend Maurice Dingman, Bishop of Des Moines Diocese and the National Catholic Rural Life Conference; Gary Lamb, Iowa Farm Unity Coalition; and Christopher Novak, president, Iowa Association of Future Farmers of America.

Would you please come to the table?

Welcome. Good to see you again, Bishop Dingman.

As I've indicated to the other panels, your prepared statements will be entered into the record, and you may proceed in any way you wish.

**STATEMENT OF THE MOST REVEREND MAURICE J. DINGMAN,
BISHOP OF DES MOINES, ON BEHALF OF THE NATIONAL
CATHOLIC RURAL LIFE CONFERENCE**

Bishop DINGMAN. I am Bishop Dingman, the Bishop of southwest Iowa, and I'm representing the National Catholic Rural Life Conference. We are pleased with this opportunity to address the topic, "Toward the Next Generation of Farm Policy." And there is definitely a lack of policy on the Federal level, and we're really happy that this is being addressed.

In 1983—that's this year—marks the 60th anniversary of the founding of the National Catholic Rural Life Conference, and we have testified many times before the national committees in both Houses of Congress. And during these six decades the Conference has repeatedly emphasized the central importance of family farmers in the vision of a just agriculture. We are profoundly troubled that family farmers are more threatened today than ever before, by economic, cultural, and political forces, and most of these are beyond the control of the family farmer.

The reality is indeed grim. From the high mark of the number of family farmers in the 1930's, the farm population—and the small towns as well, who depend upon family farmers for their livelihood and continued existence—has steadily dwindled. We were more than 7 million; now we're below 3 million.

Today, that course has become a flood. A recent study by the Department of Agriculture documents that in the five-State region of Iowa, Illinois, Nebraska, Kansas, and Missouri, in the period from 1977 to 1980, over 16,000 farms were lost. Even where this does not mean the loss of agricultural land to urban sprawl or other non-agricultural use, it signifies the ominous process of a gowing concentration of land ownership in America, a process which the National Catholic Rural Life Conference notes with great alarm.

I will be skipping some of my prepared statement here, so that I won't be too long.

I would like to indicate just very briefly why the church is interested, and obviously this has become an important issue, not only in land, but also in people.

Why should the church be concerned?

At the heart of the issue concerning family farming agriculture is a moral perspective. We really do believe that there is a right and wrong. We really do believe that values ought to be addressed, especially in terms of our Judeo-Christian values, and we feel strongly that a system of agriculture is not only the best way to preserve land, but also human values as well. I think we've experienced the fact that the family farmer insists upon such values, such human values, as thrift, sharing, living in balance without excess, and strong community responsibilities, but is also the best method of insuring that the land will be cared for and preserved for future generations. That's exceedingly important when we think that our 16 inches have now gone down to 7 or 8 inches. We only have a short time before we'll lose all of this very valuable land.

The moral dimension is our focal point. We do not speak to the technical aspects. I'm not one who can do that. But certainly I can

speak to the moral dimension of family-based agriculture. The issue is not simply one of economies of scale—which are some of the words that we hear—or embracing the technology of the future, or other such arguments, substantial as they may be in their own right.

I address this issue from the viewpoint of Strangers and Guests, a document that was written just a few years ago. We finalized it in 1980. There were 72 Catholic bishops that signed this document, We came from 12 States, and there were 24 dioceses represented. And what we gave were the basic moral principles that would govern any kinds of decisions made about the land.

The land belongs to God.

People are God's stewards on the land.

The land's benefits are for everyone.

The land should be distributed equitably.

The land should be conserved and preserved.

In America, with its strong emphasis on private property, this larger aspect of stewardship and custody of the land can often be ignored. Yet, the land is God's. Our ownership of it conveys, in God's eyes, temporary title to its use, and only if other important corollaries of stewardship are followed. It is our duty to conserve and restore the land, and it is our obligation to see that the land's benefits are for everyone. Greed and exclusiveness, which can spring from erroneous feelings that "the land is mine, and I can do with it whatever I choose," are specifically condemned as being in violation of God's covenant with his people.

The church's perspective is really one that is long-ranged. We do not think that the facts of what are happening to our people are really in dispute. The decline of family-farming agriculture has been going on for generations. I would remind you that the recent U.S. News & World Report, looking forward to what this world is going to be looking at in the year 2033, says that there will no longer be any family farms by the year 2000. That's only 17 years.

It's really a grim prospect.

We cannot overemphasize how strongly we feel that this process doesn't have to be inevitable. It looks like it is. It is, we believe, the logical and inevitable consequence of many factors, some of them chosen and some of them not, which together make it nearly impossible for relatively small scale, family-oriented agriculture to survive.

Let me speak just a moment to what I call public policy. Public policy has played a key role in the disintegration of the family farm. Laws encourage—tax laws—speculation on farmland by persons who never intended to be owner-operators. Federal credit policies have changed radically since the 1930's. Begun as an attempt to assist struggling small and beginning farmers, they've been expanded now to provide assistance to all farmers, no matter the size of their operation or their record as stewards of the land. They have become instruments in the destruction of modest-sized family-farm operations.

I'd like to skip over my prepared statement, and remind ourselves that Jefferson's dream of a democratic republic was based on widespread land distribution. When we look at El Salvador and see a few families control 92 percent of the land, and then we see

what's happening in the United States, we become scared; because revolutions start when people do not own the land. And so they rebel. And I don't want to see the heart of the Middle West become a banana republic, or whatever you might want to call it.

I think we have to beware that people own that land—lots of people. This was the great wisdom of Lincoln. And when we began to get the land out here in the Middle West, we didn't give anybody more than 160 acres. If they were married, we gave them 320.

We need a public policy, and that public policy has to give incentives for action, because it's the highest expression of the commonwealth of our country, the ethos of our society. If the survival of family farming is not effectively a paramount goal of public policy, then our leadership is really saying, quietly and effectively, that family farms ought not to survive.

What would be a beginning of public policy?

I think we need a Federal family farm policy expressed by the Congress of the United States. I would like to see a favorable treatment which tax laws give to income from capital gains to be eliminated, since the favoritism works to the advantage of the wealthy investors and land speculators, and to the disadvantage of the small and low-income farm families. I'd like to see tax laws that would give some preference to the family farmers.

We urge that modest land holdings, sufficient to support family farms, be encouraged by taxing land progressively at a higher rate according to increases in the size and quality of holdings.

We encourage a broad examination of the Tax Code in order to curtail laws which stimulate farm expansion, favor large operations, and which encourage absentee ownership and speculation in agricultural land.

It's unbelievable, what's happening in Iowa in terms of those who farm the land and are not really owners. We do not have many owner-operators left. More than half of the land is now in the hands of other people. This is not a good trend.

We really believe that we are at a crossroads in American history. If we do not alter the current momentum, the bulk of our people will either be driven off the land or will work our fields as landless tenants. I'd hate to see us go back to the Middle Ages, where we have peons again. Either development would have ominous implications for the survival of our free republic.

We, too, note with gratitude the formation in recent months of farm unity groups which represent the best in our tradition of coming together to struggle for and stand behind common goals. We hope that the Congress will recognize the significance of such efforts and turn an attentive ear to our plea.

We thank you for giving us this opportunity to speak out on this important subject.

[The prepared statement of Bishop Dingman follows.]

PREPARED STATEMENT OF THE MOST REVEREND MAURICE J. DINGMAN**"AMERICA AT A CROSS-ROADS"**

The National Catholic Rural Life Conference is pleased to have the opportunity to appear before this committee in order to address the topic, "Toward the Next Generation of Farm Policy".

1983 marks the 60th anniversary of the founding of the National Catholic Rural Life Conference (NCRLC), and during those six decades the Conference has repeatedly emphasized the central importance of family farmers in the vision of a just agriculture for all. We are profoundly troubled that family farmers are more threatened today than ever before, by economic, cultural, and political forces, many of which they feel are beyond their control.

The reality is indeed grim. From the high mark of the number of family farmers in the 1930's, the farm population--and the small towns as well who depend upon family farmers for their livelihood and continued existence--has steadily dwindled. Today, that course has become a flood: a recent study by the Department of Agriculture documents that, in the five state region of Iowa, Illinois, Nebraska, Kansas, and Missouri, in the period from 1977-1980, over 16,000 farms were lost. Even where this does not mean the loss of agricultural land to urban sprawl or other non-agricultural use, it signifies the ominous process of a growing concentration of land ownership in America, a process which the NCRLC notes with alarm.¹

Indeed, the NCRLC does not think it too strong to state that the very question of whether family farming agriculture can survive is indeed the central issue.

How did the United States of America, whose people and politicians have so long glorified and praised the virtues of family farmers, come to find itself in such a situation?

Partly because, we think, such praise has been largely romantic, and disconnected to the realities of farm life. The values this nation has espoused in this century have also been urban-oriented and have often included outright condescension towards those men and women who work the land. Further, whereas family farming always implied living in balance with nature, as well as living without excess, the powerful message of person-as-consumer repeatedly hammered home through media advertisements--helped to undermine that balance, and the ethical balance which supported it.

Candidly, while some of what must be done, we think, to redress the imbalance of factors working against the family farmer includes public policy, we also need to understand that our people must re-examine their own values. Without a conversion of heart, the loss of family farming as an institution is not only inevitable, but it foreshadows even grimmer problems for our Republic.

The Church's Interest in the Issue--A Brief Perspective

At the heart of the issue concerning family farming agriculture is a moral perspective: the Church strongly feels that such a system of agriculture not only is the best way to preserve important human values (such as thrift, sharing, living in balance without excess, and strong community responsibilities), but is also the

best method of ensuring that the land will be cared for and preserved for future generations.²

This moral dimension is our focal point and our connecting point with family-based agriculture. The issue is not simply one of "economies of scale", or "embracing the technology of the future", or other such arguments, substantial as they may be in their own right.

We must remember, however, that such discussions can never take place in a vacuum. As the Catholic Bishops of the Heartland pointed out so forcefully in their 1980 statement, Strangers and Guests,³ some of the paramount features of land stewardship are:

1. The land is God's;
2. People are God's stewards on the land;
3. The land's benefits are for everyone;
4. The land should be distributed equitably;
5. The land should be conserved and restored.⁴

In America, with its strong emphasis on private property, this larger aspect of stewardship and custody of the land can often be ignored. Yet, the land is God's. Our "ownership" of it conveys, in God's eyes, "temporary" title to its use, and only if other important corollaries of stewardship are followed: that is, the duty to conserve and restore the land and the obligation to see that the land's benefits are for everyone. Greed and exclusiveness, which can spring from erroneous feelings that "the land is mine and I can do with it whatever I choose", are specifically condemned as being in violation of God's covenant with his people.

The idea that the land was entrusted to us by God as our common inheritance, for which we must be stewards, is perhaps most clearly outlined in the twenty-fifth chapter of the Book of Leviticus. When the Jewish people finally arrived at their new homeland, and apportioned the land among themselves, God described for

them what their attitude should be toward the land as property:

Land must not be sold in perpetuity,
for the land belongs to me
And to me you are only strangers and guests (25:23) ⁵

The Problem: The Church's Perspective

We do not think that the facts of what are happening to our people are really in dispute. The decline of family farming agriculture has been going on for generations.

We cannot over-emphasize how strongly we feel that this process is not inevitable. It is, we believe, the logical and inevitable consequence of many factors, some of them chosen, others not, which together have made it nearly impossible for relatively small scale, family-oriented agriculture to survive.

We have already briefly discussed the question of values, and the way in which America's dominant values have served to undermine the ethos of family-oriented agriculture.

But there is more to the picture. The United States has truly become carried away by arguments of "economies of scale" which are always couched in purely economic terms. There is no denying the tremendous improvements wrought by advanced technology in removing so much of the back-breaking drudgery of earlier farm work. Although seldom mentioned in the romantic allusions to farming, working the land remains very hard work. Technology has helped to make that work more human--up to a point. But by pursuing a technology which seems to equate everything bigger as always better, we have lost sight of that technology's impact on people and have put people at the mercy of that technology. ⁶

Ever-larger machines, ever-wider use of pesticides, and the supportive measures taken by public policy to expand credit assistance to those using such new technology, have had a cumulative effect--one foreseen by few--very harmful to family-based agriculture.

The social costs of displacing people from the land were not considered. We think they should have been. Further, the impact of this process on land stewardship, on the principle of widespread distribution of land ownership, has also gone largely undiscussed. Yet such considerations are not only central to our understanding of God's covenant with us, but are also, we believe, central to our heritage as citizens of the United States.

Public policy has played a key role in the disintegration of the family farm. Tax laws encourage speculation in farm land by persons who never intend to be owner-operators. Federal credit policies have changed radically since the 1930's. Begun as an attempt to assist struggling small and beginning farmers, they have been expanded to now provide assistance to all farmers, no matter the size of their operation or their record as stewards of the land. They have thus become, we judge, instruments in the destruction of modest-sized family farm operations.

We think, too, that the federal department of agriculture's increasing fascination with export crops has further aggravated the process by contributing to the momentum for cash crop farming. We note the predictable consequences (which is not to say that they have necessarily been foreseen) on loss of genetic crop diversity, depletion of the soil, pollution of the water table by chemicals, and questionable impact upon the agriculture of many other nations. That fascination (in some cases, fixation) with all

things new, to the exclusion of other, sometimes older methods, is faithfully reflected in the research efforts of too many of the land-grant universities. Farmers seeking information on alternative methods of farming (many of these alternatives being more human-scale) have often been frustrated by the limited direction of research and information out-reach efforts.

Where Do We Go from Here: The National Catholic Rural Life Conference's Suggestions

First, we must begin by recommitting ourselves to the preservation of family farming.

The family farm historically has been a moderate-sized farm the majority of whose land is owned, operated, managed and inhabited by members of the same family related by blood, marriage or adoption; a farm on which the majority of labor is done by that same family; and a farm which provides a substantial part of the net income with which that family supports itself, an income adequate to meet that family's needs, ensure the survival of the farm and provide some security for the future.⁷

The family farm has helped to form the heartland's heritage...It has played a key role as a way of life that preserves and promotes such values as faith, hope, perseverance, generosity, trustworthiness, honesty and concern for the neighbor. It has helped promote harmony among rural people and between rural people and the land which provides their livelihood...It has inspired care of the land as a limited natural resource...The values which people have derived from their vocation as family farmers have helped promote the stability, harmony and prosperity of rural communities.⁸

Such a commitment cannot be just rhetorical: we must remember that practically all of the measures taken in recent years on behalf of agriculture were justified in the name of the family farm, even though most of them have contributed to its onrushing demise.

Second, we need to remember some of the lessons of our heritage. Except for those of us who are Native Americans, all the rest of

us came from other lands. Most of our ancestors fled countries where they were landless. Part of their dream in coming to America was the opportunity of owning their own land. It would be an ironic tragedy if we, their descendants, bequeathed to our own children a landless future. Such is the ominous course on which we are now embarked!

Too, we need to recall that Thomas Jefferson's dream of a democratic Republic was based on widespread land distribution. Even Jefferson's more autocratic opponents agreed with his central contention--a person's relative economic freedom determined his or her political freedom. Jefferson, seeking a lasting foundation for democracy, embraced widespread ownership of land in which family farms were central. His opponents, believing that such widespread ownership of land was impractical, or undesirable, or both, fought to keep political participation restricted to the land-owning wealthy elite. It would be a further tragic irony if we who use Jefferson's democratic rhetoric forget his warning about preserving the economic system which he felt guaranteed the survival of a free Republic.

Third, while public policy is only part of the answer, it is an important part, because public policy both delivers the incentives for action and also because it is the highest expression of the commonweal, the ethos of a society. If the survival of family farming is not effectively a paramount goal of public policy, then our leadership is really saying, quietly and effectively, that it ought not to survive.

What would a beginning agenda of public policy look like?

- 1) We need a federal family farm policy expressed by the Congress of the United States. Against such a policy would

every proposed measure impacting family farms be evaluated. This is an important beginning step in helping our legislators, and the public of the United States, understand what proposed legislation would actually do to farmers. (The feasibility of such a proposal is shown by the laws already in effect which require environmental impact statements and, within legislative bodies, analyses of the fiscal impact of proposed legislation.)

2) We urge a broad reform of land ownership and use which would promote the opportunity of all people to own or responsibly control the land on which they live and labor.⁹

3) The rights of individual investors and of investor-owned companies to acquire land must be limited.¹⁰

4) The favorable treatment which tax laws give to income from capital gains must be eliminated, since that favoritism works to the advantage of wealthy investors and land speculators and to the disadvantage of small and low income farm families.¹¹

5) We urge that modest land holdings, sufficient to support family farms, be encouraged by taxing land progressively at a higher rate according to increases in the size and quality of holdings.¹²

6) Farm prices ought to be stabilized at levels which provide fair and equitable returns to producers, and adjusted for changes in the cost of production, so that a day of labor on the farm and a dollar invested in farming yield economic returns comparable to similar contributions in other occupations.¹³

- 7) We need to encourage the entrance of new families into farming, and improve the competitive position of existing small farmers, through grants or low-income loans, technical assistance and training, and preferential treatment in the sale or lease of government-controlled land. ¹⁴
- 8) We urge the enactment of tax incentives for retiring or bereaved farm families to encourage them to sell their land to small, beginning, or tenant farmers, as well as the development of private and public land trusts and land banks that would benefit such small and new farmers. ¹⁵
- 9) We urge that federal credit programs be immediately investigated by the Congress to establish actual performance of mandated duties, and that a thorough reform of such lending agencies begin immediately in order that their original purpose of providing assistance to small and struggling farmers be restored. ¹⁶
- 10) We encourage the use of federal incentives to our land-grant institutions to stimulate the overall thrust of agricultural research and information delivery to support family farmers. ¹⁷
- 11) We encourage a broad examination of the tax code in order to curtail laws which stimulate farm expansion, favor large operations, and which encourage absentee ownership and speculation in agricultural land. ¹⁸

Concluding Comments

The above are important beginning points for the reexamination of public policy. The National Catholic Rural Life Conference stands ready to be of whatever assistance may be necessary in this

process.

We really believe that we are at a cross-roads in American history. If we do not alter the current momentum, the bulk of our people will either be driven off the land or will work our fields as landless tenants. Either development would have ominous implications for the survival of our free Republic.

But we are not without hope. Indeed, the Christian perspective is fueled by the vision that the victory has been won, but that the task of realizing that victory in our times is our own.

It is precisely because the times are difficult that we believe men and women of good will are prepared to examine the situation attentively. We need a public debate over the kind of future society we choose, and over the kinds of options (and their consequences) that we have.

The National Catholic Rural Life Conference hopes that this Committee will take our concerns, and those of our fellow citizens also appearing today, back to the full Congress in order that action might follow. Our public officials, representing all of us, offer the hope that our pleas will be heard and that our people will be saved.

We note, too, with gratitude the formation in recent months of farm unity groups which represent the best in our tradition of coming together to struggle for, and stand united behind, common goals. We hope that the Congress will recognize the significance of such efforts and turn an attentive ear to our plea.

Thank you again for the opportunity to appear before your committee.

Footnotes and References

1. A Time to Choose: Summary Report on the Structure of Agriculture, USDA, January, 1981.
2. The Family Farm, A Statement of the Committee on Social Development and World Peace, United States Catholic Conference; February 14, 1979; and, Strangers and Guests, a regional Catholic bishops' statement on land issues; May 1, 1980, pp. 6-9.
3. Strangers and Guests is a statement signed by 72 bishops from the states of North Dakota, South Dakota, Minnesota, Wisconsin, Iowa, Kansas, Nebraska, Missouri, Indiana, Illinois, Colorado, and Wyoming. Copies are available from Joyce Lemke, Heartland Coordinator, National Catholic Rural Life Conference; 4625 N.W. Beaver Drive; Des Moines, Iowa 50322.
4. Strangers and Guests, p. 13.
5. *Ibid.*, pp. 19-20.
6. Cf. On Human Work, an encyclical by Pope John Paul II, September, 1981, part II, section 5.
7. Strangers and Guests, p. 7.
8. *Ibid.*, pp. 6-7.
9. *Ibid.*, p. 22
10. *Ibid.*
11. *Ibid.*
12. *Ibid.*, p. 23.
13. *Ibid.*, p. 24
14. Family Farm, op. cit., p. 23.
15. Strangers and Guests, p. 24.
16. Family Farm, p. 23; and National Catholic Rural Life Conference Board of Directors Resolution, June, 1983.
17. Family Farm, p. 23.
18. *Ibid.*, p. 24.

Senator JEPSEN. Thank you, Bishop Dingman.

Next we have Michael Reagen, commissioner, Iowa Department of Human Services. Please proceed, in any way you wish.

**STATEMENT OF MICHAEL V. REAGEN, COMMISSIONER, IOWA
DEPARTMENT OF HUMAN SERVICES**

Mr. REAGEN. Good afternoon, Senator.

We're pleased to have the opportunity to visit with you, and pleased that you have come here to listen to our hopes for the future.

As the commissioner for the Iowa Department of Human Services, and as chair of the National Council of Public Welfare Administrators, I have had a vantage point from which to observe two distinct characteristics of Iowa.

First, Iowa's open government is based upon a tradition of electing officials who carefully represent their compassionate and prudent citizens. One does not ask a citizen of Iowa to spend his hard-earned money with abandon, nor do Iowans willfully ignore a human need.

Second, Iowa's economy is deeply rooted in farming and agribusiness. This is why the public has listened with care to Governor Branstad's marketing proposals and wishes to hear more of your, Senator Jepsen, conservation proposals. We know a firm farm economy and a preservation of our resources are essential to our well-being. We are also convinced that these goals are of prime importance to the future.

As you ponder the future of the Nation's food policy, there are some issues which I ask the committee to consider.

One, the administration of the food stamp program. I am troubled by the increasing cost of Iowa's food stamp program, as well as sharing the costs of the Federal portion in all States. I am confident that all of us have an interest in keeping the cost of managing programs to a lean minimum. However, the rapid and repeated changes in the program—five major changes since 1977, not counting appropriation bills—are costly and escalate the likelihood of casework error.

This October, States will be required to adopt yet another change—monthly reporting. I am troubled by preliminary reports that a test of the system in Illinois indicates increases in both casework errors and administrative costs. These reports would concur with a recent reevaluation of the much touted pilot program that was conducted in Colorado—and I visited with the commissioner in Colorado, and the Governor's staff. The Center on Budget and Policy Priorities concludes that in the second year of the Colorado project, increased costs, more errors, high incidence of truly eligible clients being temporarily discontinued from the program resulted from the complexity of the system.

It would be a sincere relief to States if monthly reporting were optional, rather than mandatory, and that States who wish to implement monthly reporting be given greater flexibility. This would be a major step toward fulfilling one of the promises of New Federalism for which I and many of my counterparts in other States have long awaited. That's the opportunity, Senator, to adapt pro-

grams to local needs and local circumstances. This opportunity would be especially appreciated in the administration of food stamps, since this program has not been noted for its flexibility.

Meanwhile, our department also has a concern with the illegal trafficking of food stamps. Such trafficking is obviously wasteful and hurts us all. Any dollar that is illegally trafficked obviously is a dollar that's taken away from someone who truly needs it. Therefore, we have moved ahead with programs of certified mail and electronic transfer, which should put Iowa in the forefront of States taking significant action in this area. Our department has successfully reduced food stamp thefts from over \$120,000 in one month, January 1983, to just over \$20,000 in May 1983, by using certified mail; \$20,000 each month, however, is still available to fuel the illegal underground economy in which food stamps are traded for 50 cents on the dollar.

The Iowa Bankers have pioneered the development of a statewide electronic funds transfer system. Dahl's and HyVee grocery stores here in Des Moines have pioneered the use of customer's bank debit cards to pay for their purchase by electronically tying into the Iowa bankers' system at the checkout counter. This point-of-sale debit card system could be used to eliminate theft and use of food stamps as a second currency, by assuring that the program's funds would only be spent at food stores.

Two, Senator, I would ask you to consider the purpose of the commodity programs. If there are vast quantities of items in surplus, are those foodstuffs being stored at taxpayers' expense or being distributed to the hungry?

In January 1982 this State began, on an experimental basis, with your support and your help, distribution of cheese to hungry Iowans in the Waterloo and Dubuque areas. Thanks to the voluntary efforts of the Hawkeye Valley Area Agency on Aging, 62,400 pounds of cheese were distributed which would otherwise have remained in storage at Government expense.

In February 1982, the department began statewide distribution at no cost to the Federal Government, but I might add, at a cost of me carrying about a \$400,000 deficit.

In the month of April 1983, the department, with the help of a corps of volunteers, distributed 1.2 million pounds of cheese and 500,000 pounds of butter to 194,000 households who met the reduced-price school-lunch eligibility requirements. At the peak of the distribution effort in Iowa, 4,600 volunteers contributed 25,000 hours of work in a single month. Voluntary organizations, Senator, in many cases picked up the cost of local storage, transportation and distribution. And it is estimated that they contributed over \$200,000 to that effort. These were church people, union people, business people, and so on.

Therefore, we were delighted to receive \$474,000 in title I and title II job funds. Although these dollars are going to disappear in September, we appreciate the brief hiatus of relief for ourselves and the beleaguered voluntary organizations across the State who begged and borrowed from other resources to meet the need.

Shortly after we learned of the temporary administrative assistance, we were also informed that Iowa's allocation of cheese would be reduced by 80 percent, and that the butter distribution would be

reduced by 74 percent. That's going from 1.3 million pounds of cheese to about 300,000 pounds of cheese, and from about ½ million pounds of butter down to about 100,000 pounds of butter. We have attempted to ration the allocation by distributing quarterly rather than monthly, and by cutting the allocation per household. But notwithstanding these changes, our volunteers will be forced to turn away fellow Iowans who live within their own communities. And I don't know of any way to displace the pain of hunger or the pain of saying no to hungry people. Moreover, I do not have any set of facts which demonstrate that Iowans will be 78-percent less hungry in July than they were in June.

Let me share, if I may, the words of another person who was asked to face hunger:

So accustomed are most of us to a full and balanced diet that, until recently, we have thought of hunger and malnutrition as problems in far less fortunate countries. But in the past few years we have awakened to the distressing fact that despite our material abundance and agricultural wealth, many Americans suffer from malnutrition.

Those are the words of Richard Nixon, then President, as he transmitted the final report of the White House Conference on Food, Nutrition, and Health to Congress in 1969.

The report is a compilation of recommendations designed to address the problems of malnutrition. The Citizen's Board of Inquiry into Hunger and Malnutrition in the United States had previously found four things:

That substantial numbers of newborn children who survive birth and live through the second month, die between the second month and their second birthday from causes which can be directly traced primarily to malnutrition.

That protein deprivation between the ages of 6 months and 1½ years causes permanent and irreversible brain damage to young infants.

That nutritional anemia, stemming primarily from protein and iron deficiency, was commonly found in percentages ranging from 30 to 70 percent among children from poor backgrounds.

That doctors persuasively testified to seeing case after case of premature deaths, and vulnerability of secondary infection, all of which were attributable or indicative of malnutrition.

This list goes on and on. Health officials at the Health and Human Services Department of the United States Government and our own Iowa Health Department remind us of the human costs of malnutrition. They list the diseases that can be traced to specific vitamin deficiencies:

Insufficient vitamin A causes blindness and skin diseases; vitamin B, rickets; vitamin B-2, scars on mucous membranes, insufficient calcium, bone and teeth diseases; vitamin C, scurvy; and a list of other ailments such as convulsions, pellagra, goiters, and beriberi—all of which are suffered by children in America.

Does America have enough food? Should there be hungry people in the United States? Indeed, should there be hungry people in the world?

Conversations this past week with officials of the United States Department of Agriculture have informed us that at the end of May 1983—at the same time when we're having a 74-percent cut-

back in cheese and an 80-percent cutback in the distribution of butter to needy Iowans who truly do need them, Senator—and I've been in those lines and seen that—the U.S. Government had in storage 470 million pounds of butter and 790 million pounds of cheese.

Even more staggering, our Government has 1,250 million pounds of dried milk. That amount can grow by as much as 300 million pounds in a single month under the price support program for dairy farmers. We're told that inventories of grains and cereals—though I heard earlier from other panels that it would be something like 8.3 billion bushels—we're told this week that those amounts of those inventories cannot accurately be determined due to fluctuations on a daily basis.

Estimates vary, but there appear to be at least 400 million to 1 billion individual men and women, boys and girls, in the world who are hungry. Despite the sophisticated communications technology available to us, the magnitude of the problem has not yet been accurately measured, and many of the hungry remain invisible and unheard of.

In the 1960's, America was shocked to learn of the magnitude of hunger in the United States. It is my sincere hope that these findings of the midsixties would not be reaffirmed today. If hunger and malnutrition in America has been greatly reduced, then it is because of the bold policy set by the White House and the Congress in the late sixties and the early seventies. But I cannot help wondering, as long lines of people wait for cheese and butter, and as food pantries in this community, and soup kitchens in others in this State emerge, if hunger is not creeping back into Iowa, though Iowans are very shy to speak out about it.

So I ask, as you set the goals for the coming decade, that you consider whether we have truly replaced hunger and malnutrition with adequate nutrition. The price we all pay for the pain of hunger is charged to us repeatedly in our health and educational systems. The cost of a year's stay at a hospital-school for one whose development was stunted by malnutrition this year in Iowa, Senator, was \$38,643. And that's shared by all taxpayers.

That President that I mentioned before also gave us another quote. He said:

More is at issue than the health and well-being of Americans citizens. What is at stake is the honor of America.

Thank you, Senator, for the opportunity to testify.

Senator JEPSEN. Thank you, Commissioner Reagen.

Welcome to Gary Lamb, of the Iowa Farm Unity Coalition. Please proceed, as you wish.

STATEMENT OF GARY LAMB, IOWA FARM UNITY COALITION

Mr. LAMB. Senator, I don't have any prepared statement of my own at this time. I gave your aide a brochure with some charts and maps, and so forth, of what happened during the period of time when our agriculture was locked to a pricing index. There were many positive aspects to our economy at that time. I would, of course, ask your staff and perhaps yourself, if you find the time, to analyze that research.

With your permission, I would like to give a short verbal statement at this point.

My name is Gary Lamb, sir. I've been a farmer for 32 years down in southern Tama County, farming approximately 650 acres. I'm pretty much diversified—corn, soybeans, and beef cattle.

Approximately 5 years ago I, simply, I guess, stood back and took a look at this industry around me, and I made the decision that there was something terribly wrong in this industry. I saw fewer and fewer young people getting the opportunity to start farming, and I just felt that, you know, we need young people in our industry just like every other industry needs them, to remain strong.

So, at that time—I guess my first involvement was going to an ACS meeting with elected officials like yourself. When I fully understand the complexities of agriculture and how difficult it is for someone like yourself, perhaps, to arrive at which direction we do go out here. We've seen a various number of different routes that we can take, just here today. I've watched, of course, the dairy industry being criticized at length in the last few months, for the tremendous surplus they've built up.

And, sir, although I'm not a dairy producer, I've always felt that we don't need to bring the dairy industry down to the poverty level of the rest of agriculture; what we need to do is bring agriculture up to the level of dairy.

Perhaps the thing that we overlook is that the only thing wrong with the dairy industry at this point is we have given them some sort of a safety net. We told the rest of agriculture, "Sink or swim." Unfortunately, the rest of agriculture is sinking, and it's bringing our economy and much of the rest of the Nation down with it.

I believe perhaps what we have to realize also is that there are really two philosophies very deeply embedded within our Nation, within our Government, and within our industry itself.

The first philosophy, of course, is that we must keep economic pressure on agriculture to make it more productive and ever more efficient. Then we get hit in the stomach with the second one, saying, "The reason you've got \$2 corn is you overproduced."

In other words, they're telling us we're underproducing and overproducing at the same time. And I would think that certainly would be an impossibility.

I do believe, Senator, that it is a very strange and very tragic paradox: As we try to develop programs that reduce specific feed-grains and dairy production at this time, the mayors of our large cities, less than 2 weeks ago, said the No. 1 problem in the cities is hunger and malnutrition.

I would suggest, sir, that perhaps the problem is not production or overproduction; perhaps the problem is how do we price our agricultural commodities—which presents the real problem: Underconsumption.

Our economic system may have been short circuited because our Nation's largest industry, agriculture, hasn't had the profitability or purchasing power to buy industrialized labor's full production; consequently, many of those people have lost their jobs and wage ability to buy food.

So we have food surpluses building up on one side of the table, unemployment building up on the other. Somehow we have to develop programs for future agricultural policy in this country that will bring supply and demand together. I think it's a program, sir, that will bring some stability into agriculture so that we don't have one group of farmers constantly living off another group of farmers. And at the same time we'd bring what I call a par economy. A par economy is where we have the exchange of goods between industries and exchange of labor between industries at an equal or near equal level.

Every time, if we examine our Nation's history, every time we have had that, whether it's been by accident or by design, we've had a strong economy with very little unemployment, very little inflation, very little increase in taxation, and over 90 percent of the time, we've balanced our national budget.

So I think there's something to say in these areas.

I guess what we've saying at this point, sir, is that we know there are two ways the Government can rule when we talk about formulating agriculture policies. We can certainly go the route of free markets, or we can ask Government to provide some sort of safety net underneath us.

Please do not misunderstand me. I'm not saying that I think the role of Government should be to guarantee me as an individual or my industry a profit. That would be counterproductive to the needs of my industry.

But the role of Government is not to deny me as an individual, or my industry, a profit. And yet, if we're quite honest, I think if we examine past history we find that that has been the role that Government has played.

Decreases, embargoes, economic sanctions, export restrictions, the refusal to negotiate long-term trade agreements—all these things to me, sir, dictate controlled markets, not free markets.

Now, if we're going to have free markets, we're going to have to make the determination: Can we get the State and Defense Departments to not use food as a diplomatic policy tool? We can get that first part of Government out of agriculture very easily—farm programs and the target price, the support price, and all those kinds of things. The question that remains in my mind is can we get the second part of the Government out?

And I say the role of Government is to simply be there to provide the atmosphere, the opportunity or the climate for the industry to manage, work, and be able to provide an adequate income for their families.

On the surface, sir, we would both say that in agriculture the last 30 years, we have made tremendous progress. Yields have been increased; modern technology has brought in fertilizers, chemicals, and big machinery. But in my mind, sir, progress within an industry should certainly benefit, No. 1, the industry itself and No. 2, the people who consume our products, or both of the aforementioned, to some degree.

If we look at that more closely, we realize that in the last 5 years the industry of agriculture has had to double its debt, the debt that exceeds \$200 billion today. The General Accounting Office has indicated that if you adjust net farm income due to inflation, to real

dollars, agriculture, the 3 years prior to 1982, ended up with less than $\frac{1}{2}$ of 1 percent return on our investment.

I think it's pretty obvious that as an industry we have not made progress. We can ask ourselves if we have benefited the farmers and ranchers of this country. Not really so. Since 1970 we have lost one-third of our numbers. In 1982 we lost approximately 12 percent of our farmers alone. In 1 week in the latter part of February, Senator Jepsen, in the State of Iowa, we had over 500 farm sales.

I think it's quite obvious that we have not helped the people who participate in this industry known as agriculture.

Perhaps on the surface we would like to say at least we have kept food pretty cheap for the consumers of this country. But if agriculture is the hub of the wheel that drives this Nation, if it is the basis of the economic structure upon which our Nation functions, then much of the unemployment and lack of tax revenues for badly needed programs can be traced directly to the lack of profit in agriculture.

We can say we've kept food cheap, but the man that worked at John Deere that suddenly finds we've kept it so cheap he lost his job, we haven't benefited him, either.

We would like to say we have at least helped the world's hungry. But if our Nation's recession has contributed to the world recession—and in many areas it appears it has—then suddenly we find that the third world countries cannot afford to buy our food, even as cheaply as it's priced.

So suddenly we find we have not even helped the world's hungry.

So the question we must ask ourselves, Senator, is: Has this progress been progress at all? In one sense, it appears that it has. But in the other sense it appears that we have benefited no one—consumer, producer, the world's hungry.

It is time we addressed agriculture policy long term in this Nation.

I would close by saying, sir, our Nation pressures for political, economic, and social reforms in countries like El Salvador. But perhaps the thing that we fail to recognize or realize is that the basic problem in many of these countries is that the land and wealth are controlled by a handful of people, who are not willing to give up that land or wealth.

At the same time we pressure for economic and social reform in other countries, perhaps what we fail to realize, Senator, is that time and progress itself bring changes into an industry such as agriculture, of into our own social and economic environment. And perhaps, sir, it's time, to some degree, that we ask for economic and social reform in our own Nation as well.

I think what we've got to understand, sir, in my mind, I believe that our Nation and our people should be against any type of monopoly and the high prices that monopolies can bring. And I firmly believe that we can have democracy or we can have the wealth of any industry, including agriculture, controlled by a handful of people. But we can't have both.

To that degree, sir, I would say this: Perhaps the biggest challenge facing our Nation today, both in an economic and social sense, is returning the people to the land, and the land to the

people. That may be the big challenge that we have facing us as a nation and as a government.

I thank you, sir, for scheduling these hearings. I'd agree with you, it is a crossroads and a critical crisis, and I'm sure, working together, we're going to be able to find some answers.

Thank you, sir.

Senator JEPSEN. Thank you, Mr. Lamb.

And now I assume this is Christopher Novak who has joined us; is that correct?

Mr. NOVAK. Yes, sir.

Senator JEPSEN. Welcome to the president of the Iowa Association of Future Farmers of America. Please proceed, Mr. Novak. As I advised the other panel members, if you have a prepared statement, it will be entered into the record. So you may summarize or proceed in any manner you wish.

STATEMENT OF CHRISTOPHER A. NOVAK, PRESIDENT, IOWA ASSOCIATION, FUTURE FARMERS OF AMERICA

Mr. NOVAK. Thank you, Senator. I have no prepared statement, and I will keep my formal comments very brief.

I'm not sure whether you're familiar with the FFA, or the Future Farmers of America, but we are a three-part program, which consists of vocational agriculture, which is taught in high schools across the Nation.

The second part, then, is our supervised occupational experience, or our farm programs. That is, the cattle we raise and the crops that we grow.

And then the third part of our program is the Future Farmers of America.

The purpose of our entire program is, first off, to try and train ourselves to be better farmers. Through our classroom situations, we teach more efficient marketing, we try and teach more efficient methods of production, and we try to teach young people to be more efficient and productive once they get out into agriculture and into the world we live in.

The second part of our program gives them actual experience.

And then the third part, the part that I'm representing today, the FFA, tries to help develop people who will be the leaders of tomorrow's agriculture and who will be the spokespeople of the farmers of tomorrow.

Our purpose in the FFA, then, is not to find solutions, exactly, to the problems that are facing agriculture and our Government today, because of the fact that we are a nonpolitical organization. But we feel the purpose in the FFA is to train people at solving problems and in making decisions, to be able to solve the problems of tomorrow. And we feel that this training that we're giving them, through our classrooms and through the FFA, is going to help us in the future to become self-sufficient of any Government programs or any Government intervention, I guess, in the farm community.

We would like to think that if we train farmers of tomorrow to be more efficient and to be more organized in the marketing and production techniques, that we will eliminate some of the need for the current farm programs that we have. And I think education for

us is very important on the high school level, and it is also important for the young farmer, the classes that we have in the adult education that we have. And we feel these programs must be maintained because of the fact that in the future we think they will be able to serve as a replacement for some of the farm programs.

I think if we can reach a point in the future that the farmers are self-sufficient, then we will eliminate some of the problems that we may have had in the past where, although the farm community may benefit from the few farm programs, there's always one segment of our society that does end up getting hurt from some of the programs that we have. And we feel that if we can make farmers self-sufficient in the future, that we will keep a balanced economy and no part of our society will be hurt.

Senator JEPSEN. Thank you, Mr. Novak.

Mr. Novak, in your training courses, that is, in your vocational education classes, other classes, have you ever had some direct training in the area of soil stewardship or soil conservation?

Mr. NOVAK. Yes, we have, Senator. I'm currently a freshman at Iowa State University, majoring in ag education. But while I was in high school, we spent a semester to a year working on resources and conservation and learning ways that we can be better stewards of the soil.

Senator JEPSEN. What school was that?

Mr. NOVAK. I went to school at Lynn-Mar High School.

One other thing I'd like to add along with that, in the second part of our program, as I mentioned before, the SOE, and at our high school we were very fortunate to have a 38-acre test lot or land lab that we worked. And through this land lab we put into practice many of the different soil conservation projects and methods. We used minimum tillage. And, therefore, not only were we learning about it in the classroom, but we were also experiencing it in the field.

Senator JEPSEN. Excellent. Do you think that's typical of other schools? Do you know of any other schools that have similar programs?

Mr. NOVAK. I've had a chance to travel extensively the past 2 years, as far as schools in Iowa. And, yes, that is very common, Senator.

Senator JEPSEN. Most high schools have it, then?

Mr. NOVAK. Yes. Although many of them do not. Most have a test plot. Most of them do have instruction in the classroom.

Senator JEPSEN. In soil conservation?

Mr. NOVAK. Concerning soil conservation.

Senator JEPSEN. Public and private?

Mr. NOVAK. Public and private, yes; land use management. And then they also have a chance to put what they learned to use through their production methods.

Senator JEPSEN. Christopher, you're the next generation of farmer. What kind of Federal farm policy would you like to operate under?

Mr. NOVAK. I think, as I mentioned in my statement, I think, hopefully, we'll be able to eliminate the need for farm programs in the future. Now, I'm not currently familiar with all of the programs that are available to agriculture, but I think—

Senator JEPSEN. What to you think Government's role should be with regard to promoting agriculture?

Mr. NOVAK. Government's role as far as promoting agriculture?

Senator JEPSEN. Yes. Assisting, promoting, and fostering.

Mr. NOVAK. As far as promoting agriculture, I think that is one thing that everybody in our country should do. I think that our Government can help this tremendously, because of the fact of the foreign relations offices that you maintain.

As far as assisting agriculture, as I mentioned earlier, I hope that we can reach the point where the American farmer does not need as much assistance from the Government as he has taken in the past.

Senator JEPSEN. OK.

Mr. Reagan, as you noted, there has been concern about USDA's cheese and butter distribution program. USDA has contended that the commercial concerns report that this has affected commercial sales.

Now, as you also know, at least partially in response to these concerns, USDA has cut down the monthly distribution levels of cheese and butter.

Do you want to comment on the situation from your vantage point. Is that accurate?

Mr. REAGAN. That's an accurate statement. That's what I've been told at the national level.

Senator JEPSEN. Is it accurate information? Is that true? Does it displace commercial sales?

Mr. REAGAN. I have heard no one tell me that in Iowa. In fact, Senator, I've had meetings at 6 a.m. in my office with representatives from major food stores, major unions, businesses, and trucking companies, and so on, all of whom have participated in the program in this State.

No. 2, I would respectfully suggest to you that, having visited cheese lines in this State, there's been absolutely minimum corruption.

When one looks at the people who are publicly lining up to receive free butter and free cheese, I doubt very much if they are people who would have the wherewithal to purchase this at a retail establishment.

Senator JEPSEN. Later on, we're going to have the chief financial officer of one of the major food chains in this State. We'll ask him the same question and see if we get the same answer.

Bishop Dingman, do you feel, as was mentioned earlier here today, that estate inheritance tax relief threatens family farms?

Bishop DINGMAN. Yes. I would like to see the legislation take a long view of family farms. And though I'm not an expert in taxes, there is a moral principle involved. And if the law favors a certain group of people, then we ought to change those laws.

I get the feeling that laws now help the larger farmers. It helps the corporations. Now, what we ought to do is to find a kind of policy on the part of our Government that will give special emphasis to family farmers. In other words, there ought to be a graduated tax—the larger the farms, the more the tax. That would keep us from getting such huge farms.

Senator JEPSEN. I'm puzzled at that thinking. I'm not totally sure that I understand your statements.

I have a personal interest in a family farm. My grandfather had it, my father had it, my brother and his sons farm it. We were approaching the point where, had we not done some planning when my dad died, we could have lost that family farm. I see a paradox when people say that the estate inheritance tax relief, which has finally been granted, threatens family farms. I have to admit, I was one of a number on the floor of the Senate trying to save family farms, saying, "We've got to have relief; we can't keep the land together; we've got to sell it for taxes. And who buys it? Big corporations."

I was puzzled at that statement this morning, and I just wanted to ask you to share your thoughts on it, too, and I appreciate your telling me.

Mr. Lamb, do you think Federal farm programs are reaching the farmers in greatest need of assistance?

Mr. LAMB. I think we've got to understand, sir, and I think many of us do, that it's almost an impossibility to develop and implement a farm program that will be equally fair to every farmer out there, simply because of the different size of the farm, the different indebtedness on those acres, and the different type of operation.

But I think that we can begin to develop programs—if we understand the complexities, we can begin to develop programs that will be more fair to a number of farmers. In other words, I think "The Time to Choose" is a pretty honest analysis of the economic climate that we've been living in, where almost every program that we have had has always benefitted the large more than it has the medium and small size. And I think these are simply things that we've got to recognize and address in future farm programs, to those very vital points.

If we're really serious about saving the small-family farmer, then we need to address farm programs in that direction.

Senator JEPSEN. I'd appreciate it if each panel member, starting on my left and going to the right, would answer yes or no to the following question.

Should the Federal Government require some sort of soil and water conservation plan in return for any aid extended by Government programs?

Mr. NOVAK. You'd like a simple yes or no? [Laughter.]

Senator JEPSEN. Well, if you, as a new farmer, are going to buy land and farm it, and you go to the Government for one of these long-term loans at a very low rate of interest, and part of this farmland has some very fragile soil, do you think it's fair that if the Government helps you start, you are asked what plans you have for conserving that soil?

Mr. NOVAK. Yes, I think it would be fair.

Senator JEPSEN. Well, now, let me go back and ask the question again. I'm not being an adversary, I'm not arguing either side. I'm doing this for the record, and I have been doing it for 5 years, nationwide. I'm trying to find out what's happened in the last 4 or 5 years with regard to soil conservation.

In other words, where you get a loan, or if you'd benefit from other programs, do you think that it should be required for recipi-

ents of any kind of Government agricultural aid, whether it's a loan or a commodity program, to initiate, where needed, good soil conservation practices?

Mr. NOVAK. If they're receiving Government assistance, it should be mandatory.

Senator JEPSEN. It should be mandatory?

Mr. NOVAK. Yes. The two should be tied together.

Senator JEPSEN. There should be some cross-compliance.

Mr. NOVAK. Yes, there should.

Senator JEPSEN. Are you sure of that? [Laughter.]

Mr. NOVAK. Yes.

Senator JEPSEN. OK. Thank you.

Mr. REAGAN. Mandatory.

Bishop DINGMAN. Yes, mandatory; because that's a function of Government. Give them incentives and make sure they do it. That's the Government's responsibility to the next generation.

Senator JEPSEN. There's a difference between incentives and mandatory, but you think—

Bishop DINGMAN. It must be mandatory.

Mr. LAMB. That's a very difficult question, Senator, to answer yes or no, because I'd have to know the stipulations, you know, that they're going to tie you to. I would say probably at this point, yes, without seeing the full, you know, impact of the programs and so forth.

Senator JEPSEN. OK. Thanks.

Do you have any final statement that you'd like to make for the record? I thank you for your testimony. It has been very interesting.

Mr. LAMB. Just one thing, Senator. I believe that a few months back, farmers from Marengo County asked for some funds for disaster payment, and I believe you had written a letter to Secretary Block in this regard. The grants were turned down, the request for loans for Marengo County were turned down, they were promised some FmHA money that didn't materialize. And I was just wondering, are you aware of any new development in this area? A number of the other farmers in the counties around them have received disaster aid, and Marengo County, for some reason, was left high and dry. And I just wondered if you had any latest information on that.

Senator JEPSEN. Well, I don't have anything to report to you right at this moment, but I'm glad you brought it up. If you'll just leave the names and addresses of the farmers that were involved in that with one of my aides, we'll contact you.

Mr. LAMB. Thank you, Senator.

Senator JEPSEN. Bishop Dingman.

Bishop DINGMAN. I just wish that we would have a policy at the national level, and I would certainly urge a broad reform of land ownership and use which would promote the opportunity for all people to own or responsibly control the land on which they live and labor.

Senator JEPSEN. Mr. Reagan.

Mr. REAGAN. Thank you for giving me the opportunity to be here, and I want to thank you publicly, as I have tried to personally and also through correspondence, for the assistance which you've given us in our department in our rocking and rolling,

sometimes, with our colleagues in the Federal Government. It's been effective, and we appreciate it.

Senator JEPSEN. Thank you, Mr. Novak.

Mr. NOVAK. I'd just like to add to my earlier statement, and that is, the programs that I was referring to as far as far as hoping to eliminate, by becoming self-sufficient, were the programs that gave financial aid and subsidies to farmers.

There are certain things, as you brought out later, such as soil conservation and such as the inheritance taxes, that the Government cannot just drop totally and leave to the farmers, because the Government in this case is the central organizing point and we need that help and assistance, as far as determining soil practices and inheritances taxes. And I think we can work together well with the Government on issues such as this, and I think through our education we are making things such as soil conservation a thing that all young farmers realize is important and will try to strive for in the future.

I would also like to say thank you for allowing me this opportunity to testify here before you.

Senator JEPSEN. Thank you, Mr. Novak.

I do have an answer for you, Mr. Lamb. The fact is that Marengo County did not meet the basic requirement of 30 percent disaster for the entire county that applies to everyone in your part of the country. Therefore, the USDA could not grant a waiver for this county. Even though some individual farmers in the county exceeded the 30 percent, overall the county did not, as I understand, even come close.

Mr. LAMB. Thank you, Senator.

Senator JEPSEN. Thank you very much.

Let's welcome Marion Coons, senior vice president and chief financial officer, Hy-Vee Food Stores.

How's your time schedule? You've got a panel all by yourself, Mr. Coons.

You already know what one of your questions is going to be.

Thank you for coming. I know tht you had to rearrange a lot of schedules to do so. In developing farm policy in these hearings in Washington and across the country, we've brought in people from the business and professional areas of our economy, as well as producers and processors.

So, as senior vice president of a very successful and well-known Iowa retail firm, you see agricultural production from one end to the other. I thank you for taking time to come.

Your prepared statement will be entered into the record, so you may proceed any way you wish.

**STATEMENT OF MARION M. COONS, SENIOR VICE PRESIDENT
AND CHIEF FINANCIAL OFFICER, HY-VEE FOOD STORES, INC.**

Mr. COONS. Well, do you want me to read a few of the remarks that I've got here?

Senator JEPSEN. Sure. Absolutely.

Mr. COONS. It might help set the stage for later.

You have asked that I make a writing of some personal observations about the current agricultural situation in the United States.

That is such a big subject that I don't feel qualified to make any very good observations. However, I have done some reminiscing and would like to provide some of my thoughts as a background.

It was my good fortune to grow up on a farm in Pottowattamie County near Council Bluffs, Iowa. In 1933, when I graduated from high school, economic conditions in the United States were at a very low ebb. Agriculture as an industry was in dire straits. Corn was selling at 10 cents a bushel, and hogs were 2½ cents a pound. I don't remember the price of beef. Banks were closing in great numbers, and the \$78 that I had saved, part of which to buy a graduation suit, went down the drain when the depository bank closed. Later they paid out 15 cents on the dollar.

A great hue and cry was raised that something must be done for the farmer. Congress, in its wisdom, passed legislation whereby acres were to be withdrawn from production and the farmers paid a subsidy on a formula that was determined. Little pigs were slaughtered and a subsidy paid in order to reduce the numbers and raise the price for those remaining.

Now, 50 years later, in 1983, agriculture is still in disarray. There is an increasing number of foreclosures by banks because farmers are unable to meet their obligations due to many factors, the biggest factor being that the price for the products they sell is not enough to pay for the cost of production. Interest rates have been so high that they can't make the interest payment, let alone payments on principal.

A lot of other factors are being pointed out as to why such a situation has come about when there have been various governmental programs over the last 50 years to help the farmers.

Also, it is my understanding that the U.S. Department of Agriculture has a higher ratio of employees to farmers than any other bureaucracy in Washington.

You've asked me to give an opinion as to the future for agriculture in the United States. In the face of rapidly increasing population throughout the world, it would seem only logical that eventually there should be a market for all agricultural products. However, the distribution system seems to break down because there are so many people who cannot pay for the products. Instead of cutting back on production and paying the farmer out of public funds to not raise something, it would seem more logical to spend money to promote the sale of products throughout the world, where people to be hungry. Surely, such a plan could be promulgated by those people in the Agriculture Department, working in conjunction with representatives of the people raising the product.

In my humble opinion, the best thing that Congress could do at this time would be to get its house in order, by bringing the cash income and cash outgo in balance. I think the imbalance over the past 50 years has been the greatest factor in the cause for inflation which, in turn, has had a detrimental effect on the cost of production for the farmer.

Fifty years ago, for example, income taxes were paid in the year following when the income was earned. We had the option of paying our income tax in full after the end of the calendar year, or paying in quarterly installments with one-quarter due when the

return was filed by March 15 and quarterly in June, September, and December.

Then Congress passed—which to me was one of the greatest frauds imposed upon the American people—the withholding tax, which was to get the money into the Government coffers more quickly.

There was a great hassle on the inception of the legislation about the collection of 2 years' taxes in 1 year, but that was finally resolved. The employer was required to pay the withholding tax to the Government at the end of each quarter. Then legislation was passed that it should be paid on a monthly basis. Then legislation was passed again requiring large employers to pay the withholding tax on a weekly basis.

So tax payments have been accelerated from being 1 year late, to practically on a current up-to-date basis. In spite of all that, the Government expenditures exceed Government income by such a large amount that it is beyond comprehension.

So in summation, it seems to me that the best thing Congress could do for agriculture at this time and in the future, would be to get its own house in order. This would be a giant step forward toward bringing stability into the marketplace, not only for agriculture but for all consumers as well.

Now you can fire the questions, Senator.

Senator JEPSEN. Mr. Coons, Commissioner Reagen said that there had been concern raised about the USDA's cheese and butter distribution program, and the USDA has reported a displacement factor that has affected commercial sales. As a response or as a result, USDA has cut down on the distribution levels of cheese and butter.

To the best of your knowledge, and in your opinion, do you think there was displacement in commercial sales when they were giving away cheese and butter under the program?

Mr. COONS. Well, I couldn't say specifically, but my opinion would be that there was no serious displacement on that. I think, without having it here in front of me, that our sales for cheese and butter probably was about on the same level as it has been. I couldn't say it has been adversely affected.

Senator JEPSEN. In your opinion, would you approve of the Secretary of Agriculture having more authority and more flexibility in adjusting or fine-tuning the target prices and loan rates for farm programs, rather than having them set by Congress?

Mr. COONS. I think one cook could do better than a whole lot of cooks messing in the pot.

Senator JEPSEN. Do you think the Federal Government will continue to play a direct role in agriculture in the long run?

Mr. COONS. Probably. They can't keep their hands off of it, I guess. Because I've observed over the last 50 or 60 years that when the farmer's in trouble, he runs to Washington and wants help. And when things are good, he wants everyone to leave him alone. And it seems to me there's been more trouble than there hasn't, so I think that the Government will continue to be involved, one way or the other. But it seems to me it would be more help, instead of these subsidy programs and taking money from the public coffers,

if more effort was made to sell the products. I think the Government there could be of great help, setting standards, and so on.

Goodness knows, there are plenty of people in this world who could use the products.

Senator JEPSEN. Finally, should the government require recipients of Federal farm programs—long-term, low-cost loans, commodity programs, or other programs—to implement soil conservation practices? or should conservation be voluntary?

Mr. COONS. No, sir. I think there should be requirements set up as to how the farmer who is farming the land is really acting as a trustee of that land, and I think he should, in some way or another, have to conform to that.

In that regard, I can say that my father probably was one of the leading proponents of soil conservation, clear back in the late thirties. He was one of the first farmers in Pottawattamie County—the record will show that—to do some terracing. And the Government came in and helped lay it out, leveled it, and so on, for him.

We farmed around the hills. It was kind of a standard joke for a year or two there, because he was one of the leaders—and that always happens, I guess, to the leader—but he would have half-mile rows in a quarter of a mile, for example, because he farmed around the hills. But when we'd have these washing rains, he didn't have these big gullies, and so on, develop. And I'd have to say that when he left that farm, it was in better shape than he went on it.

And I guess where I come from is why I think that we should have some sort of regulation on how it's going to be farmed.

Senator JEPSEN. Thank you. Do you have anything further?

Mr. COONS. Well, I can make a comment. Part of our problem is because of the cost that the farmer has today when he puts a crop of corn, a crop of soybeans and so on—and we all know what his costs are, and it gets up to \$100 an acre or more.

I'm on the Lucas County Compensation Board. We meet once a year, and we recommend salaries, and so on, for the elected officials. Well, a couple years ago we recommended that there be a slight increase. We had a public hearing at which time people could come in and object. And some friends of mine off the farm came in and did object, but one lady, in particular, was more articulate and got up to say that we couldn't afford this because it would raise the taxes, and already their cost for herbicide was up, the cost for seed was up, the cost for insecticide was up, fertilizer was up.

And finally, when she got through, I said, "Well, I'll tell you something. I grew up on a farm and my dad farmed with horses. He had eight horses. He fed those horses what he raised. He didn't have to pay out any cash for fuel. And the fertilizer he used on the farm, he took out of the barns and he took it out and spread it on those fields.

My mother raised chickens which laid eggs, and we took them to town and traded them for groceries.

We had a big garden. At the time, I thought it was a lot of work. We raised all kinds of vegetables, and my mother continuously was canning stuff and putting it in the cave, so we'd have it for the next winter.

We would kill a hog or a calf, and my mother canned it. We didn't have any way to keep it and freeze it, so we had to can it. So we did that.

We had an orchard where we had cherry trees, we had apple trees, we had peaches. And so, naturally, as we went through the season we were busy canning those. I pitted more cherries than I could look at, and peeled more peaches than anybody.

We had it. And we ate good. There was never anything—as I look back now, we were dirt poor, because when my dad—I know he sold one crop of pigs, and it took every dollar that came in to pay his property taxes. So we never had very much cash, but we were healthy and, as I said, we ate good.

We didn't have a lot of Government interference. We didn't have guys telling us what to do. Because, as I said, he was voluntarily out there trying to make his farm better than it was before.

Senator JEPSEN. That's a pretty good background. Do you think all that discipline and good training helped you become as successful as you are, as vice president and chief financial officer of a very successful company?

Mr. COONS. Well, I suppose so. But I wouldn't advocate that we go back. But it's been my observation, too, that now the farmer has to have—well, I guess I'll preface that a little bit.

When we cut our hay, we had neighbors come in that would help. We'd all work together, and we put up the hay. It took a lot of labor. We didn't have very many pieces of equipment, and so on. But today the farmer want to farm a lot of acres. He thinks he has to have that many in order to produce. Now, I understand that. So he does it himself, and he buys a lot of equipment to do it.

And so the manufacturers of the equipment this farmer uses—because the business is there; as the prices went up and inflation went up, the farmers would come out to buy these big tractors and other pieces of equipment—the manufacturer is then giving benefits to his help, and the hourly wage keeps going up, and the cost of the tractors is going up. And you know what's happening to the people in the business of manufacturing tractors today. Some of them are closed up and some of them are going bankrupt.

But a lot of this thing we have really brought on ourselves, as to what we want to do and what we want to try to do.

Senator JEPSEN. I thank you for your testimony, Mr. Coons, very much.

Now, we welcome Bob Pim, Iowa State Director, Farmers Home Administration; Arthur Buffington, president, Federal Land Bank; L. C. (Bud) Pike, president, Farmers State Bank, Grundy Center, Iowa, and president, Iowa Bankers Association, and the newest appointee to the State racing board; and Neal Conover, vice president, administration, Hayesville Savings Bank.

Would you come up, and then we're going to recess for 3 minutes.

[A brief recess was taken.]

Senator JEPSEN. Thank you for coming. Welcome. We will start with Bob Pim, Iowa State Director of Farmers Home Administration.

We are starting late, Bob, because there was a congregation outside that wanted to visit with us, and I said, "Well, when we're all

finished today, if you're still here, we'll visit and talk about farmers' home mortgage loans." However, we will talk about it now. Go ahead and make your statement, as you wish.

STATEMENT OF BOB PIM, IOWA STATE DIRECTOR, FARMERS HOME ADMINISTRATION

Mr. PIM. Thank you, Senator, for allowing me the opportunity to be here today, and thank you for letting the lender of last resort go first.

I've filed a prepared statement which I'm going to briefly summarize in just a few minutes.

I want to comment on Mr. Naylor, the Under Secretary of Agriculture—my boss—who testified before your committee in Washington earlier this month, and pointed out some very interesting things, one of which, as you pointed out, the expansion of Government lending in agriculture.

My statement begins that 47 years ago, when our agency started, and since that time we have loaned \$109 billion, about half of it in agriculture. Sixty-three percent of that has been loaned since October of 1976. This gives you some idea of what the tremendous growth of FmHA lending has been during the last few years.

In Iowa FmHA has a \$1.7-billion investment in Iowa. About half of it is in farming. Eleven thousand farm loans; we have about 22,000 housing loans.

FHA does business with approximately 10 percent of the farmers in Iowa and provides approximately 7 percent of the farm credit. The farm loans are handled in 60 county offices by about 91 loan officers. Along with the 11,000 farm borrowers, we handle about 22,000 housing loans, giving a caseload of about 33,000 borrowers to the 91 loan officers.

These 91 loan officers make the decisions. They're not alone, however. We have a three-person county committee that advises our county supervisors, along with our seven district and eight assistant directors with considerable experience in farm lending.

I am very supportive of this county office organization. This is the best possible solution to delivering Government programs, where the decisions are made at the local level. Of course, there's room for improvement, and we're working on that. Since January, we have hired 29 new loan officers and several clerical personnel, which will improve the delivery of our program.

We've heard a lot about delinquencies and foreclosures, but not everyone that's delinquent on their farm loan from Farmers Home is faced with foreclosure. Delinquency is defined as a borrower that is at least \$10 short or is 15 days late on payment.

Based upon the Administrator's policy issued last fall, it is our policy to continue our assistance, including additional loans, to most delinquent and problem borrowers. There will be a few casualties. More credit is not the answer for some families that have been delinquent for more than 1 year, and many have problems that cannot be corrected by more credit.

I have three basic recommendations that I would like to suggest, Senator.

First of all, I do not recommend a moratorium on FmHA loans now or in the future. It is not fair to the families that can pay. In addition, FmHA already has the authority to reschedule existing loans. Iowa has already rescheduled approximately 12 percent of their loans—or loans to 12 percent of their borrowers.

I've listed in my prepared statement the general requirements for rescheduling.

Borrowed funds are the lifeblood of production agriculture. The farm debt has expanded fourfold during the last 11 years. Credit needs will expand considerably between now and 1990. Future policies must encourage commercial credit from banks, farm credit systems, and insurance companies, to remain and expand their activity in farm lending. More credit from Government is not the only answer.

I encourage the Congress to continue to give attention to legislation that will encourage expansion of the guaranteed loan authority—this is my second recommendation—that will encourage the expansion of the guaranteed loan authority in farm lending for established farmers that are unable to continue with their present lender with the present arrangements they have. We have had limited appropriations in this area which have not been fully utilized in the past 2 years, because of high interest rates.

On the other end of the spectrum, as far as we're concerned, are limited resource farmers—and this is my third recommendation. Some farmers may face problems such as underdeveloped managerial ability, limited education, a low-producing farm due to lack of development and other related factors. This also includes the beginning farmer. Due to the complex nature of the problems facing this group, special help will be needed and more supervisory assistance will be required to assure reasonable prospects of success.

FmHA can and does provide supervised credit which can give longer terms at a lower interest rate than commercial credit. It also provides planning, recordkeeping, and other items such as that, which can help the borrower. In addition, many times there are serious management problems that need onfarm management assistance other than what FmHA can provide.

The best source of the answers to this farm management help is from the Cooperative Extension Service. I'm recommending that you take a look at this for our sake and for the family farm's sake, and provide additional funds so that the Cooperative Extension Service can provide this onfarm help to solve some of our complex farm management problems.

In summary, we would be very happy if everyone we worked with was successful. Certainly that's our objective. But we must realize that not everyone will be successful, and we must be able to deal with that also. It is the most difficult thing in the world to tell a family that we can't help them. It's easier and a lot more fun to say yes. But as responsible lenders, we realize that credit is not a substitute for income. More credit is not the answer for some farm families that do not have the ability to repay the loan.

We have continued with more than 98 percent of our borrowers in 1983. We will make some mistakes, but they will be on the lenient side. It is a privilege to help families become soundly established in farming and as homeowners. We consider it a real oppor-

PREPARED STATEMENT OF BOB PIM

From the beginning 47 years ago, nationally FmHA and its predecessor have loaned \$109 billion. Over 63% of this was loaned since October 1976. About 50% for farm purposes; 35% for housing; and 15% for community type projects. At the end of September 1982, nationally FmHA had 1,474,263 borrowers owing \$56.2 billion - approximately 270,000 of these farm borrowers.

In Iowa on March 31, 1983 there was a total FmHA investment of \$1,786,877,000. These were:

11,079 Farm Borrowers	\$850,287,000
22,188 Single Family Housing Borrowers	526,944,000
789 Rental Housing (13,120 apartment units)	191,469,000
Association Loans	218,176,000
254 Water	
201 Waste	
86 Community Facility	
50 Recreation	
12 Grazing	

FmHA does business with approximately 10% of the farmers in Iowa and provides approximately 7% of the farm credit. All farm loans and individual housing loans are handled in 60 county offices. Group type loans (rental housing and association loans) are managed from 7 District Office locations. The District Directors are also responsible for the supervision of all county offices.

On January 1, FmHA county offices were staffed with 91 county supervisors and assistant county supervisors. They are our loan officers that have the authority to deliver the credit programs. They handle approximately 33,000 individual cases. All but a very few of our loan officers have a college degree with at least 30 semester hours in Agriculture. They are responsible for making many tough decisions, and when it is negative, it is usually very unpopular. They are not alone, however.

We appreciate the help of our three-person county committee in each county. They are mostly active farmers and are very important to the successful delivery of our farm credit programs. They are an advisory committee and certify to the eligibility of the applicant and "the character, industry, experience and ability to carry out the proposed operation, and in our opinion, will honestly endeavor to carry out the required undertakings and obligations." They do not determine eligibility of housing loans.

In addition, our 7 District Directors and 8 Assistant District Directors work closely with county office personnel and all problem borrowers and complex applications. There is a total of 258 years experience in lending represented in these 15 people. Many times county and/or district office personnel discuss cases with our Farmer Programs staff at the state office. Negative decisions are not made at the whim of one person. There is also an appeal system whereby borrowers and applicants are given a hearing plus a review by individuals that were not directly involved in the original negative decision. For example, if a county committee rejects an application and the person desires an appeal, I appoint a hearing officer. A person on my staff reviews the hearing and if requested, a person on the National Administrator's staff reviews that decision.

I am very supportive of our county office personnel. It is best to have these decisions made at the local level. There is room for improvement and we are working to improve. Since January 1 we have hired 29 new loan officers. We have also hired several additional clerical personnel for county offices. This will improve the delivery of our program.

Trends in Farm Loan Delinquency

FmHA does not consider every borrower who is delinquent faced with foreclosure. Delinquency is defined as a loan or borrower that is at least \$10 short or 15 days late on payment.

	<u>Number of Loans</u>	<u>\$ Principal Outstanding</u>	<u>Number Delinquent</u>	<u>% Delinquent</u>
1/31/82	17,355	828,863,000	7208	41.5
9/30/82	17,833	880,002,000	2428	13.6
1/31/83	17,509	841,198,000	8007	45.0
3/31/83	17,453	850,287,000	5492	31.4

We expect the delinquency by September 30, 1983 to be in the 15% area.

Feeder livestock and production loans are usually all due after the first year, plus interest. Loans for machinery and livestock purchases are usually scheduled to be paid over a seven year period. Loans to purchase land are to be repaid over a 40-year period.

Based upon the Administrator's policy issued on October 8, 1982, it is our policy to continue our assistance, including additional loans to most delinquent and problem borrowers. There will be a few casualties. More credit is not the answer for some families that have been delinquent for more than one year and the problems cannot be corrected by more credit or more time.

The categories of farm loans are:

Operating Loans (OL)

Guaranteed Loan Limit	\$200,000
Insured Loan Limit	\$100,000

Funds can be used to pay for items needed for successful farming operation and debts can be refinanced under certain conditions. Limited to family farmers defined as one that a family can operate and manage with a reasonable amount of hired labor. We have had adequate funds during spring of 1983 and continue to have funds for eligible borrowers.

Insured -	
Iowa Allocation 1983	\$78,553,000
Used to Date	All but \$3,000,000
Interest Rate	10.25%
Limited Resource Rate	7.25%

Farm Ownership (FO)

Guaranteed Loan Limit	\$300,000
Insured Loan Limit	\$200,000

Funds can be used to buy, improve or enlarge farms, to construct, improve and repair homes and service buildings, refinance debts, and make other improvements to farm. It is limited to family size farms. Funds have had to be rationed and we are now out of funds until the beginning of the next fiscal year.

Insured -	
Iowa Allocation 1983	\$35,894,000
Used to Date	All committed
Interest Rate	10.75%
Limited Resource Rate	5.25%

Disaster Emergency (EM)

Available when designation is made by Secretary or President. Six counties have been designated eligible for emergency loans because of heavy rains April-July 1982. Borrowers that were indebted on December 15, 1979, can borrow annual operating funds during 1983 at 13.50%. There is no allocation for these funds.

I do not recommend a moratorium on FmHA loans now or in the future. It is not fair to the families that can pay. In addition, FmHA already has authority to reschedule existing loans.

All borrowers are expected to repay their loans according to planned repayment schedules. FmHA will work with borrowers to accomplish this objective if at all possible. However, circumstances may occur which will not permit borrowers to pay as scheduled. FmHA then has the authority to reschedule the loans. Iowa FmHA has rescheduled loans for 12% of our borrowers.

General requirements for loan rescheduling:

County Supervisors are authorized to approve, consolidate, reschedule and defer loans. When the County Supervisor determines that consolidation, rescheduling and deferral will assist in the orderly collection of the loan, the County Supervisor should take such action, provided:

- (1) Such action is not used in lieu of or to delay liquidation;
- (2) Such action is not taken to only remove a delinquency;
- (3) Such action is not taken to circumvent FmHA's graduation requirements;
- (4) The borrower's account is not being serviced by OGC or the U.S. Attorney, and there are no plans to have the account serviced by either of these offices in the near future;
- (5) The County Supervisor determines that the borrower is making satisfactory progress or will make satisfactory progress with revised repayment terms; and
- (6) The borrower is cooperating in servicing the account and is maintaining the security.

Borrowed funds are the lifeblood of production agriculture. The farm debt has expanded fourfold during the past 11 years. Credit needs will expand considerably by 1990. Future policies must encourage commercial credit from banks, farm credit system and insurance companies to remain and expand their activity in farm lending. More credit from government is not the only answer.

In regard to specific recommendations for FmHA, I would encourage the Congress to continue to give attention to legislation that will encourage expansion of the guaranteed loan authority in farm lending for the established farmer that is unable to continue on the same arrangement with their present lender. We have had limited appropriations in this area.

In 1981-1982, because of high interest rates, the guaranteed allocations were not fully utilized. Recently interest rates in the secondary markets have come down to a level that can make a guaranteed loan attractive to a farmer in some financial difficulty with his present lender.

Under this alternative, the lender makes the loan, and the government can guarantee a percentage (up to 90%). This process can make a substandard loan acceptable to the regulators. It also makes the secondary market available for the guaranteed portion of the loan, which can help provide funds for lending. It also allows banks with low lending limits to make larger loans since only the unguaranteed portion of a loan is charged against a bank's lending limit.

It also transfers some of the workload of FmHA to private lenders. Under this arrangement, the farmer doesn't have to cut his financial ties with his present lender. The commercial lenders and FmHA must work together to improve the delivery of this guaranteed concept along with providing for training and communications so that the credibility of the program can be improved on.

On the other end of the FmHA spectrum are limited resource farmers. Some farmers may face problems such as underdeveloped managerial ability, limited education, a low-producing farm due to lack of development and improved production practices or other related factors. This also includes beginning farmers. Due to the complex nature of the problems facing this group, special help will be needed and more supervisory assistance will be required to assure reasonable prospects of success.

FmHA can and does provide supervised credit which can give longer terms at a lower interest rate than commercial credit. It also provides planning, record keeping, annual analysis of farm operation, accounting for collateral and other borrower supervision. In addition, many times there are serious farm management problems that need "on the farm" assistance from other than FmHA sources.

The best source of help for some of the answers is the Cooperative Extension Service. They are not properly staffed to do all of this work. There have been pilot projects such as in Taylor-Union-Adams County where para-professionals have successfully worked with many FmHA borrowers. There is also a pilot project in Guthrie County where a professional is working with difficult farm management problems. There has also been a successful program developing in northwest Missouri.

We appreciate the fine cooperation we have received from the Iowa State Extension Service in the joint training of FmHA employees every year.

I feel it is important to many family farmers of Iowa that have unique management problems to be given a professional approach and the Cooperative Extension Service has the expertise. Additional funds need to be allocated to this effort and it needs to be given a higher priority.

FmHA priority has been with our existing borrowers. We also have provided assistance to new borrowers where realistic farm plans indicate the applicant has a reasonable chance for success. Maximum participation with other lenders has been encouraged.

We would be very happy if everyone we worked with was successful. Certainly that is our objective. But we must be realistic. Not everyone will be successful and we must deal with that also. It is the most difficult thing in the world to tell a family that we can't help them. It's easier and a lot more fun to say yes. But as responsible lenders, we realize that credit is not a substitute for income. More credit is not the answer for some farm families that do not have the ability to repay the loan.

We have continued with more than 98% of our borrowers in 1983. We will make some mistakes, but they will be on the lenient side. It is a privilege to help families become soundly established in farming or as home owners. We consider it a real opportunity to help families plan to meet their financial obligations.

Senator JEPSEN. Now, there was a gentleman who asked to testify after we've finished tonight, and he mentioned the fact that he hadn't heard anybody talk about schools and education in farm management today, so I said he would be welcome to testify about that. But you've alluded to the fact that some of the people who have applied for loans have historically shown a severe lack of the necessary financial management skills. But that doesn't mean that we shouldn't try to teach them how to handle these large amounts of money. I think that's what you're saying, or alluding to, and that the Cooperative Extension Service is there to do that.

Mr. PIM. Well, we in Farmers Home can certainly help them plan, analyze, and project. But there are many technical factors that a lender is not able to keep up on, and much of this information is available through the Cooperative Extension Service that is provided to me in group meetings. And all I'm suggesting to you—and I've discussed this with the Extension Service—is that if additional funding was available, that the expertise that is well known in the Extension Service could be provided, one on one, to the families that need to know this information, and that many times will not come to meetings that the Cooperative Extension Service would have. We need specialized help. I mentioned this in my prepared statement, but in order to be brief, I didn't go over this. But there are pilots working, one in Adams, Union, and Taylor Counties, if I'm correct, where paraprofessionals are working with Extension and with Farmers Home with limited resource borrowers. It's been going on for a considerable time, and it's been rather successful.

There's another pilot going on in Guthrie County, with professionals working with the limited resource farmers, and we think that's been somewhat successful. So we're asking you to take a look at this and, hopefully, help us and the Extension Service get the funds to expand this program, if you feel—

Senator JEPSEN. Could this be roughly described as sort of a management cross-compliance?

Mr. PIM. Well, I don't know about cross-compliance. I don't have any problem with the soil conservation cross-compliance. I do think that—well, I'd have to think about that a little bit.

Senator JEPSEN. If you were going to loan money—and the last time I checked, about 2 percent of farmers having trouble managing their money—possibly some financial management and some guidance and, as you say, technical direction might help some of them?

Mr. PIM. What I'm saying is that I think financial management can be taught in the classroom, and the principles are pretty broad and general. And after we get through this and apply it, it can be, I think, pretty general. Farm management problems are pretty specific, and, you know, they can be even so specific as maybe a herbicide, a specialized herbicide, that needs to be used. And, you know, soil types sometimes determine what herbicide you need to use. And that's just one small example of a problem that could be addressed if you had the expertise to go, one on one, to the farmer, spend some time in analyzing, looking at the situation.

Senator JEPSEN. Aren't those services available today? We can have our land tested any time we want to. We send samples to

Iowa State, and they can do all kinds of things. Aren't those available today to everyone?

Mr. PIM. The soil test is available, yes. I'm saying the advice—to go on the farm—is not.

Senator JEPSEN. Is not.

We now welcome Arthur Buffington, president, Federal Land Bank of Omaha. Please proceed as you wish.

**STATEMENT OF ARTHUR C. BUFFINGTON, PRESIDENT, FEDERAL
LAND BANK OF OMAHA**

Mr. BUFFINGTON. Thank you, Senator.

Rather than go through my entire paper, if it's all right with you, I'd just like to emphasize part of it.

Senator JEPSEN. Your prepared statement will be entered in the record in total, and we'd be very pleased if you would summarize it.

Mr. BUFFINGTON. You must be worn out.

Senator JEPSEN. No, not for personal reasons. It's just that we'll have more time to exchange ideas; that's all.

Mr. BUFFINGTON. Thank you.

I'd like to refer to the farmers and ranchers of my four States as the architects of American agriculture that we serve, because I'm proud of the tremendous job they've done in building the most productive agriculture that we have anywhere in the world. And I think that's important, because as they have been the architects, they've intended that this would be an asset for our society, not a problem.

And as I'm sure you're already aware from all the testimony today, farmers and ranchers are often influenced by political decisions around the world that they have no control over, but often thwarts the best kind of management that they can bring to their operations.

I would inject here that I think our farmers and ranchers are doing a tremendous job of coping in managing in a very stressful time. Here in your State, Senator, we have 40,000-plus loans outstanding. And at the end of May we had less than a thousand loans—894 loans—that were delinquent. I think that's tremendous testimony to the job that they're doing.

So I refer to such decisions made by foreign governments regarding spending policies, financial conditions, balance of payments, currency devaluation, inflation, interest rates, energy problems, and embargoes that affect farmers in a very deep and material way. And, of course, we sometimes have direct decisions by our own Government that have affected agriculture, and that's been brought out.

I raise this, though, because I think it's a testimony to the fact that there is a need for Government policy, long-term policy, in agriculture. And this is one of the reasons that I see a need. And whether or not we like it right now, agriculture is very much on the mid-stage of an international scenario that is so very important to the farmer and the rancher, but also to the United States, because agriculture has become this country's No. 1 economic resource. And I just remind you of the level of agriculture that we

have achieved, even at a time when the world has been in a depression.

So I think it's time that we decide just how U.S. agriculture is going to fit into this total picture, and how the economic productivity of agriculture can be marketed to the benefit of the entire society, as well as the farmers and ranchers. And I think it takes a long-term policy to accomplish that, to give the stability that farmers and ranchers must have if they are to do the job they're capable of doing. So we can minimize the problems that have been brought about, that they cannot control, through long-term policies that give them insights into the alternatives and options that they can pursue in their own management and in the building of their own agri-business.

I would also emphasize that, in looking at a long-term policy for agriculture, that we need encouragement from the Federal Government—not any kind of harassment. And some of those issues have been raised today, and there are others that could be raised.

I'd like to emphasize six basic concepts, though, that I believe are important to address in any long-term policy that is developed in the future of agriculture:

One is that American agriculture is the most productive and efficient agriculture in the world, and because of that, it has become a very vital kind of resource for this country's future. And we ought to help our society take advantage of it, not just for the sake of the farmers and ranchers, but the entire country.

Second, that American agriculture is so productive that it has far outstripped the needs of this country and, as I understand it, about a third of our production now and in the future, can be available for exports. That means that it's a very important economic asset in the balance of payments.

It is very difficult to operate this kind of an industry, with 2½ million units throughout the country, if they cannot operate at maximum efficiency, if they are only applying half of their capacity.

It's difficult to market the kinds of products that we have if the marketer cannot give assurance that we're going to be a dependable supplier.

As independent businesspersons, the American farmers should not be expected to subsidize the American consumer, nor consumers around the world.

In the same instance, I think that the independent businessperson that those farmers represent do not expect that subsidization will be coming from the U.S. Government over a long period of time. They're proud and independent people.

Any long-term policies I've been talking about here have to be designed to recognize the basic strengths of American agriculture, and that includes the agribusinesses that now exist, so that those strengths can be used as building blocks in the long run.

At the same time we need to understand the limitations and the weaknesses, so that they can be addressed and managed by the farmers, by the agri-businesses, by society, by the businesses interested in working with agriculture. And I think if we do that in an effective way that agriculture can benefit the total of our society and the farmers and ranchers alike.

[The prepared statement of Mr. Buffington follows:]

PREPARED STATEMENT OF ARTHUR C. BUFFINGTON

My name is A. C. Buffington. I am president of the Federal Land Bank of Omaha. I do not intend to forward farm policy recommendations today. Rather, I'm going to present some information which I think will be useful input as government leaders go about the development of farm policy for the future. I appreciate the opportunity to provide this background information and look forward to responding to questions as a member of the panel later during this hearing.

I regularly refer to farmers and ranchers and their families as the "architects of American agriculture"...I look at what they have built and I'm amazed and proud and I'm pleased to have been a small part of it. They have built the most productive agriculture this world has ever known. I also believe they have built these businesses so that they'll become even more dynamic in the future if given a fair chance to do so. It is true that it is a difficult time for many in agriculture...my organization finds that

about one of every six farmers and ranchers has serious financial problems today...the other 5 people are getting by, but for many of them the going is not easy.

Today, U.S. farmers and ranchers are affected by political decisions made in countries around the world and it seems that no matter how well these farmers and ranchers manage, their plans can be thwarted by things over which they have no control. I refer to foreign government financial conditions, balance of payments, currency devaluation, inflation, interest rates, energy shortages/ gluts, embargoes. There are other influences that could be listed. Of more direct impact are the decisions of our own government in many of these same areas.

It seems to me that the role of the U.S. government down the road should be to provide as stable a platform as possible from which this dynamic industry of agriculture can operate. The topic of the hearing..."Toward the Next Generation of Farm Policy"...is pointed in that direction of course and is very timely and of crucial importance to U.S. farmers, agribusinesses, and all of rural America. As I've already indicated, it goes further than that because, whether we like it or not, U.S. agriculture is on midstage in an international scenario.

So, it's time somebody decided how U.S. agriculture is going to fit into that total picture...the international picture. I'm convinced that the economic viability of U.S. agriculture will depend upon a solution being found as to how to market future U.S. agricultural production in an orderly and profitable way. What I'm saying is that I think we, as a nation, ought to be plotting a long-term course of action for agriculture... developing a master plan if you will for letting our agriculture perform on this unpredictable international stage while providing the ultimate benefit to the general public of our nation -- reasonably priced food. I think that while we're developing that master plan, it should be recognized that agriculture needs encouragement not harassment from the government. Also, I feel that international marketing of ag products must be improved, but that every effort should be made to keep politics out of the marketing scene.

Any such long-range plan for agriculture must be built on sound premises. Let me outline six such premises which I feel serve as a back-drop to this situation and which I think are basic to the future well being of U.S. agriculture.

1. American agriculture is the most productive and efficient agriculture in the world and will continue to be for decades to come.

2. American agriculture has a productive capacity far beyond this nation's food needs into the foreseeable future.
3. It is difficult to operate an industry at optimum efficiency when that industry is not utilizing at least the bulk of its capacity.
4. It is difficult to market staple products when the marketer cannot give assurances of being a dependable supplier.
5. As an independent businessperson, the American farmer should not be expected to subsidize the feeding of the U.S. consumer or other nations of the world.
6. As an independent businessperson, the U.S. farmer should not expect subsidization from the U.S. government over a period of time.

As you can see, if you accept all of these premises at one time, it paints a challenging picture for U.S. agriculture and points to the dire need for a long-range plan right now. As an agricultural lender, I can assure you that such a long-range solution is needed if U.S. agriculture is going to be given a chance to continue as the most efficient and effective producer of food in the world.

Such a long-term policy must be designed to capitalize on the strengths of American agriculture and at the same time lift up the present limits and weaknesses so they can be coped with and managed over time...all for the benefit of the total society, farmers and ranchers included.

Senator JEPSEN. Thank you, Mr. Buffington.

Our welcome to Mr. Pike, president, Farmers State Bank, Grundy Center, and president, Iowa Bankers Association. Please proceed as you wish.

STATEMENT OF L. C. PIKE, PRESIDENT, FARMERS STATE BANK, GRUNDY CENTER, IOWA, AND PRESIDENT, IOWA BANKERS ASSOCIATION

Mr. PIKE. Thank you for allowing us to come and appear before you.

At the outset—and I'm going to hurry this along as fast as I can, because we are beginning to dig into the Fourth of July weekend, and I'm sure a lot of people want to go home—I must state that last fall it became apparent that it was necessary to have a drastic change in our 1983 farm program for our Iowa farmers to survive economic disaster, although it was only a Band-Aid on a large wound.

The PIK program was born and provided that vehicle. Now it is important that the program be continued on a level that will be acceptable to our consumer—that is, the taxpaying public—and to our farm customer.

Prior to the PIK program, our basic crop, corn, was selling well below the cost of production at \$2 per bushel. This has now increased to about \$3 per bushel, or about a 50-percent gain. The PIK program enabled many of our young farmers and our highly leveraged farmers to stay in business for another year. And as we become examined by the regulatory people, most of us bankers are extremely grateful that that program came along to help us out.

It is reported that in 1983 the total farm program cost close to \$40 billion, and the PIK program cost almost \$10 billion. These figures are contributing to a Federal deficit that must be brought under control if we are to exist. Our Nation's agricultural sector needs to put its shoulder to the wheel and do its share to cut down on public spending. Therefore, cost reductions in the farm program must be implemented no later than 1984.

It is important that the good that's been accomplished by the PIK program be solidified. We do need a farm program to continue in 1984, and for enough years beyond until such time as the marketplace can take over. The mistakes made in the 1983 program need to be changed or corrected, to cut the costs of the Government programs. To accomplish this, I make the following recommendations:

No. 1, recommend that the 1984 program benefits be paid entirely in bushels—no cash payments. This will help eliminate the surplus in corn, and if we run out of surplus corn, then payment needs to be made in cash.

The feedgrain base on individual farms needs to be reevaluated, based on quality of land. It is unfair in the present program that the farms which have been entirely in corn for the past several years, that are the ones that helped create the surplus, are the ones that are deriving the greatest benefits from the 1983 program. Farms with good soil conservation practices down through the

years have been penalized. I recommend that the individual feed-grain base be tied to an overall CSR, corn suitability rating.

No. 2, for example, each farm should be indexed from 1 to 100. Of course, most farms in our area would run 85, 90, 95. A farm with, for instance, an 80 index based on the CSR index overall, would receive 80 bushels of PIK corn for each acre idled. Say corn is selling at \$3 bushel, that's \$240 he'd receive for idling that land.

No. 3, I recommend that ASC be prepared to advise farmers early in the year where they will take delivery of PIK bushels. This will allow the operator more of an opportunity to price his corn in advance in the marketplace. Just like somebody stated up here this afternoon, the farmer must plan. He must plan several months in advance. And these farm programs should be in place and ready to be part of their planning this fall. It really creates a problem to wait until January or February to announce a farm program. I think it's one of the most important things that can be done, is to put that farm program in place and let these farmers know early on, because, you know, farming isn't a day-to-day business. It takes a lot of planning.

No. 4, do not allow more than 25,000 bushels of corn to be paid to an individual owner or operator. Give some kind of a maximum figure fair consideration in studying a new program. We need to be sure that the new program is not an incentive for large operators. I agree with the people who said let's preserve the family farm. I'm not in favor of the big 5,000-, 10,000-acre operators in our community who do nothing but tear off buildings and destroy those family farms.

No. 5, if a county does not receive adequate sign-up for desired acreage reduction, allow reentry into the program on a bid basis for these remaining acres.

No. 6, I think this is important, and I sure don't like the last program because they allowed this: Should have within county compliance. We mean by that, do not allow combining of farms that are located, say, several counties apart, to pool their land and then put the poor land into the set-aside acres and keep the good land under continuous cropping. We have that happening in Grundy County, and it's the big operators who are doing it. They own or rent land in the southern tier of counties in this State, and put the whole farm in our county under corn. Now that's not going to help the surplus, and that's a big mistake in the present program. I think this continuous cropping and this type of abuse needs to be stopped.

No. 7, recognize that at the present time the strength of the dollar has hurt our export markets and sales overseas have been hurt. Foreign buyers can buy cheaper products like we sell, from other countries. I think we need to be sure that the Department of Agriculture and the Department of State continue to push foreign sales despite these problems. We need to insist that greater emphasis go in that direction. And, of course, we should never allow another embargo to be imposed that will hurt American agriculture. That was undoubtedly one of the worst blows that has ever been put on our farmers.

No. 8, our maximum tillage, caused by new and more powerful farm machinery, has brought about serious problems of erosion. All

you've got to do in our county is drive around the backroads and see how the soil is washed down the rows, and see the inches of soil that have washed down those rows, and the silt that has been deposited in the lowlands. It certainly has brought about a serious problem. Continued education and Department of Agriculture input should be provided to study and combat this problem. Fence-row-to-fence-row farming needs to be discouraged. I don't know how you'd turn the clock backward, but maybe we should return to some of the programs we used to practice. When I rode my pony about 30 years ago, we used a corn, corn, oats, and meadow rotation that was popular. And I wonder if we wouldn't be just as far ahead in some of our operations if we returned to that type of a practice.

No. 9, Government programs should not be an incentive program for our farmers, but should be programs devoted to helping the farmers over the rough spots so that they can survive until better times come along. They should only be of a temporary nature.

I've heard it said that the Government should become involved in subsidizing the livestock industry. Of course, in our case, that would be hogs and cattle. The marketplace can and does work in setting prices. Livestock farmers must learn—and they have learned—to sell these animals at handy weights and to control numbers raised and sold. Future contracts, if they're properly used, can be a good vehicle for the farmer in protecting himself on price.

The worst thing, in my opinion, that can happen to a livestock operator is to bring the industry under any type of price support program. It would be a program that would be impossible for the Government to properly administer.

Deregulation and less Government involvement is the order of the day in the banking industry and in many other industries. I hope that the same can be done with the farm programs, and the farmers can get back on their feet and make money so that they can operate freely in the marketplace without intervention.

Whatever program is adopted for 1984 should be voted in with this goal in mind.

Thank you for the opportunity to be heard.

Senator JEPSEN. Thank you, Mr. Pike.

We welcome Neal Conover, vice president, administration, Hayesville Savings Bank. Please proceed, as you wish.

STATEMENT OF C. B. (NEAL) CONOVER, VICE PRESIDENT, ADMINISTRATION, HAYESVILLE SAVINGS BANK, AND CHAIRMAN, IOWA BANKERS ASSOCIATION AGRICULTURE COMMITTEE

Mr. CONOVER. Thank you, Senator.

In addition to that, I am also chairman of the Iowa Bankers Association Agriculture Committee this year, so it's a pleasure to speak to you also on behalf of the agriculture committee of the association.

Hayesville, Iowa, is a town of 70 people, and we have a \$50 million bank there. I suppose from that standpoint, it's unique. But most of the banks in most of the communities in the State are unique for one reason or another.

I'm going to try to summarize my viewpoints from Hayesville, Iowa, by making two observations and one suggestion.

The first observation is that I believe the central theme in future farm policy should adhere to a statement that Benjamin Franklin made a long time ago; that "Anyone who give up opportunity for security deserves neither."

I don't believe that farmers around Hayesville, Iowa are willing to give up that opportunity, at least the majority of the farmers, for security. Of course, it's easier to recognize that principle in good times than it is in poor times.

The second observation is that farmers are applied economists. They'll take the theories and the macroeconomics home to the kitchen table and sit down with a pencil and paper. They'll test out the loopholes and the options, and they'll add into the total equation, new technology and the traditions of their farm. And then they decide what to plant on the back 40. And I admonish you and your committee to carefully personalize the nature of the farm program to the individual farmer so that they will be truly effective and beneficial.

Farmers learn from, adapt to, and change their businesses to take advantage of opportunities and conditions. So the challenge of the future farm policy, then, must be to delicately draw it so as to cause a desired result, as opposed to an undesired result.

Farmers around my part of the area learn more from what you don't tell them than from what you do tell them.

My recommendation centering around the farm credit question on how to best serve the credit needs of farmers in the future, are several-fold, and they're in my written testimony. However, let me center on one today that's a suggestion I've made through the American Bankers Association: That the Farmers Home Administration guaranteed loan program be structured, if that's called for, or changed, if that's necessary, to allow for an expanded use by private lenders, recognizing that the private source, the private sector, is a better provider of goods and services than the public sector. Therefore, under this proposal, the suggestion that I have, would be that the Farmers Home Administration guarantee operating capital and downpayment, so to speak, the amount of money necessary for farmers to procure land, machinery, and equipment to farm, or during restructuring phases of their operations. The private sector, then, would be charged with the responsibility of handling the collateralized debt on land, equipment, machinery, livestock, and so forth.

The cost of financing could be reduced in providing credit in this manner; perhaps only reduced to a subsidy on interest rates to commercial lenders. The bulk of farm financing then would be in the private sector, as has been the trend away from in recent times—the trend to public-sector financing. It's always been in the private sector in the past, and I see that as a point that would want to be emphasized in the future—that it remain in the private sector.

As I pointed out in my prepared statement, we have the best of economic problems—that of producing too much, as opposed to producing too little. I don't believe any future farm policy wants to

change problems. I think we want to have it consistent with Benjamin Franklin's position—at least in Hayesville, Iowa.

I appreciate the opportunity to share these observations, and I would be most happy to discuss any of these things in detail with you and entertain questions which you might have.

[The prepared statement of Mr. Conover follows:]

PREPARED STATEMENT OF C. B. (NEAL) CONOVER

I admit to my lack of credentials in addressing this committee. Therefore, I will defer to a person whom I feel is more qualified to address the central theme of future farm policy. I adhere to this philosophy. He said, "Anyone who gives up opportunity for security deserves neither." The person who said that was Benjamin Franklin.

In times of adversity it is difficult for any of us to recognize as much value in that statement as there is during times of prosperity. However, it is my opinion that in the future this concept must be at the center of any truly beneficial long term farm policy. In addition, I believe that concept needs to be held up as the measure by which all the facets of any specific farm programs are judged. Specific farm policy influences the future of agriculture. Farmers learn from, adapt to and change their businesses to take advantage of any opportunity or condition. The challenge of future farm policy must be to delicately draw it so as to cause a desired result. There are important precepts in this effort.

In the future, any new farm policy must, first of all, be fair. For instance, the PIK Program addressed the problems of the grain farmer differently from those of the livestock producer. The economic problems of the dairymen are treated very differently from the economic problems of the cow-calf

producer. Government intervention in foreign trade has unfairly burdened the American farmer with the cost of foreign policy. Future farm policy must be universally fair.

Secondly, American farm policy must be sociological as well as economical. The average farm today not only is the business unit, but the family residence and a part of the family heritage.

Any future farm policy must recognize that overproduction is a more favorable problem than under production. Therefore, incentive to increase efficiency and productivity must be maintained.

Farm assets, especially farm real estate, is not of a depreciable nature as plant and equipment is to most value-added (commercial) businesses. Therefore, incentives for conservation of soil and water resources needs to be a part of future farm policy.

The size of Federal subsidy to agriculture must be reduced. Our present Federal budget deficits and the future economic well-being of the country depend upon a balanced budget. Therefore, a long term look needs to be given to the amount of money that can be allocated for farm programs. (This

consistency in programing will also benefit the farm economy as opposed to the flip-flop crisis oriented policies. Farmers are very disappointed in the announcement hurry-ups and regular changes in present farm policies.)

The distribution of agricultural produce to those less fortunate and less productive needs to be addressed. In good conscience, how can we restrict production of food in our country while people in other countries go hungry?

Farm policy must be viewed in its aggregate. Farm policy goes beyond the farmstead. Farm policy affects farm suppliers, retailers in farm communities, agri-businesses and consumers. This precept must be addressed.

Lastly, the private sector must be considered the best provider of any and all goods and services. And it is on this point that I will concentrate my testimony today. But before I go further you might see from this list that, if Benjamin Franklin's words are to be adhered, the establishment of a new farm policy will represent a very big problem and a very big opportunity.

Farmers are "applied economists." They'll take the theories and the macro-economics home to the kitchen table and sit down with a pencil and paper. They'll test the

loopholes, the options and they'll add to the total equation new technology and the traditions of their farm before deciding what to plant on the back forty. I admonish you to consider carefully the personalized nature that all these precepts must put into before they will be truly effective and beneficial.

Today the farm credit industry is responding to the needs of agriculture and will by necessity continue to respond to those needs as affected by any future farm policy changes. The farm credit questions of the future then break down into several categories.

1. How much risk will be expected in future farm operations?
2. What form of farm business organization will our borrowers be organized into?
3. How much farm credit will be required?
4. Who will provide farm credit needs?

Let me address these questions then, in detail.

First, the amount of risk that a farmer is expected to take must be considered in relation to the collateral value of his total farm assets and farm earnings. Farm policy in the future will especially affect the earning capacity of farms. But in addition, as we have seen from the past farm policy, it will affect the asset values, especially of individual types of assets such as dairy cow herds, grassland farms, row crop farms, etc. Future farm policy, from the credit standpoint,

must consider the degree of risk that should normally be expected of a farm businessman and how that farm policy affects his collateral value as well as income. (Fairness and consistency precepts here.)

Second, the form that farm businesses take is greatly influenced by farm policy. If farm policy continues to reward large aggregate farms, such as the PIK Program has done, we will have implied to individual farmers that this is the direction they need to be going as well. Implied in this issue is whether it is the desire of our government to increase large aggregate farms or to reward smaller family farm operations. As I said earlier farmers are "applied economists". They learn as much from what they are not told as they do from what they are and will adapt to the government programs offered.

Third, the volume of farm credit will be determined to a great extent by farm policy. In addition, technological innovations and the general economy will contribute to this. We have seen in 1983 the affect that the PIK Program has had on the volume of borrowed dollars. Future farm policy must address whether the amount of credit in total is in keeping with the sound financing future of agriculture as well as the economic situation in general.

On the fourth issue of who will provide the farm credit needs of future agriculture I have strong feelings. It has seemed that in the past farm policy has not addressed this issue but, by policy (or lack of it) the Farmers Home Administration has become not just the lender of last resort but a principal provider of farm credit. In addition, the Small Business Administration through direct lending in disaster situations has been a provider of farm credit. Structural tax advantages for the Farm Credit Administration has established a competitive advantage in farm lending for them. If the private sector, that is banks and other commercial financing institutions, are to continue providing leadership in agricultural finance then the structural disadvantages and government competition must be eliminated in future policy. I have suggested to the National Farmer's Home Administration offices that they adopt a new posture in farm financing.

I have presented through the American Bankers Association a proposal that the Farmer's Home Administration be structured similarly to the Small Business Administration and thus guarantee operating credit repayable over a longer period of time for farmers beginning business or in a restructuring phase. This would greatly reduce the staffing requirements of the FHA and thus their operating costs and overhead. The cost of financing would be reduced to a subsidy on interest rates to commercial lenders and the bulk of farm financing would again be placed

in the private sector where, in my opinion, it has always belonged and will belong in the future. On this point I would be most pleased to visit in more detail with any of your staff.

Thank you for the opportunity to share these concepts with you. Let me re-emphasize the point that farmers are "applied economists" and any proposals for future farm policy should be analyzed from the individual farmers standpoint. Today we have the best economic problem, that of being too productive as opposed to having too little production. I don't believe future farm policy wants to influence a change of problems and I believe future farm policy wants to be consistent with Benjamin Franklin's position that "anyone who gives up opportunity for security deserves neither."

Thank you for this opportunity.

Senator JEPSEN. I have a couple of quick questions for you.

Do you believe that the availability of cheap credit can be viewed as the cause of farm problems, as it often has been?

Mr. CONOVER. You ask if cheap credit has been the source of farm problems in the past. I was given some advice when I first got into the banking business, and that was that with a liberal borrower, you need to be a conservative lender. The converse is true. With a conservative borrower, you can be a liberal lender. But I guess that promise still holds.

I mean cheap credit has been a problem for some people, and expensive credit has been a problem for other people. More at issue is the question of productivity. Have the people been able to use borrowed dollars at whatever rate of interest it cost to produce more than it cost?

Senator JEPSEN. Did you hear about the Rabobank this morning? What's your opinion of that?

Mr. CONOVER. I'm looking forward to that arrangement. Of course, in today's economy there are funds available in our bank, and I think in the majority of banks in Iowa, for lending to agriculture. The PIK program has reduced demand for money. So there are funds available.

Senator JEPSEN. That's coming up in the next panel.

Mr. CONOVER. However, I can remember back a few short years when there wasn't credit available, and a connection like Rabo-

bank would have been most important in providing credit to agriculture from the private sector.

Back to the other question that you asked, I believe the bankers and lenders in general have taken a little heat in the past for providing too much money at too low a cost, and they at times could have been more conservative. That may also be the case now. We may be taking too conservative an attitude.

So, I think we run the risk of inconsistency in the way we address farm credit from year to year.

Senator JEPSEN. One last question before I go to other members of the panel.

The Congress is currently considering emergency farm credit legislation that would generally prohibit farm foreclosure actions. Do you support the need of this legislation?

Mr. CONOVER. No, I do not. I think that risk of gain needs to be logically offset with risk of loss.

Senator JEPSEN. Mr. Buffington, as president of the Federal Land Bank, do you support this legislation?

Mr. BUFFINGTON. No. We certainly don't. In our organization, as you know, farmers have substantial investments in our organization. They pay the total cost of the borrowed money, and those who would come under that moratorium would mean the members who kept paying their payments would have to pick up the difference. That would be highly unfair and highly unlikely.

Senator JEPSEN. Then it would penalize the great majority who have kept up their payments.

Mr. BUFFINGTON. Senator, if I might add to that, we work very hard with all of the borrowers who fall into any kind of financial difficulty. We only have 125 loans under foreclosure at this time, and those are people that we've been working with a long time. And I pledge that we will minimize those numbers to the best of our ability.

Senator JEPSEN. How about as compared to 10 years ago? Just off the top of your head, can you tell me, is that about the same percentage?

Mr. BUFFINGTON. No, no. It's infinitely more. We always have had five or six foreclosures, but in the last 2 years it has gone from 20 or 30 to 125.

Senator JEPSEN. Mr. Pike, would you support the need for the legislation to prohibit farm foreclosures?

Mr. PIKE. No. I don't think it's necessary, with the availability of credit from the different organizations that we have today, and the willingness of each one of them to try and work with the borrowers.

Senator JEPSEN. Do any of you have any comments about the Rabobank?

Mr. BUFFINGTON. I would like to comment. I'm very much in favor of the program that Ed Tubbs and his committee have worked out, and I've written to him and told him so, for the simple reason that here in the Midwest particularly, and throughout rural America, we're in a capital deficit position, and we need all the abilities that we can develop to import capital for the future devel-

opment of rural America. An our organization has been the main pipeline in the past decades, and to have this kind of innovation come out I think is a good stroke, and I certainly applaud the Government, and we welcome the competition.

Senator JEPSEN. I'm very pleased—but not surprised—to hear it on the record.

Mr. BUFFINGTON. Senator, this particular vehicle gives us a much needed method of handling the intermediate credit. You know, most of our money that we get in is short-term, and we're foolish for taking short-term money and lending it for long. But using the Rabobank, that's a perfect vehicle for, say, helping finance a four-wheel-drive tractor, the hog confinement unit, that 5- to 7-year intermediate credit that is hard for us to come up with and that keeps them from going to the Federal Land Bank for the 30-year loan.

So it's a perfect vehicle to catch some of those short-term loans that we need, right in between.

Senator JEPSEN. It sounds as though it is a tool that's tailor-made to give better service.

Does anyone have a closing statement they'd like to make?

Mr. CONOVER. Again, just another observation in support of a couple of things that Mr. Pim brought out.

First of all, I've found in my banking career that all our problems are usually divided into bushel, acre, and pound problems, that there are efficiency problems on those farms where there are also dollar problems—even if it's cleaning out the water or adjusting the feeders. The need for some individualized attention in those cases is, a lot of times, a factor in whether that farmer can make it.

The second point, I believe the FHA in our area that I work with in our county has done an admirable job in maintaining a good balance between effective farm lending—leniency when it's necessary and strictness when it's necessary.

Senator JEPSEN. Thank you.

Allright. I have one last standard question to which I would like a quick yes or no.

Mr. PIM. I think I misinterpreted the question about cross-compliance. I definitely feel that many loans we would make or have made in the past or would make in the future need a followup type of expertise. And that's what I had in mind, is to follow up our decision to make a loan with some expertise.

Senator JEPSEN. Mr. Pike, do you have a final statement.

Mr. PIKE. None except thank you for coming out to the grassroots and getting the feelings from the people that you got today. I think it's wonderful that you would take the time to do this, and I think the best input that you can get is the grassroots input that you got today.

Senator JEPSEN. As you may know, some of my family live up in the Grundy County area, and my brother gives me grassroots input quite regularly, sometimes at 5:30 in the morning.

Mr. Buffington, do you have anything?

Mr. BUFFINGTON. I'd just like to emphasize, Senator, that from experience I've had working across our organization's operations in all parts of our county, I'm tremendously proud of the good man-

agement that exists in the mainstream of agriculture today. And given an opportunity to understand a good, long-term policy that provides that stable platform, they'll provide the kind of economic resources this country needs, both for internal operations and for the concerns that we have in the balance of payments.

Senator JEPSEN. Now, from left to right, starting with you, Mr. Buffington, answer this yes or no:

Should the Federal Government require some sort of soil and water conservation program or practices in return for payments or assistance by the Government, whether it be by loaning money or a commodity program, or whatever it may be?

Mr. BUFFINGTON. Yes.

Mr. PIKE. Yes.

Mr. PIM. Yes.

Mr. CONOVER. Yes.

Senator JEPSEN. Thank you, gentlemen, for taking your time.

We go now to panel 10, and welcome Ken Ludlow, executive director, Iowa Grain & Feed Dealers Association; John Whipple, president, Iowa Fertilizer & Chemical Association; Carrol Bolen, vice president, Pioneer Hi-Bred International; Dwain Boeck, president, Iowa Farm Equipment Association, Inc., and Eric Thompson, president, MFA, Inc., Columbia, Mo.

Well, Mr. Ludlow, since I've known you the longest and best—good to see you again—I'll ask you to lead off. Ken Ludlow, executive director, Iowa Grain & Feed Association. You've been around for a long time.

Please proceed, as you wish.

STATEMENT OF KENNETH L. LUDLOW, EXECUTIVE DIRECTOR, IOWA GRAIN & FEED ASSOCIATION, DES MOINES, IOWA

Mr. LUDLOW. Thank you, Senator. I appreciate very much the opportunity of being here.

I think, as an opening comment on "Toward the Next Generation of Farm Policy," I should piggyback on Maurice VanNstrand's editorial, where he advocated returning to open pollinated corn. Well, I could go him one better, to ban the sale of tractors to farmers. In this way, we'd increase the horse-breeding industry, we'd also raise oats back to its predominant position, we'd raise hay back there and, as an added factor, we'd get some soil conservation and we'd have our own fertilizer supply.

Well, anyway, my short remarks will be directed more to the logistics side of the farm-price-support programs.

First, I would vigorously defend Commodity's recent guaranteed storage program, which received some adverse publicity here in Iowa. The prime logistic problem facing Commodity is insurance of adequate storage capacity to carry out farm programs, and without this storage capacity, we don't have farm programs.

Even after the forfeitures began last summer, the best figures provided by county offices still showed a shortfall of 25 to 35 million bushels of commercial space, and these shortfall figures that were made public were in part a result of a serious lag in Kansas City's computerization processing of inventory. And a farm facility loan program that in 2 years added over 61 million bushels of

added storage to Iowa, and a big chunk of this occurred in 1982. And then—and this is an important one—a last-minute decision of many elevators to accept Commodity forfeitures when they'd told the county offices that they would take a lesser amount.

Now, as a result, we did have adequate storage—this is guaranteed storage, by the way—and in many small elevators is going to mean the difference between, really, survival during the 1983-84 marketing year.

Now, of primary importance in farm programs—and I'm speaking now from an industry standpoint—is advance planning. With programs such as PIK, it is imperative that farmers and the trade know programs as quickly as possible.

The present PIK program has and will have serious economic consequences for our country elevators, particularly the smaller ones. After a long dry period of reduced corn marketing, we saw farm input sales plummet to all-time lows, with projected fall inputs down in the same proportion. New crop storage and drying opportunities for elevators are virtually nil. This space is being taken by PIK, and we're told, of course, that this will mean better merchandising opportunities that will make up for this. But this isn't true. What we'll see is our elevators will see a first-blush income from merchandising after October 15, but in the 5 months following, we will see storage—except for the guaranteed inventories—drop dramatically, with no opportunity to fill its empty space. Free grain merchandising at this time is not projected to fill this gap; 1984 and 1985 will be real crisis years for the country elevator system.

We commend members of the House, and certainly Senator Jepsen on the Senate side, for sponsoring pending legislation for low-percentage emergency rural business loans. Shortly after it was announced that this might be a possibility, we were flooded, a few days after our newsletter went out to the industry, wondering where to apply for these loans, what is the percentage rate, and so forth. The situation, I think, is that tight at this time.

We have various things boring in on us as far as this farm logistics and farm program is concerned, such as the present campaign of railroads to eliminate or drastically reduce the use of leased grain-hopper cars by country elevators. Our elevators went on the line because they couldn't get equipment, and some of them signed contracts of \$500 a month per car, or more. Now we haven't had any grain to merchandise, and some of those higher priced contracts are reaching the end of the road, and they're not being renewed. We have many, many elevators out there that are being bled to death by this, and now the railroads are stepping in and severely curtailing their use. Burlington Northern has been in the forefront. Chicago North Western is fairly close to them.

Now, as to farm policy itself, the Iowa Grain & Feed Association has never made public opinions on farm programs nor tried to influence their structure. We consider our position as one which makes the program work. But—and here comes the big but—You made the remark that I've been around quite a while. I have been associated with agriculture all my life, growing up in a small rural town, on a truly small family farm, that would warm the cockles of Bishop Dingman's heart. I've been 30 years in the industry, and

I simply can't resist this one opportunity to comment on farm program restructuring.

Mark Twain said he'd never met a man he didn't like. I've never met anyone connected with agriculture that didn't have a farm program, and 90 percent of the people who aren't in agriculture have a farm program. The simplest one I ever heard was my neighbor, who said, "Why don't you sell the stuff."

Well, as we look back over 50 years of farm programs, the old saying that there is nothing new under the sun applies. Our basic system is unchanged. We have made variations and variations on variations, and have coined new names for old names, and repainted the horse a dozen times.

Probably the one substantive change was to eliminate the bin sites and place the surplus on the farm where it belongs, while extending the life of the farmer's title to the grain. But we still go through the same monstrous, unwieldy method of Government periodically acquiring title and assuming inventory storage obligations and eventual disposal responsibilities. And you know, when you come right down to it, our present reserve system is nothing more than a glorification of our former bin site system.

I would personally like to see farm organizations and blue-ribbon agricultural people assembled to investigate a different approach to farm prosperity which I believe lies in a free market and which was proved in the seventies, for both the farmer and the grain handling community.

My thoughts aren't new in this area. They've been bandied around for a long time. But I think it's time to give it some more serious thought.

I think we should retain the structure of the Commodity Credit Corporation and participation requirement by farmers, but adopt a true target-price concept, or deficiency-payment program, as you may, but let the grain be freely marketed with Commodity Credit Corporation having authority to enter the marketplace as cash buyers, to build reserves and/or enhance prices.

The final cost of this would, in my estimation, be much less than our present cumbersome system which, I suspect, was engineered in the 1930's, because that generation felt that you should receive something if money is not repaid, even though what you receive nets much less than the original loan, and you additionally pyramid and escalate costs on top of the original loss.

Now, I personally have been and will be a staunch supporter of the farm program—that is, the price enhancement program. And you might go back to what I said and say, "Well, aren't we doing essentially the same thing now?" But the problem is that it's a rigid and inflexible system that locks surpluses into rigid price structures which all you have to do is pick up the monthly sales list issued by the Department of Agriculture, and look at the formulas that are necessary to purchase corn for unrestricted use.

Now, I would hope that the farmers and farm organizations would study or restudy a free-market program that can be more rewarding to the farm community and responsive economically and in volume to the food needs of the world and, as a previous speaker noted, to our domestic population also, and also to our competitive position in the world.

In conclusion, the trade needs advance notification, more advance and ongoing planning with Government, and a realization by Government of the economic impact of programs on the agri-business community, because our community, the country elevator, is going the way of the family farm. And I think percentagewise, I think it is probably ahead of the so-called family farm, whatever that is.

Above all, we must—at practically any cost—stay clear of international embargoes, the last of which was absolutely disastrous to family farms.

I would say one thing that's a little paradox to me, too. I've been around agriculture for these many years. I want to see surpluses trimmed. But when we do trim them, such as occurred in 1 or 2 years, I'm very uncomfortable. I think we have to maintain some type of—call it a reserve—program. The idea of not having enough feedgrains and not having enough cerealgrains to meet needs or to not feel comfortable with as a carryover, is a grim specter and one which you see the rest of the world in now.

So with that, again I thank you for the opportunity to make these comments.

Senator JEPSEN. All right, Mr. Ludlow. I expect that if we ever got into a situation in this country where we depended on a foreign source for supplying food for our people, we'd have some very serious problems. Just think what our national security problems would be then. That's why planning long-term programs, including soil and water conservation, stewardship, and all other aspects of farming are so important.

Mr. LUDLOW. I fully agree with you. I think we can look at the Soviet Union right now and one of the strongest reins, I believe, on their expansionist policy is based on their lack of agricultural capability. If I were looking for something to worry about, I'd worry about the Soviet Union reaching out toward that agricultural capability.

Senator JEPSEN. Thank you.

Next, we welcome John Whipple, president, Iowa Fertilizer & Chemical Association. Please proceed, as you wish.

STATEMENT OF JOHN WHIPPLE, PRESIDENT, IOWA FERTILIZER & CHEMICAL ASSOCIATION

Mr. WHIPPLE. Thank you, Senator.

I am an independent fertilizer and agricultural chemical dealer, and as a supplier of crop-production inputs, farm policy has a large impact on my business. The latest attempt at reducing production in hopes of bolstering the farm economy and reducing feedgrain surpluses has been devastating to the fertilizer and chemical industry. In reality, it is questionable as to what extent production will be reduced and at what cost.

The large amount of surplus grain which will be returned to the marketplace this fall must be consumed in order for this program to be effective. It is imperative that we secure foreign markets for the disposition of this surplus grain in order to relieve price pressure on our domestic grain market.

The United States must establish that we are again a reliable supplier of feedgrains to the world market. Past performance has forced foreign buyers to seek other suppliers at the expense of American agriculture. We must not continue to use grain for diplomatic purposes, with agriculture ultimately absorbing the cost.

The existing grain reserve program, while establishing a floor under feedgrain prices, has also established a ceiling. At present, the corn market has risen to within a few cents of the trigger price for release of grain reserve corn, but buyers are well aware that triggering this release would put large quantities of corn into the market, driving the price down. This program has served to destroy a competitive market for feedgrains.

Any future programs for the reduction of crop acreage should have acreage allotments considered on the productive capacity of the land, not on past cropping history. By using past cropping history and established yields, an individual who has abused his land and may not have practiced good soil conservation is rewarded, while a grower who raises livestock or has seeded forages on land not well suited to row crop production is penalized. Under the existing program, acreage removed from production was not required to have a cover crop seeded if crop residue was left on the fields. With this approach, we missed a tremendous opportunity to practice good soil conservation by seeding forage crops on these acres and reducing soil erosion.

It appears that most farm programs, including the current payment-in-kind program, have been very shortsighted, put into effect to solve a short-term problem, with little regard for long-term effects. In some cases, these programs have created larger problems at a very high cost to the American taxpayer.

An alternative to the past approach to farm programs would be the establishment of an agriculture policy board, made up of growers, Members of Congress, and businesspeople associated with agriculture, for the purpose of setting both long-range and short-term agriculture policy. The terms of this board could be staggered to eliminate political control and must have power to implement recommendations. This would eliminate farm programs from being political in nature, as well as giving a long-range approach to farm policy.

Thank you for the opportunity to appear before this committee.

Senator JEPSEN. Thank you, Mr. Wipple.

Our welcome to Carrol Bolen, vice president, Pioneer Hi-Bred International, Inc. Please proceed, as you wish.

STATEMENT OF CARROL BOLEN, VICE PRESIDENT, PIONEER HI-BRED INTERNATIONAL, INC.

Mr. BOLEN. Mr. Chairman, I, too, want to thank you for providing the forum for giving us the opportunity to talk about a comprehensive farm policy for this country. I believe that input from the broad spectrum of those of us associated with and dependent upon agriculture is an essential first step if America's farm policy is to be more than a series of independent and uncoordinated farm programs.

In my opinion, there are two tests which must be applied to any future farm program. First, does it reflect an understanding of the changes that have taken place in agriculture in the last 50 years—that there is a new interdependence among the various constituent groups in agriculture and in agricultural programs?

And second, does it recognize the relationship between the agricultural sector and the rest of our economy—that farm policy can and does have as profound an effect on our society as fiscal or foreign policy decisions?

Seventy years ago, 35 percent of our population lived on farms. Today less than 3 percent of our people are farmers. However, those figures present a distorted view of the agricultural sector as it exists today.

Let's look at farming in the broader context of food production. The production, processing, and distribution of food accounts for 18 percent of this country's total production of goods and services. The largest component of that 18 percent is off-farm labor, of course, but they are nevertheless affected by farm policy. Many people in the chain may not recognize that they are a part of agriculture, but some do, like the deckhands on the barges of our inland waterway system who aren't working because corn exports are down by several hundred million bushels, or the unemployed steelworker whose mill used to supply steel to the farm equipment industry.

That's the new agriculture and the people in it need to understand their stake in a healthy farm economy.

But just as importantly, this country's new agricultural policy must take into account the fact that farm programs don't just affect 2.5 percent of the population. Today's farmer is not the independent, diversified producer of 50 years ago when our present farm policy was formulated. He relies a great deal on those of us who supply the inputs necessary to produce his crops. He is also dependent on those who process, distribute, and market his production.

But we also rely heavily on him.

I believe it is terrible nearsighted, both politically and economically, to look at the declining on farm-population as if it were reflective of a declining industry.

My other concern is that this country's leaders begin to recognize that farm policy decisions can't be made in a vacuum. It has become increasingly apparent to me that our food and agricultural policies are often being made by the Departments of State and Defense and by the Office of Management and Budget, without even consulting Agriculture. This is partly because the Department of Agriculture is seen as having a political constituency of only 2.5 percent of the population, and partly because many of our policymakers don't understand the fundamental influence of agriculture on the other segments of our economy.

Let me offer one quick example. When the grain embargo was selected as the most appropriate sanction we could employ to protest the Soviet Government's incursion into Afghanistan, I'm sure it was partly because the administration felt that the economic effect here at home would be localized. Forget for a moment that it had no ghost of a chance of bringing about the desired results. Look instead at the economic chain reaction it precipitated.

I haven't time to detail it for you here, but it's been thoroughly analyzed and documented, as I'm sure you're aware. However, consider this postscript: Would the 1983 farm program, with its \$21 billion public pricetag, have been necessary if the grain embargo idea had been discarded as ill advised? Would the economic difficulties of the past 2 years in nearly every segment of our economy have been as pronounced without the decision to selectively embargo the production of only 2.5 percent of our population?

Mr. Chairman, I have not proposed specific programs to deal with specific problems in agriculture today. In my opinion, farm programs that react to situations in which we find ourselves are no substitute for a comprehensive and consistent farm policy. What I'm saying is that we currently have farm programs, but we don't have farm policy.

I am suggesting instead that this distinguished committee take the lead in developing such a policy, one that recognizes the changes in the agricultural sector and acknowledges the important role of each segment; one that encourages the entry of young farmers into the system by allowing them a reasonable return on their labor and capital; one that supports investment in research at our colleges and universities; one that recognizes that we are dependent upon foreign markets for many of our products, but that our customers generally have other alternatives; one that makes provisions for the vagaries of nature and the inevitable shortages and surpluses that can cause such violent fluctuations in market prices. And, most important, a policy that reflects an understanding of the basic importance of a healthy agriculture to the total economic well-being of society as a whole.

Thank you.

Senator JEPSEN. Thank you very much, Mr. Bolen.

We welcome Dwain Boeck, president, Iowa Farm Equipment Association, Inc. Please proceed, as you wish.

STATEMENT OF DWAIN BOECK, PRESIDENT, IOWA FARM EQUIPMENT ASSOCIATION, INC.

Mr. BOECK. Thank you very much for taking your time to be here today. I appreciate the fact that you've come out here to get our views on this.

I deal with a lot of farmers and I think I do represent a lot of their problems, as well as the farm-implement dealers all along the line.

There are several topics that I want to discuss today that concern the implement dealers and the farmers. It is my belief, as representative of the Iowa-Nebraska Farm Equipment Association, that the prime problems of our industry and the American farmer lie in three areas. They are interest rates, energy costs, and equipment replacement prices. We appreciate the fact that interest rates have come down some, but not enough to ease the constant drain of funds that it puts on us.

The farmers and implement dealers have to maintain inventories in parts alone in the hundreds of thousands of dollars. The interest cost on the use of \$100,000 for 7 years at today's rate is \$100,000.

This figure is correct if you are able to pay the interest when it is due. If you let it compound, it would be \$100,000 in 5 years time.

As I understand it, the reason for the high interest rates is the competition for money. The farmers and the small-business proprietor are prime competitors in borrowing money, as well as the Federal Government. The Government's continual practice of overspending has created a real monster in the money market and, in turn, is creating an unbearable burden on farmers and small-business people.

I'll skip a little bit here.

Let us think for a minute that a farmer has come into my dealership and purchased a tractor for \$30,000. If he goes to the bank or the Farmers Home Administration and borrows that amount of money at 14 percent interest, and finances the tractor for 5 years, which is about the average finance period at this time, the price of that tractor will be increased by \$12,711. And in such a high-price bracket, it is almost impossible to ever trade it off again. Therefore, this high interest rate restricts the farmer to the point that he cannot replace machinery when it becomes necessary.

I realize that modern farm equipment is a marvel in technology, but when you stop to consider that equipment to operate a modern-day farm costs nearly half as much as the value of the land, you get some idea as to the farmer's plight when it comes time to purchase replacement equipment.

The reasons for high prices on replacement equipment are many and varied. I realize that the manufacturer is plagued with energy costs and interest costs, the same as me and my colleagues, the implement dealers and the American farmer.

But there is one other item that has not been covered, and that is the high cost of labor. This includes all employees, from the president of the company down to the janitor. We in the Midwest find it hard to understand why the president of a corporation is worth \$200,000 or more a year, or why an assembly man on the line is worth \$150 to \$200 per day, when the farmer isn't even allowed a break-even point for his crops or livestock. These labor costs are all reflected in the cost of the finished product.

Another point I want to discuss is the allocation of Government funds. The Federal Government has drastically reduced the amount of money for Farmers Home Administration. This has greatly restricted the farmer and his progress. Farmers used to be able to go into their local FmHA and borrow whatever amount of money they needed to buy farm equipment, or to just operate. But now there is not enough money to go around.

If it is true that more than an adequate amount of Government money is going into low-rent housing, and so forth, I believe we farming-oriented businesses should oppose it. The shortage of funds at the FmHA level has forced many farmers to take bankruptcy or, on a less severe scale, to reduce their farming operations greatly.

In plain, simple words, it takes a lot of money today to operate a farm or business—a lot of money. But we have to see to it that our farmers and agri-business people are supplied with what they need. They are our food source, not only here in America, but in a vast portion of the world.

One of the Nation's biggest problems is energy, whether it be to produce machinery, food, or the heating and cooling of our homes. The cost of energy in any form has gone completely out of sight. The cost of the fuel for tractors, as one example, is many times higher than it was 4 years ago.

How many increases has our utilities taken in the past 4 years? We all hate every one of these increases, yet there seems to be nothing that we can do to prevent it. Why?

We are asked to produce more efficiently, but still everything we have to buy goes higher. Why?

Oil prices went down, but gas prices went up. Why?

The people of this country need some answers, and they need them now.

The accelerated increases in the cost of energy are creating unexpected additional expenses for the American farmer. Nothing happens on the modern-day farm that does not require purchase of energy—drying grain, moving grain, plowing, planting, harvesting. Therefore, the imbalance of energy costs to product return is a prime factor in the problems facing the American farmer today.

I believe the Federal Government should take a close look at energy companies to determine their needs for the rates they are charging, and evaluate their position in the problems now facing the farmer.

Our Government needs to provide more markets for our products. This is a very difficult task, when production costs are so high here and so cheap in other countries. Here again, the cost of the fuel enters into the picture.

Fuel, or energy if you will, is expensive, labor unions have wages at a very high level, and it costs a lot to produce whatever we want or need. So other countries buy from countries that can produce whatever they want or need, because those countries can produce it for less.

The United States is on a very high pedestal, and we have earned that position. But in order to maintain that position, we must find ways to bring our cost of production down.

Our welfare programs today have become mostly a money give-away type of thing. Some days I am even envious of the people who get these gifts of money from our Government. I have worked hard for my business, and in today's economy, when I am actually going backward, I wish I could actually receive one of these gifts from our Government. Could we not give these people cornmeal, flour, and other staple crops and let them produce from there, rather than the money, which must become a temptation to buy what is wanted instead of what is needed? The money has to come from taxes, and if it could be channeled through our surplus crops, would not this be better?

I would like to see more money allocated to the Small Business Administration. With the economy picture the way it is today, many small businesses are struggling to keep the door open. They need help. Could there be a program through the Small Business Administration for some kind of low-rate financing to implement dealers? This type of program has been done in the past with our farmers, and although there was some abuse of the program, it was very beneficial.

Every time a small business is forced to close it makes the big business that much stronger and so he can control better. We do not need this big business control. As each small business is forced to close, that means that more people are out of work, and rarely can the big business absorb any of these people and put them to work.

The payment-in-kind program has done nothing for the implement dealers this year. When the farmer set aside such a great portion of his land as idle acres, he realized that he did not have to replace the two or three pieces of equipment he had planned to replace.

This need to not replace equipment affected all areas of our equipment inventories, from plowing to harvest, leaving each dealer with a great overload of inventory.

Also, the PIK program has done nothing for the livestock farmer, who feeds all the grain he raises, and generally has to buy more. They need help, too.

The program has helped the grain farmer, especially the ones who farm many, many acres. It has also raised the price of cash rent for the landlords. The person getting the biggest advantage from the PIK is the banker.

In closing, I would like to repeat that the high cost of energy—gas, oil, diesel fuel, and electricity—fertilizer, herbicides, insecticides, the excessive cost of operating capital, and the high cost of production of replacement equipment, are speedily causing the small businessman and the American farmer to become an endangered species.

These are all things that need to be considered in our movement toward the next generation of farm policy.

Thank you.

[The prepared statement of Mr. Boeck follows:]

PREPARED STATEMENT OF DWAIN BOECK

It is a pleasure for me to be here today with you. It pleases me to find that our people who represent us in Washington are concerned about the status of business in our state of Iowa and that they want to do something about it.

There are several topics that I want to discuss today that concerns the implement dealers. It is my belief as representative of the Iowa-Nebraska Farm Equipment Association that the prime problems of our industry and the American farmer lie in three areas. They are interest rates, energy costs, and equipment replacement prices. We appreciate the fact that interest rates have come down some, but not enough to ease the constant drain of funds that it puts on us.

We implement dealers have to maintain inventories in parts alone in the hundreds of thousands of dollars. The interest cost on the use of \$100,000.00 for seven years at today's rate is \$100,000.00. This figure is correct if you are able to pay the interest when it is due. If you are unable to pay the interest and it compounds on you, this figure is lowered to approximately five years. As I understand it, the reason for the high interest rates is the competition for money. The farmer and the small business proprietor are prime competitors in borrowing money as well as the federal government. The government's continual practice of overspending has created a real monster in the money market and in turn is creating an unbearable burden on farmers and small business people.

Almost every implement dealer has to borrow every penny to finance all of his inventories. This has to be done through his bank or his respective company and with the total dollars of his

inventory being so high he is forced to pay interest with every dollar that comes in the door. Believe me, I am speaking from experience when I say there is no profit and indeed our businesses are losing money every day. This interest drain takes everything and still there is the expense of actually running the business. This constant drain of interest is gone forever--you cannot recover it. When machines are transferred between dealers, no way will the other dealer pick up this expense and certainly you cannot add it to the price of the machine when you sell it. I repeat--it is gone forever. This certainly doesn't paint a very pretty picture, does it?

Let us think for a minute that farmer has come into my dealership and he has purchased a tractor for \$30,000.00. If he then goes to the bank or the Farmers Home Administration and borrows that amount of money at 14% interest and finances the tractor for five years, which is about the average finance period, the increase in the price of that tractor will be \$12,711.00. This puts the tractor at a figure of \$42,711.00 and is in such a high price bracket that it is almost impossible to ever trade it off again. Therefore, this high interest rate restricts the farmer to the point that he cannot replace machinery when it becomes necessary. I realize that modern farm equipment is a marvel in technology, but when you stop to consider that equipment to operate a modern day farm costs nearly half as much as the value of the land, you get some idea as to the farmers plight when it comes time to purchase replacement equipment. The reasons for high prices on replacement equipment are many and varied. I realize that the manufacturer is

plagued with energy costs and interest costs, the same as me and my colleagues, the implement dealers and the American farmer. But there is one other item that has not been covered and that is the high cost of labor. This includes all employees from the president of the company down to the janitor. We in the mid-west find it hard to understand why the president of a corporation is worth \$200,000.00 or more a year or why an assembly man on the line is worth \$150.00 to \$200.00 per day when the farmer isn't even allowed a break-even point for his crops or livestock. These labor costs are all reflected in the cost of the finished product.

Another point I want to discuss is the allocation of government funds. The federal government has drastically reduced the amount of money for Farmers Home Administrations. This has greatly restricted the farmer and his progress. Farmers used to be able to go into their local F.H.A. and borrow whatever amount of money they needed to buy farmers, equipment, or just to operate, but now there is not enough money to go around. If it is true that more than an adequate amount of government money is going into low-rent housing, etc., I believe we farming oriented businesses should oppose. The shortage of funds at the F.H.A. level has forced many farmers to take bankruptcy or on a less severe scale to reduce their farming operations greatly. In plain simple words, it takes a lot of money today to operate a farm or business--a lot of money. But we have to see to it that our farmers and agri-business people are supplied with what they need. They are our food source, not only here in America, but in a vast portion of the world.

One of the nations biggest problems is energy--whether it be to produce machinery, food, or the heating and cooling of our homes. The cost of energy in any form has gone completely out of sight. The cost of the fuel for tractors, as one example, is many times higher than it was four years ago. How many increases has our utilities taken in the past four years? We all hate every one of these increases yet there seems to be nothing that we can do to prevent it. Why? We are asked to produce more efficiently but still everything we have to buy goes higher. Why? Oil prices went down but gas prices went up. Why? The people of this country need some answers----now.

The accelerated increases in the cost of energy are creating unexpected additional expenses for the American farmer. Nothing happens on the modern day farm that does not require purchased energy--drying grain, moving grain, plowing, planting, harvesting. Therefore, the inbalance of energy costs to product return is a prime factor in the problems facing the American farmer today. I believe the Federal Government should take a close look at energy companies to determine their needs for the rates they are charging and evaluate their position in the problems now facing the farmer.

Our government needs to provide more markets for our products. This is a very difficult task when production costs are so high here and so cheap in other countries. Here again the cost of the fuel enters into the picture. Fuel, or energy if you will, is expensive, labor unions have wages at a very high level and it costs a lot to produce whatever it is we want or need. So other countries buy from countries that can produce whatever it is we want or need. So other

countries buy from countries that can produce for less. The United States is on a very high pedestal and we have earned the position. But in order to maintain that position, we must find ways to bring our cost of production down [and at the same time help our competitive countries to produce at a higher level equal to ours.]

Our welfare programs today have become mostly a money give-away type of thing. Some days I am even envious of the people who get these gifts of money from our government. I have worked hard for my business and in today's economy when I am actually going backward, I wish I could actually receive one of these gifts from our government. Could we not give these people cornmeal, flour and other staple crops and let them produce from there rather than the money which must become a temptation to buy what is wanted instead of what is needed? The money has to come from taxes and if it could be channeled through our surplus crops, would not this be better?

I would like to see more money allocated to the Small Business Administration. With the economy picture the way it is today, many small businesses are struggling to keep the door open. They need help. Could there be a program through S.B.A. for some kind of low rate financing to implement dealers? This type of program has been done in the past with our farmers and although there was some abuse of the program, it was very beneficial. Every time a small business is forced to close it makes the big business that much stronger and so he can control better. We do not need this big business control. As each small business is forced to close, that means that more people are out of work and rarely can the big business absorb any of these people and put them to work.

The Payment In Kind program has done nothing for the implement dealers this year. When the farmer set aside such a great portion of his land as idle acres, he realized that he did not have to replace the two or three pieces of equipment he had planned to replace. This need to not replace equipment affected all areas of our equipment inventories from plowing to harvest leaving each dealer with a great overload of inventory. Also, the PIK program has done nothing for the livestock farmer who feeds all the grain he raised and generally has to buy more. They need help too. The program has helped the grain farmer especially the ones who farm many, many acres. It has also raised the price of cash rent for the landlords. The person getting the biggest advantage from the PIK is the banker.

In closing I would like to repeat that the high cost of energy: gas, oil, diesel fuel, electricity, fertilizer, herbicides, insecticides--the excessive cost of operating capital and the high cost of production of replacement equipment are speedily causing the small businessman and the American farmer to become an endangered species. These are all things that need to be considered in our movement toward the next generation of farm policy.

Senator JEPSEN. Thank you.

We welcome Eric Thompson, president, MFA Inc., Columbia, Mo. Please proceed, as you wish.

**STATEMENT OF ERIC THOMPSON, PRESIDENT, MFA INC.,
COLUMBIA, MO.**

Mr. THOMPSON. Senator, thank you very much for the invitation to attend. We have always heard, in Missouri, that you're a determined and tenacious individual, and I think you are, if you're willing to take this punishment on the Fourth of July weekend, especially to allow a Missourian to come North and say his piece.

I guess my attitude, when I look at past farm programs, is a little bit like the Kamikaze pilot in World War II, who flew his 39 missions. He was involved, but he wasn't committed. And that's the way I think we've been running our farm programs.

I want to eliminate much of the written text and get quickly to the point.

One of the things I'll spend a lot of time speaking to you on, sir, is the word "strategy," which implies direction, scope, parameters—which is definitely different than our farm program, which has concrete measures, short run in nature.

So today, sir, I would like to spend my time on that, but briefly, I think it is important to let you know that we, in MFA Inc., are an agri-business cooperative and—I'll make an enemy out of the gentleman on my left—we have about a million dollars' worth of sales. Our sales have decreased this year by \$250 million, we've closed 37 facilities, and we expect to have a loss. Our employees have all taken pay decreases. This is going to be one tough year.

As we look at the program ahead, I think we face a tremendous opportunity, sir; an opportunity to launch ourselves into a new arena in agriculture. And that can be done, I think, through exploring a bit what I'm talking about—strategy.

As your committee reviews the agricultural situation, it seems to us that two factors must be kept clearly in mind: The inadequacy of past programs and the international character of agricultural markets. But before any of us—you, sir, in Congress, or any of us in society itself—can act on developing policies and specific legislation for the future, a basic ingredient is absolutely essential. That ingredient is a long-range, national agricultural strategy, one that transcends administrations, and take into account the two broad factors that I've recited, as well as others, affecting our national well-being.

I might add this: As far as I can ascertain, we in the United States are one of the very few major agricultural countries in the world that does not have a coherent national agricultural strategy, a plan for use of agricultural resources.

The concept of a national strategy does not preclude the development of farm laws or programs to take into account the philosophy of a particular administration and the economic considerations currently facing that administration.

But, Mr. Chairman, a long-range policy or strategy would enforce some continuity in the specific actions of all administrations. In

turn, this would enhance our ability to cope with one of the major difficulties affecting our industry—price instability or volatility.

In developing a national strategy, we in agriculture must realize that such a strategy cannot be developed, approved or implemented in terms of we farmers alone, farm organizations alone, or agribusiness alone. Along with farmers, we must include processors, marketers, distributors, and financiers.

But we must go one step further and include a cross section of our American society, including Members of Congress, the administration, consumers, labor, and other groups.

I have suggested, sir, in a letter to President Reagan, this type of a national commission to establish a strategy for obtaining the maximum benefits from our agricultural industry, can and should be formed.

Mr. Chairman, I should like to suggest that your committee could become a basic starting point for a national dialog on a strategy for agriculture.

There are several broad approaches to dealing with the food and agricultural situation in the United States. One is a policy of cutting back our production, of retrenchment, of pulling in horns, holding down the industry of agriculture to a level equal to existing domestic and international requirements. The PIK program is a perfect example of this.

The second is a forward-looking, dynamic, growth-oriented, demand-enhancing, market-developing, food-using approach, in its basic thrust.

I would hope that a national commission for a long-range strategy for agriculture would seriously consider which of these two approaches—that of market retreat or of market attack—can best serve our national and international goals.

There is no reason why such a commission could not determine a strategic direction for American agriculture to head, while defining the parameters by answering certain key questions.

Sir, we need to know what game we're playing and what's the rules. How long is the football field, how wide is it, and what are the penalties?

These questions are such as:

Will agriculture output continue to be used as a foreign policy tool? If so, how?

What percentage of the world agriculture export market does not only our industry need to capture, but this Nation, for economic and political reasons?

What countries are to be targeted for agricultural export development?

What is the most effective role for private business and Government as a team to take in market development and sales consumption?

Based on our military and domestic needs, what is an acceptable surplus of retained food and fiber?

What is a valid definition of "the family farm"?

If the American taxpayer was not having to subsidize agriculture producers through traditional farm programs, what would be a fair percentage of disposable income to be spent for food?

The development of and a commitment to a national strategy which answers these questions—of which I'm sure there are more—would provide the direction and parameters so desperately needed for our vital industry to become the greatest economic contributor to the return of a vibrant and healthy national economy.

In other words, how can we use the productivity, the efficiency, the infrastructure, the industry, of the people engaged in agriculture to the benefit not only of those in agriculture, but of our entire Nation? This Nation's economy desperately needs a healthy agriculture industry—an industry that is a positive economic contributor, not a user.

I think it's fair to conclude that the policies over the last several decades have not utilized that opportunity to the maximum—again, due largely to the fact that we did not have a national strategy for maximizing the benefits from the industry and to this industry, and for this country.

May I leave this committee with that final thought and encourage you to help set the stages so that our industry and our Nation can move ahead in a well-thought-out, strategic plan?

Do we as farmers, as agribusiness leaders, as farm organization leaders, as union leaders, as consumers, and as Congressmen have the courage and intelligence to reason together, to give and to take, and thereby to develop a guiding national agriculture strategy that is both complete yet simplistic and, most of all, workable?

It's critical at this time in our national and individual lives that we take this type of sensible, business-like approach.

Thank you, Mr. Chairman, for the opportunity to meet with you.

Senator JEPSEN. Well, I thank you. I'm glad you came up from Missouri. Your message has thought and enthusiasm.

[The prepared statement of Mr. Thompson, together with an attached letter, follows:]

PREPARED STATEMENT OF ERIC THOMPSON

Mr. Chairman and Members of the Committee, I appreciate the opportunity to testify at this hearing and I commend the Joint Economic Committee for setting out to obtain the thinking of farmers and farm organization leaders, academic and political leaders. This effort can help a great deal to lay the groundwork for what is very likely the most critical period for the food and fiber industry in the history of the United States.

MFA Incorporated is an Agribusiness Cooperative doing business in Missouri and the peripheral areas of the surrounding states. Our cooperative has annual sales volume of \$1 billion in fertilizer, seed, feed, ag chemicals, farm supplies and grain with a voting membership of 89,000 farmers and an associate membership of 51,000. I am the President and CEO of MFA Incorporated

We of MFA have tried to stand back from this nation's largest industry and make a broad assessment of the economic factors that affect this industry and thereby arrive at a clear and significant recommendation for food and agriculture policy. This testimony will attempt briefly to summarize the situation as we see it and provide some specific suggestions for the decade or decades ahead

for this most important of industries -- agriculture.

Two factors, one historic and one current, set the stage for any long range view of American agriculture, its needs and opportunities, in the years ahead. The first of these is the record -- the record of success or failure -- in the government's well intended effort over the past fifty years to assist in obtaining a reasonable supply demand balance and fair levels of income for producers. In this effort, our performance has been a dismal failure.

One has to conclude that as far as agricultural producers are concerned, government's efforts, while providing some short term and temporary respite from severe economic conditions in agriculture, have not been successful in meeting the needs of this largest industry and now the most critical industry relative to economic recovery in the United States. We have repeatedly experienced periods of surpluses followed by shortages or near shortages, with wide fluctuations in farm prices and incomes. These fluctuations have too often favored the down side with the result that the farm economy generally has been greatly depressed relative to other sectors. For example, industrial prices are approximately four times the level of 1950 whereas farm prices are not much more than double the 1950 level.

At the same time the Federal programs, while not fully serving the needs of the American farmer, have also failed other elements of the society. We hear a growing crescendo of complaints that the costs have become unacceptable. Certainly, in the past several years

these costs have climbed to very high levels. The PIK program in particular, while providing some short term relief for some farmers, will prove to be expensive to the tune of \$25 - 30 billion and thereby another burden on the national budget. In addition, this program has had an extremely severe impact on those industries, those businesses, and those cooperatives that supply the inputs so vital to American agriculture. These agribusinesses and especially cooperatives, because of their historic tendency to be highly leveraged, cannot continue for long to bear the burden of a PIK program. In MFA specifically, we will witness by fiscal year end a sales decline of \$250 million, most of which has occurred in the last four months, resulting in the termination of 32% of our employees and like most regional cooperatives a certain year end financial loss.

The second major factor that we in MFA believe must be a basic consideration in any review of farm policy is the dramatic change that has taken place in farm product markets. In short, Mr. Chairman, U. S. agriculture has become truly internationalized. Our markets have shifted, and shifted dramatically. Just ten years ago we sold less than \$10 billion of agricultural commodities abroad. Last year, even with a sharp decline in sales, we sold some \$40 billion in farm products abroad -- a 400 percent increase in just ten years. Sales abroad account for the produce from two-fifths of our harvested cropland and provide at least 25 percent of farmers' income. In certain commodities -- wheat as an example -- export markets take almost two-thirds of total U. S. production.

More important to the subject of this hearing is the fact that the future growth in demand for the products of our farms and ranches is likely to be much more concentrated in new markets overseas than in the needs of our own people here in the United States. Moreover, we are told by experts in government, universities, and business that within that overseas market the greatest potential for demand growth lies in the rapidly developing, newly emerging, growing countries of South and Central America, Africa, the Mediterranean basin, and South Asia. In short, while the redevelopment of the Russian market is of great importance, it is the markets mentioned above that American farmers must depend upon to assure a return of growth and strength in demand for our products.

Mr. Chairman, as your committee reviews the agricultural situation domestically and world-wide, it seems to us that these two factors must be kept clearly in mind -- the inadequacy of past programs and the international character of agriculture's market. But before we in agriculture, the administrators in the government, the legislators in the Congress can act on developing policies and specific legislation for the future, a basic ingredient is absolutely essential. That ingredient is a long-range, national agricultural strategy -- one that transcends administrations, and takes into account the two broad factors that I have recited as well as others affecting our national well being. I might add that as far as I can ascertain, we in the United States are one of the very few major agricultural countries in the world that does not have a coherent national agricultural strategy -- a plan for the use of its agricultural resources.

The concept of a national strategy would not preclude the development of farm laws or programs to take into account the philosophy of a particular administration and the economic considerations currently facing that administration. But, Mr. Chairman, a long-range policy or strategy would enforce some continuity in the specific actions of all administrations. And in turn, this would enhance our ability to cope with one of the major difficulties affecting our industry, which is price instability or volatility. In developing a national strategy, we in agriculture must realize that such a strategy cannot be developed, approved, or implemented in terms of farmers alone, farm organizations alone, or agribusiness alone. Along with farmers, we must include processors, marketers, distributors and financiers. But we must go further to involve a cross-section of our economic society, including members of Congress, the Administration, consumers, labor and other groups.

I have suggested, in a letter to President Reagan, this type of a national commission to establish a strategy for obtaining the maximum benefits from our agricultural industry. And I have been advised that this suggestion was one of the key factors in leading to the convening of the agriculture summit meeting that Secretary Block is planning for early July. However, Mr. Chairman, I must point out that while the summit meeting has very important goals and can contribute in some part to the development of a national consensus on a long-range strategy for American agriculture for food and fiber, the strategy itself should be adopted first, with specific programs,

policies, administrative actions, and organization to follow. Secondly, a national agricultural strategy can never gain acceptance by any administration or Congress if developed internally within agriculture industry.

Mr. Chairman, I should like to conclude with one other recommendation to your committee which could become a basic starting point for a national dialogue on a strategy for agriculture. There are several possible approaches, broad approaches, to dealing with the food and agricultural situation in the United States. One is a policy of cutting back our production, of retrenchment, of pulling in horns, holding down the industry of agriculture to a level equal to existing domestic and international requirements. The PIK program is a perfect example of that type of retrenching, inward looking, shrinking approach to American agriculture and it will prove to be a disaster.

I think that most full time commercial farmers in our market area feel that a different approach would lead to a better long range policy -- an approach that is forward looking, dynamic, growth-oriented, demand enhancing, market developing, food using, in its basic thrust. These are the same farmers who now realize that our loan rate level is precisely one of the major reasons that we are the world's grain storehouse with sales potential of only the last resort. I would hope that a national commission for a long range strategy for agriculture would seriously consider which of these two approaches, that of market retreat or market attack, can best serve our national

and international goals. There is no reason why such a commission could not determine a strategic direction for American agriculture to head while defining the parameters by answering certain key questions:

- 1) Will agriculture output continue to be used as a foreign policy tool? If so, how? (Certainly not embargos.)
- 2) What percentage of the world agriculture export market does not only our industry need to capture but this nation for economic and political reasons?
- 3) What countries are to be targeted for agriculture export development?
- 4) What is the most effective role for private business and government as a team to take in market development and sales consumption?
- 5) Based on our military and domestic needs, what is an acceptable surplus of retained food and fiber?
- 6) If the American taxpayer was not having to subsidize agriculture producers through traditional farm programs, what would be a fair percentage of disposable income to be spent for food? (Certainly not 14 - 16½%.)

The development of and a commitment to a national strategy which answers these questions, of which I'm sure there are more, would provide the direction and parameters so desperately needed for our vital industry to become the greatest economic contributor to the return of a vibrant and healthy national economy.

I would hope that your committee, as you draw conclusions from your many hours of hearings, would likewise consider which of these approaches best fits the needs of our nation for the rest of this century. In other words, how can we use the productivity, the efficiency, the infra-structure, the industry, of the people engaged in agriculture to the benefit not only of those in agriculture but of our entire nation? This nation's economy desperately needs a healthy agriculture industry -- an industry that is a positive economic contributor, not a user. I think it's fair to conclude that the policies over the last several decades have not utilized that opportunity to the maximum -- again, due largely to the fact that we did not have a national strategy for maximizing the benefits from this industry and to this industry, and for this country.

May I leave this committee with that final thought and encourage you to help set the stage so that our industry and our nation can move ahead in a well thought-out, strategic plan. Do we as farmers, as agribusiness leaders, as farm organization leaders, as union leaders, as consumers, and as congressman have the courage and intelligence to reason together, to give and to take, and thereby to develop a guiding national agriculture strategy that is both complete yet simplistic and most of all workable? It's critical at this time in our national and individual lives that we take this type of sensible, business-like approach. Thank you, Mr. Chairman, for the opportunity to meet with you.



Office of the President

201 South Seventh Street
Columbia, Missouri 65201
314-876-5430

Eric G. Thompson

March 18, 1983

The Honorable Ronald Reagan
President of the United States
The White House
Washington, D.C. 20500

Dear Mr. President:

There is more news daily about the nation's economic recovery. That's good news for all Americans. Recovery is important, but more important is the economic stability recovery promises.

The American farmer historically has had an important influence on the economic development and stability of this country. There is real danger, however, that the economic stability and growth of our farm sector might instead become stagnant unless this nation comes to grips with its chronic "farm problem."

Every farmer knows that Congress only develops "farm programs" to deal with "farm problems." The history of U.S. farm programs is replete with moderate successes and dismal failures. These erratic government programs that first throttle and then encourage America's agricultural production have been major contributors to the economic uncertainty of farming. The past, however, is hardly an adequate prescription for the future of America's largest industry and most significant contributor to our balance of trade.

The world has a right to be concerned about the future of the American farmer, and the American farmer must be more than a passive bystander when talk turns to the future of agricultural production.

Farmers know that Congress is becoming increasingly concerned about the frequency, complexity, and cost of farm programs whose only purpose, it seems, is to move us from one farm crisis to the next. Mixed with that concern is a growing consensus among both rural and urban representatives that the voluntary programs of the past no longer provide adequate solutions for the future agricultural needs of this nation.

It seems clear that now is the time for action. The next 18 months, while PIK is in effect, and before national elections, provide a unique opportunity to create a comprehensive national agricultural strategy that would have support from the leadership of both parties. While the opportunity for significant progress is great, history has clearly shown that the obstacles we face in trying to reach a consensus on farm-related issues are even greater. We must not allow these obstacles to deter us.

If we allow history to repeat itself in this instance, Mr. President, future generations will surely look back and know that the economic and humanitarian impact of our self-inflicted paralysis was greater than any market-shattering embargo or prolonged period of adverse weather.

The problem and the question we face are one: Voluntary programs have not worked and the American farmer does not want government-mandated production controls. What reasonable and effective alternatives then, would farmers prefer?

That, Mr. President, is the purpose of this letter. I believe we have a unique opportunity to articulate a production and marketing strategy for American agriculture. This is an opportune time for you to appoint a study group composed of representatives from farm organizations, consumer groups, agribusiness and the federal government to look beyond our current dilemma and into the future role of American agriculture.

What I propose is a bold undertaking but I believe that the American farmer has both the desire and the courage to plan a strategy for the future. I believe that the leadership of our farm organizations, commodity groups and agribusinesses are finally willing to commit themselves to the planning process so desperately needed by American agriculture.

The results of such an effort would certainly justify the hard work that this endeavor would require. Imagine for a moment a national agricultural strategy that would transcend administrations and remove agriculture from the realm of political football and fiscal nightmare. Imagine a well-conceived export development program upon which agricultural producers and foreign buyers could rely. Imagine a program of stability and growth that considers the needs of an increasingly hungry world.

Bold ideas? Yes. Impossible dreams? Certainly not. The American farmer is ready to talk about the future. He is ready to define his marketplace and produce to serve it in the future.

All the elements are in place, Mr. President. I respectfully request that you provide the innovative and bold leadership that would make such a dream a reality. The American farmer awaits your response.

Sincerely,



Eric G. Thompson
President
MFA Incorporated

db

Senator JEPSEN. Based on what a lot of people have said today and previously, and, as Marion Coons said very effectively, we've got to tell our story. We've got to move out, identify our problems and work together and get everybody involved in a long-range program. Agriculture is everybody's business.

Last week I wrote a letter to President Reagan, recommending creation of a national commission on agricultural competitiveness. I think I'll go back to the drawing board and expand that now.

Three weeks ago the President announced a National Commission on Industrial Competitiveness.

But we've got to keep the momentum going.

I would ask this question of the panel, and ask for some brief answers:

Is the payment-in-kind program effective and equitable, and do you think it should be extended through 1984? We'll start with you, Mr. Whipple.

Mr. WHIPPLE. I don't necessarily think it has been fair and equitable with regard to livestock producers versus grain producers, and I don't think it should be extended through 1984 at the level that it was allowed to go forward this year.

Senator JEPSEN. Mr. Ludlow.

Mr. LUDLOW. I think basically it was equitable. I feel some serious thought has to be put into the program if it is extended through the next year, and whether it goes as far, I don't think it can or should go as far as it did.

Senator JEPSEN. Mr. Thompson.

Mr. THOMPSON. If equitable in the short run, in the technical sense, as applied to farmers, yes, I think it is. If equitable to the entire agricultural industry over the long run, I think it would prove to be a disaster.

Senator JEPSEN. Mr. Boeck.

Mr. BOECK. I think it did a lot of good this year for the farmers—the ones that could participate. It shortchanged some of the smaller farmers and the livestock farmers. And I think if they go on with it, they're going to have to put a few more teeth in it.

I don't think one year of the PIK program is going to satisfy all our problems. We're going to have to go a little longer range, maybe 3 or 4 years down the line, before we can get it straightened out.

But I think they'll have to make it more even and equitable overall.

Senator JEPSEN. Mr. Bolen.

Mr. BOLEN. The PIK program was very well supported, I think, throughout all of agribusiness, and our company is very much for that effort. If the problem is not solved—which we think it is not—we continue to support some type of a program for getting supply and demand in balance, whether it's the PIK program or some other program. The problem is not solved.

Senator JEPSEN. Before my final question, does anyone have a final statement?

Mr. THOMPSON. Sir, one thing I would hope that your committee would take the lead in dealing with, is what I think to be a key problem; and that is the definition of "the family farm."

We've heard everything under the sun today, and we're supposedly professionals. The definition of USDA is a thousand dollars' worth of produce sold. My mom is 80 years old and does that out of her garden.

What is the definition of the family farm? It's changed.

Now, we can all go back to the glories of how we were raised. I can, too. I loved it. But that family farm is different today, and 1 percent is producing 67 percent of the production and earning 66 percent of the net farm income. And that 1 percent is family farms.

Whether EEOC, EPA, or OSHA, you cannot corporately, a corporation such as I'm president of, pay any employee enough to wade through pig manure. No way.

So let's not worry about the corporate farm. Let's worry about what is the family farm, and design our programs around a correct and proper definition, that includes the majority percentage of income earned from on-the-farm operations.

Senator JEPSEN. Very key and very important. Without being judgmental, I've been somewhat surprised at some thoughts that have been offered here today regarding family farms, especially concerning the inheritance tax. You'd think it should be the corporate farms, but it's just exactly the opposite.

Mr. THOMPSON. Four-tenths of 1 percent of Missouri's total output is done off corporate farms. So it's nothing. The large family-farm is here to stay.

Senator JEPSEN. But if you're going to make the taxes so punitive in nature, you're going to have to sell the farms, because you don't cut off a fourth of the farm to pay your Federal estate tax. You're going to sell it. And there are a lot of corporations around to buy them up.

I think this is key to helping the family farm.

Now, my question is, should the Federal Government require some sort of soil and water conservation program in return for payments or any other assistance rendered by it, whether it be loans, farm commodity programs, or whatever? Answer it yes or no, starting with John Whipple.

Mr. WHIPPLE. Yes. Definitely.

Mr. LUDLOW. This is an extremely sensitive issue, Senator. Iowa Grain & Feed Dealers Association would say that we would hope the farm community would seriously assess this.

Senator JEPSEN. I hear you. Go ahead.

Mr. THOMPSON. I'd say yes, but as Ken says, with a large "but." Because I think the final conservationist, and the best, is a fair return on the investment in farming.

Senator JEPSEN. Mr. Boeck.

Mr. BOECK. I think we definitely have to put some kind of teeth in it, because we have to preserve the land for future generations, not just ours today.

Senator JEPSEN. Mr. Bolen.

Mr. BOLEN. The majority of farmers are for it, and our company would be for it.

Senator JEPSEN. See how he answered that, Mr. Ludlow. That since the majority of farmers are for it, then he's for it.

Mr. BOLEN. Well, that gets to one area where agribusiness really should get involved. For a long time we looked at our company as a

seed corn company, and one where our principal objective would be to produce the best products we can for the farmer, leaving farm policy and all these other things to him and his farm organizations. That just doesn't work any longer. And I think we and others here, as has been expressed, feel that the time is right and we recognize the sincere need for all of us to work together for a stronger agriculture.

Senator JEPSEN. If I were in the implement business—which I'm not—I would be looking into adding minimum tillage equipment to my line, because, I predict you will be selling a lot more pieces of equipment every year.

Mr. BOECK. I think the day of the big tractor is on the downhill slide. Now, with the minimum till, we can take a 100-horsepower tractor out there and get a crop in the ground, get it cultivated and cleaned up and harvested, with 100 horsepower instead of 200.

Senator JEPSEN. I thank the panel very much. If I don't get to my last panel on conservation here, they're going to protest or something. But thank you very much, it was most interesting.

We welcome Charles McLaughlin, chairman, Soil Stewardship Committee, Iowa Natural Heritage Foundation; Lee Dallagher, past national president, Izzak Walton League of America; Walt Peechatka, executive vice president, Soil Conservation Society of America; and Diane Shivvers, Iowa Chapter of the Sierra Club.

I thank you for your patience and perseverance.

Did we lose Lee? Well, I think he will return. He usually does.

Ms. Shivvers, shall we start with you? I know of your interest in soil conservation. I know you attended the conservation hearing in Ames, Iowa, and I thank you for it.

I will advise this panel, as I have the others, that your prepared statements will be entered into the record, and you may proceed in any manner you wish.

Thank you for coming, Ms. Shivvers. It's good to see you.

STATEMENT OF DIANE FORD SHIVVERS, IOWA CHAPTER, SIERRA CLUB

Ms. SHIVVERS. Thank you, Senator Jepsen, for again allowing the Sierra Club to present testimony on agricultural matters. You've already heard our concerns regarding soil erosion, water quality and the need for a strong and adequate Federal budget for agriculture.

Today I would like to address another area of concern for the future. I think it's been laid out, and I will confine my discussion to one topic only.

Although there are many issues which need to be addressed with respect to agricultural policy, one issue which the Sierra Club is extremely concerned about is the preservation of farmland. To this end, we support the express purposes of the Farm Land Protection Policy Act of 1981.

This act was designed to examine and minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It is certainly obvious that many acres of prime farmland are becoming

the victims of urban sprawl, industrial expansion and highway construction.

The nonagricultural use of prime farmland forces farmers to cultivate marginal land which is extremely vulnerable to soil erosion.

Also, this marginal land requires a greater amount of fertilizer, herbicide, and other farm chemicals which contribute to the groundwater pollution.

Although the Farm Land Protection Policy Act has laudable goals, we do not believe it has been carried out as its terms require, and that there are certain portions of the act which are in need of amendment. First of all, we believe that the act should require what might be called a "Farm Land Impact Statement," such as the Environmental Impact Statement required by the National Environmental Policy Act. This would insure that any action which involves the Federal Government would require a detailed examination of that involvement on prime farmland. In implementing such a procedure, there should be detailed guidelines, either in the act itself or established by the Department of Agriculture, stating what is or is not an adverse impact on farmland. If such adverse impacts are identified, there should be definite requirements that the proposed project should be terminated.

Second, we are not aware that the Secretary of Agriculture or the Department of Agriculture has established any rules or guidelines, as required in the act, or that the report which was due December 22, 1982, reciting the progress or lack thereof made in implementing the provisions of the act has been accomplished.

The act should be strong enough to force these requirements. These matters are extremely important to the proper administration of the act, and to insure that its purposes are carried out. If Congress definitely feels that farmland is a valuable resource worth protecting and conserving, it should require the provisions of the act to be carried out.

Third, it appears that the act prohibits any sort of legal action to enforce the terms or the spirit of the act. This seems to make the act a nice statement of policy with absolutely no practical effect. Although the National Environmental Policy Act is weak in many ways, at least interested parties can require, through litigation, that the provisions of the act be carried out. At least this minimal protection ought to be a part of the Farm Land Protection Policy Act. Again, if Congress deems the protection and preservation of farmland an important matter, it should provide for the means to carry out that policy.

Farmland is this country's most valuable resource. It is a resource that is not quickly renewable. If we continue to lose this resource, an important segment of our economy will be destroyed and our natural environment will be drastically altered for the worse. In order to protect this resource and insure that we will have it in the future, Congress should and must strengthen the provisions of the Farm Land Protection Policy Act and make sure it is carried out.

Senator JEPSEN. Thank you.

I might share with you that, since our meeting in Ames, I've held meetings in New England States, and when you talk about farmland preservation and priorities we've got hundreds of thou-

sands of acres out here, and up there conservation is No. 1 on the list. They have State laws. In New Jersey they've passed bond issues to go along and buy up land.

I gained a new and much broader perspective on it.

Ms. SHIVVERS. I think Iowa has a unique opportunity, because we are on the low end of the scale of losing farmland. We have an opportunity to stop it before it gets started.

Senator JEPSEN. Well, it's very interesting. There's a lot of work being done.

I was impressed last year when New Jersey passed a bond issue—and a developmental rights bill covering all farm issues—for farmland preservation and rural land preservation, and it passed with flying colors.

Welcome to Walt Peechatka, you may proceed, as you wish.

**STATEMENT OF WALTER N. PEECHATKA, EXECUTIVE VICE
PRESIDENT, SOIL CONSERVATION SOCIETY OF AMERICA**

Mr. PEECHATKA. Thank you, Senator.

I am Walt Peechatka. I'm executive vice president of the Soil Conservation Society of America.

In the interest of time, I would like to state that the record will show that SCSA delivered its formal and detailed statement last week at our hearing in Washington, D.C., and that statement was presented by Norm Berg. Rather than repeat that statement today, I would ask that the record indicate that a full statement from SCSA can be found as part of the hearing record for June 22, 1983.

Let me begin today by saying that a primary concern that we in SCSA have is that soil conservation is not given sufficient priority when discussing the economic condition of the agricultural sector of this country. The fact is the soil and water conservation needs to be higher on the agenda when discussing agriculture policy issues. It is inextricably tied to many other agricultural policy issues and, therefore, needs to be addressed when one talks about the economics of agriculture.

Even though it is frequently ignored when discussing economic policy, we have noted that it is being mentioned with increasing frequency. This, we feel, is a very good sign.

I'd prefer not to cite a lot of statistics here today, but suffice it to say that the "1982 Natural Resource Inventory Data" will be released sometime later this year. This information will update the last NRI, completed in 1977. We will then have better information to use in making long-range and permanent decisions.

We encourage the U.S. Congress to utilize the information in the 1977 NRI, and the updated information in the 1982 NRI when it is released, in considering the sodbuster legislation currently under consideration in both the Senate and the House.

It is our understanding that the Senate was to complete markup on Senator Armstrong's legislation just yesterday, but that markup was postponed until after the Fourth of July recess. We feel this concept is a very solid one and we urge early consideration and enactment of this type of legislation to stop further Federal subsidies from going to those highly erodible lands that, by capability class, should not be intensively cropped.

In addition, every possible means of encouraging those land users who have highly erosive lands to dedicate them to a long-term use, such as grass or trees, that best fits their natural capability, needs to be emphasized.

We know even these proposals to encourage farming within the land capabilities are not simple, because land-use decisions and farming practices ultimately relate to the economics of soil conservation and the economic welfare of agriculture. We look upon soil as a natural resource, at times mismanaged because its long-term value is underestimated by the marketplace.

Cost-effective conservation measures need to be emphasized in future conservation programs. Conservation tillage is an excellent example of a cost-effective conservation measure which is receiving increased emphasis across the county.

SCSA is proud to do its share in educating the decisionmakers and the land users on this important new concept. We recently released a special issue of our publication, the Journal of Soil and Water Conservation, Senator, and I have the first-run copy here that I'd like to present to you at the conclusion of this hearing today, dedicated to the subject of conservation tillage.

While conservation tillage is not a panacea nor a cureall to end all problems in agriculture erosion, it is an idea and a concept which has tremendous promise. We would urge others to give further consideration to this concept. At the same time, we caution that conservation tillage needs to be utilized in conjunction with other conservation systems in order to be totally effective.

To summarize very briefly our comments, let me emphasize that it is our feeling that the next generation of agriculture must include as a minimum the following features:

- Emphasize the need for conserving natural resources for those generations yet unborn, without being an excessive financial burden to the current generation.

- Insure the protection of landowners' property rights without encouraging the waste of our vital soil and water and other natural resources.

While there are other key elements to an agriculture policy, of course, these two are very important from the standpoint of natural resource conservation.

We appreciate this opportunity to give these brief comments today, and I'm available to answer any questions you may have.

Thank you very much.

[The prepared statement of Mr. Peechatka follows:]

PREPARED STATEMENT OF WALTER N. PEECHATKA

Mr. Chairman, members of the Joint Economic Committee of Congress, I am Walt Peechatka, executive vice-president of the Soil Conservation Society of America. SCSA is an international membership organization dedicated to the science and art of good land use and has its international headquarters in Ankeny, Iowa.

SCSA appreciates the invitation from your committee to provide brief testimony here today on the subject of the next generation of agricultural policy.

In the interest of time and space, I would like to suggest that the record show that the Soil Conservation Society of America delivered its formal and detailed statement which was recorded at your hearing last week in Washington, D.C. That statement was delivered by our Washington Representative, Mr. Norman Berg. Rather than repeat that statement here today, I would ask that the record indicate that a full statement from SCSA can be found as part of the hearing record for June 22, 1983.

Let me begin today by saying a primary concern that we in SCSA have is that soil conservation is not given sufficient priority treatment by most organizations or individuals when discussing the economic condition of the agricultural sector of this country. The fact is that soil and water conservation needs to be higher on the agenda when discussing agricultural policy issues. It is inextricably tied to many other agricultural policy issues and therefore needs to be addressed when one talks about the economics of agriculture.

Even though it is frequently ignored when discussing economic policy, we have noted that it is being mentioned with increasing frequency. This we feel is a very good sign.

The Payment-in-Kind program is an excellent example of an opportunity that may have been missed by the U.S. government in tying together a conservation program with a set-aside program. Prior to the announcement of the PIK program by the President and the Secretary of Agriculture, SCSA, on December 20, 1982, sent a letter to Secretary Block encouraging the Department to develop a soil conservation component for any new set-aside program or whatever final program should emerge.

In that letter we pointed out that not since the 1930s has soil erosion commanded as much public attention as it has in recent years. We urged him to take advantage of the opportunity provided by the need for a cropland set-aside program to help achieve the nation's soil conservation objectives. This to be done by creating a set-aside program that encourages the most erosive cropland to be idled. We offered to work with the Department in developing that important component.

Following the announcement of the Payment-in-Kind program, we again contacted the Secretary of Agriculture commending him for taking the initiative for developing a program of this nature. We further offered to work with him and the Department in developing a conservation component. As you can see, SCSA, like many other conservation organizations, has been vocal on this issue for some time.

I would prefer not to cite a lot of statistics here today but suffice it to say that the 1982 Natural Resource Inventory Data will be released some time this year. This information will update the last NRI completed in 1977. We will then have better information to use in making long-range and permanent decisions.

We encourage the U.S. Congress to utilize the information in the 1977 NRI, and the updated information in the 1982 NRI when it is released, in considering the sodbuster legislation currently under consideration in both the Senate and the House. It is our understanding that the Senate was to complete markup on Senator Armstrong's legislation just yesterday. We feel this concept is a very solid one, and we urge early consideration and enactment of this type of legislation to stop further federal subsidies from going to those highly erodible lands that by capability class should not be intensively cropped.

In addition, every possible means of encouraging those land users who have highly erosive lands to dedicate them to a long-term use, such as grass or trees, that best fits their natural capability, needs to be emphasized.

We know even these proposals to encourage farming within the land capabilities are not simple, because land use decisions and farming practices ultimately relate to the economics of soil conservation and the economic welfare of agriculture.

We look upon soil as a natural resource--at times mismanaged because its long-term value is underestimated by the marketplace.

Cost-effective conservation measures need to be emphasized in future conservation programs. Conservation tillage is an excellent example of a cost-effective conservation measure, which is receiving increased emphasis across the country.

SCSA is proud to do its share in educating the decision-makers and the land users on this important new concept. We recently released a special issue of our publication entitled the Journal of Soil and Water Conservation* dedicated entirely to the subject of conservation tillage. I am pleased to present you with a copy of this publication which was released earlier this week.

This special issue delivers the current state of science and art of conservation tillage and includes a number of overview articles assessing the impacts of conservation tillage technology, a series of articles that look at the applicability of conservation tillage from a regional point of view, imaginative extension efforts being used to gain acceptance of tillage and experiences of some farmers in using tillage systems and finally reports of important research on tillage as well.

While conservation tillage is not a panacea nor a cure-all to end all problems in agriculture erosion, it is an idea and a concept which has tremendous promise. We would urge others to give further consideration to this concept. At the same time we caution that

conservation tillage needs to be utilized in conjunction with other conservation systems in order to be totally effective.

To summarize briefly our comments, let me emphasize that it is our feeling that the next generation of agriculture policy must include as a minimum the following features:

1. Emphasis on the need for conserving natural resources for those generations yet to follow without being an excessive financial burden to the current generation.
2. Ensure the protection of landowners' property rights without encouraging the waste of our vital soil and water and other natural resources.

While there are other key elements to an agricultural policy, of course, these two are very important from the standpoint of natural resource conservation.

We encourage the attention of this committee on these areas and on the need for addressing soil and water conservation matters when addressing agricultural policy in general.

SCSA has appreciated the opportunity and the invitation to offer brief testimony here today. We will be pleased to answer any questions you may have.

Senator JEPSEN. Thank you. Mr. Peechatka.

We welcome Charles McLaughlin, chairman, Soil Stewardship Committee, Iowa Natural Heritage Foundation. You may proceed, as you wish.

STATEMENT OF CHARLES McLAUGHLIN, CHAIRMAN, SOIL STEWARDSHIP COMMITTEE, IOWA NATURAL HERITAGE FOUNDATION

Mr. McLAUGHLIN. Thank you, Senator Jepsen.

As you know, I'm also a farmer, or essentially a farmer, appearing here today for the Soil Stewardship Committee of the Iowa Natural Heritage Foundation.

I might say, in opening, that as a farmer I'm being paid to not produce corn, and I'm being fined because I'm a dairy farmer, for producing milk—by the same Department of the Federal Government.

On behalf of the Iowa Natural Heritage Foundation, I would like to thank you for the opportunity to testify about national agricultural policy.

While I cannot predict which policies will evolve in the future, I think it is safe to say that they will be significantly different, because of the current political trends. There are three important trends which can produce changes as early as 1985.

First, the political influence of farmers continues to decline in relation to other groups. Farm households comprise less than 3 percent of the population, as you no doubt have heard today. The farm vote continues to be fragmented by the varying economic interests and philosophical differences.

Second, there is a growing conservation constituency which has concerns about the impact of agriculture on natural resources. About 90 percent of voters are aware of these issues, and about 15 percent are members of one or more conservation-oriented organizations.

Three, and perhaps most significant among these trends, is that the growing Federal deficit is absorbing private investment capital otherwise needed for a strong economy.

Recent polls suggest that certain farm programs, like PIK, are losing public support and any projected agricultural policy may be a compromise of many of the concerns just listed, or there may be a failure to compromise, which will result in deregulating and de-subsidizing agriculture to an extent similar to other industries.

Unfortunately, agriculture is not similar to other industries. Agriculture is slow to respond to overproduction. We can look at the lessons of the 1930's, for example, to see that a weak agriculture policy has a high social cost for farm families and rural economies, and a weak agricultural policy encourages abuse of the Nation's natural resources.

During the past 50 years the Federal Government has intervened in the marketplace because of concern about producers in times of surplus, and concern about consumers in times of shortage. The primary rationale for agricultural policies is to balance the farmer's desire for overproduction with the consumer's desire for inexpensive food and with the economic need for dependable free trade

policies. This criterion must be reflected in a flexible, long-term program to quickly adjust supply to demand.

A second criterion must be to respond to public concerns for developing an environmentally sustainable agriculture. This is a simple recognition that our future prosperity and quality of life is determined by the extent we help private landowners to protect soil productivity, to improve the quality and quantity of water supplies, and to develop renewable energy resources, and to improve wildlife habitat.

These criteria have been mentioned in farm policy for many years, but they have never been adequately funded. What is needed is a policy alternative which appeals to many interests and responds to current concerns. One example may be a voluntary long-term conservation land reserve. The concept is to offer Federal contracts to remove cropland and grazing land from production. Payments would be based upon the public benefits from soil and water, wildlife, and energy conservation. There is nothing new about using land reserves rather than commodity reserves to support farm income. But designing this program for a maximum conservation benefit is new.

Potential conservation benefits of this approach are substantial, especially when considering that 10 percent of the cropland produces 50 percent of our cropland and soil erosion, and 2 percent of the cropland, about one-sixth of our irrigated acres, creates 50 percent of the depletion of ground water supplies. Similar improvements can be anticipated in surface water quality and in certain wildlife populations.

While this approach is attractive to conservationists, it would need to be modified to attract support from other constituencies.

First, the reserve must be market oriented. In order to limit its impact on consumer prices, the land reserve would need release requirements tied to commodity prices similar to the current long-term grain reserves. However, both consumers and producers would benefit from the reserve impact in moderating high and low prices.

Second, the reserve must be a good investment for the taxpayer. Costs could be controlled by concentrating on marginal land which seldom shows a profit and is farmed primarily to create a cash flow. Landowners could also competitively bid for contracts, based on the annual payment or the commodity price which releases the land from the reserve. Tax deductions or exemptions could also be offered, in addition to the cash payment.

Third, the reserve must encourage diversity. New jobs could be encouraged by this use of reserve land for renewable energy production, reforestation, or the introduction of new crops or products. The land should have permanent vegetative cover. The establishment of permanent land improvement practices should be encouraged to protect the land for posterity.

In summary, the thrust of agriculture policy needs to stress the importance of both human resources and natural resources. As a nation, we have the ability to produce more agricultural products at an economically, environmentally, and socially acceptable cost. As a national policy, our investment in the protection of our natu-

ral resources must be commensurate with our responsibility to our posterity.

Senator JEPSEN. Thank you, Mr. McLaughlin. Excellent testimony, and, I might add, delivered with much conviction, which you have, obviously.

Mr. McLAUGHLIN. Thank you.

Senator JEPSEN. Very quickly, do you feel that the Secretary of Agriculture should have more authority and latitude to adjust prices and loan rates in our commodity programs than he has at present?

Mr. PEECHATKA. YES.

Ms. SHIVVERS. I would plead ignorance. I'm not sure I'm knowledgeable enough on that to answer.

Mr. McLAUGHLIN. I'm sure that he will have to have latitude to do that, but I think we have to have a better established policy upon which to base those decisions than we have at the present time.

Senator JEPSEN. I'm guessing what your answers are going to be on this one, although I've been surprised before.

Should the Federal Government require some sort of soil and water conservation procedures, whether you want to call it cross-compliance, or mandatory requirement, in return for any type of assistance which it may give farmers?

Mr. Peechatka.

Mr. PEECHATKA. Yes. As I indicated in Ames, yes.

Senator JEPSEN. Mr. Shivvers.

Ms. SHIVVERS. Very definitely, yes.

Senator JEPSEN. Mr. McLaughlin.

Mr. McLAUGHLIN. I have to qualify the statement. I think, yes, but I think we'd have a better investment of our effort if we educate for conservation, a better investment in time and money to have people doing the conservation because they believe in it and know what it involves, but to do it mandatorily, as a last resort, for some people.

Senator JEPSEN. As I indicated in Ames, there's been a 180-degree turnaround in the answer to that question in the last 4 years.

Mr. McLAUGHLIN. I think that's the same answer I gave you 4 years ago. [Laughter.]

Senator JEPSEN. I didn't mean yours has turned around. I'm just saying that the numbers have turned around.

Well, do any of you have anything to add before we release this panel. Is there anyone else in the audience who wishes to testify?

Do you have anything else? Thank you for coming.

Mr. McLAUGHLIN. Thank you for your patience.

Senator JEPSEN. Well thank you for yours.

Mr. McLAUGHLIN. I'll stay here as long as you listen.

Senator JEPSEN. Diane, thank you again for coming.

Walt, good to see you again.

Thank you, panel, for coming. Is there anyone in the audience who desires to testify—who has not yet had the opportunity to do so?

One, two, three. Would you mind, all three of you, just coming down so we won't have to take the time to shift the chairs?

Thank you.

Now, by way of a little procedure here, you may proceed in any manner you wish. If you do have a prepared statement, we'd be pleased to have a copy of it. You're advised that it will be entered in the record.

If you do not, that's all right too. We'll record every word that you say.

I ask that you identify yourself and your organization. Then you may proceed.

Mr. Roberts; why don't we just start from my right, as you wish.

**STATEMENT OF DARYL E. ROBERTS, ATTORNEY,
INDEPENDENCE, IOWA**

Mr. ROBERTS. Thank you, Senator Jepsen. I'm Daryl Roberts. I'm from Independence, Iowa. I'm an attorney, and I really don't represent anybody. I'm just here as a concerned citizen. And the fact that I'm here has nothing to do with my being an attorney.

My concern is that we have a PIK program this year, and thinking about a PIK program this next year, where we are paying people, farmers, to not raise crops. And we have in the world a lot of hungry people.

Now, there just seems to be something wrong with that. It's just kind of offensive. And I think if we were to ask the majority of the American people—at least in my conversations with people who have come into my office, or in normal conversations in a social setting—they oppose that too. Almost all of them, it bothers them. And I'm sure, Senator, that bothers you.

A Public Law 480 program wherein, as I understand, the Government does appropriate approximately \$1½ billion, and that's been fairly constant since the program was implemented. And, as I understand, the reason for that is economic reasons. And it's my understanding that one of the reasons that we are not having the farmer raise the crop and then the Government buy the crop and then giving it to the hungry, one of the reasons is the economics of it may create economic world chaos, as some have indicated.

But it seems to me that if you are going to feed a country, or people in a country, that cannot afford the product in the first place—and I'm thinking of the African countries right now, where there is an emergency—that we could buy the product and send it to these countries, and it would not create any economic hardships.

And so I'm suggesting that at least in the future we would set up a program, and possibly through Public Law 480, that we'd be able—the Government, to buy the crop from the farmer and then when we had an emergency situation in the world such as in Africa now where there is a drought, we would be able to feed those people and would have little, if any, economic impact.

One of the things one of the panels talked about, regarding the PIK program was the fact that it hurt the implement dealer, it hurt the fertilizer dealer, it hurt the seed business. If we were to let the farmer raise the crop, the Government buy the crop, and then give it to the hungry people, that the seed business wouldn't

be hurt, the fertilizer people wouldn't be hurt, nor would the implement dealer be hurt, because the farmer is going to go ahead and raise the crop.

We also would have an easier time selling this to the people who, as I'm reading the papers, some of the Eastern liberals are getting a little concerned about the PIK program because of the cost. If you were to tell these people that we are feeding the hungry, I think it would be easier to sell the program.

They're saying if we're feeding people, then that's fine. But if we're just having a welfare program for the farmer—which is basically what it is—then what I'm saying is it would be easier to sell it to those people.

You, as I say, are more familiar with this problem than I—an other argument that people give for not feeding the hungry is we can't distribute the goods, it's very difficult to make the distribution. My thought is why not use some of the current organizations that we have, like World Vision, the Catholic Charities, or CARE.

My understanding right now is that Public Law 480 does use those programs or these organizations right now. But they seem to have a good distribution program, and we could possibly use them to distribute it.

Another argument that some people use that we cannot feed the hungry with grain is the fact that it is grain and it is not food stuff. But in my communication with World Vision, they indicated that that grain could be converted into some foodstuff and could be fed to the hungry.

We're talking about creating markets—it seems to me that if you did give some of this foodstuff to the African nations while they can't afford it, at a later time they may be able to afford it and you could create some markets in the African nations for your grain and your foodstuff.

Senator, I feel quite strongly about this, and I think that the Lord has blessed this country, where we can feed more people than we have in this country. We could come close to feeding most of the hungry people in the world, because the Lord has blessed us in that area. With that blessing, I think we have a responsibility. And if we don't accept that responsibility, it seems to me that we run the risk of losing the blessing.

The Lord disciplines us sometimes. I feel strongly enough about this to say that I'm willing to donate my time in this area if you had any interest in it, just to donate my time—say my vacation—to come to Washington and work in this area, free of charge. I wouldn't expect any pay. Or I'd be willing to work on weekends and at nights, to overcome or at least try to overcome some of the problems. Because I realize that I can give you a simplistic answer to this very complex problem, and it needs a lot of work, because there are problems in the area.

But I think the American people really want to have it resolved in a way where we are taking care of our responsibilities by helping to feed people who are in need. Thank you.

[The prepared statement of Mr. Roberts follows.]

PREPARED STATEMENT OF DARYL E. ROBERTS

The Federal Government under the PIK Program pays farmers not to grow crops and idle farm land. It is my understanding that up to approximately 40% of the farm land in the State of Iowa is idled and no crops are growing on it in 1983. Why do we idle farm land when there are so many hungry people in the world? Why doesn't the Government have the farmer raise the grain and the Government purchase the grain and feed those hungry people of the world? The Government has to pay the farmer to idle the land and would also have to pay to purchase the grain from the farmer in order to feed the poor. However, if the Government purchased the grain to feed the poor, then the Government would be receiving something for its money, creating goodwill and opening possible markets.

Is this economically feasible? First, the same money that the Government is paying the farmers to idle their land could be used to purchase the grain to pay the farmer. Second, there are a number of farm suppliers who have been hurt by the PIK Program. The farm chemical industry, the seed corn company, the implement business and the fertilizer business have all been hurt by the fact that the farmers are using less of these products because they are not growing crops. If the Government were to purchase the grain from the farmer, the farmer growing this grain would be using these farm products and implements, and thus, a segment of the economy would not be hurt as it is under the PIK Program. Third, if the United States Government sent grain to the countries who have an emergency need, such as the country of Ethiopia and other African and South American countries, then the world economy or the economy of other countries would not be affected. The countries who have a drought or a flood and are hit with an emergency cannot purchase the grain regardless of the price. If a country cannot grow or buy the

grain, this should not affect the world economic structure. Also, this should not negatively affect the recipient country's economy because that country is not growing the crop to compete nor is it in a position to buy the grains. If we contribute the grain to countries who are themselves marketing grain products or can afford to buy the grain, then this upsets the economy in that country as well as the world economy. I would not suggest that the United States make gifts to countries who are in competition with the United States in the grain market, except as the United States has done in the past through the use of PL480 and have established patterns which have been accepted by the other countries of the world. Fourth, once the recipient country's economy improved, this country may be in a position to buy crops, thus opening up a new market.

Can the grain be distributed? One of the biggest problems in giving the grain away is to insure that the grain is delivered to the people who need it rather than have it sit in boxcars or warehouses. I would suggest that the Government rely heavily upon private charitable organizations such as Catholic Relief, World Vision, and CARE. These organizations seem to have the ability to distribute the grain to people who need it. The Government could pay for the shipping and distribution by allowing the charitable organizations to sell a percentage of the grain and use the proceeds to pay for shipping and handling of the grain.

Can the grain be converted into foodstuff for the people to use it? There should be no problem with converting wheat into foodstuff for hungry people to use. Also, World Vision has indicated that it uses a process to convert corn to foodstuff. In addition, corn could be converted into cornmeal or other usable foodstuffs. The people to whom the foodstuffs would be given may have to be educated as to how to use it, but once again, the charitable organizations could provide the educational programs at Government expense.

Can this program be used in conjunction with other valuable agricultural programs? The feeding of the poor could be used in conjunction with soil conservation. For example, 10% of the farm land could be idled to give the land a rest, thus rotating this 10% every year for 10 years would allow land to lay idle for one year every ten. Then the Government could buy another 5% to 10% of the crops grown by the farmers to feed the hungry which would have the equivalent of idling 15% to 20% of the farm land in any one year. Percentages could vary from year to year depending upon the need.

Is this the American way? The American people have always been generous and have always prided themselves in being a charitable country to others in need. The Lord has blessed this country and with our blessings go responsibilities. The Lord gives us responsibilities to feed those who are hungry. If we do not take this responsibility seriously and discontinue idling land when people are hungry, the great blessings of America can be taken away. Also, when the farmer is idling his land, he is not working and is accepting money for doing nothing. This is not the American way and does not build pride in our farmers. Farmers would take pride in growing crops to feed the world's hungry. Also, the American people would much rather have their money be used to feed the hungry than to pay farmers to idle land.

In considering any farm program, I think that the Government must consider its responsibility toward the hungry of the world. God has given us the capacity to feed those hungry and we must not turn our backs on them by not growing the grain they so sorely need.

Thank you for your consideration:

Senator JEPSEN. I am taken with your sincerity and your line of thinking. You know, oftimes the right and simple things don't get put in the hopper in our sophisticated climate back in Washington. In fact, the farmers could go ahead and produce and—I'm saying this to make sure I understood what you said—then, in turn, the Government could buy the commodities, which is what they're essentially doing anyway, by paying them not to produce. We could utilize this in Ethiopia and other places around the world where there are folks dying.

I appreciate, though, your thrust, and I assure you we'll study the things you talked about, and we'll be in touch with you as to how we are progressing. Not that it's going to happen, necessarily, but maybe something will happen. I can tell you right now—and then I think we must go on, out of courtesy to the other witnesses—the problem with Public Law 480—which is administered by USDA, the Foreign Agricultural Service, and carried out by the Agency for International Development [AID]—is that it was set up as a marketing tool, to send agricultural commodities to Third World countries, sort of like a Marshall Plan, and over the years it was turned into the economic development program, which places importance on finding current markets for our commodities.

But, as you indicated, through CARE and through other agencies, we could explore a source.

Frankly, I have given some thought to this very type of thing. We have dairy surpluses and at the same time people are starving all over—not only here but abroad.

Thank your for your testimony and your concern.

Welcome, Mr. Grodahl, please proceed as you wish.

STATEMENT OF WAYNE GRODAHL, SAC COUNTY, IOWA

Mr. GRODAHL. Senator Jepsen, I'm Wayne Grodahl from west central Iowa, Sac County. I'm a farmer and represent no group here. I farm with my two sons. I'm a little bit concerned today about what I heard about what the concept of the family farm might be, and it's depicted as being somewhat smaller than I personally think it is. And if this concept is taken back to Washington, it may discriminate against people like myself and my sons, who are, I think, a family farm unit.

I'll tell you what. We farm 1,600 acres. We own half of it and rent half of it. I've been farming for 34 years. My sons have been with me probably the last 15 years. They started when they were freshmen in high school.

I guess the principal thing here is that there was concern that in preserving the family farm, the interest was in the individual out there who was on his own farm, farming perhaps his 160 acres or his 240, whatever it might be. Meanwhile, his son or daughter is off working in town, because his unit is not large enough to incorporate the family in. So then we have to go to a size which allows that incorporation of your children before you can really call it a family farm which is preserved for the family.

Then we get into the area of how do you preserve it? We recently incorporated. I know there's some discrimination against farm corporations. We did it to enjoy the same tax privileges as any other corporation enjoys and attempt to pay for some of our land with after-tax dollars, which weren't taxed at quite as high a rate.

We get no low-interest money from anyone. We can't qualify. Yet, we have economic problems that are as serious as a lot of other people's, and partly due to the fact that we're forced to pay a higher interest rate than we've ever paid in the 34 years of farming. Today we pay a bank rate of approximately 14 percent, which I believe would be maybe 3, 3½ points over the prime. At one time, we were paying as much as 4½ over the prime. I don't recall prior to that, that we ever paid the prime.

So if this trend continues—which I'm assuming there's a good possibility it might if this prime starts back up—I'm assuming my rate will start back up too, and this is where the problems will multiply themselves.

I'll refer to my notes here and go on.

Oh, in one other area, the talk today has been about the PIK program and the cost of that. We hear no talk of the PIK program and its cost to the farmers, cost to the country, and the welfare, or whatever it's been termed here today, to the farmers, without any additional consideration for what also might go to the urban resident. And I'm referring to Federal grants particularly, and low-interest loans. So sometimes the farmer is singled out unfairly, when sizable amounts are going to the urban areas too, in a gift form.

I'm a great believer in the supply and demand situation, as I believe a lot of farmers are, but I don't think we can operate today in a supply and demand situation where it's clouded by the previous history of embargoes. Once the embargo psychology is in place, I doubt that it ever can be removed, short of an act of Congress. And as long as it's there, we are preventing prices from ever going unusually high. But without farm programs, we are not prevented from prices going unusually low.

So until we remove the stigma of the embargo, I don't think we're going to move the farm program.

I think that concludes my remarks.

Senator JEPSEN. OK. Thank you. And how do you spell your last name?

Mr. GRODAHL. G-r-o-d-a-h-l.

Senator JEPSEN. Welcome Mr. Swanson, please proceed, as you wish.

STATEMENT OF HAROLD SWANSON, DEAN, AGRICULTURE DEPARTMENT, IOWA WESTERN COMMUNITY COLLEGE, COUNCIL BLUFFS, IOWA

Mr. SWANSON. I'm Harold Swanson. I'm head of the agriculture department, Iowa Western Community College. I also have a farm of my own.

I've lived in three States, including the States of Washington, Iowa, and Minnesota, and was one of the pioneers in the Columbia Basin project, to kind of give you a little background.

I'll give a few brief remarks so that you can go from there. I followed Secretary Bergland's 10 meetings a number of years ago on the structure of agriculture, and I waited and listened for somebody to say that there's some value in strong management education programs, especially at the postsecondary level. I didn't hear anything out of those 10, and would venture a guess, Senator Jepsen—I think—is this your first one, or is this—you've got 8 coming, of these, isn't it?

Senator JEPSEN. This is the ninth. I have eight down. Five more to go.

Mr. SWANSON. OK. And have you heard anything specifically about the value of farm management teaching as a tool to improve agriculture's problems?

Senator JEPSEN. As a matter of fact don't think I have.

Mr. SWANSON. OK. That's where I'm coming from.

I was one of the first instructors—as a matter of fact, back in 1951, I was teaching high school in Minnesota when the Minnesota Vo-Ag farm management system was started, and today that's the single, probably, biggest broad-based management system that's available to farmers in American agriculture.

And so I think it's important.

I would like you to flip over to the charts there that you've got. I want to show you a few things just briefly.

First of all, there's the one with the realized net farm income for Iowa.

I want you to note in that chart in the upper left there [indicating] that back in the fifties the average Iowa farmer netted 40 percent of his gross sales. In 1980, the last year that this shows, we netted 5 percent of our gross sales.

You've got to compare the distance between the two in order to—it's not shown, other than to measure. But in other words, in 1980 they were netting 5 percent of their gross as an average, and in the fifties it was 40 percent of their gross.

Now, when you look at farm recordkeepers and get down to the lower end, the A and B columns down there, you see a comparison of average incomes of Iowa farmers with the average incomes of Iowa Business Association recordkeepers for the same period of time. And you'll notice in 1967—the Iowa Farm Business Association got started in those years, and there was only a few thousand dollars difference—a \$6,000 to \$8,000 difference.

But then you start to get into 1971-80, and you notice that from 1971-80 there's no less than 2½ times more income for the recordkeepers, and in 1980, it was 10 times—the recordkeepers in the as-

sociation were earning 10 times more net income than the average in the State of Iowa. To me, that's a very, very shocking figure.

I can show you the same figures from Illinois, comparing State averages with association averages, and you'll get a 2½ times or more discrepancy.

If you throw the whole population in there you're going to get into a situation where, obviously, it's different. But Iowa Farm Business Association—there's nine of them now—is strictly a recordkeeping service. They usually have 100 to 125 clients to each man who services them, usually there's 3 or 4 of them in an association, and there's 9 associations. About 4,500, at the very most, of Iowa farmers, or roughly 3 to 4 percent of Iowa farmers, are in it. And you've got a computer that's operated by the Farm Bureau, and I don't know just how many they have, but that is in addition. And then you've got a few that are through the Extension Service; I would say roughly maybe 100 or more in the State of Iowa that are operated for farmers through the Extension Service.

So we've got an extremely small group of people who are in that.

I want to show you, then, from staff papers by John Helmberger, who happens to be the brother of—who was it that was here this morning? Anyway, I visited with him a little bit.

These are a comparison of farm incomes in different States over a different period, and the shocking thing to me, just very briefly, is that when you compare a 3-year average of Iowa farmers, 1949-51, with the 1978-80 3-year average, for Wisconsin, Minnesota, Iowa, and Wisconsin increased their average income during that period 157 percent, Minnesota increased 140 percent, Iowa increased 46 percent, the U.S. average was 86 percent, and Nebraska was 22 percent.

I asked Mr. Helmberger who appeared earlier, I asked, "Now, when I ask why amongst people that had seen these statistics," and they say, "Well, it's dairy."

Well, I'd spot maybe 50 points of that Wisconsin figure as dairy, and I think the same with Minnesota. But I think the rest of it is the management systems that are in operation in those two States. They are very broad based, and they have been going—the Minnesota Vo-Ag system has been going since 1952, is when it started.

Now, if you'll flip over to the back side and look at the Iowa situation, that's right out of the "1980 DHIA Costs and Returns." the average DHIA cow in the State of Iowa makes the average farmer in Iowa \$500 a year. The average cow in Iowa makes the average—and this includes all DHIA cows—according to the statistics, makes him \$200. And if you interpolate that figure off to say that everything off to the left here, half the cows in Iowa are here and half there, are you would probably realize that—on average—that 30 percent of the cows in Iowa are losers. The only thing they're contributing to is the surplus to our whole situation. And that's the way I interpret those statistics.

In other words, we could get rid of 30 percent of the cows in Iowa and we'd eliminate about 9,000 pounds of milk per cow and we'd go a long way to eliminating our surplus problem by getting ride of that animal, and you'd have some cash flow from the meat.

But anyway, that's where I'm coming from.

Now, I'll get into the meat of what I started here.

The next generation of farm policy implies change, or moving to something better. So let's look at the 50-year record briefly.

In production there's no question that this has been an extremely successful function over the last century. We might even say too much so.

One marketing. Some successes, but a lot of failures and currently tremendous problems.

As for management, that depends on your criteria of evaluation.

Two profitability. USDA statistics indicate decreases in total net income in the United States in recent years. This total is distributed among fewer farmers.

Three, progress. Although we have many evaluation factors under this category, I think the most important measure is, are we moving forward? The answer is yes, but way too slowly. Today less than 5 percent of Iowa farmers have financial and production records which will allow enterprise and general analysis needed for management decisions, and the U.S. average is about the same.

I have some statistics on farm income which I would like to have entered into the record. They indicate that farm managers on record systems have consistently netted 2½ to 10 times the net income of published USDA figures for income on only 30 percent more acres. I didn't say that before.

Specifically, I suggest the following:

That a 5-year goal of getting 50 percent of farm operators in the United States on analyzable farm management systems through a tuition tax credit of up to \$250 per year for a maximum of 3 years, for attending a competency based farm management program modeled after the Minnesota Vo-Ag farm management program. And the reason I specifically stated that is that that is documented, there's books published, and it would be a uniform program available throughout the United States. It's a very good, solid system.

That a tax credit be allowed for the first \$200 paid for record systems services that provide enterprise and whole farm analyses, and whose group analyses are published annually. This would be for the first 3 years. The whole cost of the services would still be allowed as a regular deductible operation expense.

That a community development act be passed and funded. The function of a community development organization would be advisory and would be set up at the community or service area level, to help develop a consensus of goals for the community of what size and kind of farms and business organizations are needed for them to continue to be a viable unit and provide needed community services.

Another function of the community development organization would be to establish local pools of young farmers and businesspersons who would be guided and aided in individualized training programs, which could include college, vo-tech schools, and apprenticeship-type programs, along with entrepreneurial guidance in establishment of credit lines and various financial arrangements, so when bakers, real estate people, and lawyers come up with farm or business opportunities for sale or lease, that they will call the pool first, instead of Mr. Big, because they will know that most of the hassle factors will have been worked out for these people in the

pool. And a go or no-go decision will be only a matter of hours of work instead of weeks or months.

That American agricultural production be regulated under a market responsibility act, which would operate as follows:

Each farm in a county would be categorized according to the following formula: Acres capable of continuous row, or erodible crop production; acres capable of erodible crops no more than once every 3 years; acres that should be in permanent vegetation, pastures, and so forth; and acres in farmstead, specialty functions, and waste.

These would be worked out cooperatively by the farmers with the help of county ASC and SCS personnel and adjusted as conservation practices, land clearing and other situations make possible changes in the original plan. Farmers would submit their planned crop acreages for the coming season with their local ASC office, accounting for all acres in each unit, no later than 4 months prior to the earliest recommended planting date for that crop.

USDA will establish the national market needs for the year for each controlled crop. Counties will apply for a bushel allotment based on the acres requested by farmers, times their yield for their farms.

USDA will compile these totals and issue each county a total bushel or hundredweight production total, after comparing the projected market needs with planned farmer production. In this particular case, this is where the farmer is going to say, "This is what I want to do," and after going through his cropping plan and soils maps with the ASCS process, this is the place where they could say "This is what you should be doing." So you've got a control point there.

Counties will, in turn, issue farmers bushel or hundredweight certificates based on production requests of farmers in the county as a percent of total county allotment. These certificates would be maximum salable, feedable, or usable production for this farmer. Any excess would have to be declared to the ASCS and stored by the farmer at his cost. He would be able to sell it to a drought or other catastrophe-stricken farmer who didn't produce enough for his quota. This would provide a kind of special disaster insurance for affected farmers, for they could try to buy the needed production at a less than market price from the overproducers, and have a little profit in the transaction.

Farmers who double-crop a controlled crop would have this extra potential yield factored into their average yield for full season acres based on their farm history for the practice.

Any sales or usage would be recorded directly on the allotment certificates or a copy thereof, and turned in to ASC when completed. All buyers would have to report purchases with certificate numbers to the local ASC offices on a weekly basis.

The procedure for each Government-controlled crop would be the same, so that farmers would have extra acres for other uses. Any extra demand that would develop during a given year would be allocated by USDA to the counties, and by the percentage method to the farmers, so those that had products to sell could move them,

and those that didn't could bargain with those who did. Acreage planted would not be regulated other than through production quotas.

All crops, livestock, and livestock products could be handled under these arrangements, where farmers would submit their plans for actual production units in to the local ASC office and these would be compiled nationally to compare anticipated needs and potential production, and then give each farmer his percentage as a percent-of-use figure.

Commodity groups would have the opportunity to vote on participation or nonparticipation for that specific commodity once every 4 years or so. For those commodity groups who choose not to be controlled, they could be offered a perpetual commodity inventory, which would allow them to become part of a system in which all producers would report total inventories as of some specific date each year and then make weekly reports to ASC offices of production harvested, sold, fed, spoiled, or other disposition and to help those producers, ultimate users would be required to file monthly consumption reports, and estimated next month's needs to ASC offices, so that broad-based knowledge of both supply and demand figures can be available to both producers and processors of uncontrolled commodities.

Just a couple of other comments which aren't in the report so far. I feel very strongly about something that was brought up with Mr. Pim of the FmHA. I proposed to FmHA several years ago that one of the requirements on the FmHA borrower in that he be required to get into some kind of a management training program, at the minimum 100 hours and maybe up to 300 hours over a 3- or 4-year period, and that cost would become part of his loan.

I discussed that with Mr. Pim today. As a matter of fact, there was an article in the paper up in Minnesota that said they were going to do that. He said that administratively they wouldn't be able to get away with it. So that's one thing.

Another thing is the salvation of the family farm will ultimately rest on whether at least 60 percent—I'm saying 60 percent, but a good strong majority of the farmers in the United States get into some kind of basic management training program.

I have taught adults. I've taught college. As a matter of fact, I had farmers last winter for 30 hours. I asked them a few questions, the first class: "How many here do their own schedule A, your own recordkeeping?" Out of 30, zero. Excuse me, one.

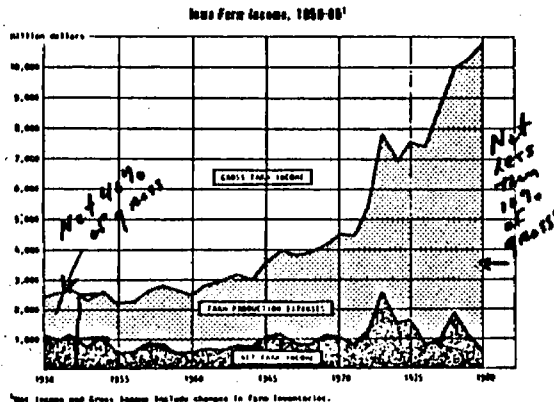
How many check over their schedules after they get them back from the tax man? The only one was the one who did his own.

How many check your depreciation schedule after you have had it done? Again, it was only the one person.

Now, from my teaching of management that spans 30 years, and the fact that I have put through six college students free and clear by looking at their depreciation schedules and finding pieces of equipment that they have either missed or had improperly put into the schedule—we found a 4400 combine, forty-two 21-tine plows, over the years. Look at those. Completely forgotten. Turned over to the tax man and either forgotten or something.

So basically that's what I'm talking about.

[The charts referred to by Mr. Swanson follow:]



HOW DOES YOUR SELECTION STACK UP WITH NATIONWIDE NEEDS OF INDUSTRY AND GOVERNMENT?

EDUCATIONAL REQUIREMENT OF JOB	% OF TOTAL WORKFORCE	
	CURRENT ACTUAL NEED IN U.S.	INITIAL STUDENT RESPONSE (INCLUDES ALL YOUNG ADULTS)
COLLEGE DEGREE(S) BS* BA* MS MA - PH.D	20%	40%
VOCATIONAL-TECHNICAL - HIGH SCHOOL AND/OR POST SECONDARY OR EQUIVALENT ON-THE-JOB TRAINING	60%	15%
LITTLE, OR SHORT TIME ON-THE-JOB TRAINING	20%	45%

Realized Net Farm Income, Iowa, 1967, 1971-1980¹

Calendar year	Realized gross farm income	Farm production expenses	Realized net farm income		Net change in farm inventories	Total net farm income		Iowa Farm Bus. Assn.
			Total, all farms	Average per farm		Total, all farms	Average per farm	
	Million dollars		Dollars		Million dollars		Dollars	
1967	3,809.3	2,328.8	880.5	5,793	41.6	922.1	6,067	8,382
1971	4,412.8	3,591.9	821.0	5,741	35.6	856.5	5,390	14,995
1972	5,301.8	4,156.9	1,144.8	8,115	116.2	1,281.0	9,085	29,162
1973	7,463.1	5,112.8	2,350.3	16,908	300.1	2,650.4	19,068	44,266
1974	7,822.2	5,508.8	2,313.4	16,764	-864.9	1,448.5	10,497	29,497
1975	6,944.6	5,893.1	1,051.5	7,732	803.8	1,655.3	12,172	33,135
1976	7,613.5	6,544.0	1,069.5	8,041	-236.4	833.1	6,244	26,108
1977	7,564.1	7,054.7	509.3	4,075	362.6	872.0	6,374	29,606
1978	9,508.4	7,982.1	1,526.3	12,409	420.8	1,947.2	15,831	56,555
1979	10,154.4	9,203.9	950.4	7,855	635.4	1,586.8	13,106	44,642
1980	11,001.6	10,232.8	728.7	6,124	-174.3	554.4	4,653	52,206

¹Individual items may not add to totals due to rounding.

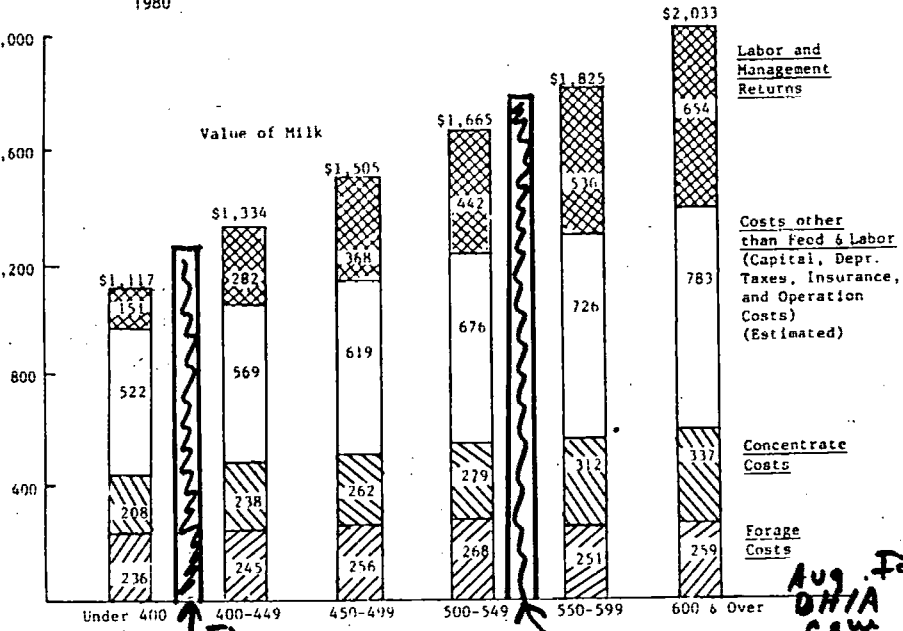
Compare the net earnings of all farmers in Iowa (Column A) with (Column B) - the average net income of the farmers on Iowa Farm Business Assn. Record Systems with only a 30% increase in acres/farm. It really pays to get management training and help.

Table 1.7 Total net farm income in Minnesota, neighboring states, and the U.S., selected years

Area	1 1949	2 1950	3 1951	4 1949-51 Average	5 1978	6 1979	7 1980	8 1978-80 Average	9 Change 1949-51 to 1978-80
	-----millions of dollars-----								percent
United States	12,780	13,648	15,934	14,121	26,458	32,697	19,860	26,338	86.52
Wisconsin	447.6	435.0	601.8	494.8	1015.3	1453.7	1353.5	1274.2	157.51
Plains States	2,802.2	3,663.1	3,709.1	3,391.5	6474.6	7321.3	2964.0	5586.6	64.72
Minnesota	493.3	512.0	663.9	556.4	1420.6	1437.3	1156.5	1338.1	140.50
Iowa	725.3	1,055.4	1,017.2	932.6	1947.2	1585.8	554.4	1362.5	46.09
Missouri	492.1	563.8	568.1	541.3	857.4	1224.3	306.3	796.0	47.05
North Dakota	176.3	262.0	245.4	227.9	496.2	382.7	88.6	322.5	41.51
South Dakota	157.8	245.8	339.0	247.5	427.4	525.7	191.7	381.6	54.18
Nebraska	361.6	530.5	468.4	453.5	621.0	916.4	129.2	555.5	22.50
Kansas	395.8	493.6	407.1	432.2	704.8	1249.1	537.3	830.4	92.13

Source: Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics, 1980, Economic Research Service, USDA, pp.59-84.

Iowa DHIA Costs and Returns
1980



Aug 50
Cow
109360

Aug. 50
DHIA
cow

GROUPED BY POUNDS OF FAT PER COW

	Under 400	400-449	450-499	500-549	550-599	600 & Over	Total
No. Herds	92	132	251	336	301	228	1,340
Milk, Lbs.	9,479	11,206	12,627	13,890	15,183	16,833	14,050
Feed, Lbs.	361	427	475	526	573	641	532
FEED (lbs.)							
Concentrates	4,032	4,623	4,911	5,194	5,727	6,250	5,354
Acculents	9,331	9,114	9,544	10,679	10,242	10,784	10,186
Hay	4,147	4,323	4,490	4,013	4,124	4,480	4,245
Pasture	63	69	46	44	40	34	45
(days)							
FEED COST	444	483	518	547	563	596	544
Income Over							
Feed Cost	673	850	987	1,118	1,262	1,439	1,141
Feed Cost Per							
Cwt. Milk	4.68	4.31	4.10	3.94	3.71	3.54	3.87
Return per \$1							
Feed Fed	2.52	2.52	2.91	3.04	3.24	3.41	3.10
Return per Hour							
for Labor &							
Management	2.52	4.70	6.13	7.37	8.83	10.90	7.50

Handwritten box containing the following values:

1,340
14,050
532
5,354
10,186
4,245
45
544
1,141
3.87
3.10
7.50

Senator JEPSEN. Thank you. It's obvious you put a great deal of time into the preparation of this, and I thank you.

Now, we welcome Mr. Narigon, please proceed, as you wish.

STATEMENT OF DON NARIGON, FARMER, NODAWAY, IOWA

Mr. NARIGON. Thank you, Senator. I'm Don Narigon, farmer, from Adams County.

The day is getting long, and I will keep my points very short.

I do want to comment, though, I do know what it takes to be a U.S. Senator now. You have to have a fair knowledge of what's going on, you have to be numb on one end, and you have to have a damn good bladder. I think you qualify.

There are four things I'd like to stress on a new farm program, and there's one area that I think may be was slightly overlooked today, because there haven't been actually too many farmers talk today.

A lot of the people who have talked are very aware of the farm programs, but they are isolated from the actual day-to-day activities and the day-to-day frustrations of making a living out there.

As you pointed out 5 years ago when you were running for Senator, you made one statement that's stuck with me since then, and I still believe that's the role of the Federal Government. I think the Federal Government should defend our country, and stay the hell out of the rest of our business.

Farmers have kind of become like trained mice. We run to the Federal Government every time something happens. I don't think this is necessary. I think farming can stand on its own feet if left alone by the Federal Government.

This cannot happen overnight.

The four points I'd like to stress that be included in a new farm program are:

First, we cannot continue with the present type of program we've been surviving under the last 50 years. We cannot prop up part of the agricultural commodities and let the rest of them float. The PIK program is an example. It's brought the grain prices from \$2 or slightly over to up over \$3. I, as a livestock farmer, was all for the PIK program. I'm in it 100 percent. But this was going to be one of the years when I was going to recoup some of my losses in the hog business, livestock business. I'm buying corn. So now I'm paying \$3 for corn that I thought I could buy for \$2.25. It's helped the grain farmer. The livestock farmer has lost.

This is just one area that we cannot continue living under.

Second, we must get much tougher on soil and water conservation. At our meeting you held a couple, 3 years ago down in Corning, I suggested at the time that probably all the volunteers have already stood up. It gripes me to no end to see the thousands of dollars that we've spent for terraces in this country, and then right around that same field, there'll be 24 or 32 rows going right straight up and down the hill and over the terraces, so they can turn around the 12- and 16-row equipment.

If we're going to spend money putting up terraces, we'd better require that we have grass lines. This would help some of our production.

The third point I'd like to stress in a new farm program is that we must continue our export efforts, but we also should look into the efforts of exporting more value-added products. We cannot continue to export our grain to countries that can't use it. We need to keep our labor and our technology here and send them the food that they can eat. It would be much better if we provided them with the food clear up to the last, and if they couldn't buy it, to give it to them. Because all the rest of the technology would stay here in this country. We ship them grain, and they can't use it—by the shiploads. A lot of it's wasted.

The fourth point that I think must be included in a farm program is a point that aids the beginning farmer, such as the old Homestead Act that got farmers back on the land. This point cannot be violated to the point that everybody can take advantage of it. But the new and beginning farmer—our average farmer in this country is about 47 to 48 years old. The cost of starting farming today is prohibitive. Unless there is some aid to get this young farmer back on the land, we face a much tougher problem 10 years down the road.

Thank you, Senator, for allowing me to present my ideas.

Senator JEPSEN. Thank you, Messrs. Narigon, Swanson, and Grodahl.

I might say, Mr. Grodahl, I followed your prepared statement point by point, and it's just about parallel to our family farm situation. My brother and his two sons and a son-in-law work the farm. As the younger men came along they had to have some extra land, to make it possible for all of them to grow. So first you rent, then you buy, then you expand a little bit. And we now have a dairy operation, we have feeder pigs, hog confinement, we have a cow-calf herd. And I know first hand that it's really a family operation. That family rotates duties, takes turns doing chores on Sundays, and they work things out together, and that's what the family operation is all about.

Now, the acres are somewhere in the neighborhood of where yours are now. So it isn't just, as you say, a case of a 160-acre farm. I think we must recognize that times have changed, and there are situations that have changed with them.

But family unity and working together as a family, those basic ideas that surround a family have not changed, thank goodness. Those positive values are still there. And although some people think they're not very worthwhile, most folks in Iowa do, thank goodness. And those things won't change.

I want to thank all of today's witnesses who have taken the time and made the effort to share their views on future farm policy. The responsibility to transmit these views to the Congress and the administration is now mine, and I acknowledge and accept that responsibility.

Within the span of one generation, U.S. farmers have turned this country from a net importer of agricultural goods to the largest and most powerful producer the world has ever known. In fact, for the first time in the history of mankind, our country stands ready to produce and deliver food in proportion to the needs of the world's hungry, if we will only let it.

The fact that this country is idling over 80 million acres of the most productive land on the face of the Earth is tremendously regretful, and borders on a crime against humanity, and shamefully reflects past and current public policy ineptness. America's agriculture is as much an obligation as it is an opportunity; as much a blessing as it is a business—a technological phenomenon.

Future world history books will call attention to the fact that the most food productive land on Earth was placed in the stewardship of the most capable, enterprising, and innovative individuals, and judgment will be made relative to our potential and actual contribution to the betterment of the human race.

The challenge and responsibility for the Congress and the administration at this point in our history is to create a political and economic environment which will permit our agricultural resource to achieve its greatest potential and, at the same time, safeguard and preserve it.

It is time to implement a new era of agricultural policy, as has been said over and over again today, one which combines farm and food policy with an ambitious, aggressive international policy which has as its foundation the most powerful partnership—that is, the unmatched productivity of the American farmer and the economic strength and ingenuity of our representative Government.

I thank you all once again for coming. Have a safe trip home.

The committee is recessed.

[Whereupon, at 7:55 p.m., the committee recessed, to reconvene at 9 a.m., Tuesday, July 5, 1983.]

[The following information was subsequently supplied for the record:]

STATEMENT OF TOM DORR, VICE CHAIRMAN, IOWA GOP FARM POLICY COUNCIL, IOWA
REPUBLICAN PARTY, DES MOINES, IOWA

I am Tom Dorr, a farmer from Marcus, Iowa. I am appearing before you as vice chairman of the Iowa GOP Farm Policy Council. I wish to commend you and your committee for this hearing. The Joint Economic Committee has long been considered the top policy development group in Congress and your presence here bears that out.

In addressing the issue of farm policy for the next generation, there are three important questions.

First, how is food going to be used by this country in its foreign policy?

Second, how long is the U.S. going to allow other countries to manipulate the dollar before we insist on changes to correct the problems in world finance?

Third, must agriculture eternally defend its importance to the rest of the economy, or can we develop a long-term food and fiber plan for this nation?

First, the problem of food and foreign policy. Immediately the 1980 grain embargo to Russia comes to mind. In fact, a sizable portion of our current carryover in grains can be traced to that embargo. The problem is much deeper than that. The basic problem in using food defensively in foreign policy is the mistaken concept that by interfering with trade we think we can influence other nations' foreign policy. We must develop a policy in this country that allows commercial trade to continue unless the problems between nations become serious enough to sever diplomatic relations. Digging a little deeper in food and foreign policy, we come to the problem of embargoing food when there is alleged short supply in this country. When is this country going to grow up and find out that it is not an island alone, find out that when we are in short supply, the world is in short supply, and that we, indeed, are our brother's keeper?

To think that we should embargo food when there is a runup in prices and the stocks are reduced is really foolhardy, especially when you realize that the free and open market and its price is the best rationing system available in the world.

Digging still further in the problem of food and foreign policy is an attitude that is starting to surface out in Washington. It is an attitude that is not new, but one that we must guard against. We must oppose the quota system to world markets. The system was tried a number of years ago. Probably the best remembered is that of the International Wheat Agreement.

Over the long pull to think that we can carve up the world markets and allocate them fairly between producers is foolish. An agreement like this cuts across relative economic advantage. It cuts across the changing resources, the changing weather, the efficiency of a free and open world market.

The temptation to agree to a quota market system around the world is going to increase, especially as our problems with EEC and Japan become worse and we try to work them out. But this is one area that we must be on guard if we truly believe the theory of relative economics in trade between nations.

To put it another way, if the U.S. Government cannot protect open access to foreign markets for U.S. agriculture it will have only the domestic market. If we reduce agriculture in the U.S. to that extent, it will convert farming to a public utility. And to convert agriculture to a public utility is to eliminate all of its economic advantage.

I will stop at this dismal point to further emphasize how critical market access is to U.S. agriculture. Let us next examine the problem of world finance.

Over the last few years, we have moved away from the gold standard, and we moved away from fixed exchange rates into a fluid world financial condition where currency exchange rates change on a daily basis. One advantage of the variable exchange rate system is it adds liquidity into the world financial markets.

We have also created some very serious flaws. One flaw which must be addressed by this country is that, since there is liquidity between currencies, there may also be a demand for one currency against another in excess of what is the difference between strengths of the two economies.

Another problem is that as interest rates vary between countries, a demand is created that is again separate from those needs for commerce throughout the world. We are in a condition today where the value of the U.S. dollar has changed almost 20 percent in the past year and one-half relative to the value of the Japanese yen. This 20 percent value change is not based on the relative strength of our economy. It, rather, is based on the demand for the competitive dollar. The 20 percent differential is in place not because of relative economic disadvantage in world trade for our products, but because, first, the dollar is the preferred currency around the world, thus giving it an inflated value.

Second, our interest rates are higher here because of government deficit spending, and, third, because of a quirk in Japanese laws that do not allow their financial instruments to be traded on the world market.

Thus, with the exception of some futures trading in the yen, it is impossible for a company or an individual to own Japanese financial instruments, and to protect themselves in trade with or parallel to the Japanese.

It is high time that the U.S. Government convened a conference on world finance to work out these problems. We cannot guarantee a perfect outcome to a conference of this type, but we must move forward to work out these problems. The alternative is to further collapse the U.S. economy and result in relative gain in other areas of the world.

In addition to the problems we have in developed countries, we must address the issue of the financial problems of the Third World. If we continue the way we are with world finance not based on productive repayment capability but, rather, a race to see what bank can redistribute the most money, we risk a world financial collapse. It is time now to meet with our trading partners in the free world and then methodically work out the problems in world finance.

Let us turn to the third question, that of agriculture having to defend itself to the U.S. economy and our apparent inability to work out a long-term agricultural plan.

First, a current issue. We are now in the media backlash on the PIK programs. Reporters are digging out what they call the "true costs" to the American taxpayers for the Payment-in-Kind program. They are digging out all the wrinkles and imperfections that all government programs have when applied out in the economy. Let me just say that, given the burdensome stocks and the restrictions placed on the USDA by the Office of Manpower and Budget, the PIK program probably was the best program that could be developed. It may still be the best program that can be hammered out, given the present condition.

The unfortunate thing is that we're spending a lot of time rehashing the old program and its impact to the budget when we ought to be talking about how we are going to work out of our present situation. We must continue to make the point that

agriculture is the largest single section in our economy. When agriculture has problems, then everyone has problems. Agriculture is still the base of this economy, and to fail to address its problems in a timely fashion is to undo the U.S. economy.

Why is it necessary to go back to Congress every four years to hammer out a new farm bill? Why is it necessary for Congress to tinker with the farm every year? The net result of the lack of a plan thrown at farmers at the last minute is often a knee-jerk program. Many times farmers have been faced with the problem of having to sign up with a farm program when it isn't completely written yet. It is high time that this country sat down and laid out the parameters for a farm law that will allow the farmers to plan into the future. They must be able to do conservation practices knowing that their plan will fit into the government program if government intervention is needed on down the road.

Sometimes as we plod along, we fail to back off and see what has worked in the past and what hasn't. One of the programs that has had varying success is P.L. 480. All of us recall that Public Law 480 has saved a lot of lives around the world. Public Law 480 has built a lot of markets. Right now in most people's minds, P.L. 480 is pretty ineffective. This law needs to be revitalized and rejuvenated. We should change Title I of Public Law 480 to allow money from the sale of P.L. 480 products in other countries to be placed in a new type of lending institution for small farmers and small business people in these foreign countries. These two changes would go a long way in bringing the third world out of the economic doldrums. This would not only increase economic activity, but bring banking stability to these Third World countries. We need to change Title III back, to allow market development work to be done like it was in Korea.

I am very concerned that there is too much emphasis on production controls and not enough on potential demands. There is market potential out in the world for our agricultural products if we are innovative enough to find them. Research and market development are the keys.

The economic well-being of the next generation depends on our ability to protect and enhance this miracle known as U.S. agriculture. We must do it a little bit at a time; working toward free markets, improving world finance, helping poor countries help themselves, and working out a long-term program for agriculture. This plan is not quick and easy, but it is what needs to be done to improve the quality of life in the future.

I thank you very much for this opportunity to testify today. I commend the Joint Economic Committee for this long-range look at agriculture farm programs into the future. I truly hope that we will have many more chances to discuss these things in the future.

Thank you very much.

STATEMENT OF A. ARTHUR DAVIS, ATTORNEY AT LAW, DES MOINES, IOWA, ON BEHALF OF MABSCO AGRICULTURAL SERVICES, INC., AND RABOBANK NEDERLAND

Senator Jepsen: I write to you in my capacity as General Counsel of MABSCO Bankers Services, Ins. The subject of this letter is the Agricultural Loan Participation Program of MABSCO Agricultural Services, Inc. ("MASI") and Cooperative Centrale Raiffeisen-Boerenleenbank B. A. ("Rabobank Nederland").

MASI is a business corporation organized under Delaware law. MASI is a wholly-owned subsidiary of MABSOC Bankers Services, Inc., a Delaware business corporation owned in equal shares by the state bankers associations in the following twelve states: Arkansas, Colorado, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, North Dakota, Oklahoma, South Dakota and Wisconsin. These associations represent over 6,000 banks.

MASI was organized to enlarge the commercial banking industry's capacity to meet the increasing need for agricultural credit. The MASI/Rabobank Nederland program is designed to provide for an efficient and consistent source of funds for commercial banks which make agricultural loans in the twelve-state area. In addition, the program will permit banks to extend credit facilities to their customers in excess of their lending limits.

MASI will be engaged in the placement with institutional lenders of participation interest in agricultural loans made by commercial banks active in the program.

Banks participating in the program will each lend to MASI certain amounts, up to \$14,750, evidenced by subordinated demand notes such as Capital Notes. MASI may use the funds provided by the Capital Notes to purchase Participations for its own account in certain agricultural loans which cannot or will not be transferred to institutional lenders, or for other business purposes.

MASI has successfully completed a pilot program and is now launching a full-scale program involving the placement of participations by commercial banks throughout the twelve-state region. Rabobank Nederland, through its Federal Branch located in New York, acts as the institutional lender in purchasing the participations. MASI markets the program and otherwise acts as servicing representative for Rabobank Nederland. Generally, the interest rate paid on the participations to Rabobank Nederland, is indexed to Federal funds rate.

Although Rabobank Nederland has been the sole international lender purchasing Participations during the pilot program, MASI will not limit or preclude other institutional lenders from participating in the full-scale program. MASI has agreed to provide Rabobank Nederland with a right of first refusal: MASI must offer participations for purchase by Rabobank Nederland before either offering them to other institutional investors or purchasing them for its own account.

I wish to take this opportunity to personally thank you and the Joint Economic Committee for your and their efforts in connection with the planned July 1 announcement of the launching of the full-scale program. I am afraid I will be out of town on July 1, and I have asked my partner, Mr. Harlan D. Hockenbergh, to attend in my absence.

STATEMENT OF ROBERT J. WILLIAMS, EXECUTIVE DIRECTOR, TRADE ASSOCIATION OF PROPRIETARY PLANTS

The basic problem confronting agriculture, especially corn grain and dairy—the two major-problem segments—is excess productive capacity. The result has been excessive price support costs.

The extreme approaches of eliminating price supports or strict production control programs will not solve the problem. Eliminating price supports would create economic chaos in an already troubled economy. Mandatory base plans are undesirable from the standpoint of too much government regulation and unacceptability to farmers, and the fact that bases (right to produce) assume values. These values are a windfall to present producers, but become an added cost of production for new farmers or those wishing to expand.

Any agricultural program should be voluntary in nature. It should contain incentives to adjust production up or down, according to the needs of the commercial market, including exports. Reasonable reserves should be maintained in event of crop failures, et cetera.

Specific recommendations for dairy and corn:

The cheapest approach is to pay farmers not to produce surpluses. For example, in dairy it is estimated that present surpluses can be eliminated by a \$10 per hundredweight payment to reduce production eight to nine percent at a support level of \$13.10. It is cheaper for the government to pay \$10 per hundredweight than pay \$17 per hundredweight to purchase unneeded surplus. The farmer is better off reducing production five to thirty percent, because he receives \$10 per hundredweight for reduced volumes, plus saves \$6 to \$9 per hundredweight in variable costs of production. This is the program presently being considered by Congress, and it has a lot of merit. This approach can be refined with time and experience.

The payment not to produce and the associated price support rate gives the government all the flexibility they need to indirectly regulate supply and demand at the lowest possible cost, yet provides a safety net for farmers.

The same voluntary approach can and has worked in grain under the old acreage and conservation reserve programs. I believe the PIK program will prove to be too costly a solution.

The above programs contain the key ingredients necessary to balance supply and demand at reasonable prices and with minimum governmental costs. Being voluntary in nature, they are flexible and acceptable for individual farm operations with a minimum of government regulation.

An Additional Program Needed:

A program which could be incorporated with the corn program which would also be beneficial to the dairy program would be development of an ethanol (fuel alcohol) industry. This would not only be a boost for the corn and dairy industry but also our entire economy. Contrary to the general belief that corn is food for people, it is actually a feed grain for cattle. Only about five percent of corn production is used for human food.

Ethanol has been criticized as having a negative energy balance considering the energy expended for growing corn. Growing unneeded surpluses creates a much

greater negative energy balance than if the major portion of the energy is retrieved in usable fuel. Exporting corn also exports energy.

The following specific advantages could be derived from development of a fuel alcohol (ethanol) industry in agriculture in the coming years:

1. Cut down oil imports, thus improve foreign trade balance of payments.
2. Cut down economic vulnerability to oil embargoes, high prices, et cetera, for security as well as economic reasons.
3. Cheese production and consumption is increasing, causing increased pollution problems. Protein can be separated for human or animal feed. The remaining filtrate can be made into ethanol. An alcohol program would economically solve the increasing whey pollution associated with whey disposal.
4. An alcohol program would constitute an additional market—even if alcohol was subsidized—for corn. The more volume of corn which can be marketed reduces the price which has to be maintained on corn, because a farmer's income depends on price and volume.
5. If the government sells corn at a low enough price for alcohol production to develop, about \$2.50 per bushel, for a long enough assured period of time, the industry could develop with private money and resources. It would provide new jobs, new building, new investment and new tax base in agriculture. The PIK program is presently killing the developing ethanol industry. Break-even on ethanol means \$2.80 per bushel corn. The PIK program has driven the cost up to over \$3 per bushel.
6. This additional market for corn would allow fuller production on farms and assist associated service and the farm supply businesses.
7. Foreign countries need protein supplements to develop their animal industries. The by-product of corn alcohol is distiller's dried grain, which is a superior high-protein feed. It has prospects of being a good candidate for exporting.
8. The technology for alcohol production is developed and ready. Other alternative sources of energy are not proven or are in the developmental stage. Corn and whey are renewable sources of energy.
9. If one considers the economic cost and advantages of such a program, it is, overall, the best and cheapest approach to solving the problems of agriculture and our economy in general.

Time and space do not allow detailing this program, but the program should be given serious consideration in developing a long-run program which will benefit agriculture and our economy.

Summary: We need a combination of voluntary commodity programs where the government can balance supply and demand at appropriate price levels through a combination of incentives not to produce and price support programs.

By changing incentive payments and price support levels, the government has adequate flexibility to adjust production to demand, including exports, without the buildup of unreasonable volumes of surpluses.

Agriculture and our economy need a long-term program to encourage development of a renewable energy program involving ethanol from corn and whey.

STATEMENT OF LEE DALLAGER, PAST NATIONAL PRESIDENT, IZAAK WALTON LEAGUE OF AMERICA, TRUSTEE, J.N. "DING" DARLING CONSERVATION FOUNDATION, DES MOINES, IOWA

Thank you for the opportunity to address this Hearing today. I commend you for the strong interest in Future Farm Policy and the importance of Soil Conservation in our future.

As I earlier advised your Staff, technical material is being sent on for the use of the Committee.

I'm speaking to you today as a Citizen Business Owner who has had a strong interest in Conservation. My Hunting and Fishing pursuits keep me close to the land and help a continued awareness and appreciation of one of our greatest assets....Our Soil.

I think the key to future farm policy is a well planned, long term, consistent approach to both the farm economy and soil Conservation. A sound farm economy is important to all of us as well as the Farmer. It is much easier to encourage re-investment in conservation if the Farmer can project income and expenditures on a long term and stable basis.

As long as government plays a part in Agri marketing, we probably will always have a need for various subsidies but we do need to curb our tendencies toward over-production in many areas. We need a well coordinated approach to Farm Policy by all segments of our governments. It makes little sense to have programs encouraged by the U.S. Dept. of Agriculture that aren't in "sync" with EPA, IRS, etc. Coordination with the States is also important.

Water Planning enters into Farm Policy also. Water Quality and Water Resources are directly related to all agriculture. A serious need exists for Regional Water Planning with strict control. Inter-Basin Transfers are no good. Inter-State Pacts are very difficult to accomplish.

The need for soil conservation is quite apparent across the U.S. Any Farm Policy must contain strong provisions for meaningful Soil Conservation. It is interesting to me that Iowa and some other midwestern states have the most altered landscape in the country. Anyone who has flown over middle america in recent years has noticed a dramatic change. The continual loss of our topsoils is a real shame.

As far as soil conservation is concerned, we have a wealth of sound knowledge across the country about what is happening and what is needed... what we do need is something to be done.

There are a number of measures that need to and can be implemented if the Nations Leaders put forth a sincere effort:

- More Conservation Tillage
- Protection of waterways by green belts
- Proper & well planned shelterbelts that can also be used as set asides and long term crops such as timber
- Reasonable land use policy
- Conversion of marginal land to grass & timber
- Tax incentives to those who practice good conservation
- Crop rotation on tillable land
- Long term, well planned set aside acres
- Conservation and environmental education in our schools at all levels
- Termination of subsidies to those who don't practice soil conservation

We still can't ignore the fact that soil conservation requires money. Whether we directly contribute by government money or indirectly by tax or other incentives, we still need to realize that it is a long term continual process.

The Farmer is put in a real strenuous situation under present times. Most farmers want to practice soil conservation and many are very conscientious but are also frustrated by the irregularity of the farm economy.

In closing, I will share with you a statement that "stuck" with me that came with a responsible young western Iowa Farmer at a soil conservation meeting several years ago..... " I guess I know all about soil conservation that I can afford to know".

Thanks again for the oppurtunity to share my feelings with you today.

Lee Adlidge

STATEMENT OF JAY LEGVOLD, EAGLE GROVE, IOWA

AGRICULTURAL POLICY

It is my hope that these suggestions, together with that of others, will stimulate the development of a more healthy economic climate for agriculture and better land and water use policies.

Much of our price and income support legislation for agriculture since its inception in the 1930's has been misdirected.

After we have spent the money we have very little to show for it other than a temporary lift for the farmer. The subsidies have often misguided our production practices. As examples, we have subsidized irrigation when we actually need less crop production, and really need to conserve water for more appropriate uses; we have promoted an over expansion in milk production. All this at great costs to the Federal Government.

Soil and water conservation could be, but are not, properly addressed. The water level in the Ogalalla aquifer is reported to have dropped 100 feet in recent years due primarily to the use of water for irrigation. Not only are we depleting that very important source of water, we are also salinizing the soil so that before long the soil will not even be fit for dry land farming, as is already the case in other parts of the world, and even now in this country, because of using ground water for irrigation.

For our crop reduction programs, non-irrigated and non-erosive land is taken out of production at the same percentage as land needing conservation. This should not be. If we need to reduce production, let's place the emphasis of the crop acreage reduction program in areas needing soil and water conservation. Let's have something to show to future generations for the money spent today.

Referring to our PIK program, it is very unfortunate we could not have found a satisfactory way to use our surplus to help feed a starving world.

It would have been good international public relations. It is realized here that playing world Santa Claus presents problems, particularly if our help promotes a population growth in a nation that is more rapid than its economic growth. But wouldn't food do more good toward promoting friendships and stimulating good trade relations than guns? If Russia had excess food and fiber they certainly would use it to advantage.

In spite of short-sighted government embargoes and trade restrictions, the American Soybean Association and soybean farmers have set a standard of world wide marketing that is worthy of note.

Much of agriculture's cost problems of today can be addressed with appropriate labor legislation, by lower interest rates and by a common sense tax system. Unfortunately, we tend to wait to take corrective action until the costs are much higher.

Legislation regarding labor, interest rates and taxes are issues by themselves, but I would say that our laws should be such that they prevent any individual or group from taking advantage of others. Instead we tend to grant one group an advantage. Then we have to turn around and grant someone else a favor to compensate. And so, on and on the vicious circle goes. The labor union monopoly has not only unduly increased the cost of agricultural production, but has tended to make both labor and agriculture less competitive in the world market. The results are lost labor, lost markets and inflation.

When we take public money to reduce productivity and increase prices, we reduce the national standard of living and promote inflation. A "balance wheel" system plus other appropriate legislative action would be much better in handling agricultural economic problems.

Engineers are smart enough to put a balance wheel on an engine to make it operate more smoothly and effectively. The balance wheel absorbs energy on the power stroke, and then releases it between power strokes. Basically it does not increase or decrease the power delivered by the engine. But the

engine performs far better with the balance wheel than it would without.

I believe each commodity group in agriculture can establish a "balance wheel" of its own to minimize the affects of extreme swings in market prices at very little, if any, cost to the government.

The balance wheel idea would work in this manner. Each commodity would establish its own reserve fund. The fund would be developed by, say, a surcharge of 25% of that portion of the market price that exceeds 110% of the past three year average. Then, when the market price falls below 90% of the past three year average, the farmer would receive from the reserve fund an additional 25% of that portion the market price is below the 90% figure.

These are arbitrary figures and could be adjusted when the program is established by each commodity group.

This kind of program would not tend to reduce demand, as our present program does with a price support system at a time we want to promote a market. Also, under our present system, other nations tend to increase production when we reduce production and put a floor on the world price.

In short, our programs of the past are self defeating, and we must look for a better system.

July 10, 1983

Testimony for FutureAgriculture Program Policy

Senator Roger W. Jepsen
731 Federal Building
Des Moines, Ia. 50309

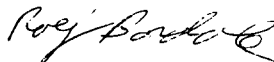
Senator Jepsen:

I believe the less government the better, but when the government manipulates and distorts world demand and price of our products, then they must be willing to support the U.S. producer or accept the consequences of a large number of full time farmer bankruptcies.

I believe the government could use farm program dollars more efficiently by making use of existing commodity trade offices and programs. I'm sure there are regulations to overcome, but I believe the effort would be worth it.

I would also like to plead with you to get the program information out early enough the previous fall, so we can plan the following season's work.

Thank You



Roy Bardole

5/100 RETURNED

IOWA SOYBEAN CHECKOFF

\$1.00
INVESTEDTHE
BEST TRADE
IN THE COUNTRY!

HOW YOUR SOYBEAN CHECKOFF
DOLLARS WILL BE INVESTED:
To create demand, increase
sales and add more profit

A total of \$3,343,000 is immediately needed to fund several identified American Soybean Association (ASA) projects, designed to create demand for more soybeans in existing foreign markets.

These projects and activities are outlined below with the anticipated Benefit Cost Ratios (BCR), as determined by ASA and the Foreign Agriculture Service (FAS), and the projected Return on Investment.

PLEASE NOTE: BCR's are calculated for THREE YEAR PERIODS -- the average anticipated result for three years divided by the average estimated investment. For more information, please contact Les Rhodes, Executive Director, ISA/ISPB office, 1200 35th Street, Suite 600, West Des Moines, IA 50265; 515/223-1423.

<u>PROJECT DESCRIPTION</u>	<u>FUNDING NEEDED</u>	<u>BENEFIT COST RATIO</u>	<u>PROJECTED RETURN</u>
<u>Western Europe</u>			
Greek Feed Team to U.S.	\$ 10,000	46	\$ 460,000
Turkish Feed Team to U.S.	10,000	46	460,000
EEC Consumer Journalist Team to U.S.	12,000	46	552,000
EEC Margarine Market Profile	22,000	28	616,000
Institutional Soy Oil Frying Promotion	4,500	28	126,000
Italy, France, & U.K. Soy Oil Promotion	750,000	12	9,000,000
Greece & Turkey Feed Demonstrations	50,000	46	2,300,000
Greece & Turkey Soy Oil Technical Services	20,000	22	440,000
Greece & Turkey Trade Servicing	50,000	34	1,700,000

-CONTINUED-

MRA3/83

<u>PROJECT DESCRIPTION</u>	<u>FUNDING NEEDED</u>	<u>BENEFIT COST RATIO</u>	<u>PROJECTED RETURN</u>
<u>Northern Europe</u>			
Norway Soy Margarine Promotion	\$ 6,000	36	\$ 216,000
West Germany Identified Oil Promotion	250,000	11	2,750,000
Finland Feed Demonstrations, Swine and Poultry	10,000	54	540,000
West Germany Soy Protein Research	20,000	166	3,320,000
West Germany Soy Protein Technical Services	32,000	15	480,000
Austria Identified Soy Oil Promotion	20,000	13	260,000
Austria & Switzerland Margarine Promotion	5,000	38	190,000
Denmark Soybean Meal Promotion	15,000	99	1,485,000
<u>Spain & Portugal</u>			
Spanish Poultry Marketing Team to U.S.	5,500	39	214,500
Co-Sponsor European Feed Manufacturers Association Technical Conference	4,000	39	156,000
Fish Farming Seminar	10,000	39	390,000
Portugal Soy Oil Technical Servicing	20,000	51	1,020,000
Portugal Soybean Meal Technical Seminars	10,000	86	860,000
<u>Middle East</u>			
Algeria Bulk Handling Seminar	15,000	66	990,000
Tunisia Feeding Demonstrations	6,000	65	390,000
Nigeria Poultry Indepth Technical Servicing	60,000	52	3,120,000
Morocco Soy Marketing Seminar	10,000	220	2,200,000
Mid-East & Africa Management & Technical Training	22,000	100	2,200,000
Mid-East & Africa Soy Oil Technical Servicing	65,000	56	3,640,000
Nigeria Poultry Team to U.S.	14,000	70	980,000
Nigeria Poultry Seminar	17,000	70	1,190,000
Feed Formulation Technical Servicing	10,000	70	700,000

<u>PROJECT DESCRIPTION</u>	<u>FUNDING NEEDED</u>	<u>BENEFIT COST RATIO.</u>	<u>PROJECTED RETURN</u>
<u>Eastern Europe & U.S.S.R.</u>			
Soviet Feed Milling Short Course	\$ 25,000	16	\$ 400,000
Technical Food Use Training	8,000	15	120,000
Yugoslavia Feed Milling Short Course	80,000	50	4,000,000
Regional Technical Servicing, Soybean Meal	200,000	38	7,600,000
<u>Japan</u>			
Identified Soybean Oil Promotion	300,000	24	7,200,000
Fish Feeding Trials	20,000	61	1,220,000
<u>People's Republic of China</u>			
Technical Servicing, Soy Oil	15,000	16	240,000
Soy Protein Team to U.S.	25,000	16	400,000
Soy Milk Team, Asian travel	15,000	16	240,000
Pilot Soy Milk Plant	32,000	16	512,000
Poultry & Livestock Feeding Trials	65,000	16	1,040,000
<u>Korea</u>			
Soy Oil Utilization Team to U.S.	13,000	77	1,001,000
Fish Feeding Demonstration	5,000	78	390,000
Pork, Poultry & Egg Promotion	8,000	78	624,000
Technical Servicing, Soybean Meal	15,000	111	1,665,000
Soy Oil Promotion & Technical Campaign	174,000	69	12,006,000
<u>Taiwan</u>			
Fish Feeding Trials	8,000	67	536,000
Soybean Oil Promotion	10,000	31	310,000
Technical Information Distribution	5,000	67	335,000
Poultry & Swine Technical Seminars	6,000	67	402,000
<u>Southeast Asia</u>			
Aquaculture Trade Servicing	14,000	44	616,000
Soy Food Recipe Booklets	5,000	44	220,000
Soy Baking Workshops	2,000	44	88,000
Food Editors Team to Japan & U.S.	24,000	44	1,056,000
Singapore Identified Soy Oil Promotion	30,000	30	900,000
Aquaculture Team to U.S.	30,000	29	870,000
Technical Servicing, Soy Oil	58,000	24	1,392,000
Technical Servicing, Soy Food	40,000	21	840,000
Technical Servicing, Soybean Meal	47,000	40	1,880,000

<u>PROJECT DESCRIPTION</u>	<u>FUNDING NEEDED</u>	<u>BENEFIT COST RATIO</u>	<u>PROJECTED RETURN</u>
<u>Asian Subcontinent</u>			
Pakistan Poultry Feeding Trials	\$ 35,000	145	\$ 5,075,000
Pakistan Poultry Team to U.S.	22,000	79	1,738,000
India Soy Oil Technical Servicing	38,000	96	3,648,000
Establish office in India	23,000	96	2,208,000
Aquaculture Team to U.S.	7,000	86	602,000
Technical Servicing, Soybean Meal	20,000	79	1,580,000
<u>Latin America</u>			
Identified Soy Oil Promotion	32,000	60	1,920,000
Soy Milk Replacer for Livestock	20,000	106	2,120,000
Poultry & Livestock Show Exhibits	12,000	106	1,272,000
Poultry Seminars	15,000	106	1,590,000
Swine Seminars	15,000	106	1,590,000
Bakery Seminars	14,000	15	210,000
Aquaculture Team to U.S.	9,000	106	954,000
Fish Feeding Trials	4,000	106	424,000
Mexican Poultry Seminars	5,000	106	530,000
Venezuela Soy Oil Promotion	60,000	61	3,660,000
Establish South American office	170,000	44	7,480,000
<u>Worldwide</u>			
Worldwide Technical Publications, Soybean Meal	8,000	100	800,000
TOTAL	\$3,343,000		

TOWARD THE NEXT GENERATION OF FARM POLICY

TUESDAY, JULY 5, 1983

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 9 a.m., in the Convention Center, Town House Motel, Sioux Falls, S. Dak., Hon. James Abdnor (member of the committee) presiding.

Present: Senator Abdnor.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR ABDNOR, PRESIDING

Senator ABDNOR. The Joint Economic Committee will come to order for the hearing this morning. And I want to welcome all of you people to our hearing.

This is a subject of great importance to me and not only South Dakota, but all the world where farming plays such an important part in the economy. The Joint Economic Committee has been holding extensive hearings in Washington, and we wanted to come out to different areas of the country to visit with the people who have to live with the legislation we pass and to get their reaction. We have completed a series of eight Washington hearings on the theme "Toward the Next Generation of Farm Policy."

During these hearings, we heard from 28 national experts addressing a variety of subjects ranging from farm policy in the post-PIK era to the consumer's interest in the farm policy, from agricultural trade policy to the economic condition of rural and agricultural business, conservation, and financing agriculture in the 1980's. The testimony was comprehensive and sometimes controversial and certainly, above all, thought provoking.

At our first hearing Secretary Block identified three basic options for future farm policy: Continued programs; turn to the protectionist policies as employed by the European Economic Community; or begin the movement toward a greater commitment to a more market-oriented U.S. agriculture. In strongly recommending the third option, Secretary Block requested congressional authority to set target prices and loan rates. The Secretary acknowledged that while some farmers would flourish under a more market-oriented U.S. agriculture, others would not and would be forced out of farming.

Representatives of major farm organizations testified during our second hearing. We had the heads of the biggest farm groups in the

country, and as might be expected, the entire spectrum of Federal farm policy was presented. We heard recommendations ranging from a more market oriented agriculture to strict supply control and income support programs. A panel of four prominent agriculture economists presented testimony during our third hearing. Almost in unison they argued for farm programs that were more flexible and capable of being adjusted to changing domestic and international economic conditions. They did not hesitate to recommend that loan rates should be reduced to stimulate support sales and target prices frozen or lowered to discourage production. They stated that farmer-owned reserve programs were not being used as originally designed and that strict supply control programs would be with us for some time.

The consumer's interest in farm policy was the subject of our fourth hearing. Given the divergent viewpoints represented on this panel of witnesses, it was difficult indeed to try to summarize it. Perhaps it is sufficient to say that the administration's witness and the witness from a consumer advocacy group had few areas of agreement. The third witness, however, presented a very interesting perspective which he referred to as a triangle of interest of agricultural policy; triangle being the inherent conflicts between complementary aspects of farm, food, and foreign policy objectives; all three of which must be fully recognized and effectively addressed in any future agricultural policy.

Administration officials from the Departments of Agriculture and State and the Office of the U.S. Trade Representative were our witnesses at our fifth hearing. No surprise here either, but the point was made that the Reagan administration must set aside and avoid counterproductive turf battles between the three governmental agencies. All three agencies are on record in opposition to any future agricultural trade embargoes, and that was encouraging to hear.

Agribusiness, rural communities, the unsung warriors of agriculture's current depression were discussed during our sixth hearing. Production agriculture generates 20 million off-farm jobs and is the life blood of thousands of rural communities. The present economic employment of America's 2.4 million farmers is truly only the tip of the iceberg.

Conservation was the focus of our seventh hearing and a critically important point was made. Agriculture substantially must be both economic and environmental. Continued degradation of agricultural resource base, soil and water, will eventually make profit a moot point.

The committee's final Washington hearing dealt with the very complex challenging topic of financing agriculture in the 1980's. Because of agriculture's depressed financial condition, farmers are becoming increasingly dependent on Federal lending institutions. However, a recently completed 1979 farm finance survey performed by the Bureau of the Census revealed that almost one-half of the farmers were at that time totally debt free. I don't mind telling you I have trouble accepting that. Supposedly they have a census along that line.

One, of course, cannot even begin to adequately summarize the findings of 8 congressional hearings, 28 witnesses and over 20

hours of testimony. But in my mind there was one overriding concern expressed or implied by virtually every witness. That concern was the absolute frustration over our failure to design and implement public farm policies and programs that would reflect the full competitive clout of the U.S. food and production and distribution system in the international marketplace. The next generation of farm policy must do that. And, of course, I'm here to listen to your ideas.

This morning it is appropriate that we start off with our Governor whom we so highly respect. He offers South Dakota—one of the most agricultural States in the Nation—strong leadership and I can't think of a more fitting witness to start us off.

Governor, welcome. We look forward to hearing from you.

STATEMENT OF HON. WILLIAM JANKLOW, GOVERNOR, STATE OF SOUTH DAKOTA

Governor JANKLOW. Senator Abdnor, thank you very much. I would like to start off this morning by saying, and I speak as Governor, that you are a rare commodity that we are very proud of. You are a U.S. Senator who comes back and does his work in a year when there is not an election, who comes to South Dakota between elections, to find out what it is that ails the people, what it is that they feel ought to be done about their ailments, and more importantly, showing a willingness to go back to Washinton to try and do what needs to be done to straighten out some of these problems that we face.

You know, as we discuss the topic toward the next generation of farm policy, I think the first thing we have to do is really honestly understand where we are. We point our finger a lot as to how we got there, but sometimes we are confused as to where we are at.

I think if we pause to reflect for a few minutes, we can't help but look at some of the major trading areas where we heretofore have had a significant impact on the world; the first one obviously being the European Economic Community. It was really right after World War II that Europe lay in devastation. Whether the country was one of our allies or one of our enemies during the Second World War, the entire continent, for practical purposes, was laid to waste. Their industrial might was gone. They had none. Their agricultural might was virtually nonexistent. They were left to farming pursuits or agricultural efforts that in some instances approach what had gone on in the Middle Ages.

There was a strange move underfoot after the war, really led by the United States, to integrate and join together the European Economic Community. It ended up with something like the Treaty of Rome. They went after a common agricultural policy. But what they tried to do is they integrated both the industrial and agricultural mighty Europe. They tried to find a few common grounds.

First of all, they wanted to increase farm productivity, something that this country greatly supported. They wanted to insure a fair standard of living for their farmers, something, again, that this country supported. They wanted to stabilize agricultural markets and that is something the world has sought to do for hundreds of years. They wanted to guarantee regular supplies. And again, that

was something that we supported. And they wanted to insure reasonable food prices. And there has never been anybody in the world that has ever argued that we should have food at unreasonable prices.

In moving toward those goals, there was a tremendous amount of support from the American people, the American Government. And it wasn't just moral support, leadership. It was financial. We started out with the Marshall plan. We started out with food programs. And the net result was that they were able to build themselves into one of the greatest economic powers and they were integrated together in the history of the world.

But where are we today in 1983? First of all, we find that they have conducted their agricultural pursuits, and more importantly, not their farm policy, but their governmental policies, in such a way that, one, they stifle the quantity of the foods that are demanded within the European Economic Community. The Economic Community in Europe uses export subsidies in third markets, far in excess of what has ever been used elsewhere in the world. The added instability that the European economic stability transmits into world markets by maintaining rigidly stable prices and insulating members from justice signaled by the international market communities bring havoc not only on their own domestic markets, but the international markets as well.

Where are we? We now find that they have incredibly high support prices, a system of variable levers, a price that is called or a mechanism that is called the intervention price. If you want to go back to 1973, the European Economic Community had \$8 billion in exports. By 1980 they have had a threefold increase to \$25 billion. They imported in 1973, \$21 billion. And in 1980, they imported \$43 billion. So they doubled in the amount of agricultural goods that they imported, but they tripled the amount that they exported.

What does that mean for us? It means if we look at the 1980-81 price, the world market for wheat was \$195 a ton. The European Economic Community supported it at the price of \$362 a ton in the domestic markets. The world price for wheat was \$152 a ton and the European Economic intervention price was \$217. Corn was \$152 a ton on the world markets and they supported it at the rate of \$217. And beef on the world markets was worth approximately \$1,200 a ton, and they supported it with their intervention price almost double to the rate of \$2,200 a ton.

So where does that put us as we look at the European Economic Community? It helps us in understanding certain things. First of all, these 10 countries that make up the European Economic Community are now the most important trading block in the history of the world. Their prosperity has increased in Europe much faster than it has in the United States.

In 1957, the per capita income in the Common Market was less than half of that of the United States. Today it's over three-fourths of what the per capita income in the United States is. In 1975 the European Community—since 1975, I should say, the European Community has declined as a share of the U.S. agricultural market. Sure, they are an important trading partner of ours today, but they become less and less significant every year as they artifi-

cially expand, as they artificially create, and as they artificially tinker with the world marketplace.

As an overall trading partner or as a trading entity, I should say, the European Economic Community is larger than the United States, as a trading community. In the literature that they have passed out in preparation for these hearings, they really pass out the obvious. You see charts that say things such as factors that propelled production upward in the past decade. Easy credit, I submit there is no such thing for agriculture or really for any struggling entity in America as easy credit. There may be the availability of money, but when you pay 13, 14, 15, 17, and 20 percent, that is not easy credit. What that really is is a transfer of one's back and one's labor to someone else who provides the capital or the formation of capital which really means that people are not engaged in economic freedom pursuits as they go about their own individual efforts.

We have seen heavy capital investment in the agricultural community in the last decade, a phenomenal achievement in light of what the rest of America has done. As we went through the decade of the 1970's when virtually this entire country made no investment in the capital formation of the capital base, when the steel mills invested nothing in their mills and the petroleum-chemical complex invested nothing in their mills and the automobile companies invested nothing in their mills and as industry after industry, major industry made no investments for the future, it was American agriculture that did it virtually alone.

Billions and tens of billions of dollars were poured by the independent farmer back into the farmplace, building up their machinery, building up their equipment, forming the soils, going into irrigation, developing water resources. They have made a heavy commitment in terms of capital investment; such a heavy commitment that they are able to compete with the rest of the world in a free marketplace unlike anything else that there is that engages throughout the entire world economic community.

Nobody in the world any longer looks forward to the opportunity to buy an American automobile. It used to be the story that an American automobile was the ultimate status symbol in some countries. Nobody looks forward to purchasing steel that is produced in our steel mills. What the world looks forward to is the opportunity to have America as the ultimate shock absorber for their demand for food. That takes place with the demand that people have to eat.

We see rising prices and price supports. And they talk about that being one of the factors of overproduction in the past decade; booming farm exports. The booming farm exports did not come about as a result of any official governmental policy of the United States. We were all caught by surprise in the middle 1970's when the monsoons raised destruction in India, when there were the tremendous shortages. For about the fourth consecutive year unforeseen circumstances caused the failure of the Soviet crops. Year after year unforeseen circumstances always caused them to fall short with respect to what their demands are, or I should say, the needs of their people.

We had acreage expansion. And part of that acreage expansion came about as new agricultural technology took over in America. Part of it came as a result of people really needlessly and unfortunately tearing up soils that had no business being torn up. They now hold the potential to blow away to other States or wash down to the Gulf of Mexico and clog our waterways and streams. But we had acreage expansion.

Using technology, new grains, new strains, new genetics, new ways of applying and utilizing fertilizer caused a tremendous increase in the amount of production that was capable of being done from any particular plot of ground, and then we were blessed, like we have been for the last 1,000 years in this country, with good weather; much better weather than we had ever really experienced in the—in the modern history of American agriculture.

And where do we find ourselves after half a decade of this? We find the world at a worldwide recession for a lot of reasons. First of all, you can't double and then quadruple—I should say triple and then quadruple the price of something as basic to the wheels of industry in the world as petroleum without causing incredible inflationary pressures and problems.

Second of all, we found the rising value of the dollar, a phenomenon none of us expected. Year after year after year, as America entertained deficits, as America pursued really unsound fiscal policies, we saw the value of our dollar slipping. And then all of a sudden because of really the economic disaster and recession that were taking place elsewhere in the world, we all of a sudden found, in almost a contradictory sense, the American dollar increasing in value. We found instability in Eastern Europe. We found instability in Central and South America. We found instability basically throughout the world. Then we ran into our embargo-related losses; something that, again, wasn't anticipated.

As we moved forward from the decade, from the 1970's into the 1980's, we saw increased East-West tensions and unfair trade practices. You know, when you go back to the scriptures, this great Judeo-Christian belief that most this country holds near and dear to itself, you can look at Isaiah, the book of Isaiah, chapter 2, scripture No. 4, "And they shall beat their swords into plow shares, and their spears into pruninghooks: nation shall not lift up sword against nation, neither shall they learn war anymore."

As you introduced me this morning, Senator, you talked about being the most agricultural dependent State. And we are. There are States that out produce our State, but there are none that are more dependent in terms of their economic viability and survivability than South Dakota is to agriculture. There are States that have larger yields or make greater income in terms of total dollars, but there are none that make a greater per capita receipt for their people in return on agriculture than we do.

We are not basically tied to the rest of America's economy. If we had \$4 corn and \$6 wheat, there would be no problems in South Dakota. The rest of the problems that the world has and America has wouldn't be visited upon us.

If you drive across South Dakota like 9 million Americans will probably do this summer, you will see one of the most ironic and symbolic sights that you can find anyplace in America because side

by side you find missile silos and you find wheat silos. You find oceans of wheat and at the same time a vast military complex that is used for the safety of this Nation. As much as the safety of this Nation, you find the grain that we are capable of producing. Missiles and wheat may seem a little bit inconsistent, as inconsistent as the biblical symbols of swords and plowshares. Yet, they are closely entwined in the past and the future course of America's foreign affairs.

This country and the Soviet Union really, unfortunately, today stand on near equal terms in terms of the overall ability to defend themselves and to protect the world. But in contrast the food race is no race at all. There has never been a starting point. It's never even been a fight.

The United States every year draws closer and closer to achieving two goals that were once considered mutually exclusive, the conversation of guns and butter. We are approaching both a balance of fire and a balanced diet unlike the history of the world has ever seen. But our friends the Russians aren't so lucky. No other country in the history of the world has had to buy and import and get as much food as the Soviet Union has to. Not even India back in the 1960's and 1970's after the great successive failure of the monsoons, with all of their teeming hundreds of millions of people had to import as much food as the modern Soviet system has to do. No less than one-fourth of the grain consumed in Russia today is imported from the West. Every day, even in these low trade times, two 20,000-ton freighters piled high with wheat sail from American ports to the Soviet Union. Still others sail from Argentina, Canada, Australia, Brazil, and a lot of other trading partners.

Last year the Soviet Union spent \$6.6 billion in purchasing agricultural foodstuffs, at a time when the Soviet's prime exports, gold and oil, brought successively lower prices on the world market. Russia's annual imports of meat have skyrocketed. They jumped from approximately 170,000 tons in the early 1970's to over one million tons less than a decade later in the 1980's. Russia's total food import bill has tripled between 1974 and 1980. The outlook for the Russian balance-of-payments has turned even worse in recent years.

The Soviet Union has almost exactly the same area of permanent cropland per person as does the United States. Each one of our countries have approximately 2.2 acres for every person in the country; 2.2 acres that are under cultivation. Yet the Soviet Union cannot adequately feed it's own population.

American agriculture not only supplies our population with the richest diet in the world, but also supplies more food for export than any other country. We are far ahead in the food race. We are so far ahead of the Soviet's that they can't even see our taillights. The contrasts are staggering, Senator.

During the last decade American farmers boosted annual grain production from 215,000,000 tons to 330,000,000 tons; double the Soviet yields. During the same time period the production of Russian farmers has declined, actually declined. Because of fertilizer, pesticides, new hybrids, good old fashion work, American farms have tripled corn yields in recent years.

Soviet production again in this field has always slumped. It takes the Soviets 8 tons of grain to produce 1 ton of beef. It takes the Americans 5 tons of grain to produce a ton of beef. Soviet cattle are delivered to the market place with an average weight of 700 and some pounds; America's in excess of 1,000 pounds. Their dairy cows yield approximately 5,000 pounds of milk a year compared to ours in excess of 12,000 pounds a year on average.

German research just a couple of months ago concluded that in order to produce cattle weight gain of 100 kilograms, it takes the Russian collective farmer 55 hours and in the United States it takes 3.1 hours, almost 1.20 of the amount of time it takes their Soviet counterpart. Each person working on the American farm produces enough food and fiber for 76 persons. One-third of those people live in other nations outside the United States.

Two of every five acres in the United States are under agricultural cultivation. And every time the value of American farms increase by \$1 billion, we create approximately 31,600 new jobs, most of them in the small towns and on the farms and ranches of this country. Agriculture represents one-fifth of America's gross national product, 23 million jobs, and about \$40 billion in exports.

Why do I throw all these numbers around? Because we have to somehow fundamentally start understanding in this country the important unique role that agriculture has played during these current devastating economic times. We have the ability in this country to produce what it is that the world truly does need. What the world needs it can't really produce for itself unfortunately in a lot of areas.

In addition, unfortunately, most of those nations with which we are competing are subsidizing agriculture far in excess of what we are trying to do. As we hear the discussion that we have to be turned loose to a free marketplace, that is great sounding rhetoric. And I have never met a farmer of any political persuasion—left, right, liberal or conservative, Democrat, Republican, what have you—that would argue with that if they were competing with the agricultural producers of the rest of the world. But it's unfair, it's unjust, and it's unsound to expect America's agricultural producers to compete with the governments of the rest of the world and be left to fend for themselves in a marketplace that is not a free marketplace.

We kid ourselves. Never in the history of the world has something that has been a free pursuit been more tied in to governmental policies than American agriculture is tied to America's policy; whether you are talking about national defense considerations, and our country's determination of which countries we will provide free food for or low-cost food for in propping up some government or propping down some government, pulling the pegs out from under some government.

We historically have utilized the food weapon as one of the weapons of doing that; whether we are talking about foreign policy considerations—foreign policy considerations that again determine things such as most-favored-nation status, whether we are trying to provide assistance and support, whether we are trying to provide assistance and support to some of these other countries, again, whether we are trying to teach them a lesson or tweak their noses

a little bit. We use, again, the one ultimate weapon that America has; our food or our ability to produce food for their people when we make those determinations.

And finally, our own domestic food policies. There is no free marketplace within our own domestic food policies. As the cheese warehouses become full, all of a sudden the Government turns loose and gives away free cheese. And they gave away free cheese to the point that it may affect the price in the marketplace of purchased cheese. So then we stop the distribution of free cheese in order to prop the price within the competitive marketplace. It's an artificial price in an artificial marketplace when you are moving these things into storage and at the same time holding up the price.

I am not criticizing any of these moves. What I am suggesting is whether you are talking about national defense, whether you are talking about foreign policy or whether you are talking about domestic food policy or domestic economic policy, there is no industry that is more tied to the governmental whims, caprices, and policies than American agriculture is.

Since 1973, the first year of the Arab oil embargo, payments for agricultural imports to the United States have offset more than 62 percent of America's increased expenditures for imported oil. That is one of the most phenomenal statistics in economics that America has; something that our people really don't know. That is the price of oil has shot from a dollar or so a barrel up to a high of \$30 at some points in time.

America's agricultural exports during the same period of time were able to foot the bill for—alone, single handedly for over 62 percent of all of our increased expenditures for imported oil. Over this amazing picture of American agricultural productivity loom the lengthening shadows of two developments which pose both a danger and an opportunity. One shadow is cast by the world's growing dependence upon America's food pantry. By close to the end of this century, the world will have as many as 2 billion additional mouths to feed, 2 billion more than they have just today. Most of them will be born in developing countries, not developed countries. And most of them will live in areas that have especially marginally poor land; marginally poor in terms of their suitability for agricultural production.

Bob Bergland once said the world's agricultural economic shock absorber is the United States. And one of the things that we have to recognize is if our agricultural people are going to survive—forget the prospering—if they are going to survive the 1980's, they are going to have to become more than just the agricultural shock absorber or the utilizer of last resort for the hungry people of the world.

What we now call trade wars aren't new. Back in 1807, Thomas Jefferson rammed an embargo act through the Congress of the United States. The embargo was aimed at, I think, England and France. Chronic war has distributed—has disturbed, I should say, American commerce. A poet put the embargo into a poem which is as appropriate today as it was back in 1807. He said,

Our ships all in motion once whitened the ocean. They sailed and returned with cargo. Now doomed to decay, they have fallen prey to Jefferson, worms and embargo.

American farmers whose foreign markets disappeared overnight in 1807 reversed the letters of this cursed word embargo and they called it "O grab me". The farmers knew where they were really being grabbed and by who.

In 1974 it wasn't much different. Not for foreign policy reasons and not for national defense reasons, but for domestic food reasons, domestic economic reasons, another President, President Ford, announced an embargo on the exporting of soybeans from the United States. Shortly after this embargo began, one of the giant trading companies of Japan bought 50,000 acres of land on the Brazil frontier. They have turned all 50,000 acres into soybean production. It was the beginning of the end for American domination of the world soybean trade and the start of a remarkable success story in the name of Brazil.

President Ford was simply trying to stem what he felt were inflationary pressures on the fast rising world soybean demand that had been put on the domestic livestock prices. What he succeeded in doing was making Brazil one of the world's major export growers. In fact—and this is a phenomenal statistic—if we talk about Brazilian coffee, last year the nation of Brazil earned more money exporting soybeans than they earned from exporting coffee. Countries like Canada, Mexico, Bulgaria, Rumania, they are now all significant soybean producers. Since 1974, America's share of world soybean trade dropped more than—from more than 90 percent down to around 60 percent.

Just a few years ago, in January 1980, President Jimmy Carter drafted once again the America farmers to fight a diplomatic war against the Soviet Union. He didn't ask for volunteers. He again drafted them, all into his trade war that he was going to have with the Soviet Union.

Farmers in Canada and the Common Market cashed in on higher prices and expanded markets. America's farmers, who had until that moment been encouraged to produce as much as possible, piled their embargoed grain on railroad sidings. That winter the sparrows ate from the railroad sidings a lot better than a lot of our farmers ate from their agricultural pursuits.

Before that selective embargo, we had 70 percent of the Soviet agricultural market. Our share dropped to 13 percent almost overnight. Last year we slowly climbed back to 35 percent. When President Carter started playing Russian roulette with American grain, he not only wounded himself politically, but he also economically wounded American farmers. Some have never recovered from these wounds. It's like any other war. Some die, some came home injured, and a lot of them are still healing.

Of course, not only the decisions by the President and the Congress hamstrung American agriculture. The Marshall plan after World War II was a challenge that America farmers met with gusto. The Russian deals of the 1970's, part of our policy of détente helped fuel an extraordinary change in Soviet economic policy.

The Federal Government has continuously changed the economic rules of the game for the American farmer. If there is one message that I can drive home more than any other, it's that the American farmer can't always be the recipient, can't always be on the end of the line of new found policies from Washington, be it from the leg-

islative branch or more importantly from the executive branch of this country, of either one of the major political parties. It's not only unfair and unjust, but more importantly, it's unworkable to expect the farmer to stay out there and become a pawn in the marketplace of governmental policies that are really alien to any of the partnership roles that government has ever played with agriculture.

The Federal Government has continuously, as I said, changed the economic rules of the game for American farmers. In effect, Congress can by its whim and caprice appeal the laws of supply and demand. One year the Government tells the farmers to grow a blade of grass or two blades of grass where one grew before. The very next year they tell the farmer to sit in the shade and chew on the blades of grass. Of course, the farmer is expected to maintain consistent his massive and expensive investment in land and machinery.

Because the world's appetite is growing as fast as its population and because the Soviet Union is becoming increasingly dependent upon world agricultural trade, agriculture is now more important than ever considered as a national defense weapon by policymakers throughout the world. The policymakers who are so eager to beat plowshares into swords should know their covenant carries a commitment. If our farmers are to be used as soldiers in America's trade wars, then the Federal Government has a continuing obligation to help its troops.

American agriculture is the greatest private enterprise tool the Government uses to conduct foreign policy. There is no other industry, there is no other profession, there is no other pursuit that is used by America's Government to pursue it's foreign policy and it's national defense policy like they use American agriculture. The day may soon come when a John Deere tractor is more powerful than an American tank; when a grain silo is greater than the missile silo.

And the important thing we have to remember is just as we can't afford to let our national defense fall by the wayside—so if it's ever called upon to be needed, it's there to respond—the exact same message is true with American agriculture. There is no such thing as saving agriculture by a crash program. Senator, you know as well as anybody does. You have come from an agricultural background. You spent your whole life dealing with agriculture; as a young man, as a farmer, and in political life. You know full well there is no way to provide a quick fix to the problems we face in agriculture. As a matter of fact if it can be fixed quickly, it isn't broken. It's not only going to take a commitment by the American people, it's going to take understanding.

First of all, there is no way our friends and neighbors and relatives in the cities can begin to deal with our problems unless they understand them. There isn't any way that we can begin to assist in the problems of places like Cleveland and Detroit and Pittsburgh and what have you until we understand those people and their problems. And one of the great beautiful things about this country is that every time since way back in the 1400's, and clearly every time since 1776 when this country has been called upon by a

threat from outside our shores, it has responded together to deal with these problems.

And so I guess I ask as Governor of the most agricultural State in the Union that the foreign policymakers, the national defense policymakers, and the domestic policymakers of our elected government in Washington, the legislative and the executive, recognize the unique responsibility that they have to agriculture if they are going to continue to use agriculture for their governmental policies. Thank you very much.

Senator ABDNOR. Thank you, Governor. I do want to visit with you just a second about a few questions. But first, let me introduce to you the gentleman on my right. This is Robert Tosterud, a North Dakota product who came to Washington. He is an agricultural economist. Mr. Tosterud grew up on a farm. He was with the Department of Agriculture when I borrowed him one day. I had known of his great ability and borrowed him for my Joint Economic Committee hearings.

I am chairman of the Subcommittee on Agriculture and Transportation. Let me say that the Joint Economic Committee is a very prestigious committee in Washington, made up of the House and Senate jointly. During my first couple of months on the committee it seemed to me that agriculture was rarely mentioned. Economists, such as Allan Greenspan and Walter Heller—and everyone else in between—appeared before the committee, but rarely did I ever hear anything about agriculture. When 20 percent of the economy is agriculture, and it's certainly worth talking about.

I did a little research and discovered that 25 years ago this committee carried on extensive agricultural hearings. We revived the issue and now agriculture is a prime topic on the committee. That is why we are out here for these hearings.

I would encourage you all to pick up our report from a year ago covering our first year's hearing. We brought in the former Secretary of Agriculture. I remember Murray Weidenbaum, who was economic adviser to the President—I chewed him out one day because I didn't think he knew what agriculture was about. So when he appeared before the committee, he said "See, Senator Abdnor, I do know something about agriculture."

We are working very closely with Senator Helms who is chairman of the Agricultural Committee of the Senate, de la Garza, who is a Congressman from Texas, chairman of the House Agricultural Committee. True, this committee does not have any authorizing authority, but the facts and findings, and the reports that we bring in are going to be extremely beneficial to those committees. They have got to come up with something innovative.

Governor, I just want to tell you that you did a beautiful job of laying out the history and the problems. I wish we had the quick answers, or as you say the real quick fix. I don't think we are progressing like we should and something must be done. We must be more innovative. I have been a little disappointed in some of the leading agricultural groups that have appeared before the committee. They have not been sufficiently innovative.

I am also on the Appropriations Committee, and we have just passed next year's agricultural budget—\$32 billion. This far exceeds last year's budget, and I'll be quite honest with you—I'm

afraid it is in line for a veto. What we are spending on agriculture has more than doubled in the last few years.

So we have a choice. Either the U.S. Treasurer or the marketplace. And that's what we are searching for here today; to try to find some answers. The discouraging thing we are discovering is that we are losing ground, Governor.

In our exports a year ago we had 56 percent of all world sales. We are down to 50 percent this year. We have PIK and I am grateful for it and I hope it continues for a while until we get straightened out, but while we have been cutting back in our production, the European Economic Community you have been talking about, and other countries of the world heavily subsidize their agriculture, so that the amount of our reduction is really very small in relation to what is going to be available on the market. So these are some of the things we are exploring and we hope to come up with some new thoughts and ideas we can take back to Washington.

Governor, I couldn't agree with you more regarding the problem of dealing with the European Economic Community. I was over there last year for a few days. That was quite an experience. I took a trip on one of those C-5's. It took four of them to get me home, and it almost made me glad I didn't vote for more of those if they don't work better than they do. But I have dealt with the European Economic Community. I got over to England and the attaché took me over to see the British Minister of Agriculture. We talked about what is happening and whether we want to start a trade war because they are pulling the rug out from under us. We haven't been able to compete with them.

Among our other problems, American currency is so much higher than the other countries of the world. We start at a great disadvantage when they offer their product for a less price than it costs to produce.

I said, "If you want to get into a trade war, we will get into one." And the guy said, "Well, that wouldn't be good for either one of us, but we would beat you." I kind of told him where to go. I lost my temper for a second, because all things being equal and fair no one can compete with American agriculture.

With that in mind, have you got any suggestions on foreign trade? Among others the State Department is always concerned about a confrontation with our so-called allies. How do we handle this? Because we can only eat up so much of what we produce. So we must find sales. Have you got any thoughts as to what can be done?

Governor JANKLOW. Senator, I think for better or worse, America has tied itself to the export market. We will never restrict our production ever and so it's a futility and rhetoric to even discuss it. But we will never restrict our production to the point of only producing what America's needs are, one. Two, there is no country in the world, and I truly mean this, as we all know—I'm just speaking of the obvious—there is no country in the world that can produce at the effective cost per bushel, cost per pound, cost per anything that we can.

At the same time, a lot of our industrial products are overpriced in terms of the world market and the ability of the world to pay for

them or compete with them. We are underpriced in terms of our ability when it comes to economically producing the agricultural food and fiber that we do.

But in addition to that, probably more than anything else, they talk about not being in a trade war with us. They are. They just flat are. It's a joke to argue that we are not engaged in the most bitter struggle that the world—economic world has ever seen with the European Economic Community, some of the Asian communities the developing agricultural communities of South America; Brazil, Argentina, our friends the Canadians which plant millions of new additional acres every year, our friends the Australians. These people may all be our friends, but they are as much our friends as the Green Bay Packers are friends to the Minnesota Vikings because in the final analysis they will be friends at the end after they knock our ears off in turn.

This thing is not a game; agricultural exports of the world. They are all in the same boat. The biggest problem that we obviously have is not how do we export to the European Economic Community, but is when will the world begin to recognize that none of us are safe unless the entire world is safe. More importantly, none of us are educated until the entire world is educated and none of us is healthy unless the entire world is healthy.

People go to bed tonight. We all sit here today, you, I, all the rest of us, sit around and talk about this tremendous abundance and our problems with world markets. Yet tonight 500 million people will go to bed in this world hungry. Not just with malnutrition. They will go to bed hungry. And another billion people in this world will go to bed tonight suffering from malnutrition.

So the real challenge is where do our greatest exports all come from? They come from the most developed country. The more developed a country becomes, the more it has a demand for American food and fiber. So what we really have to do is figure out how to develop the economies of the world; not how we can all argue with each other in trade. We have to figure out how do we develop El Salvador, how do we develop Honduras, how do we develop Indonesia, how do we develop Albania, Lithuania, how do we develop all the Indias and the Chinese.

Countries that are well fed that are moving forward in terms of their industrial mechanization, they don't harbor the desires to war against their neighbors. They don't want to shoot at other people. They are too busy pursuing what we call the good life.

So I guess I am not an expert in economics. I don't have any answer to economic questions and I don't profess to, but I can tell you this: I can tell you that the more that the world's economies prosper, the less tensions there are in the world, the less people talk about things like trade wars and the more we are able to get rid of things that every country is capable of producing best.

So the real challenge is how do we develop the countries of Africa and Asia and Europe and South America and the rest of the world because as their countries develop, they will gravitate toward things that they can do best economically. And for 90 percent of them, that is not agriculture. Their lands aren't suitable for it. Their climate isn't that suitable for it. And their—their raw materials and resources have been prepared for development in an-

other direction. So if there is one thing I think we should be concentrating on, it's assisting the rest of the world in developing. It's in our own selfish self-interest to do that type of thing.

Senator ABDNOR. Thank you. I agree.

[Applause.]

Governor JANKLOW. That must be my mother here.

Senator ABDNOR. Your entire statement, Governor, is excellent and we appreciate having it for the record. I know you have done a great job in trying to promote agriculture in spite of the limits you have in the State. We know the Federal Government has the policy, but I'm aware of the assistance you have given farmers to help with financing and other things. We appreciate your testimony and getting us off to such a good start.

Governor JANKLOW. Thank you. Let me just add one additional aside, if I may. As you know, to bring prosperity to rural America, we need only approve any number of the marketing plans; whether it be lower the prices, or I should say the cost of production for producers, whether it's to increase the price that they receive in the marketplace. A lowering of petroleum prices is as much of a boost for agriculture income as an increase in the sales price. A lowering of their interest costs.

We have a serious, as you know, a very serious credit problem in rural America. Agriculture is capital intensive, much more so than most any other business that you could get into. You can find very few other professions or businesses where a small number of people require so much capital in order to be able to effectively do their job. Whether it be a plumber, an electrician, a person that produces steel, a lawyer, a doctor, accountant, it makes no difference. None of them require the front-end continuing financing costs, I should say capital costs, that agriculture does.

We need the continuation—I should say we strongly request that you use whatever influence you have, Senator, and I know you have tried, but that you continue to try, to make sure that they don't restrict our ability to find the lowest cost possible money that we can have.

The ability to have things like an agricultural bonding program won't bring a solution to our problems, but they will bring us substantially lower credit costs at a time when the current credit costs are all stifling. The same thing goes true with respect to the ability to have money for things such as local industrial development which will provide the financing for agri-business development or housing. And so I know there are some bills that have been introduced in Congress and the House of Representatives along with strong support in both political parties, mine or the other. They are misguided attempts by Members to deal with what they perceive to be the problems of America, the economic problems of America. And I really ask that you use whatever influence you have to assist us in defeating those kinds of measures.

And finally, Senator Jim, I would like to say one more time, I meant what I said. It's a pleasure to have a U.S. Senator that comes back and takes a keen interest in a year that is not an election year in the wherewithal of his people, the wherewithal of his constituents, and the wherewithal of his country. Thank you very much for coming.

Senator ABDNOR. Thank you, Governor, for those kind words.

We are still waiting for Mr. Hogen, our secretary of agriculture from South Dakota. I know Mr. Orton is here, but if he doesn't mind, we are going to skip over the first panel and go into the second because I know both gentlemen are here from the South Dakota ag unity group.

In trying to find a panel or a group of witnesses today, we couldn't just open the hearing to the public. That would take a week if everyone who wanted to testify, testified. Although we would like to do that, the next best thing was to try to get a cross-section. We worked with the South Dakota unity group and Richard Ekstrum of the South Dakota Farm Bureau.

Mr. J. D. Lynd is the moderator. Is J. D. here? I didn't see him come in. Oh, right there. Pardon me. Mr. Lynd and Mr. Ekstrum of the South Dakota Farm Bureau Federation and Leland Swenson, president of the South Dakota Farmers Union. Gentlemen, I will turn this over to you because I don't know how we propose to go about it. But I know you three gentlemen are speaking for the farmers of South Dakota. J. D., I think we will turn to you as the spokesman here.

Mr. LYND. OK. Senator, my name is J. D. Lynd, executive secretary of the South Dakota Association of Cooperatives. And I have Richard Ekstrum with the South Dakota Farm Bureau Federation and Leland Swenson, president of the South Dakota Farmers Union. And I think I will just ask those gentlemen to give their statements and then we will open it up for questions here. We will lead off with Richard.

Senator ABDNOR. Dick, nice to have you with us. Please proceed.

STATEMENT OF RICHARD EKSTRUM, PRESIDENT, SOUTH DAKOTA FARM BUREAU FEDERATION

Mr. EKSTRUM. I am pleased to be here and certainly appreciate the opportunity to be able to express the views of the members of the South Dakota Farm Bureau Federation concerning future farm programs.

I guess, you know, as one would look at the future for agriculture farm programs, we have to take a look at the past. And then as we look in the past, I think we have to recognize there have been some very serious faults in Government farm programs. One obvious fault of those programs is that they have tended to ignore supply and demand. Farmers have produced for a program and not for a market. Those price support mechanisms and credit programs have caused overproduction and stockpiling of commodities that bear very heavily on our market prices. Rigid escalation clauses in price support programs do not keep in touch with changes in inflation or market demands. Obviously, farm program policies designed to hold farm prices up to legislated income support levels without regard for long-term markets do not work.

Practically all farm programs have concentrated on a few commodities while ignoring the impact these programs have on other commodities not covered in the program. Little consideration has been given to livestock producers affected by wheat and feed grain programs. The beneficiaries of those programs have been allowed

to produce roughage-type crops on acres they were paid to take out of production. This allows those farmers an unfair subsidized advantage for ruminant animal production over farmers and ranchers who are not covered in the program. The present PIK program is having serious effects on some livestock feeders as well as producers of feeder stock.

Much of the soil erosion now being experienced in the wheat belt can be attributed to farm programs. Support prices have been incentives for farmers to break up so-called fragile lands for cultivation that never should have been farmed. The impact of this action will be felt for generations to come.

Small farmers have complained that farm programs have tended to benefit the larger producers the most. This has contributed to the shift to larger farms.

Last, but not least, has been the impact that these programs have had on our U.S. Treasury. The farm program support and related activities will cost an estimated \$20 billion in 1983—almost 10 percent of the projected 1983 budget deficit.

In summary, past farm programs have been designed for short-term effect on a commodity-to-commodity basis with little consideration for the impact that these programs have on other commodities and also the long-term impact.

If our Government is truly sincere about helping farmers, then there are a number of things that need to be done.

First and foremost is getting this country back on a sound economic basis. A fiscally sound Nation would do more for the American farmer, and everyone else, than any farm program ever could. We need substantial reductions in Government spending, taxation, and regulatory burden that the people of this country must bear.

The next thing that Government can do for farmers is, to enhance the opportunity for agriculture to flourish at the marketplace. Embargoes, cargo preference laws, dock strikes, transportation problems, to name a few, have all taken their toll as well as world trade barriers. These problems need immediate, serious attention. It is important that farmers be allowed to take maximum advantage of market opportunities at home and abroad without Government interference.

The prices for agricultural products must be allowed to adjust to the realities of changing world conditions. We cannot set the price for farm products at an arbitrary level and expect our foreign customers to buy. The fast developing agriculture of other countries of the world has already taken a large share of our export markets.

Farm Bureau members strongly believe in a market-oriented agriculture. It is their conviction that farmers will do much better at the marketplace than they will with Government farm programs. We also firmly believe that a market-oriented agriculture is best for the economy of this country. We intend to work hard for these convictions.

And I would like to make a few further comments after hearing the Governor's well-stated statement. He mentioned world trade and the importance of world trade for American agriculture. And without a doubt it's extremely important. And particularly in the areas of wheat, feed grain, soybeans, and that type of thing. But I didn't hear any mention made of the importance of the GATT ne-

gotiations. And, Jim, Senator, I know you are very familiar with those. And it certainly is an important place for agriculture to be well represented, that we get a chance to speak our peace and agriculture get a fair shake at the GATT negotiations. No question about it.

Further comment with regard to the European Economic Community: You were over there a year ago. I was also over there a year ago and spent considerable time in various countries, including Brussels with the European Agricultural Commission. I think we have to really recognize some of the things that are taking place there and what impact that is having on the economies of their countries over there. Sixty-three percent of the total budget of the European Economic Community today is used in support of their common agriculture program. There are countries who want to grow out of it. England is one. There are some other countries that want to grow out of it. I personally believe that it's headed for internal destruction. Maybe not immediately—maybe it will be several years—but I think it will be.

We talk about a trade war. And I would wholeheartedly agree we need to fight fire with fire. We have got to get tough in this world trade. And you asked the Governor what should we do in this area as far as the European Economic Community is concerned. I didn't hear him say anything specific, but I might, if I may, make some comments in that respect.

I think in the area with France we have a tool here that we can work and that is with wine. That is important to those people, their exports to this country. Now, I realize it's a very small commodity, but I think a message can be sent to those people that—if we were to put some restrictions on our importation of wine from France. Perhaps there are other—some minor commodities that are very important to them. And we could use that as a tool in this so-called trade war in trying to get some equality for the American farmer at the world markets.

And I—you know, I guess I would conclude with—that we strongly feel that farm programs have been nothing more than a dangling carrot for farmers out here to grasp a hold of and have caused the continuous production without regard to markets. And so we find ourselves in a surplus position. We find ourselves in noncompetitive markets as far as world trade is concerned. And now is the time, particularly with the PIK program and the impact this is having on feed grain and hopefully will have on the wheat and other commodities, to come up with a systematic planned phase out of Government farm programs. We strongly believe that. Thank you.

Senator ABDNOR. Thank you. I appreciate that.

Mr. LYND. OK. I think with that, Senator, we will go with Leland Swenson and then we will open it up for some questions.

Senator ABDNOR. Very good. Mr. Swenson, please proceed.

STATEMENT OF LELAND SWENSON, PRESIDENT, SOUTH DAKOTA FARMERS UNION

Mr. SWENSON. Thank you, J. D. My name is Leland Swenson. I am the president of the South Dakota Farmers Union, the State's

largest volunteer farm organization with over 15,000 family farmers and ranchers as members.

I first want to extend the appreciation of the South Dakota Farmers Union to Senator Abdnor and members of this committee for the leadership they are providing in seeking input into the future farm program that will set the direction of agriculture after 1985.

The South Dakota Farmers Union strongly believes family type farms to be the keystone around which our highly successful agricultural system has developed. We believe also that the best interest and welfare of the Nation lies in the preservation of a family farm pattern of agriculture.

To clarify the goal of our organization, let me first define a family farm as an agricultural production unit which can be efficiently operated by a full-time farmer and his family, that provides most of its labor, management, and investment and derives its major income from the farm.

A crisis of great magnitude has developed that threatens the extinction of this family farm system of agriculture. Farm income has declined for 4 years in a row, farm debt has escalated tremendously, farm exports in 1982 declined for the first time in 13 years even though there was no embargo in place and the projection for 1983 is another year of decline in exports.

The response from Congress and the administrations, past and present, has been to react to these situations with only stopgap measures and no long-term solutions that provide stability for agriculture, Government, or the agri-business community.

Agriculture has become a political football. Commodity groups have been pitted against commodity groups and farmers have been pitted against consumers in an effort to hold down Government costs but maintain a cheap food policy.

The South Dakota Farmers Union would like to encourage you to strongly consider a new approach to the farm program for 1985.

First. The program would encompass all agricultural commodities, discontinuing the many commodity-by-commodity agreements that arise during congressional action.

Second. The program would limit Government exposure as to costs for a farm program, thus eliminating the problems of 1983 when it will cost the Federal Treasury more in 1 single year than the net cost of the first 41 years of farm programs.

Third. The program would not rescue inefficient operators and would encourage a strong stable market for all agricultural commodities.

Fourth. The program would place the Federal Government in the role of providing a safety net for American agriculture, displacing the too familiar thought that farmers live off Government subsidies.

Fifth. The program would provide the incentive for farmers and ranchers to practice proper soil conservation methods without costing the Government millions of dollars.

Sixth. The program would encourage farmers and ranchers to produce at levels which maintain a strong market and thus lessen the need for continuously changing supply-management programs which in many cases create arguments commodity by commodity.

The program I have outlined to you today is one that is needed to preserve the family system of agriculture.

The major ingredients are prices received by farmers, parity price, cost of production, income earned from nonfarm sources, and the national median family income. Each of these ingredients is available under current statutes or laws.

These items when applied within the formula of a farm program, which I have attached for your further review and that of your staff, would provide a sound, reasonable farm policy whereby farmers would produce a steady and dependable supply of food and fiber in return for full parity prices up to a family farm level of production.

Farmers Union stands willing to work in concert with farm organizations and other interest groups in order to secure sound public policy guaranteeing the preservation of the family farm, not only needed for farmers and ranchers, but for our rural communities as well.

Thank you for the opportunity to be here today.

[The attachment referred to by Mr. Swenson follows:]

A PROGRAM TO PRESERVE THE FAMILY FARM

We support a program under which payments would be made to each farm family in the United States up to a maximum amount sufficient to raise the net returns on the labor and management of full-time farmers to the national median family income, as follows:

a. Payments would be based on a rate per unit of the commodity or commodities produced by the family (Unit Payment Rate) equal to the shortfall of the national average price received by farmers during the year from the parity price of the commodity.

b. The volume of commodities on which each farm family would be eligible for Parity Payments, and the amount of Parity Payments which each farm family would be eligible to receive for each commodity which it has produced, would be computed as follows:

1. All unearned income (from interest, dividends and rents) received by the family during the year and non-farm earned income (from wages and salaries) received by the family during the year in excess of two-thirds of the national median family income, would be deducted from the national median family income. This amount would be the family's Farm Income Supplement Goal for the year.

2. The national average cost of production per unit of each commodity for the year, excluding the allowances for labor and management efforts of the farm operator and family, would be subtracted from the parity price of the commodity. The resulting amount, called the "(Wheat, Corn, etc.) Fair Farm Income Margin," would be divided into the family's Farm Income Supplement Goal to give the maximum number of units of each commodity for which the family would be eligible for Parity Payments.

3. Each farm family would be entitled to Parity Payments up to a total amount equal to the maximum number of units for which the family would be eligible for Parity Payments times the Unit Payment Rate for the respective commodities produced by the family.

4. Of all the farm commodities produced by a family during the year, Parity Payments would be payable first for the production by the family of that commodity for which the national average price received by farmers is the highest percentage of the parity price therefore.

5. If the national average price received by farmers for a commodity is higher than the parity price, the amount of that difference, times the number of units of the commodity produced by the family, would be deducted from the amount, if any of Parity Payments for other commodities for which the family would otherwise be eligible.

6. If the production by the family of the "first commodity" as described in subparagraph 4 (above) is less than the maximum number of units for which the family would be eligible for Parity Payments as specified in subparagraph 2 (above), the family would be eligible for Parity Payments for all or part of the family's production of that commodity for which the average price received by farmers is the second-highest percentage of the parity price therefore. The maximum number of units and the maximum amount of Parity Payments in respect to that "second commodity" for which the family would be eligible would be calculated as follows:

(a) Subtract the total amount of Parity Payments for the "first commodity" as calculated according to sub-paragraph 3 (above), or the amount of over-parity income received by the family as specified in sub-paragraph 5 (above), from the family Farm Income Supplement Goal.

(b) Divide the remainder (if any) by the Fair Farm Income Margin (as specified in sub-paragraph 2) for the "second commodity." The result would be the maximum number of units of the "second commodity" for which the family would be eligible for Parity Payments.

(c) Multiply the number of units of the "second commodity" as calculated according to (b) above times the Unit Payment Rate for the "second commodity."

7. If the production by the family of the first and second commodities is less than the maximum number of units for which the family would be eligible for Parity Payments, eligibility for additional Parity Payments in respect to other commodities produced by the family would be determined for each other such commodity as specified in sub-paragraph 6, beginning with the commodity for which average prices received by farmers are the third-highest percentage of the parity price therefore, and so on.

Senator ABDNOR. Thank you, Leland. Do you have anything, Mr. Lynd?

Mr. LYND. I don't have anything to offer. I have submitted a prepared statement.¹

Senator ABDNOR. I think it's fair to say that you two gentlemen, one with Farmers Union and one with the Farm Bureau, represent a goodly number, a high percentage of our farmers in South Dakota. That's why we are so pleased to have your testimony today. Let me just say on GATT, Rich, I couldn't agree more. And, you know, they have been over in Europe last month, I think it was GATT or was that a—apparently they think they have made more headway than they have for a long time. Still they haven't come up with anything. I guess they are at least talking. I just don't know how we are going to overcome that.

I don't think either one of these gentlemen mentioned the problems which are confronted with the higher American dollar and our currency being so much higher than other countries. I don't know what the advantage is of 20 percent credit on the average. It starts us off behind the eight ball. I am hoping somewhere along the line someone is going to tell us how we handle that situation. I mean we can complain about GATT, and I do, unfair trade practices we have to compete with with other countries. But here they are kind of like continual problems, like high interest has been to farmers all along. And some way, somehow there has got to be a level to start with, a starting point, because when we do deal with a country that cuts their cost below production, we have a lot of problems.

I would like to get your thoughts, if you have anything, about how we offset this dollar. But I recall a year ago Dr. Schuh from the University of Minnesota, dean of agriculture up there, made a big point of that. He was back, of course, this year and even more I listened to him because he is so right about what it's doing to us and our trade.

You are talking about the expense of this GATT. This is one difference between Europe and America. Over there, when I was there, I discovered they are willing to pay the high price of food. Our country, they seem to think they have got to buy food for the least possible price. And one of our hearings is with the consumer groups. And we want them. We have got to have them behind the program if we are going to sell it to the country because it just has to be that way. But I bet I explained to this guy for 15 minutes to get him to say if we had a good farm program that really worked, he would be more than willing to pay a little more for his food. And they have got to accept that fact, that farmers can't keep producing for what they are receiving today.

But these are the kind of problems we have to deal with. And over in Europe, they put 22, 28 percent of their take-home pay to food. We put 16½. And people complain about it. Somewhere along the line we have got to make them realize what a bargain they are getting because the ultimate goal is to get farm prices up, which is bound to make food go up. And I am sick and tired of apologizing in every program and particular act that we do that might help be-

¹See statement, p. 494.

cause the prices will go up. I always find that one sentence in there, whether it's a Democrat or a Republican, saying this should not make consumers' prices go up. I think we ought to face facts. And they are going to have to go up if the farmers are going to get any kind of a break.

I don't know if people realize it. They only get about 30 percent of the cost of the food dollar anyway. And it wouldn't make it go up all that much but it's something that has to happen. But they do pay for part of theirs by paying more for their food. I guess they know what it's like to go without food.

But we saw what happened with that flour sale that we made to Egypt. We did that through subsidizing the sellers of the grain so we could under sell France. And they are still crying about it. At least they got a message.

But it looks to me like our people are pulling back and saying let's don't ruffle their feathers and try to get along until we work out something. But we have got to be more competitive in this regard or we are going to keep cutting back. PIK is fine, and I'm all for it, but if we keep cutting back each year and those people keep growing more each year, pretty soon they are going to be doing all the world's business and we are going to be farming for a few people in America. We just can't let that happen.

So these are—first on the dollar, anyone have any thoughts about that? How are we going to—

Mr. EKSTRUM. Well, certainly, the inflation factor we have in this country, up until the last couple years, has been a real factor as to the reason why our dollar has deteriorated in value. Now, we are getting back up now to where we were or not quite, but the value of the dollar is increasing primarily because of the monetary and the fiscal responsibility of this—that this administration has assumed. So that is one of the reason, you know, why we are noncompetitive on the world market. But you have to recognize if we were to continue in the way that we were going, that would be the cheapest thing we could heat our homes with, would be the dollar because it wouldn't be worth anything. We would load it up in the wheelbarrow and shovel it in our stove. So it's important that we get the dollar back up.

I don't have an answer as to how, you know, get more competitive here. I guess, see that the economies of our customers are improved and then they can afford to, you know—then the value of their currency will rise in comparison to our currency.

Senator ABDNOR. There are only so many dollars we are going to be spending. I mean the agricultural budget has gone up considerably. And like I said, fine. The one we passed the other day was \$32 billion. That included a lot of things. But PIK, I guess cost—we got at least a \$21 billion budget this year, price supports and other programs.

Well, I honestly believe we might just as well face this. When you are fighting for the almighty dollar down there, you are not going to be able to double and triple it every year and get it with the people giving up in education and other areas of the budget. You can talk about defense all you want to, but you can take that increase and that still is not going to finance that alone. So that's not in the total answer.

So the dollars, limited dollars, where do we put them; in price supports, grain storage, or do we start using them for promotion of sales? Isn't that a fair question, J. D.? Are we going to start putting some greater emphasis on the selling industry or are we going to keep the dollars going for storage programs and things we have done in the past? Because right now we are at the crossroads down there. There is pressure to freeze target prices. I don't know what is going to happen on that, but I see the press secretary more or less put out a threat we are willing to start talking about the set-aside for next year and the PIK program. But we want to see what happens with the Congress on setting a freeze on target prices.

I suppose loan rates, I don't think the administration will go nearly enough on the amount of money we ought to put in for promoting farm sales. I mean they think we have got enough. I don't think we have. I would like to hear your comments on that. Where do you think the dollar ought to go?

Mr. LYND. One comment I would like to make, Senator, is the fact that the competitors in the world export market have been spending like an average of, over the last 3 years, 39 cents for every dollar of exported products. And so that's, you know, that's the kind of atmosphere that you are working with here. And as you stated before, that if we continue to operate in that kind of an atmosphere, we are going to be clear out of the ball game. And so I think we have got to take a look at, No. 1, our negotiations in these areas; and, No. 2 is I think we are going to have to take a look at promoting our products and making new innovative steps in transportation, in finance, in marketing and get with the program. I feel that if we just sit here, we are headed for a lot of trouble.

Senator ABDNOR. In other words, just price isn't good enough any more. I appreciate that.

Mr. LYND. We are competing in a whole different ball game. If all nations and all farmers in all nations were competing in the same atmosphere that we are competing here, we would have no trouble competing on that basis, see. But that isn't the—that isn't the rules that we are playing by. And so we are going to have to take a look at being able to compete in that kind of an atmosphere.

Senator ABDNOR. You are so right. There is no one, everything being fair and equal, that can compete with American farmers. I mean no one can produce as cheaply, as efficiently as our people do. But we are not all playing the game by the same rules. So I appreciate your comments. Leland.

Mr. SWENSON. Senator, No. 1, the worldwide recession has tremendously cut into the exports of our country. And I don't know that any type of monetary policy in place worldwide could have turned that around. And offering more credit to Poland has not been the way that we can increase exports. We see the crisis that we now face in Mexico. And much of the loans that they are carrying are carried by major lending institutions of our own country. And so I think that the worldwide recession and the monetary policy puts our own country economically on shaky ground. And I think that should be of concern not only to the financial institutions, but to the farmers of America as well.

But I want to say that as far as the trade war is concerned, entering into a trade war for the sake of a trade war will be dis-

astrous not only to the farmers and ranchers of America, but also to the farmers of the European Economic Community, of Canada. And I feel that we we enter into negotiations dealing with those types of areas, that we should be very, very careful not to destroy the most efficient people that we have, that you have mentioned, Senator. And that's the American farmers and ranchers.

And I also would like to just address one thing in the area of exports. And that is the increase of exports that our cooperatives are doing. More and more cooperatives have gotten into the export area and developing export facilities, not only on the gulf coast, but now through a merger, on the west coast. And we feel these can be very beneficial to the farmers in the Midwest. And we make our product available through our cooperatives to our importers throughout the world because it's commonly known, Senator, that product, when shipped by farmers through their cooperatives, is the highest quality product available on the world market and has gone through less contaminating than some of our other products have. And so I think that we can reach some innovative ways of increasing our exports, but unless the monetary policy throughout the world is improved, it's going to be a tough road to hoe.

Senator ABDNOR. Thank you.

Mr. EKSTRUM. Well, I certainly would agree with the major—more agricultural dollars should be used in the area of marketing. I don't think there is any question about that. That's why we need to spend our dollars and promote the sales of our product. We talk about the so-called buying down of credit to our customers around the world, and which some of the European economic countries are doing and other trading people of the world. And I—you know, it's trouble almost. But we have to be very careful about who are creditors are and who we really, you know, extend this credit to because we certainly don't want to get into the position of having a bunch of bad debts and those people that are unable to pay for whatever they purchase from us.

If I may just digress just a little bit, you mentioned the GATT. And I guess I feel very strongly about this one because really that is where the ground rules are laid for world trade. The European Economic Community people strongly emphasize the point that our subsidizing agriculture is no different than their subsidizing agriculture. Therefore, what they are asking in the GATT negotiations is perfectly justified on the basis of what we are doing in the subsidized agricultural programs that we have in this country. And so if we can somehow eliminate those things, we have eliminated those arguments for them and then, of course, they are going to have to come with something else or they are not going to get support for their side of the argument. And I think that—that's important.

Senator ABDNOR. We were talking about financing and sales. Recently we were called upon to put \$8 billion plus into the IMF account. How do you feel about that? I don't think the average person out here would go for that for 5 seconds. On the other hand, that is where the money for the grain sales is coming from whether it's to Mexico or anywhere else. How do you guys feel about that? What is your reaction to that?

I think it's part of the supplementary appropriations bill that still has to go to Congress. At least \$8 billion which some people

claim is a big bank bailout. I don't know. But I do know that if Mexico wants to buy some more of our grain and they are willing to—they are the third largest importers of our products—there is nothing wrong with it. I understand their financial situation has improved the last month. They are not going to need the dollars they thought they were going to need. But the point is do we go through with this? Is the IMF a good thing for farmers? Should we encourage it as part of a farm program? Gentlemen, have you any thoughts on that?

Mr. SWENSON. Senator, as far as during the current situation of offering credit to foreign importers, I think it's the only way, No. 1, that we are going to move exports because otherwise your exports would be minimized greatly mainly because of the worldwide recession that we are in. But to, you know, continue on some of the policies that we have and then do it at the expense of the American farmers and ranchers, I think is the misguided direction that we have taken. And we seem to export well below the cost of production with our food product and yet when it comes to high tech, when it comes to military hardware, we don't sell that below the cost of production. And that's a disservice we do to the American farmer and rancher. And we seem to continue to do it time and time again.

Senator ABDNOR. That's a good point. But what do we do then? France is sitting over there willing to sell to them for less. Then how do we handle it?

Mr. SWENSON. I guess the fact is that we need to really address the situation if we are out here somewhat diminishing the soil, plowing up land that we shouldn't plow up, all for the sake of world exports, we are somewhat misguided in the direction of American agricultural policy. Increase the value of the land and that in some cases is—well, because farm debt has increased so rapidly, to cover that debt, farmers have taken prairie land which they can increase the value by raking it up and they do it. And then they can carry more debt on that land. And I think that we need to, in 1985, in the next farm program, and that's what we are here to address today, really take that into strong consideration.

Senator ABDNOR. I appreciate that. What you say is absolutely true. We have got to keep moving. But my only point is this. We are watching PIK. It's almost like a soil bank. It could turn into that, I suppose. Maybe the old soil bank was better. If we keep cutting back—and if the other countries follow—it would be great. But we have already seen the results of a unilateral cutback—I do not know how much these other countries—Argentina, the European Common Market—brought into production, but they must be laughing all the way to their sales. I guess my question is: How are we going to control this thing so that we gain the benefits of retiring acres or cutting back? We can't compete with them because they are going under to undersell us. What do we do?

Mr. SWENSON. Senator, I don't think you will find them laughing all the way to their sales when they continue to find their sales are costing them tremendous amounts of money. And if we finally are starting to show the leadership that we should show and we are not going to continue to get into this bidding warfare on sales and start showing that leadership which we should have shown years

ago, we may not have this problem budget, not only in our country, but in other exporting countries as well.

Senator ABDNOR. Very good. Let me ask—go ahead.

Mr. EKSTRUM. Well, you know, back to your original question in regard to the credit and extending moneys to these countries. I guess I just kind of reemphasize the point I made, and that is that we have got to be careful who our creditors are and make sure that we are not getting some bum deals here as far as loans are concerned.

Back to this, we cut back production. They increase and thus pick up the sales and this type of thing. You know, I guess that's really a strong indication to get more to a market-oriented agriculture in this country because that will—that will force them over there much more to—it will be harder on their economies, the economics of those countries, and force them to be spending more money in their agricultural programs to support them. And if we can somehow survive in this country until we get to that point as far as agriculture is concerned, then I think we are going to be in the driver's seat without a doubt. I don't think there is any doubt about it. But it is almost an unanswerable question at this point. How do you compete with the treasuries of those nations as an individual farmer in this country?

Senator ABDNOR. That is why I say we have got to be innovative and come up with something, somehow, some way. We can't stick with the old practice. That is not good enough. One last question—it's going to be confronting me and all the Members of Congress. Secretary Block has asked the Congress for more authority to adjust target prices and loan rates. Should he be given that authority in your judgment? I would like to hear from you, all three.

Mr. EKSTRUM. I—we certainly agree with that. And the reason is these adjustments have to be made in taking—recognizing world—changing world conditions, changing market conditions, changing demands and this type of thing. That is the problem in the past. Look what has happened in the dairy industry today. That is because he has—he has been frozen to a rigid set of guidelines that he has to abide by. And you cannot live with those things that way. And I think also it's true as far as wheat grains and others. There have to be adjustments.

Senator ABDNOR. Thank you.

Mr. SWENSON. Senator, some latitude needs to be allowed within the discretion of the Secretary of Agriculture. But I also think it must be done with a careful eye of Congress to make sure that the policies enacted can be responded to by congressional action if felt that they are not in the best interests, not only of American agriculture, but of the whole economy as well. And I look at the current situation in which we are faced with a tremendous decline in farm income. It looks like it will be the fourth year in a row. And we are driving thousands of family farmers, and not only family farmers, but corporations as well, out of agriculture. And I look at this as some of the misguided policies that we've put in place. And they haven't been responded to, either by the Secretary of Agriculture in the past or President or Congress in the past or present. And I think you need a working combination of both. You can't put

it all in the hands of one individual, be it—no matter which party is in power.

Senator ABDNOR. Fine. Thank you J. D.

Mr. LYND. I agree that we need more flexibility. I think with the communications, and the involvement, and the input, and the ability of agriculture to respond, I think the administration should have the ability to have more flexibility when things arise so as to respond to it. And, sure, you need the checks and balances in there, but I think—I think we have got that. Those tools are available to us. If—and I think you are going to see agriculture, the farmers themselves, becoming a little more involved and interested in following and responding to some of these things so that you have got a good flow of communications.

Senator ABDNOR. I thank all three gentlemen for being here. You have been very, very helpful. This has been a very interesting discussion and we are not as far apart as you think in getting all the groups together like this. It's really encouraging to me, and as I said, very helpful. I just wish we had more time because I still have got a lot of questions.

All right. Now, we are happy to see our secretary of agriculture from South Dakota has arrived and so has John Orton, commissioner of agriculture from the State of Wyoming. So Marvis and John, will you gentlemen come forward and give us the benefit of your thinking on this.

I don't know of any two gentlemen we have to deal with more in our lives. That is, you have to get along with our groups. In South Dakota and Wyoming, we would like to have more to say about the national policies. You certainly have strong feelings, I am sure, and we want the benefit of that today. So we will turn it over to Mr. Hogen. Please proceed.

STATEMENT OF HON. MARVIS HOGEN, SECRETARY OF AGRICULTURE, STATE OF SOUTH DAKOTA

Mr. HOGEN. Thank you, Senator. I apologize for being late. I want to say, first of all, that I don't envy you at all in the position that you and the other Senators are in and that is having to draft a farm program if you have the difficulty that I do in finding out exactly what people want and what should be done. An executive—or an employee of the State department of agriculture—or not the State, national Department of Agriculture told me once something about the dairy program that kind of applies to this. They are having a great deal of difficulty in coming up with the proper dairy program. And he said the only way that he thought that he could suit all the groups is if the Government came out with a program. He knew that would unify everybody because they would surely be against it. And so what I have done is contacted producers and agricultural people that work in all the segments of agriculture in South Dakota and tried to come up with a consensus as to what they think a farm program should be. And I want to tell you, I'm having an awful time. I am not satisfied with the report I am going to give you today. And thank goodness you are not going home and draw the bill today because I hope to have more information for you as time goes on.

One of the things that I found, the only consensus I found, was total dissatisfaction with where we have been and a desire to do something different and something better. But the problem that I had, I could get plenty of broad guidelines, but it was hard to get the specifics, the kind of specifics that I would want, Senator, if I was in your position to go back to help draft a bill and put amendments on it. And I am sure that I am not going to be able to give you the hard kind of thing that I would like to be able to give.

Senator ABDNOR. I appreciate your assessments because that's important to us, too. The more information we get, the more we appreciate it. Go right ahead.

Mr. HOGAN. I broke my questions down into eight broad categories and I will go over those just as quickly as I can. The first question was, What should the Government's role be in agriculture? Now, there is a substantial group out there that says the Government shouldn't be in agriculture at all. In fact, two respected farm organizations kind of came out and said that in South Dakota. But I really think that that is more lipservice than it is a genuine feeling. I think it's something that has been popular to say and it's still being said, but I think that most of the people believe that the Government is so deeply involved in agriculture here and all over the world that they have got to stay; that they are going to stay. And so what we should do is to put what input we can to make the Government's program as helpful for us as it can be.

Here are some of the things that the people generally think they should do. One thing, they think the Government should do more research leading to greater efficiency and more profits. Another thing, they think that agriculture has a bad name that it doesn't deserve. The Government should give the same support to agriculture that they give to the many other—the health care, education, the professional fields, those kind of things. They should give the financial—they give—it seems to them they give it willingly to these other sectors and grudgingly to agriculture. And I am afraid maybe that is something they are going to have to do themselves.

The one thing that is the most often heard, and there is a consensus, it's this consensus, is no Government payments for anyone that farms fragile land. I think that is—that is surely a consensus. In fact, some people go so strongly as to think that if you—if you break up fragile land, you shouldn't be in the program at all. Most people think you shouldn't get a payment on that particular piece of land that is fragile. But some people think, if I may comment on what they call the sin of breaking up the fragile land, you are out of the program, period.

And the last one in that is to do something really effective in foreign sales. And here is the thing that I think, and I think a lot of other people think, is the Government isn't a good salesman. These sales efforts should be given to the private sector. They have done the job in it and they should be given the opportunity here.

The second broad category, What is the balance between the—what should the balance between the branches of Government be? The absolute consensus I got was more latitude to the administration and to the Department of Agriculture, that Congress draw the broad guidelines, but let the Secretary of Agriculture and his staff who have got the expertise and are able to move quickly, let them

make the field decisions. And you will notice on the panel this morning, there wasn't a consensus in that particular one.

The third one, What should the policy of the farm bill be and which issue should receive particular attention? This is the area where I've found—where I needed the best answers and got the fewest. The consensus seems to be that the United States should make the decision as to whether agriculture is going to be a free enterprise thing or is it actually going to be treated as a public utility. That is what we have done now. So we should decide. Are we going to make it free or are we going to keep controlling it like it has been?

And, of course, one of the broad goals is to get rid of the surplus. And, for the first time, I hear increasing sentiment for caps. I think that people—the farmers themselves sort of resent it when they read about one person getting—I think it was in U.S. News & World Report—\$4 million in PIK payments. I think they resent this themselves. And they also realize that that gives agriculture a black eye. That gives us a name and kind of flies against what I have also always felt and heard is free enterprise. Don't put a penalty on success. But I really think that is changing. And I think a cap is something that would be acceptable.

Another point is that we must consider in agriculture programs what it does to other sectors of agriculture. The example of the South Dakota cattle industry is equal to the next—I think I researched that. I think you have to list 18 other categories before you equal what cattle are in South Dakota, cattle and calves. So what they want the Agriculture Department at the national level to do is realize what it does to other things. You see, there is no question that this PIK is going to have a dramatic effect on agriculture, on the cattle, you know. They think that this grazing shouldn't be allowed in a way that is expanded beyond what it is. And then finally in that category is develop a long-term plan, something that you could plan and build for, something that isn't going to change every year.

The fourth category, costs, what are—are there more effective cost approaches to the farm program than what we have had? Some people think it might be better to have a 5- or 10-year contract to take it out of production. Another cost-effective way is to get rid of the surplus so we don't have the interest in the storage cost.

And finally, the thing that I was so glad to hear you say, Senator, is the cheap-food policy. We just cannot continue to have a healthy agricultural segment in the work—in the United States and let our people spend less money for their food than any other country in the world. That is one of the things that the farmers are the most resentful about.

Fifth, production. Can more effective production controls be developed? Now, I was absolutely unable to get a consensus in this area. The answers of people I talked to varied from no control to free market to volunteer controls with incentives to mandatory controls. I do not know. I just don't have an answer to that one. And I hope to get back to you.

But there is one strong consensus and it's a growing consensus. And that is we should have a bushel production control rather

than an agriculture—than an acreage control. That will let the farmers use the efficiencies that they have learned and so on. And this is something that has been talked about. And I think that the Congress should take a real close look at that one.

Sixth, what can we expect our exports to be over the coming decades? Now, here is something that I think the U.S. Government and maybe the South Dakota government has done a poor job in really telling the farmers what shape we are in the export market. I do not believe that the South Dakota farmer realizes the tough situation we are in the export market. The export market is the panacea that we think it is. I think that we must come to the realization that we have got to produce what can be sold and what our customers want.

The seventh, what should our response be to increasing subsidies and trade barriers to our competitors in the world market? And I was delighted to see the depth of knowledge that our people in South Dakota have on that. The sentiment is for free trade. They feel that if we really had free trade, the U.S. farmers could beat anybody. But I think there is a growing realization that they now—that that is a dream that we are not going to have. Fair trade is the best we can expect rather than free trade. I guess consensus in this area would be—is that our Government must do for our farmers in the United States what the governments are doing for theirs or we can't compete.

And eight, and the final one, what effect are technological innovations likely to have on our farm programs and policies? Well, I didn't get any answers to what effect it's going to have on the policies, but the consensus here was that the farmers expect the same advances over the next 10 years as—10 or 20, as we have had in the past. Not so much—they think maybe the yields are at the maximum, but maybe in efficiencies that can be spelled out in profits.

Now, these are the things that I have found talking to people. And, now, I would like to just give you what I think the biggest thing is that we should do first. And that, I think, and was echoed here by the previous panel, is that we have got to sell this stuff. Senator Abdnor, you remember when your dad came to Presho, S. Dak. If he had a pushcart and if he had seven teakettles that weren't going to sell, the last thing in the world he would do is find the attic of somebody's barn to put those teakettles. He knew one thing he had to do to survive and be successful and that was sell the teakettles. And whatever he had to do to sell them, if he had to sell them on credit, if he had to trade for them, whatever he had to do, he had to sell them. He wouldn't keep them. And that is what I think we have to realize. And I think we have to take these sales efforts out of the hands of Government who have traditionally been poor salesman and make incentives and give freedom to our markets so they can do that. We have got people that can break the barrier into Russia and China with Pepsi Cola. We can do the same thing with our agricultural products. And you don't do it with price.

I think you all have seen a list of why people quit shopping in a hardware shop, is the one I read. And people quit shopping in stores for a lot of reasons. And way down on the list, No. 5, is the

price is too high. That is the fifth one. And that has become a thing in our mind. We have got to give these foreign buyers the kind of products they want, how they want them and when they want them at a price that they are willing to pay and at the kind of terms that they need. And we can do that, whatever accommodations we have to have to do that.

And we just don't have a sales force. I just visited with somebody that came back from Formosa. And they said they think the island is going to sink below the sea and the reason it is, is it's so filled with American buyers and Japanese salesmen. Now if we just did the kind of job in selling our agriculture products that Japan and Hong Kong and Korea have done in selling their electronics, we could survive. And that's the thing that—the whole key. All is paled in significance, I think, beside the need to have that kind of a sales effort.

And finally, I am delighted to feel a note of optimism even when I talk to these people and maybe they might be a little pessimistic in the long run, but they have the confidence that the growing world population is going to make a market for these goods.

Now, Senator Abdnor, I am going to put the monkey on your back here. And here is something that the people there—while they don't say it, I sense they feel it. They feel that their government is going to do something. They have confidence they are going to come up with a farm program that is going to answer the problem. And I'm satisfied that you are going to do your very best. And I hope that the rest of the Congress and you can come up with something that will get the most successful segment of our economy in the position that it really has earned and deserves.

Senator ABDNOR. Well, thank you, Marvis. I knew you were going to give us outstanding testimony and it is. We appreciate your trying to feel the farmers of South Dakota out—and those associated with agriculture—as to their thinking. I'm sure it's still pretty scattered out there throughout the State, but as we explore this more and more we are going to come to some general agreement in some areas and people will be aware of all the problems we are confronted with.

Congress is far apart on what we are going to do. Hopefully, our hearings in Washington and in the field will help us reach some conclusions and maybe some innovative ideas because we have just got to do better than we have done in the past. And your comments today were very helpful to us.

Mr. ORTON, we are very grateful to you for coming all the way from Wyoming to give us the benefit of Wyoming's situation. It might be a little different than South Dakota, but not that much, I know. So we appreciate your attendance. We know you are speaking for the ranchers and farmers of Wyoming and we are happy to have you with us. Please proceed.

STATEMENT OF JOHN ORTON, COMMISSIONER OF AGRICULTURE, STATE OF WYOMING

Mr. ORTON. Well, thank you, Senator Abdnor and other distinguished guests. I am very happy to be here. And I want to thank you for your invitation.

The first thing I would like to say is I am not an expert on farm policy. In fact, my definition of an expert is someone that is 50 miles from home with a new briefcase. And I'll grant you I am farther than 50 miles from home, but I am carrying an old briefcase.

But I would like to share with you this morning some of my observations and thoughts that I believe can be applied to the next generation of farm policy.

First, I don't believe anyone knows what this Nation's farm policy is. And I would offer that this Nation has never had an agricultural policy. Historically this Nation has had hundreds of agricultural programs. Every administration and every new Secretary of Agriculture comes in with a so-called new agriculture policy which always changes.

A program develops from knee jerk responses to an immediate agricultural crisis, possibly made by some who are far from the reaches of the agricultural sector. The crisis passes, but the responses become cast in some type of agricultural program which lingers on and on.

The entire Federal agricultural program has reached a level of complexity that can be comprehended only when you look at the bottom line. The bottom line as of June 8, I think the Senator referred to, there was a \$32 billion appropriations bill passed. And the question is how much longer are the Nation's taxpayers going to support this type of spending even through the taxpayer generally benefits—I don't think 50 percent of them realize it—from the expenditures in the form of lower food prices when compared to the other industrial nations.

This Nation needs a clear, concise agricultural policy, a policy which clearly spells out what will and will not be done for the agricultural sector and what our national agricultural goals and objectives will be.

I submit there are agricultural objectives that transcend administrations, Secretaries of Agriculture and even time. I believe the Nation needs a basic agricultural policy that people would support. I'm proposing that Congress or the administration convene an agricultural commission with a mandate to develop a far-reaching and somewhat flexible agricultural policy that the Nation's agriculture sector and the American citizens can understand and get behind.

I'm not proposing another study. I believe the former Secretary of Agriculture Bob Bergland's study on the structure of agriculture combined with many other studies could provide the commission the necessary information to formulate a national agricultural policy.

It is my belief—what would a national agricultural policy contain? It would certainly establish long-term agricultural objectives for the Nation. And I would submit the following policies for your consideration. A policy to address foreign agricultural competition. There has been a lot of talk about that today and I'm inclined to agree with the panel beforehand. I can't recall the gentlemen that said this, but I think we are going to have to fight fire with fire.

I would support a policy that we will aggressively compete with foreign agricultural competition by whatever methods are necessary. And we have to have a policy on embargoes and this, to me, has to be a definite policy, not—we don't have to—we have got to

get rid of that cloud, in other words, on the horizon that says, well, we might go and export to you and you and you short of war. But to me, we have to say take that cloud off because our contracts have to go from year to year, not from week to week.

And this fits right in a policy of being a reliable supplier of quality agricultural products worldwide. And I think that is something that we may be overlooking when we are talking about bucking other nations of the world. I don't think anywhere in the world are there any better quality products than grown in the United States of America. And I don't think there is anybody that inspects their products any closer going into the export market than the United States of America. I think that is something that we can work on because we have the quality and we have got to keep drumming on that.

And then a national domestic food policy which is something that could be pretty broad. I think we have to maybe go out in the near years to come and talk to some of the people. And I agree with Senator Abdnor. They are going to have to figure some way to pay more for food. And I certainly—because that's the only way that agriculture can stay in the—as the largest producer in the world is by making money. If we don't, why, we are going to go down the drain.

And possibly a policy on agricultural credit. And when I mention that, we are speaking of foreign credit. I think—I certainly like our—the program that we have initiated back there now on loans to other agricultural nations to buy products from us at low-interest loans, but I also think we have to use a little bit of business judgment there which has been emphasized before.

Another thing, I think we have to have a policy on soil conservation because we are losing an awful lot of soil. And the answer to that, to me, is pretty tough. I think that probably Senator Abdnor knows there was a—the trust fund bill on some of that was about to come out, but I haven't any answers for that. But I think it's something that we have to look forward to.

A policy on agricultural research, and that is researching markets and also researching the agricultural sector, which I think is probably a duty of the Federal Government. And also a policy in the management of our Federal lands to sustain and improve agriculture production.

I believe such policies, if adhered to over the long run, will lessen many of our agricultural problems and it will reduce agriculture subsidies, eliminate confusion and make our Nation stronger.

And I will close by saying I appreciate this committee's effort to look into the agricultural situation and I pledge my support in any way possible. You have a very difficult task ahead of you, Senator Abdnor, and the leadership of this Nation will have to make some very difficult decisions in the area of agriculture in the months and years ahead.

Thank you.

Senator ABDNOR. Thank you. The first thing I would ask of you or say to you, is, we have got to make the people in Congress realize the important part that agriculture plays in the economy. Believe me, that is a problem. We are making some headway, I think. We have got to recognize that farmers have problems and we have

to take care of them. They make up 20 percent of the total economy. They are an important part. Indirectly, agriculture creates employment for 20 million people. Somehow that fact is overlooked in Washington, and I don't know how we are going to get that message across. I think, Marvis, that farm groups are coming to a consensus. They have a long way to go, I grant you, but I think we're starting to make some movement in that direction.

Mr. HOGEN. Senator, could I say one thing in that area? You know what tremendous farm programs that they have in the European Common Market and some of those places. I have heard that the reason for that is that in those countries, that the farm groups speak with one voice. Well, you know if you read the newspapers in South Dakota, that isn't what happens in South Dakota; and I think that is true nationwide. We have such a different voice that it's difficult for you as a Senator to know what to answer to. And I wouldn't change that for the world. I think that that is one of our strengths. But it makes your job increasingly difficult when you hear two different—

Senator ABDNOR. Let me just follow up on that a second. Both you gentlemen have talked about research and salesmanship. I guess there isn't an industry in this country that doesn't reinvest some of their sales in research, advertising, and sales promotions. Yet a couple of times we have had the beef checkoff. I don't know what this would have been, but it ought to be something we all agree on—either it isn't worth a darn or it's good. We have big arguments on that. I just hope I see the time when we all agree—either for or against something. When you're in Washington and you get a proposal, from four or five different groups that make up 3½ percent of the population, and you get five different opinions concerning the proposal. I can understand our city cousins saying, "What do the farmers want?" I mean we have to start speaking the same language. You can't be 1,000 miles apart and convince somebody in Congress that farmers need some help. I mention that because I think you ought to understand what we are up against also.

Mr. HOGEN. Senator, this beef checkoff is one of my chief interests. I could never understand why that failed so dismally here in the State and nationally. I think just recently I found the answer. I saw some figures on what a great percentage of our beef production is by people with only a few head of cattle. And they don't think of themselves as beef producers and cattle people. And I think that is one of the—the jobs that the industry has to do is to get—convince these people with between 10 and 30 cows, you see, that they are a major part of the industry and it isn't the fellow with 1,000 head that really is the greatest producer. And unless we do that, we are not going to get a beef checkoff passed.

Senator ABDNOR. Thank you. Before you go, I'd like to ask a question which I meant to ask the previous panel. It's a question coming up in Congress. We have emergency legislation before Congress dealing with farm credit legislation that would generally prohibit or delay farm foreclosure action. Now, do you support the need for this legislation moratorium on all loans or should it be case by case? That's really throwing you the hot potato over there, gentlemen.

Mr. HOGAN. Well, Senator, that is one I have researched very carefully. And the answer that I have to that is not a popular answer. And that is that I think that maybe one of the greatest disservices that we do to some of our people is to extend them too much credit too long. And I have got to be very careful about that. I said that once before and the news reporter said, in other words, you are in favor of more foreclosures. I don't mean that at all. If you remember, just recently legislation was introduced to give the Farm Home Administration the ability to postpone foreclosures. I believe that we do not need that legislation. I have talked to the people in that organization. And they have plenty of latitude right now to postpone those. I don't see any need for it.

Senator ABDNOR. On a case by case—

Mr. HOGAN. Yes. It should be on a case-by-case basis just like it is. A moratorium, if you put a moratorium on foreclosures and don't put a moratorium on interest, it's the most—greatest disservice you can do to that man. While he is lying there sleeping, that interest is grinding away and it's going to kill him. And we can't put a moratorium on interest because that is just something that wouldn't sell. So I don't think that a moratorium would serve anything. I have talked to my friends in the banking industry and they feel that maybe they, too, have made that mistake. Maybe they have gone longer with some people than they should have.

Mr. ORTON. I definitely feel I am going to have to go along partially with Marvis. I don't believe that it should be stepped up. But I definitely believe that it has to be handled on a case-by-case basis.

Senator ABDNOR. I realize it's a very difficult question, but I was interested because it's going to be coming up and I am sorry I didn't ask the three gentlemen before. Maybe I can get their written answers before we leave here today. We do that a lot in the Senate. If you don't get all your questions asked, you have an understanding that you will have the right to submit questions in writing and get the answers in writing for the record. I don't know about that. Maybe that's all right. Maybe we should do that. We are not going to have time to do everything we would like to do here today.

Mr. HOGAN. Senator, one thing on that moratorium, if there was a bill introduced to do that, and if you really read that bill, it's actually a campaign practice bill because it doesn't—you read it carefully and it doesn't really give them any authority that they don't have now. And it sounds good, but it does nothing.

Senator ABDNOR. Thank you. One last question. Has the payment-in-kind program been effective?

Mr. ORTON. My personal opinion, it really is just a personal opinion, is that the first year I think what we are getting now is a lot of psychological impact on our future market and whatnot from the PIK program. But my personal opinion is as far as supplies goes, the first year I can't really see where it's going to make any difference because, Senator, it would be more or less like me selling you my cows. They are still in production. We have still got the grain out.

Mr. HOGAN. Jim, the jury is still out on that one. But my opinion is—winter wheat is where I have most of my experience and I think that in Lyman County with where you live and in Jackson

County where I live, the amount of grain produced is not going to be near as low as the expectations were because the best ground stayed in production so land that was already plowed up stayed up. But it's sure going to be a boost to the farmer. It's one of the most profitable things to him that can be done. But I don't think it will drop production like it should.

Senator ABDNOR. Thank you. We do know that it's going to be the fourth biggest wheat crop in history.

Mr. ORTON. We have some large carryovers.

Senator ABDNOR. Thank you, gentlemen. We appreciate your testimony very, very much.

Our next group is Paul Symens of Amherst, S. Dak.; LaVurn Schafer of Strandburg, S. Dak.; Lance Ekberg of Hamil, S. Dak.; Norman Weckerly of Bismarck, N. Dak.; and Armin Leising of Arapahoe, Nebr. Now, that is quite a panel. I have a hunch we are going to get some very divergent thinking here. Maybe we are putting too many at one table. Gentlemen, we welcome you to the panel today. I would like to add the other three gentlemen because we are seeking all the information and views we can. But, Mr. Symens, why don't you start first.

STATEMENT OF PAUL SYMENS, PRESIDENT, DISTRICT III, SOUTH DAKOTA FARMERS UNION, AMHERST, S. DAK.

Mr. SYMENS. OK. My name is Paul Symens. I am a farmer in Marshall County, S. Dak., and serve as president of District III of the South Dakota Farmers Union. I am a producer of commodity—of different commodities in the agricultural arena in South Dakota. I would like to thank you, Senator, for this privilege to come before you at this hearing. This opportunity doesn't arise that often and we thank you for these opportunities.

When we look historically at farm programs, there are some ideas and practices which are very useful and some which we must discard that have proven unreasonable over the years. The Agricultural Adjustment Act of 1938 reaffirmed that congressional policy of assisting farmers to obtain, insofar as practicable, parity prices for commodities and parity of income. This policy has been reaffirmed many times over the years by Congress.

This should be the primary goal of any farm policy or program which we are going to be looking at in 1985. This goal can only be achieved by creating a long-term policy which takes into consideration all the aspects of our economic society, our Nation and the world in which we live. Some of the main requirements of such a policy are as follows:

First. Programs must be geared to people, not bushels, acres, or dollars worth of production. We must become a nation that looks at people and the impact of programs on people.

Second. It must treat all commodities alike. It must not pit one group against the other as has been done so often in the past. And just—just to make a comment on that, when we look at the PIK program, the detrimental effect that is going to be felt on the livestock industry from the PIK program, I believe, will be monumental in the next few years. That is something that should have been

addressed when PIK was initiated, something we really have to look at when we are looking at policy and programs in the future.

Third. As Governor Janklow said earlier this morning, we must build for long term. We must build for 10, 20, or 30 years. We can no longer go from year to year. Now, a farm loan is not set on the basis of 1 or 2 years. They are set on the basis of 10, 20, 30, and 40 years. And these short-term programs have really been detrimental to the long-term effects that farmers are looking for to come from programs.

Fourth. They must be limited as to the amounts of participation per person—again, I'm looking at persons—and cannot become a guaranteed income item in the Federal budget. This would protect the Federal budget from the heavy burden that PIK is proving to be and other programs have proven to be in the past. And it would also not allow the larger farmers or larger capital rich firms to grow at the expense of the small family farm. This has proven to be true in the past because of some of the programs that have been initiated in agriculture.

Fifth. We should allow the financial entry of more young people into farming by being able to pay for land from production of that land. Not as a hedge against inflation, not by allowing capital or by purchasing cattle from other capital intensive areas, but we must get it back to the basis that agricultural land will pay for itself from it's own production. I find it a fallacy in our economic terms and in our economic arena in this country to look at agriculture as the one area of economics that produces new wheat, that gives us a new crop every year, that produces something as it were from nothing, that cannot create it's own capital to maintain itself. I find this unreasonable. And I would think that our economics people, our economic advisers, our economic professors, are going to have to begin to address this and see what is the problem because that is the one basic industry in this country that should be able to provide it's own finances. That is agriculture. And it has not been doing so in the past. And I think we have to address the problems that have arisen from that, but we also have to address why that has been that.

Sixth. We should allow freedom to the farmers to manage the farm and to make its economic decisions. It would allow for better conservation of the land and its resources. This is the thing that we have to address very quickly. The conservation, it has been mentioned here numerous times today. We must address it. It is very important. They should also be able to make the decisions based on their knowledge and on their available resources. They should once again farm the land, not the Government programs. I think this is very vital to any policy that we have today.

Seventh. We must maintain a plentiful supply of food and fiber at a fair price to consumers both at home and abroad.

Eighth. Above all else, any program must have a positive impact on inflation, on employment, rural and small town development, and all of the other social problems which now plague our society. These kind of policies can only be arrived at and carried out through a long-term commitment by our Government to insure the possibility of American agriculture to succeed economically, socially, and politically. And unwritten contracts do exist between the

Government and the American farmers. We need to now define the terms of that contract and use it to the benefit of all Americans and all of American agriculture.

If we cannot develop an agricultural policy which can have a positive influence on the above points, I am convinced that the family farmer will be better off with no programs at all. Almost all short-term programs have been counterproductive when examined over a long period of time. We must not continue to create short-term programs that become monsters in future years.

Attached you will find some of these ideas which are more developed with further explanations. I would be happy to answer any questions and would be willing to work with those who have this task of developing the next generation of farm policy.

I thank you again for your time and your interest.

Senator ABDNOR. We thank you, Mr. Symens. And I also will make your attachment part of the record, too. I see you have questions and answers here. We will just include that as part of the printed record.

[The attachment referred to follows:]

The Unit Plan for Parity Questions and Answers

By: Paul Symens, Director
SOUTH DAKOTA FARMERS UNION
Amherst, South Dakota 57421



Historically, the Farmers Union as an organization has fought on a variety of fronts to improve the economic status of family farmers. We have fought for certain farm programs, tax laws, support prices, Food for Peace, welfare and other programs, that have been a small help to farmers. Yet, every stand that has been taken for family farmers, has always benefited all farmers, large, small, corporate, foreign, etc.

U.S. farm programs adopted since 1952 have been all inclusive. If we were to leave the small family farms alone to go their own way, while providing no assistance to large farmers, the family farm could outlast the larger operations. Essentially, the small, independent, family farm unit, composed of a family who owns, operates, manages and furnishes its own labor, can be and is the most economical, most competitive, and one of the few surviving vestiges of free enterprise in this country.

But the federal government has not allowed this. Through federal manipulation of farm programs, tax laws and the government's failure to deal with commodity price manipulations, the family farm has all but vanished.

We believe we must accept our government's position on cheap food as a permanent policy. We must also accept the use of food as a political weapon at the expense of farmers. As farmers, we do not have enough political clout to change this.

We believe the time has come for Farmers Union to solidly align ourselves with the needs of the family farm and with the needs of consumers. We believe new federal farm programs should contain certain qualities which have not been present in past programs:

- They must help family farmers and not all farmers regardless of size,
- They must help establish new family farmers,
- They must maintain management at the family farm level,
- They must aid the unemployed,
- They must be anti-inflationary,
- They must maintain a plentiful supply of food and fiber at a relatively low price,
- They must maintain and preserve the incentive to work, manage and grow (freedom),

Above all:

- They must help to relieve the social pressures and social costs which have confronted cities as a result of the continuing rural exodus.
- They must help rural development,

To do these things we must make it possible to reverse the trend away from the family farm. If we could put more farmers on the land we could do a great deal for rural development. We could drop the unemployment rate. We could relieve the social pressures on urban America. We would definitely produce a quantity and quality of food and fiber at a relatively low price. In effect, it is time we return to a more labor intensive agriculture in this country, rather than to continue our trend to a more energy intensive type of agriculture.

What type of program will do this?

THE UNIT PLAN -- PARITY OF INCOME PLAN

Initially, this plan would guarantee farmers a parity of income with those in the median income bracket in this country.

In 1977 this meant about \$16,000 for the average family.

The Unit Plan would do this by guaranteeing each farmer full parity prices on a certain number of units of production to assure him a net income equal to the median income. A full explanation of a possible structure to do this follows:

* PROPOSED: PARITY OF INCOME UNIT PLAN

The purpose of the parity concept when it was established in the 1930's was to provide a parity of income to farm families. As defined in an early farm law, parity shall be that per capita net income of individuals on farms from farming operations that bears to the per capita net income of individuals not on farms the same relation as prevailed during the period from August 1909 to July 1914.

The following proposal is based on North Dakota Farmers Union's Family Farm Commission Report and similar recommendations by other Farmers Union groups. The proposal is based on net farm income, rather than the Commission's proposal which is based on gross farm income.

This program is voluntary. It would utilize a "free market" concept on the domestic level with a national agency (federal) to be the exclusive exporter and importer of food. It is not a production control program in the traditional sense of such programs, but rather a program to provide a parity of income for farm families. Thus, it does not require acreage controls, allotments, etc.

The program would guarantee full parity returns on ~~2,000 units~~^{2,000 units} of production for each resident farm operator to assure the farm family a net income that would reflect the national median family income of other sectors of the economy. A husband and wife would be considered as one farm operator for the purpose of this program.

This program is not a guaranteed annual income for farm families, since the farm unit must produce ~~at least 2,000 units~~^{at least 2,000 units} of production to receive full parity returns up to the national median family income. It can be more readily compared to a minimum wage law. It only provides the opportunity for a farm family to achieve a parity income.

The purpose of the program is to provide the family farm unit the advantages under a federal farm program and eliminate the current advantages received by larger farm units over smaller farm units in present farm programs.

The value of each commodity unit would be determined annually by dividing the difference between the cost of production and parity into the national median family income. (The land component of the cost of production would be figured at the average normal rental value of cropland.)

FOR EXAMPLE: WHEAT (1977 statistics)

PARITY - COST OF PRODUCTION = DIFFERENCE x 2,000 Units = NET UNITS
 $\$5.50 - \$3.60 = \$1.45 \times 2,000 = 2,900$ net units

National Median Income or \$16,009 ~ 5.5 bushels of wheat per unit
Net Units 2,900

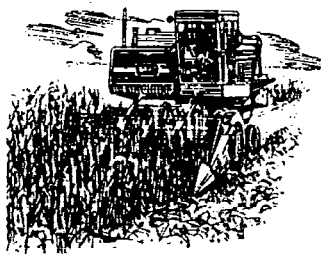
The federal incentive payment to the producer would be based on the difference between the parity price and the national average price received on a given commodity, multiplied by the number of units actually produced, but not exceeding 2,000 production units. A farmer producing more than 2,000 units would receive payment on the commodities which have an average price closest to the parity price. Non-farm sources of income earned by the producer would be deducted from the payments, provided that a producer must produce at least 1,000 units before any deductions are made.

FOR EXAMPLE: WHEAT PAYMENT

PARITY - NATIONAL AVERAGE PRICE RECEIVED = DIFFERENCE x Unit Value x Units
 Produced = Payment

$\$5.05 - \$2.29 = \$2.76 \times 5.5$ bushels per unit $\times 2,000$ units = \$30,360

This example assumes that the producer raised 2,000 units of wheat (11,000 bushels) and that the national average price of wheat was the closest to the parity price among the commodities raised by the producer. In this case, since the national average price was less than the cost of production, the producer would have received a payment higher than the national median income. In effect, the incentive payment would have covered part of the producer's cost of production, with the remaining payment becoming the producer's net income.



The following table shows some possible unit values for various commodities, based on July 1977 parity and estimated 1977 production costs.

COMMODITY	PARITY	COST OF PRODUCTION	NET DIFFERENCE	VALUE PER UNIT
Wheat	\$5.05	\$3.60	\$1.45	5.5 bushels
Corn	\$3.47	\$2.50	.97	8.3 bushels
Barley	\$3.00	\$2.50	.50	16 bushels
Cotton	.841	.614	.227	35.3 pounds
Oats	\$1.74	\$1.50	.24	33.4 bushels
Soybeans	\$7.65	\$6.07	\$1.58	5 bushels
Flaxseed	\$8.61	\$7.37	\$1.24	6.5 bushels
Peanuts	.287	.147	.140	57.2 pounds
Rice (lbs.)	.14	.085	.055	146 pounds
Beef cattle (lbs.)	.586	.45	.136	59 pounds
All Milk (lbs.)	.13	.09	.04	200 pounds
Hogs (lbs.)	.557	.40	.157	51 pounds

The value per unit of each commodity would vary. The following are examples of how these might vary.

CHANGE IN PARITY

$$\$5.30 - \$3.85 = \$1.45 \times 2,000 = 2,900 \text{ net}$$

16,009

$$2,900 = 5.5 \text{ bushels per unit (11,000 bushels total)}$$

CHANGE IN PARITY AND COSTS

$$\$5.30 - \$4.05 = \$1.25 \times 2,000 = 2,500 \text{ net}$$

16,009

$$2,500 = 6.4 \text{ bushels per unit (12,800 bushels total)}$$

CHANGE IN MEDIAN INCOME

$$\$5.05 - \$3.85 = \$1.20 \times 2,000 = 2,400 \text{ net}$$

17,060

$$2,400 = 7.11 \text{ bushels per unit (14,220 bushels total)}$$

The same variables will affect the federal payments to producers.

$$\text{PARITY} - \text{PRICE RECEIVED} = \text{DIFFERENCE} \times \text{Unit value} \times \text{Units produced} = \text{Payment}$$

\$5.05	\$3.05	$\$2.00 \times 5.5 \times 2,000$	\$22,000 payment
\$5.05	\$4.05	$\$1.00 \times 5.5 \times 2,000$	\$11,000 payment
\$5.30	\$3.90	$\$1.40 \times 5.5 \times 2,000$	\$15,400 payment
\$5.30	\$3.90	$\$1.40 \times 6.4 \times 2,000$	\$17,920 payment

Questions that arise:

Q. What about price supports?

- A. The free market price would be essential to the program's success. There could be no minimum guaranteed prices on production beyond the family farm level.

Q. What about disaster payments?

- A. An all-inclusive, compulsory national crop insurance program should be set-up.

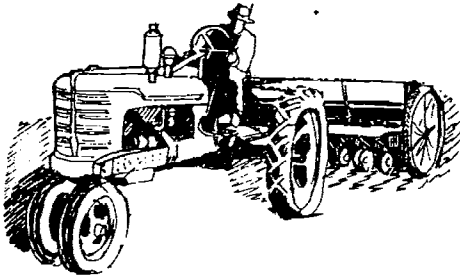
- A. It should be low-cost if it is compulsory.

- Q. What about a food reserve?
- A. The cost of a reserve for humane purposes should be borne by the entire nation just as are Social Security and other such programs. The family farm could carry some reserve as a financial hedge in case of a drop in production.
- Q. Who would control the program? Who would figure payment levels, production costs, etc.?
- A. A National Board meeting quarterly or semi-annually, made up equally of producers, consumers, and processors. Local control and implementation could be by state and county ASCS boards.
- Q. How could compliance be reported?
- A. Through submission of commodity sales receipts, weights. Compliance could only be established when commodities are sold.
- Q. What about quotas, acreage restrictions?
- A. The market would establish the acreages. Quotas and restrictions would not be needed.
- Q. How would the program deal with landowners who rent?
- A. Rentals should go to cash-basis with no direct payments to absentee landowners. Ideally, the land should be sold to young or new owner-operators.
- Q. How can we be assured that farmers will not cheat on reports?
- A. Penalties should be severe enough to discourage cheating. Penalties could include perhaps loss of payments, fines, or two to three years out of the program.
- Q. How can we keep farms from being split to children in order to receive higher payments?
- A. Establish a minimum age, operator definitions, proof of ownership, rental contracts, etc.
- Q. What happens to land prices?
- A. Prices would be stabilized because growth in farm size would be slowed. Ideally it would be reversed. It would not pay to be a land cannibal as far as commodities go.
- Q. Who would participate?
- A. The program would be totally voluntary in participation as well as in planting and production decisions.
- Q. How would good management or marketing be rewarded?
- A. Wise marketing would net higher than average prices, therefore a bonus. Above average production or lowered costs of production will bring higher net profits.
- Q. What about food prices?
- A. A free market would set food prices competitively and cheaply.
- Q. Could young farmers get started?
- A. With full parity guaranteed on a certain level of production plus land being made available by large landowners, the banks could afford to lend to young farmers on a low rate of collateral.

- Q. How would a steady supply be assured?
- A. As supplies fluctuate, the free market response will be an increase or decrease in supplies as needed.
- Q. Would all crops and commodities be included?
- A. Certain crops such as small, centralized commodities which are grown under strict limits or controls could be included or excluded by a vote of the growers.
- Q. How would unemployment be affected?
- A. It would be reduced. A larger number of smaller farms, would mean less labor competition, more support industries -- in short fewer persons entering the labor market and the creation of new jobs.
- Q. How will it relieve social pressures in urban areas and help stabilize rural areas?
- A. It would stem migration to cities, keep young farmers in rural areas, on land or in support industries.
- Q. How would it be non-inflationary?
- A. Inflation results from an unbalanced or manipulated economy. This would be a basic step in returning to a sound economy. It would return the wealth created by renewable resources to its proper recipients. Anytime an economy is fed from the bottom up, or from a renewable resource position, it can produce a savings as it flows through the economy. This could be a positive influence in returning this country to a sound economy.
- Q. What will it cost?
- A. The cost of this program to the federal treasury would not be much greater than the present costs of farm programs, although at first glance it appears that it might be higher. The maximum cost would be \$35.2 billion, assuming that there are 2.2 million farmers and each received the full \$16,009 net income payment from the treasury. However, a more realistic view would be based on last year's total net farm income which totalled \$22 billion. Dividing \$22 billion by 2.2 million farmers results in each farmer having an average net income of \$10,000. The difference between \$16,009 and \$10,000 would be \$6,009. This multiplied by 2.2 million farmers would amount to a total federal expenditure of \$13.2 billion. However, it has to be recognized that farm production is not equally divided among farmers. Considering that about 15 per cent of the nation's farmers produce over 80 per cent of the nation's farm production, and that about 60 per cent of the income of farm families was earned from off-farm sources, the actual federal outlay would be approximately one-third to one-half of the \$13.2 billion or an actual cost of \$4.4 to 6.6 billion.
- You can call this an educated guess, which is all that is possible. Let's go further than this. Put a value on less unemployment, less welfare, less migration from rural areas to urban areas, more conservation on farms, more labor-intensive (less energy intensive) farming, less funds needed for rural development, more farming units paying a net tax as well as other support industries paying a net tax. I would dare to say there would be no costs if all these were added in. I would even dare to bet there would be a net gain to the U.S. Treasury as well as to the economy as a whole.
- Q. What is this program based on when it comes to philosophy and morals?
- A. We have to decide if we want to save the family farm. It is no longer an economical or political decision, it is a philosophical and moral decision.

We have a cheap food policy, but why should the farmer pay for it. Isn't it time that our whole society carries this burden? Isn't it time that the farmer gets a "minimum wage," just as labor or big business gets? Farmers cannot add on production costs, taxes, labor and management costs to set the price they need for production. They have been carrying the whole burden of inflation. It is time for us to realize that without the family farmer, the small rural business, the small banks and small support industry, this country is headed for a real disaster.

This plan should be put into affect as soon as possible. It will benefit the consumer, (cheap food, less unemployment) the government (a net tax savings), business (a better economy, a cash flow with savings) and above all, the farmer (he could afford to stay on the farm and produce what we all need -- food.)



Senator ABDNOR. Before we go on to questions, I think we have been waiting here for our next witness. Mr. Weckerly, please proceed.

STATEMENT OF NORMAN WECKERLY, PRESIDENT, HURDSFIELD GRAIN CO., HURDSFIELD, N. DAK.

Mr. WECKERLY. Thank you, Senator Abdnor and honored guests. My name is Norman Weckerly. I am a farmer from Hurdsfield, N. Dak., and I also have operated a small country elevator for the past 15 years. I am past chairman of the North Dakota State Wheat Commission, a former president of the U.S. Durum Growers Association and the former chairman of the Agricultural Council of the Greater North Dakota Association. I will give my personal statement and I would also like to submit a statement sent to me by the U.S. Durum Growers Association.

Senator ABDNOR. Without objections, that will be made a part of the record.¹

Mr. WECKERLY. Thank you, Senator. I can agree with nearly all that has been said this morning. There certainly has been a lot of good testimony brought to our attention and a lot of agreement on that we need changes and we need agricultural policies. I will delete a lot of my prepared statement, but I will try to emphasize what I think are some of the most important points from my statement.

To me the cornerstone of any agriculture policy that we develop must be emphasizing strong exports and strong trade policy. We just cannot produce only for our own domestic market. We have the capacity and the capability. The cost for our domestic producers to support our agriculture would be much too great if we don't emphasize exports.

We are and we always have been in a trade war. Maybe not to the extent that some people use the terminology, but we haven't been consistent with our use of our trade policies. When we were in heat of battle, we retreated with export embargoes in the past. And this really has been damaging to us. It's important that we must spur growth in world trade and we have got to hold or increase the U.S. share of the export trade.

But we must examine the factors that are causing the problems in this growth. It's been said several times this morning about the world financial and economic problems. There is no question about it, that this was unforeseen in past agricultural policy development. But it seems to me like we developed our past agricultural policy based on the fact that we would suffer shortages within just a few years. The 3 year reserve was called on by farm groups and by grain companies and food aid people, that we need to build stocks. And in the midseventies to late seventies, this is what our farm policy was designed around, was a stockpiling program. It may have worked had we not had the export embargo to the Soviet Union. If we still had our share of the Soviet market, we wouldn't have a problem today.

¹ See statement, p. 492.

The domestic policy also has been aggravated, of course, by the concept of increasing loan rates and target prices. It has encouraged more production. And particularly in the area of the reserve loan, it made it more attractive to produce for the Government than it did for trading.

Now, we all are looking for solutions. And I don't—I don't mean to say that there are some simple solutions. There aren't. But we have to start in a direction which will help us out. I think that we have to recognize as a basis of farm policy that we have the ability to produce more than we can consume or sell domestically and in export. The past program wasn't designed with those factors as a given. The theory was that we had to build stocks because the world would run out of food. We have over built our agricultural capacity. But we can't cut it back extremely quickly. The farm debt has to be serviced. There is no easy way to wish it away. It can be—it can be taken care of. If there were no farm program, it would be written off and there would be an economic collapse. But I don't think any of us want that. I think we have got to progressively compete in the world market using some export subsidies. Interest buy downs were mentioned quite frequently here this morning. And I realize that is an export subsidy and that must be used.

In the midsixties we had direct export subsidies. We had bid subsidies that were unknown to the foreign competition so we got the sales. Something like the Egyptian flour sale. I think we have to use these kind of tools to deplete our reserves. Then we need to put a cap on reserve stocks. We just can't build reserve stocks like we have.

The PIK program—there is a benefit from the PIK program. And I see some benefit in the PIK program. No. 1 is strengthening farm income. No. 2, probably more important, is the possibility of some depletion of reserve stocks, bringing grain out of this 3-year reserve program. Now, that in itself with the good weather we are having, it may not diminish the total stock, which that part is a failure. Part of the reason for that is that last spring—I'm sure that most of you have read that the commissioners of the Canadian Grain Board suggested that farmers in Canada cut back their wheat acreage 5 to 6 percent. I just read in late publications that the farmers have increased their acreage by 9 percent in direct response to the U.S. PIK program and the anticipation of higher world market prices for wheat.

Target prices on corn and wheat, I feel, need to be frozen and loan rates lowered. Now, that doesn't mean that we can lower income to farmers, but we have got to lower the loan rates to allow these commodities to move in international trade competitively with other countries. I'm not suggesting lower farm income. Whatever the cost to the Treasury—there is going to be a short-term cost to the Treasury, but hopefully we will make some progress. We are spending the money now and we are not having any progress.

I think another idea that really needs to be explored is to replace the PIK program with a viable long-term land retirement program. It would be very attractive to conservationists, wildlife groups and it would also enhance the productive capacity of these marginal

lands in the long run. Hopefully we would be storing the productive capacity of these lands in the land rather than in the bin where the carrying costs are very high. I think in any kind of a program that this would—it should be considered.

There should be a trigger mechanism able to bring this land back into production if commodity prices would react on the upper side because I think we realize that even though we are in this dilemma, total world stocks of grain are only 14 percent of annual consumption. Some kind of world weather problems could turn this around very quickly. I think we have to be cognizant of that fact.

In summary, although the PIK program hasn't been effective, it has been a start. But I think we have got to face the tough issue that we cannot support American agriculture only through programs of domestic subsidies and cutbacks. We have to couple domestic subsidies and cutbacks with a more aggressive foreign trade program and more viable long-term programs to reduce production.

You've mentioned several times this morning, we need something new. We need some creativity. Well, I am not a believer in very many things being new. We run things around and look at it, but there are new things for new times. Maybe there is a place for creation and innovation in an alternative fuel program. Perhaps it was much more prevalent here 2, 3 years ago when petroleum prices were high. Maybe the cost of subsidizing an alternative fuel program rather than importing as much energy as we do is an alternative that should be researched. I certainly am not an economist and I am not a specialist in this area, but I do know that this is one thing that we as a country are short of.

I think we have to get more agricultural commodities, renewable resources into industrial uses. We can't eat it all. We have lost a lot of our agriculture market to synthetic fibers, to synthetics, about everything we can think of. If there is some way we can get some of the agricultural production back into industrial uses, this could be a safety valve that when stocks reached a certain level, the excess production would go into these kind of programs.

The economy of the Midwest depends on finding long-term solutions. With a total farm debt today of \$175 billion, the aftershock of our failure to take corrective action on these programs that we are in now, will affect a far larger portion of our overall economy than just the farm sector. And I can't emphasize that enough. Thank you, Senator.

[The prepared statement of Mr. Weckerly follows:]

PREPARED STATEMENT OF NORMAN WECKERLY

Mr. Chairman and members of the committee, my name is Norman Weckerly. I am an owner and president of Hurdsfield Grain Company, and a small grain farmer from Wells County in North Dakota. I am a former president of the U.S. Durum Growers Association; former chairman of the North Dakota State Wheat Commission; and former chairman of the Agricultural Council of the Greater North Dakota Association.

THE IMPORTANCE OF AGRICULTURE

The contribution of a strong agriculture to our country and consumers of the world is obvious. It is important to the nation, not only as a source of our food and fiber, but also as a major export commodity to achieve a favorable balance of payments. I believe that agriculture will become even more important in the future as a supplier of food and fiber to an ever increasing world population.

But we have some major problems ahead of us that need to be addressed. During the decade of the 70's our agricultural sector responded to price incentives created by very strong exports and export policies that promoted continued growth in export markets. At the same time we had high grain prices, we had cheap livestock prices. This situation pushed more upper midwest farmers out of the livestock business and brought more land into grain production. This trend has continued into the early 80's, with a shift in consumer eating habits to more pork and poultry and less beef. We've also seen increased efficiencies in producing and marketing livestock through large, centralized feedlots prevent many farmer feeders from getting back into the livestock business, and therefore total acreage devoted to grain production has remained high. Not only has planted acreage remained high, production the last two to three years has been at or near record levels. The problem is that in 1980 we changed our aggressive export policy, with disastrous results, by embargoing exports to the Soviet Union, an action that U.S. markets have yet to recover from. This was the first blow to the farm economy. Several others have followed, and although the other blows haven't been as devastating, the overall impact has been serious. Trade disagreements, mandatory use of U.S. flag vessels for some export business, failure to respond to aggressive export subsidy programs by other countries, and a farm program that has been effective in building stocks of U.S. grain but not effective in providing economic relief to the U.S. producer, are some of the blows that have followed the 1980 embargo. All of these actions, coupled with a very strong U.S. dollar and weakening world economies, have brought us to today's situation and, in a sense, to this meeting.

U.S. agriculture became heavily indebted during the late 70's, a period of rising prices, escalating land values and inflationary pressures that sharply raised the cost of doing business. The U.S. farmer geared up to meet the expectations of continued growth in world demand for our product. Financial institutions supported this growth, freely lending money for farm expansion through a period of record high interest rates, most often based on inflated land values as collateral.

Today our world market share has declined, prices for farm products are substantially lower, grain stocks are near record levels and the prospects for a major surge in exports are not good. Yet we have created an agricultural machine that is heavily in debt and must be helped. The farmer is not the only one facing the problem. The entire economy must have a strong agricultural sector to be healthy. Let's look at North Dakota as an example of the importance of agriculture to the economy.

NORTH DAKOTA AGRICULTURE'S EFFECT ON STATE ECONOMY

North Dakota is predominantly a rural state. It is a state whose 650,000 people depend upon agriculture, energy production, manufacturing, and tourism as the major sources of new wealth to generate economic activity. In 1981, the state's new wealth was nearly \$6 billion, with about 53 percent being generated from agriculture. This is down from 58 percent of new wealth being generated from agriculture in 1980, and 66 percent in 1979. Prior to that point, agriculture historically generated more than 70 percent of the state's new wealth.

During the decade of the 70's, manufacturing expanded rapidly in North Dakota. In 1970, new wealth from manufacturing was \$148 million, or 11 percent of the total. By 1980, this increased to \$562 million, or 14 percent of the total. Manufacturing was tied mainly to agriculture, such as farm tractors and implements, as well as processing agricultural products.

Another measure of the importance of agriculture to the economy of North Dakota is its gross state product. In 1981, the gross state product was \$8.5 billion. Agriculture generated \$1.3 billion, or about 15 percent of the total. The next largest was mining, with \$1.1 billion, or 13 percent of the total. Thus, the health and prosperity of agriculture is extremely important to the condition of all sectors of North Dakota's economy.

EXPORTS

A strong export demand for agricultural products is extremely important to North Dakota, as much of the grain produced in our state is exported. Three very important crops in world trade are produced in North Dakota—hard red spring and durum wheat and sunflowers. For example, in 1980, wheat exports from North Dakota were 13.2 percent of the total U.S. wheat and flour exports. During the same year, North Dakota exported 62.5 percent of all sunflower seeds and oil. In order to maintain our creditability with foreign countries as a reliable supplier of our high quality durum and hard red spring wheats, as well as sunflowers, it is essential that

every effort be made to develop a foreign trade policy that aggressively promotes and markets our agricultural products.

EXPORT POLICY

It is important to spur growth in the world trade or in the U.S. share of export trade. However, we must first examine factors causing problems of this growth.

The first and foremost problem is the financial and economic pressure that the world-wide recession has exerted on all nations and all industries. Credit has become more costly to everyone and less available to many of those nations who need it most. At the same time, the strength of the U.S. dollar has made U.S. commodities relatively more expensive.

We also know that the United States suffered substantial losses in Soviet grain trade over the past three years. In fact, if we now enjoyed the same share of the Soviet market as we had before the 1980 grain embargo, the United States would be selling the Soviet Union some 25 million tons of grain annually. Instead, this country appears likely to sell the U.S.S.R. only a minimum of 6 million tons called for by the long-term agreement. The U.S. losses in the Soviet's market encouraged several foreign competitors to increase their own production and to sign bilateral agreements to preserve their newly acquired shares of U.S.S.R. trade.

Domestic farm policy has also aggravated our trade problems. As market prices have plummeted, which should have signaled growers to reduce levels of production, our loan rate target prices and reserve entry loan rates were increased. Our support levels provide an umbrella for a price protection for the world contributing to higher production in many foreign countries. As U.S. loan rates have dominated our markets, U.S. grain has been stored rather than marketed.

PROPOSED SOLUTIONS

This brings us to the heart of the problem. Our farm programs have been ineffective in dealing with the changing world economic situation. We just make some changes in government policy to begin to turn things around again. We must recognize and develop commodities that we can consume or sell—not on the premise that we will have a shortfall and not be able to feed ourselves. The Malthus Theory has been disproved many times in history.

The first thing we must do is aggressively compete in the world marketplace to sell our surplus. We must look hard at export subsidies to become price competitive. It seems to me that instead of the government paying 26 cents to 36 cents per bushel per year to store grain in this country, that storage payment should instead be used as a subsidy to sell grain and reduce stocks. We can't continue to let the EEC and other countries increase production and then heavily subsidize exports to reduce their surplus without taking retaliatory action. A subsidy program should also include a cap on U.S. reserve stocks, with an aggressive goal to liquidate excess stocks over those in reserve programs. Promises of voluntary restraints from other countries are not effective. The end result of subsidies is to lower the world price for commodities, thereby forcing other countries to cut production. In 1983, Canada suggested their farmers cut wheat production—the opposite happened. Wheat acres increased 9 percent.

Target prices on corn and wheat should be frozen and loan rates lowered. U.S. producers need the target price payments to encourage participation in acreage reduction programs and also for economic stabilization of the farm economy. Loan rates need to be lowered closer to world market clearing levels. It does no good to artificially stimulate production that is not needed. We must strive to create a farm program that is in sync with world economies and realistic demand.

Another idea that should be explored is replacing the PIK Program with a viable, long-term land retirement program designed to take land that is of marginal production value and requires high input out of production. This kind of program would be very attractive to conservationists, wildlife groups, and would enhance the productive capacity of these marginal lands when it is needed. This program must be carefully thought out and should include a trigger mechanism that would automatically bring retired land back into production as the situation requires.

The final recommendation I have is that we should consider the possibility of designing a program that will divert a percentage of our production into an alternate fuel production industry, either with alcohol or vegetable oils. I envision some sort of national production goals for each commodity based on domestic and export requirements, with a percent of the balance allocated for use in alternate fuel production. I fully understand the difficulties of such a proposal, however, it should at least be discussed and researched.

In summary, although the PIK Program has been creative, it hasn't been effective. The government will spend approximately \$20 billion on farm programs this year, and the overall affect on farm prices to date has not been beneficial. I believe we must now face the tough issue that we cannot support American agriculture only through programs of domestic subsidies and production cutbacks. We must couple domestic subsidies and cutbacks with a more aggressive foreign trade program and more viable long term programs to reduce production. The general economy of the midwest depends on finding long term solutions. With total farm debt today at \$175 billion, the aftershock of our failure to take corrective action will affect a far larger portion of the overall economy than only the farm sector.

Senator ABDNOR. Thank you, Mr. Weckerly. We really appreciate your coming all the way from Bismarck. Obviously you're wearing several hats here today with the many organizations and groups you are representing. Now, you submitted a statement for the record concerning the U.S. Durum Growers Association. I think they recommended a freeze in target prices and a lower loan rate. Is that right?

Mr. WECKERLY. That's right.

Senator ABDNOR. This is quite a different position than I have heard previously from other commodity groups. Why, in your opinion, haven't other wheat groups been quite so bold in coming in with a suggestion like that? Do you think there is a big difference in thinking between durum and some of these other commodity groups?

Mr. WECKERLY. The durum growers as a class of wheat are a closer knit group. It's a more concentrated production. We saw it so visibly with the higher reserve loan rate that we had 100 million bushels in 3-year reserves in Government ownership, 104 million to be exact, which is more than we will produce in a year. And yet we had a national average trigger mechanism that wouldn't allow that to come out of the reserve unless the national average was something like \$4.65. Even though we were sitting on pile of commodities, we would lose our markets to other classes of wheat because of the farm program that we were grappling with. Sixty percent of our production should—needs to go into international export. We can—we had a higher price and yet with the inclusion of Greece into the European Economic Community, Greece was taking our markets away. Production in Arizona, California was taking the markets away from the traditional durum growers of North Dakota, Minnesota, South Dakota, and Montana because of an ill-conceived commodity program. So I guess it was with these things in mind that we took the bold step of asking for an export-oriented durum program.

Senator ABDNOR. Thank you. Both you fellows are farmers. Let me ask you this question. Do you feel the Government programs are reaching the farmers in greatest need of assistance? Mr. Symens, do you think—you talked about monetary programs. Your whole testimony was built around this. Do you think we are reaching out to farmers with the greatest need?

Mr. SYMENS. I think you have in areas, in individual instances, but not a broad base of agricultural policy. I think it's time that we come to terms with everthing that we do. When we build a wheat program, we are building a wheat program at the expense of the other agricultural producers who are not in wheat in many instances because wheat has a definite price influence on what hap-

pens to corn and soybeans and vice versa. When we put together a corn production program such as PIK, we have a very detrimental effect on the livestock industry in a long-term program because short-term programs become so detrimental at times down the road. So we can address an immediate need, but we have to address the long-range need. That is much more important than the immediate need.

Senator ABDNOR. Good point. I think we can agree with that very well and relate to that.

Mr. WECKERLY. It goes back to the Government continually changing the rules. We can't play baseball with football rules. And we can't switch back and forth. That's part of the problem. And it isn't just in agriculture. It's in all trade policy that this Government has conducted in my immediate memory. The pipeline embargo damaged agriculture as much as the agriculture embargo did. You know, trade has to be a two-way street. This is where I can't stress enough, we need long-term agricultural policy. We have to recognize have we or have we not overbuilt our agricultural production capacity. If we have, then let's do something about it on a longer term rather than putting a Band-Aid on a cancer patient. And this is—this is what has been happening. We keep putting Band-Aids on the cancer patients. Raise the reserve loan. Put more in the reserve, add the PIK program. Government reacts. They don't seem to act. And out of these hearings, I hope that we can—that you people, you know, that Government can come up with something that acts rather than reacts to immediate problems.

Senator ABDNOR. Thank you. That's certainly a good point. PIK, you know, came out of nowhere; almost, at the tail end of the session last year, and all of a sudden it passed the House and was over in the Senate. Maybe the Department had thought it out, but I think there could have been some more discussion.

For instance, under PIK—if Mr. Anderson were here, he could give me the answers—you can sign up for wheat and stay out of corn or milo, or you can sign up for milo and corn and stay out of wheat. Do you think it would be best if that was an across-the-board thing rather than allowing an interchange like we used to have where you grow your wheat on your acreages today and use a little discretion on which way you want to go? We have an awful lot of wheat in the market; maybe we would have had more milo and corn, which we apparently could use a little more of. There is not quite the same surplus as wheat. Do you think that PIK could be improved in the way it's been administered if we are to continue having it.

Mr. WECKERLY. Senator, if we are really serious that we must cut back production and cut deeply, then you have to have cross compliance because people with a low basis of corn, low basis of barley, and high basis of wheat, particularly in fallow areas, move from one crop to another. But this is where there are so many problems with land retirement programs that aren't of multiple years. You get into fallow areas that are 50 percent fallow and you ask them to cut back another 50 percent, your land washes away. There is so many local things, as I see, that it's so hard—it's so hard to address these. So we make a program that—we devise a program that

allows some flexibility for these things. And then it's not effective. And some of that has happened in PIK. I think there are areas that PIK was effective. It actually cut back into areas. It went into cover crops. Maybe some of the cover crops are going to screw up the livestock industry. And I think I saw some of these through my trip in South Dakota. I stopped at a friend's up here 50, 60 miles north, and they were—they were planting their PIK acres to cover crop which can be used after the 15th of September. I suppose it's better for the soil and better for the operations if it is, but it screws up the livestock business. It's very, very hard to devise a massive cutback program and treat people fairly and still be good to the soil. I guess this is where I go back to my—my long-term land retirement being a cheap option and a better option, more acceptable than these short-term immediate programs.

Senator ABDNOR. Very good.

Mr. SYMENS. I agree with everything you said, particularly that long-term land retirement thing. It's thing, if we go cutback production, then we should be looking at a 5- to 10-year cutback, not the next year or 2 years. And long-term conservation wise is a smart move as he said here a minute ago. But even further than that, you talked about cross compliance. We should have cross compliance in everything we raise, not just in wheat and corn. But you know, wheat, corn, oats, and barley. On my farm I could raise wheat, corn millet, sunflowers, and alfalfa and anything else that will grow in those areas. If I have got acres to lay aside that can be planted to another crop, whether it be a grazing crop or anything else, it's going to be in my best financial interest to do that. But at the same time, you are not achieving the end results that the program set out to do. And if we are going to be honest about it, then we have to take some hard steps and say you're either in or out. We have to become mandatory or at least require cross compliance on everything, whether they be rented acres, owned acres, or crop acres of different commodities.

Mr. WECKERLY. I really, on the face, disagree with the total concept of acreage basis. Values get built into acreage basis. And I started farming in the midfifties when we had acreage basis of wheat that was very valuable. I was in the poor end of the county. Our average wheat base was 8 percent of our cropland acres. Twenty miles, away, the average base was 33 percent of the crop acres and wheat was the only crop we could grow profitably under the price-support system at that time. It's not too much different now. But in the ensuing years, we were given a barley base. And that was phased into a combination wheat-barley base with the long rate at a comparable ratio so it really didn't matter if we raised barley or wheat. Then we became responsive to the market. When durum was a premium, we raised more durum. If barley was a premium we raised more barley. At that time we couldn't raise corn. Now we are raising corn and soybeans and sunflowers and flax and millet. But if we could accept the premise that we have this capacity to overproduce and effectively take some land out of production in long-term land retirement and get these loans back into a competitive value and let us raise what the market looks like it's going to be, even though, somehow there has got to be a way to get back.

Senator ABDNOR. How would you set that up? Ignore the acres, historical acres? What would you use? How would you set up the machinery for—

Mr. WECKERLY. Maybe a cropland base, strictly just a cropland base. Let the market signal what we should—what we should seed in a given year. I don't know.

Senator ABDNOR. If some guy just went out and busted his land in the last year or two, would you give him a ratio basis the same as you would the guy who farmed for 30 years?

Mr. WECKERLY. No. I agree with the concept here of fragile lands. And I think that has perhaps been more of a problem in South Dakota than in some other States, although we do have some in North Dakota. And my own farm has some of this. The cattle became so unprofitable that, very frankly, we had to break up some of the land to make it economically feasible, economically, you know—to make the payments. After a crop disaster—I personally am not a cattle producer, but my brother is. And very frankly, to keep his operation going, we needed to break up more land and get more into crop production. And some of this was fragile lands, but it will raise a good crop for 5 or 10 years. And at that point hopefully the cattle business will be better or whatever alternative we need to do.

But I guess it's—to me there has to be some restrictions on the acreage that can go into these programs. I think we see a—I have personally seen an abuse of this in the dairy industry. And I have no connection at all with the dairy industry. I don't milk a cow. I just drink milk and eat cheese. But I have been in Phoenix, and I have seen some huge dairies there. I mean 2,500 cows. And it's the price support on dairy products that makes that economically feasible. Now, that's—I think that's, you know, an abuse of the use of Government instability for agriculture. If we stabilize it too much, it just invites the investment capital, as you mentioned. It isn't agricultural money producing. But if we have the price high enough, investment capital is going to slow in agriculture. It has \$175 million of debt.

Senator ABDNOR. You say you have something to add.

Mr. SYMENS. There is one area—when he mentioned investment capital, one of the things that was always plaguing the American farmer, not only the investment capital, but the tax incentives that are written into investment capital, to get out and compete and push land prices, up, push the hog industry, the poultry industry into vertical integration. This type of thing has been very detrimental to what we call family farmers or the real agricultural section in this country. And it has been made possible through tax incentives. I think when we address the farm problem, particularly when we address animal production in the poultry and the hog area, that has to be addressed. Not only wheat and corn, but that also has to be addressed.

We can look at the tax incentives as a real problem, that it has created those problems. It's true in the dairy industry. Those large dairies would not have been built without tax incentives and without dairy price supports. And, you know, there would be no dairy problem now, there would be no over production of dairy foodstuffs in this country had we not had such problems in the beef and in

the corn and in the wheat producing areas, the other production areas of agriculture. To get an FHA loan or to maintain an FHA loan many people had, they went into dairying. And I find that a real problem when we put one section of agriculture against another through tax subsidy, through our programs. We push people to go one way or the other. They can not make their own financial decisions and I find that wrong in a program.

Mr. WECKERLY. I think we have to address those areas.

Senator ABDNOR. Thank you. One thought went through my mind. What would happen if, let's say, wheat suddenly sold for \$5 a bushel and corn went up to 3½ and 4.

Do you see capital investment going right on, with farmers out bidding up farmland even higher than they normally would? I guess there is nothing that is going to control that. But that often follows, doesn't it, in a year when—

Mr. SYMENS. It definitely does.

Mr. WECKERLY. The farmer is his own worst enemy in a way in cash rents. It's the pride of ownership, the pride of a more efficient operation. But part of this is propelled by the overcapitalization we have in equipment on farms today. A lot of farms could farm half again more acres with the same equipment and struggling to do that, to pay their bills. I'm not saying that that is the total problem. I don't think that \$4 wheat would do this or maybe not even \$5, but if you got \$6 that was mentioned here this morning, hey, we would be right back in the same old ballgame again.

And I, one other thing I would like to mention. In agriculture, several times, several times here this morning it was said that we are the most efficient agriculture producers in the world. Maybe we are today. But I'm not so sure that in the future if we continue to have inflated land values and this, that we would be because we would have such a tremendous capital base in our agriculture that we wouldn't be efficient. And this is one of our problems today; that in some areas of our country, the land values have been inflated so much that they are not efficient. And that's a real concern I have in designing a program which makes us too healthy again.

Senator ABDNOR. Gentlemen, you have certainly given us some great thoughts here. I don't know how we are going to use them all, but they are going to be brought out. I guess there is no easy answer, but, again, I think some of the input we have had from you two gentlemen has made quite a contribution to our testimony today. We thank you folks for the efforts you made in coming down. Thank you.

Mr. SYMENS. Thank you for the opportunity.

Senator ABDNOR. How many have come here with the idea of wanting to testify? We only have so much time. The gentlemen with the NFO was talking to me a minute ago Where—

Mrs. McKEOWN. I think he probably left because he felt he would not have an opportunity to speak.

Senator ABDNOR. Come up, ma'am. Come forward, if you will. We need your name and address and we will probably go for at least 15 to 20 minutes. Were you with him, young man, the gentlemen from the NFO? Weren't you out there? Can you tell me who that gentleman was? Did he leave for home?

Mr. McKEOWN. I don't know if he did or not.

Senator ABDNOR. Are you kind of a representative of the NFO?

Mr. McKEOWN. No, I am not.

Senator ABDNOR. I notice we don't have them on our list here and I would hate to leave the NFO out. Is there somebody from the NFO?

Mrs. McKEOWN. We are NFO members.

A VOICE. I think he went out to lunch. I think he is coming back after lunch.

Mrs. McKEOWN. I don't want to take much of your time.

Senator ABDNOR. Do you have a written statement, too?

Mrs. McKEOWN. I will have to send in one. Getting a daughter married and big gardens interfere, you know. And I didn't know about this hearing until I saw it over the television inviting us to come and give our opinions.

Senator ABDNOR. We had to go ahead and prepare so we got a cross-section.

Mrs. McKEOWN. I understand perfectly, Senator.

Senator ABDNOR. What do we have, 4 or 5 days? I think in Washington we allow them 4 or 5 days. Please proceed, Mrs. McKeown.

STATEMENT OF MRS. GORDON McKEOWN, FARMER'S WIFE

Mrs. McKEOWN. Believe me, we are pushed from pillar to post; and I would like to have it on record. My name is Mrs. Gordon McKeown. I am a full-time farmer's wife and mother of six children, two of whom are trying to do their best to enter farming. I am going to address myself very briefly to two subjects which the two farmers covered very well. But a very dear friend of mine—

Senator ABDNOR. Just a minute. Are you having trouble hearing back there? Can you bring the mike closer to you?

Mrs. McKEOWN. I'm going to read something. And I think Mr. Thompson who is here from South Dakota State University would confirm that this man is a world respected economist, Mr. Harold F. Breimyer, right, John? OK.

Senator ABDNOR. Let me say we have had the gentleman on the panel several times.

Mrs. McKEOWN. He has been teaching me since 1964, Senator. I'm glad you like him. In the final analysis, if farming disappears from view, it will have been done in by family farmers. This rash verdict has been my theme song for 15 years. And I have treated this element of farmer psychology under the heading of farmers' noninstinct for self-preservation. Now, there was a farmer here this morning who put it so much more eloquently than I did. He has left. He said we farmers are like zebras on the Serengeti Plains of Africa. We stand there and run around and the lion comes out and eats one of us and we stand there and watch. I also used the saying wolves do not eat their own. So I think this subject has not be addressed.

I am not a farm person born and bred, so not a pure family farmer, you know, holy halo, et cetera. I am from a large city originally. And after 24 years of research, I think we farmers must assume our proper responsibilities or we deserve to be thrown to the dogs. I only say that we farmers must be saved not because of us, but in spite of us. And in this area, I am concerned about my

seven grandchildren and all grandchildren and my six children. Because the question here for future farm policy, and I am just speaking off the top of my head, Senator, is, as North Central did it 10 years ago—and it's been one of the best kept secrets in the system for farmers—Who will control agriculture? This is the question. We don't have big corporate entities that will take over the land. They couldn't afford it. But they can do it by vertical integration.

And that will lead me into my second very brief statement. I know I could keep you here for a 4-day seminar. What has not been addressed is the structural part, that is, structural revolution, you know, that we are in. The question in the end is who is going to control the productive resources of this land; millions of farmers or like in West Virginia four companies controlling 80 percent of the land or in California where you have factory field agriculture? They only grow lemons. They don't grow the necessities. OK. In the Senate you know about those problems.

The next thing is—that I wish to discuss is the destruction of what we used to call a viable market system. Farmers sell to four major grain companies. Co-ops still historically—I think the co-op people will agree they still only handle about 20 percent of the grain in this country. I have watched the market system disappear. I run the Sale Barn Cafe over at the Brookings Livestock Auction. And it's a pretty sad thing to see every week. They used to have two sales a week and they used to last until 2 in the morning. And this went on all over the country. Now, a 3-hour sale is a good one. I think only 10 percent of the hogs go through a marketing system, but economists still study it. I don't think over 12 percent of the cattle, and I am being very, very conservative, go through a marketing system. And we sit and talk yet about supply and demand.

Now, when the hog industry is integrated, and the good old mortgage lifter is gone because farmers will have no place to sell their hogs anymore than they now have anyplace to sell their eggs, then, I think, Senator, this Nation is going to face a very interesting state of affairs. It's—if you are going to have an industrial agriculture, then you are going to pay the price tag. In the factories when General Motors finds there is no profit in cars, they turn off the switch, right? Out here, now, they say, oh, they can't do that. But even I, as a farmer's wife, know all you have to do is feed a cow flax straw and they will abort very fast. And industrial agriculture—you can be sure that the geneticists and engineers will come up with a methodical method of controlling production. And our children are going to see blood in the streets. There is a man back here who just came back from Nicaragua—pardon me, Guatemala—Nicaragua, who can tell you about what happens in any country in the world where people do not control the productive resources, the land. You name it, Russia, China, all of Central America, Brasilia, everywhere. Where people once lose control of the land, how do you get it back? And that I think is the question we should be looking at today. And I have already taken so much of your time.

May I just reiterate that I agree with what Mr. Brimeyer says about the tax systems, but when Senator Curtis of Nebraska—and I took the Congressional Record for years. And what happened, he asked the tax committee, and this is in, you know, general session,

how about second buildings that can only be used for one purpose. Do they come in under the fast tax writeup? And that opened the door, Senator, for this concentration of investor-owned production of livestock. You know, so many little things happen that turn into such large things.

And I don't know—I have a son here and he is one of the two that is trying to farm. And I know he is going to be angry at me. And I finally got him to come down here. He said, oh, mom, it wouldn't do any good. My daughter would have come. She is a beautiful child also. She is part of the partnership, she and her husband. My son is working his butt off in very dangerous work in the oilfields of Wyoming, very dangerous. They call it nipping down. I have seen where he works. It scares me. And he is working so he can help the young people get started farming. My daughter teaches full time and trying to help run the farm at home to get into farming. Senator, they have to have their chance. I'm not being objective here, but these are the young people that future policy must be formed for. Thank you so much for your time.

Senator ABDNOR. Thank you. Do you want to add to that? State your whole name.

STATEMENT OF SHANE McKEOWN, FARMER, BROOKINGS COUNTY, S. DAK.

Mr. McKEOWN. My name is Shane McKeown. And I live in Evanston, Wyo. And I have a farm up here in Brookings County with my brother-in-law and my sister. And what I would like to address here is the problem of the young farmer and the problem of the young man trying to get into farming. And as mom stated, my sister teaches full time and I work full time out in the oilfields out there. And we can't even hardly pay the interest. It's very much what it amounts to. And I think that's the No. 1 problem right there, the interest rates we have to pay right now.

Now, something that has come up here, a few of these people have talked about conservation. And what I wanted to address is the last 10 years I have seen shelter belts torn out, waterways blown up, pheasants dying, you know, the whole 9 yards. And if we are going to have some type of conservation here again, we are going to have something that is not going to allow that again. And I think, you know, that is a major problem with the farmland today. It's not going to be around for my kids if we keep on doing this.

Now, I talk and I work with young farmers and young farmers that are trying to get into farming from every State in the United States, from cattle farmers in Florida to grain farmers in California to wheat farmers in North Dakota. I work with them, talk with them, live with them. And I will tell you what, our general consensus is we would like to see the Government get out of the welfare business in farming. And that's just strictly what it is. That's just what we call it. We don't like it. You know, it's not our way of life. We can't get any pride out of it.

And, No. 2 is we would like to see the Government quit using our futures as farmers as political bargaining. And No. 3 we need to let our farm organizations control our markets; not some grain com-

modity futures here and there. We need to control our own selling. We need to control our own buying. And No. 4 is I don't think we can stand another grain embargo of any sort. I just think—farmers are the most patriotic people there are, but something like that just wasn't altogether fair at all. And it's been a long time a coming at some sort of help, but we don't want no help. We don't want the help. We want to be able to produce and we want to be able to live on that farm and we want to be able to make it on our own. And I would like to thank you for your time.

And I just wanted to say that I do talk to a lot of kids. There is a lot of kids like me out there working in these oilfields, and, you know, I've worked in 20 States in oilfields. I have talked to kids from all over the place. And there is—you know, every one of us in the company I work in, we are all trying to—we have all got a little interest in some type of farming operation or we have all got a dream of a ranch or something. It's just not possible.

Senator ABDNOR. Do you really think you could get all the farmers thinking alike on marketing and things? I often wonder. That would go a long way toward solving a lot of problems. Do you think farmers are willing to work together or talk and work together?

Mr. McKEOWN. You are always going to have a certain amount of disagreeing and whatnot, but I think that we need to control our own marketing system. And that's you know, pretty much—if we can control it and if we can let a free enterprise system control it, we are taking care of our own problems. I know we can. But there is only one thing I think the Government—two things the Government, I think, needs to be in and that is helping out in disasters and helping out in the conservation. And that's the two things. And I think that the Government has to see that this land is conserved. And I think we can take care of our prices. But I think the Government has to see—I mean you have seen it yourself, the shelter belt, the waterways, you know. It's sickening, you know. And it's—

Senator ABDNOR. Let me jump over to another subject briefly. You were talking about the young man and woman getting started in farming. It is tough for a young person to get himself involved in farming. It costs a fortune. But how would you do it? You just can't open it up, loan any kid, every guy that would like to go farming. We would have so many. I guess every one isn't meant to be a farmer, but have you got any thoughts on how we can go about getting young people into farming? That is a problem. Farmers—there are getting to be less of them and they are getting to be older.

Mr. McKEOWN. I think if we had a fair market and we were able to control our own destiny, I think the farmer would take care of his own. I think you would see a lot more young men on the land. There ain't a dad in the world that has a boy or a daughter or whatever, a son-in-law, there ain't a dad in the world that doesn't want to see him there, see that land continue in the family. I mean that's—that's 90 percent of the whole pride of stewardship of land. And that's—it's the family, you know. Sure, we can go to town and make more money, you know. But as far as what I have done to get into farming, I started out 10 years ago and I have just bought a little equipment at a time and tried 1 year and got dried out and

bought a farm the first year and got hit by a cyclone. You know, it's tough.

Senator ABDNOR. We had some figures from one of our hearings that said two-thirds of the farmers in this country make a large part of their income off the farm. Now, that's probably what you are doing right now. You call yourself a farmer, but you have to go off the farm to make ends meet. I think there is more of that going on in the New England States and so forth. It isn't particularly true here. There are an awful lot of them that devote more time to their income off the farm than they do on the farm.

Mr. McKEOWN. Well, right now you are talking about a modest investment to start farming and to get a viable operation going, you know, around here of half a million dollars. And that's modest investment. You start paying that—the interest rates today, and you think about it a minute, well, it takes all my income just to pay interest alone, you know. And, you know—then let alone not get a price for our product. I thank you for your time.

Senator ABDNOR. Thank you, Shane. I think we will call a recess here and let our reporter get a chance to rest her weary fingers. We will be back at 1:30. We will stand in recess then until that time.

[Whereupon, at 12:10 p.m., the committee recessed, to reconvene at 1:30 p.m., the same day.]

AFTERNOON SESSION

Senator ABDNOR. We are ready to come to order. We will carry on with our agenda. I let myself fall a little behind, but we have been very, very pleased with the meetings and the hearings to date. And I'm looking forward to your testimony this afternoon.

We have quite a variety of agricultural areas here today to give us some input. We are going to start our this afternoon with a very important segment of agriculture. As I said before, we are trying to get a broad spectrum. You couldn't go anywhere without ladies giving us their input as a group called Women Involved in Farm Economics [WIFE]. WIFE has been very helpful in hearings around the country. We have had them call on us in Washington. This afternoon we have Norma Hall from Elmwood, Nebr., and Marie Fisher from South Dakota who are going to lead off our panel with statements. If I could have the ladies come up, I would appreciate it. I know the significance of Big Red in Nebraska, but I don't know about Mrs. Fisher. She is wearing red today, too.

Mrs. FISHER. May I correct you right away today. We wear red in South Dakota because we are farming in the red.

Senator ABDNOR. That is good, very good. Which one of you two would like to start? Go anyway you want to.

STATEMENT OF NORMA HALL, NATIONAL SPOKESWOMAN, WOMEN INVOLVED IN FARM ECONOMICS [WIFE]

Mrs. HALL. I guess I will go first, if you don't mind, Senator Abdnor. I am Norma Hall, national spokeswoman for WIFE, representing the States of South Dakota, Kansas, Wisconsin, and Nebraska. I appreciate the opportunity to share some thoughts concerning the next generation of farm policy. I also presently serve

as treasurer of the Nebraska Agriculture Council which is made up of 44 agribusiness farm organizations, although I am not representing them here today. I do appreciate the opportunity to share some thoughts concerning the next generation of farm policy.

Conditions in our economy sometimes change quite rapidly. The advent of the PIK program, trade embargoes, and good or bad weather are good examples in the agriculture segment. The PIK program is a remarkable effort to control production. To look ahead toward the next generation or even the next 4 years and predict accurately what will happen is an exercise in futility. It is not futile, to list some things that must be emphasized. These include:

No. 1, do not allow special interest groups to unduly influence decisions. This includes all levels of government, schools, media, consumers, and farm-commodity organizations.

No. 2, provide broad programs of training in agriculture for those who are to be employed in policy influencing and determination. It is not enough to have owned or operated a farm, business or be active in politics. A person in these positions cannot avoid yielding to pressure unless he or she has a thorough background in all areas. We have specialists and executives. An executive is supposed to handle people who are specialists. He, therefore, becomes the focus of many specialists who naturally are also interested in specific areas and his supervisors who are not. It becomes a tug of war with the person in the middle often going the direction of the most pull. A judge hears the evidence, but has the law as a basis. Many decisions in agriculture have little or no precedent. It takes an exceptional person to make correct decisions and often he is under so much criticism that he does not remain very long.

No. 3, maintain our markets and develop new ones. In order to help our foreign trade deficit, emphasize exports. However, exporting commodities at below the cost of production is not the answer to the farmers financial plight. Right now it is a buyer's market for commodities. Our competition with other producing countries is hurting the exporting countries. It will require many conferences and subsequent constant contact with these countries to preclude the continuation of the feast and famine agricultural product supply. Perhaps we should consider bartering with those who do not have enough money to buy. They may need our assistance in developing markets for their products. We must get world production under reasonable control. If controls are placed on domestic production, WIFE recommends that the basis be unit or bushel, not acres.

No. 4, continue to emphasize and provide financial aid for soil and water conservation. The real wealth of this Nation is our land and it is everyone's responsibility to preserve it, not just producers. We cannot continue to mine the land and still provide productive land for future generations.

No. 5, the farmer-held reserve grain stocks program should be continued, but at a manageable level. A good reserve system will fulfill two obvious needs. It will absorb excess stocks in times of abundance, and it will make up shortfalls in production during bad years.

No. 6, have a longer term commitment to programs such as alcohol fuels. The present commitment has eroded to little more than an interesting sidelight in the energy saga. We in WIFE feel that the use of commodities for alcohol production would lessen the grain surplus and provide a source of energy, with the byproduct being used for food.

No. 7, in Government sponsored agencies, avoid sensationalizing in such areas as cancer-causing feed additives, publications which advocate animal rights and other hastily released information. This isn't to say that cancer-causing drugs are to be used. It is saying that we need to evaluate the research and discontinue use of these drugs if they are dangerous before we lost our red meat market because of consumer disapproval. Once an idea is implanted in the consumer's mind, it is difficult to retract that idea if it is proven false.

No. 8, work toward the goal of a reasonable income to the producer. Is the continuation of the present trend from fewer family-size farms to large nonfamily corporate farms what we want for rural America? Do we want to go back to the tenant farmer who has little or no opportunity to ever be able to purchase land? Rural America has become the backbone of this country by the desire of great grandparents to come to America to live and someday own some land. Yes, they were tenant farmers, but their dream was achievable, to own some land.

Last week I was visiting with a young farm wife from Illinois. She said that they were renting their farm ground and milking 60 head of cows. Their dream is to own a farm and she said they had worked too hard and long for that dream not to come true. Without profit in agriculture is that dream a reality? Does the opportunity still exist and how much are we as a Nation willing to support a profitable agriculture?

It is estimated that the 1984 budget calls for spending 29 cents out of every dollar for defense and 12 cents for interest on the national debt and yet only 6 cents for other Federal operations which includes agriculture. How important is food compared to defense? If we deem the future of agriculture to be important, then a long-range farm program must be established. The cost of school lunch subsidies, food stamps, and some welfare activities should not be classified as aids to agriculture.

No. 9, reasonably priced credit is an essential. When rates fluctuate to high levels, and prices are good, the purchase is made. When prices go down the borrower is left with few alternatives except to try to hang on. He may have to be sold out with tremendous loss to his family and a sizable loss to his creditors. If a commodity loan structure is to be implemented, WIFE recommends that the loan rate be not less than the cost of production.

No. 10, continue a vigorous agricultural research program. We could not have become the world's agricultural envy without a strong Federal and State commitment to agricultural research. Work needs to be done in the development of quality and new uses of crops and livestock products. The possibility for alternative crops also needs to be researched. We cannot afford to curtail our research program and thus lose qualified people. Research must focus toward the future generations.

Agriculture is a highly productive industry in the United States. Many other people and industries derive a significant portion of their income from it. With some adjustments, food and fiber exports will reduce the trade deficit and our own surpluses. We must continue to make progress in our country so that we remain world leaders rather than a provider of raw materials, labor, and land that will be the source of profit for others. A balance must be achieved between the contributions of Government, the people and agriculture to provide quality food and fiber at prices which are profitable for agriculture and reasonable for the people.

Senator Abdnor, I ask that you and your committee consider the points that I have presented here today. Through compilation of these ideas may your committee add direction to planning farm policy for the next generation.

I thank you for permitting me to have input at this hearing. May we continue to communicate and respond together.

Senator ABDNOR. Well, thank you for your statement, Mrs. Hall. It certainly gives us some food for thought and that's what we are looking for. I am anxious to hear from Mrs. Fisher.

STATEMENT OF MARIE FISHER, SPOKESWOMAN, SOUTH DAKOTA WOMEN INVOLVED IN FARM ECONOMICS [WIFE]

Mrs. FISHER. Mr. Chairman, members of the Joint Economic Committee, my name is Marie Fisher and I am here today to testify as spokeswoman for South Dakota WIFE [Women Involved in Farm Economics]. This testimony is the result of numerous telephone calls to members to combine our thoughts as to the needs as we see them for the 1985 farm program.

First and most important, every one said that we must have a floor price set at the cost of production which is at least 75 percent of parity on the major farm commodities using the U.S. Department of Agriculture cost of production report as it is done now giving us a parity price for May 1983, wheat at \$7.39, corn \$5.12, and so forth. If labor can have a minimum wage, why can't the farmer have a minimum price? Nobody can live very long without food.

In the May Grain Sorghum News, Elbert Harp, executive director of the Grain Sorghum Producers Association, points out some very important facts.

Contrary to the arguments of many people, grain surplus is built during periods of low price supports. Those who are recommending that the loan and target price supports should be lowered for 1984-85 should review the history of the past 30 years.

I will not give you the figures. I'm sure you have heard them plenty of times. WIFE, in February 1982, did a survey on the county, State, and national level to find out how much money was not generated into the economy because we were not receiving parity. These tables are attached to my prepared statement. For my county, Tripp, the amount of money not received is \$28,338,666. For the State of South Dakota, the amount is \$1,616,481,501.

Each dollar the farmer makes multiplies five times as it passes through the economy of the State so \$8,082,407,505 of income were not received by the citizens of South Dakota in 1982 because the

farmers did not receive parity. Each dollar the farmer makes turns over seven times as it passes through the economy of the Nation so the United States lost \$509.6 billion or a tax revenue of \$101.9 billion due to the fact that the U.S. agriculture was not at parity.

Second, we feel that there should be a strong bushel, pound, et cetera, supply management but the Government should own no grain. The reserves, or a better term would be inventory, should be farmer-held with storage payments, but the size of the inventory on the farm consisting of not more than a 2-year average allotment for the farm, able to receive storage payments. The Secretary of Agriculture would estimate how much production of each crop is needed well in advance of the planting season so farmers would be able to plant according to the anticipated need for the following year and every farmer with a crop base would be able to share according to his history. Anything over the 2-year supply, he could store at his own expense, but it could not be sold until he could use it as part of his allotment.

The third item that was brought up in our discussions for the farm program is soil conservation. Senator Armstrong's "Sodbuster Bill" goes a long ways, but I feel it is too weak. In my travels in recent years, I see way too much erosion and I know that there is no reason for there to be very much erosion because on my own farm, there was just about no erosion last year or this year, even though we had so much rain. Along with soil conservation, it was suggested that our extension service do a study on organic farming for those who would like to try it because we do not like using so many chemicals.

Another item that would be beneficial to the economy of the Nation as a whole would be to use a lot of our production of grain to make alcohol fuel. This would be a real boost to our balance of trade and what better food could be given to the poor in our country and other nations than the high protein byproduct from the production of alcohol because the food they are most short of is protein. It would also be a big help to the pollution problem in our cities.

Farm bills were originally meant to help the family size farm and we feel that the new farm program should be made to help the family operated farm with no payments or tax breaks going to the absentee owners or corporations who use the farm as a tax write-off. There should be a limit as to the size of the Federal payment to any family, though the family corporation actively operating the farm should be treated as farmers. Feed companies feeding livestock should be getting no tax breaks or subsidies.

Last, we need to look at international trade. We realize that this is a very complicated issue, but our American farmers produce the best and most healthful food in the world and any food that we import should be of no lesser quality.

Now, I would like to read an article from the May 1983 NFO Reporter:

We don't have a surplus. We control the world's inventory of food and fiber. Let's take a look at the red meats. In the 3 years of 1979, 1980, and 1981, we imported five times more red meat than we exported. It means that we were not producing enough red meat to feed our own people in this country. We exported 506,000-metric tons during those years and we imported 2,724,000-metric tons of red meat. The

Reagan administration, in assessing the dairy producers a 50 cent tax is really saying that the dairy producers have produced a surplus and that they should pay for storing the surplus they produced. Let's look at the statistics. In 1979, 1980, and 1981, we imported three times more dairy products than we exported. It means that we either do not produce enough dairy commodities to feed our own people or the inventory of dairy we have on hand is the result of imported product used to build an inventory and give the impression that the American dairyman overproduced.

In working on these issues, we were trying to find a way for the American farmer to be as independent as possible with the least possible cost to the Federal Government and yet preserve the family farmer—the most productive individual in the world.

Thank you for letting me give this.

[The tables referred to by Mrs. Fisher follow:]

Livestock, 1978 Production
Grains, 1980 Production
Prices, 1981 Calendar Year

TRIPP COUNTY, SOUTH DAKOTA AGRICULTURAL FINANCIAL SURVEY

COMMODITY	UNIT	PRODUCTION	AVERAGE PRICE PER UNIT	TOTAL VALUE	AVERAGE PARITY PRICE	VALUE OF PRODUCTION AT PARITY	DIFFERENCE BETWEEN PRICE RECEIVED AND PARITY PRICE
All Wheat	Bushels	2,571,600	\$3.96	\$10,183,536	\$7.07	\$18,181,212	\$7,997,676
Milo	Bushels	1,782,700	1.93	3,440,611	4.59	8,182,593	4,741,982
Corn	Bushels	485,000	2.72	1,319,200	4.87	2,361,950	1,042,750
Oats	Bushels	426,000	1.88	800,880	2.63	1,120,380	319,500
1100 lb. Steers for Slaughter	cwt.	5,390	63.28	3,751,871	91.98	5,453,494	1,701,623
450 lb. Calves	cwt.	43,410	69.26	13,529,594	109.50	21,390,277	7,860,683
242 lb. Hogs	cwt.	49,200	43.00	5,119,752	82.26	9,704,204	4,674,452
		TOTAL		\$38,145,444		\$66,484,110	\$28,338,666

Sources of information for this report:
United States Department of Agriculture
1978 Census of Agriculture, Preliminary Report, Tripp County, South Dakota
South Dakota Agricultural Historic Crop and Livestock Estimates, John C. Ranek, Statistician

1980 Production South Dakota Agricultural Financial Survey
1981 Prices (calendar year)

COMMODITY	UNIT	PRODUCTION	AVERAGE PRICE PER UNIT	TOTAL VALUE	AVERAGE PARITY PRICE	VALUE OF PRODUCTION AT PARITY	DIFFERENCE BETWEEN PRICE RECEIVED AND PARITY PRICE
Corn	Bushels	121,900,000	\$2.72	\$331,568,000	\$4.87	\$593,653,000	\$262,085,000
Wheat	Bushels	62,425,000	3.96	247,203,000	7.07	441,344,750	194,141,500
Oats	Bushels	66,000,000	1.88	124,080,000	2.63	173,580,000	49,500,000
Dairy	cwt.	16,400,000	12.50	205,000,000	20.15	330,460,000	125,460,000
Slaughter Cattle	cwt.	13,749,000	63.28	870,036,720	91.98	1,264,633,020	394,596,300
Calves 450 lbs	cwt.	7,425,000	69.26	514,255,500	109.50	813,037,500	298,782,000
Hogs	cwt.	7,435,850	43.00	319,741,550	82.26	611,658,001	291,916,451
		TOTAL		\$2,611,884,770		\$4,228,366,271	\$1,616,481,501

Sources of Information for this Report
 United States Department of Agriculture
 1978 Census of Agriculture Preliminary Report, Gregory County, South Dakota
 South Dakota Agriculture Historic Crop and Livestock Estimates, John C. Ranek, Statistician

1950 Production

UNITED STATES AGRICULTURAL BALANCE SHEET

1981 Prices

163.2

COMMODITY*	UNIT	PRODUCTION**	U.S. AVERAGE PRICE PER UNIT	TOTAL VALUE**	U.S. AVERAGE PARITY PRICE	VALUE OF** PRODUCTION AT PARITY	DIFFERENCE BETWEEN TOTAL VALUE AND PARITY PRICE
CORN	bu.	6,644,841,000	\$ 2.92	\$ 19,402,936,000	\$ 4.87	\$ 32,360,376,000	\$ 12,957,440,000
WHEAT	bu.	2,374,306,000	3.88	9,212,307,000	7.07	16,786,343,000	7,574,036,000
SOYBEANS	bu.	1,792,062,000	6.93	12,418,990,000	12.41	22,239,489,000	9,820,499,000
OATS	bu.	458,263,000	1.92	879,865,000	2.62	1,200,649,000	320,784,000
GRAIN SORGHUM	cwt.	324,350,000	4.71	1,527,689,000	8.21	2,662,914,000	1,135,225,000
BARLEY	bu.	360,956,000	2.73	985,410,000	4.54	1,638,740,000	653,330,000
COTTON	lb.	5,338,608,000	.67	3,576,867,000	1.17	6,246,171,000	2,669,304,000
COTTON SEED	ton	4,471,000	25.71	427,919,000	213.92	956,436,000	528,517,000
CATTLE Slaughter	cwt.	362,408,000	62.16	22,527,281,000	91.95	33,334,288,000	10,807,007,000
Calves	cwt.	202,491,000	64.85	13,131,541,000	109.51	22,172,765,000	9,041,224,000
HOGS	cwt.	232,499,000	44.17	10,259,481,000	62.25	19,125,368,000	8,865,887,000
LAMBS	cwt.	7,234,000	55.18	399,172,000	102.05	743,294,000	344,122,000
ALL MILK	cwt.	1,284,250,000	13.75	17,658,437,000	20.05	25,749,212,000	8,090,775,000
TOTAL				\$112,417,895,000		\$185,216,045,000	\$ 72,798,150,000

The agriculture dollar turns in the national economy 7 times.

The 7 times turn of the \$72.8 billion underpayment to United States agriculture equals ----- \$509.6 billion.

This is the amount of earned income that the Nation could have received had United States agriculture been at parity.

In a balanced (parity) economy every farm dollar generates approximately \$1.40 in taxes nationally.

The Nation lost \$101.9 billion in tax revenues due to the fact that United States agriculture was not at parity.

Sources of information: United States Department of Agriculture
National Organization for Raw Materials, Inc.

Prepared by: W.I.F.E. (Women Involved in Farm Economics)

National President: June Saylor

Route 2
Muleshoe, Texas 79347

* Only major commodities were used for purposes of this report
** Figures rounded to nearest 1000.

Senator ABDNOR. Thank you, Mrs. Fisher. We prepare proposals and comments and we do appreciate your comments. Now, you said that all we would have to do is shut off imports and we wouldn't have anything to worry about?

Mrs. FISHER. According to these statistics.

Senator ABDNOR. Could be. If we could save \$2 billion a year, I think we better work on it.

Mrs. FISHER. If that is in the NFO paper and I don't believe—I apologize. I was called out to California because—

Senator ABDNOR. Let me have the figures for the record because that is what—

Mrs. FISHER. You want the NFO paper in?

Senator ABDNOR. I just want the figures.

Mr. TOSTERUD. Is it in your statement?

Mrs. FISHER. Yes, it's in my statement.

Senator ABDNOR. You both feel that exports are important in this. How do we guarantee this price support? You were saying that we shouldn't export at a price less than the cost of production. I agree. How do you think we can control the other countries of the world? Do you have any thoughts on it?

Mrs. HALL. I do not have a solution for it, but I saw an article in the paper, the Omaha World Herald, a couple of weeks ago and it was interesting to me because I think the price of wheat is three something now. And the Government bought this wheat for \$6 a bushel. And they sold it overseas. And I don't know if this was a credit arrangement or not. But the value at that time was \$16. That's not an exact figure, but around \$16. So—

Senator ABDNOR. I think maybe the Japanese would do that. I don't know what they get for a bushel of wheat. We sell at the market price. They have their own government groups that resell that grain at higher prices. And for some reason people are willing to pay more for food over there. Do you think we can convince the consumers in our country they have got a bargain, that they ought to be paying more. I don't find that very easy to sell. Are we making any headway in that?

Mrs. HALL. The point that I was trying to make with those figures was that someplace between the \$6 and the \$16 that we received, I believe someone somewhere was making excess profits and yet the wheat was costing that much, but it wasn't in—a comparable share wasn't going to the farmer.

Senator ABDNOR. I am sure it wasn't. I don't know. I know with meat that's the way they do it in Japan. The farm groups in Japan run the government, they tell me over there. They are very strong. And they don't let our products come in. They buy it at the regular price and sell it at tremendously high prices, and that is what saves their industry. I don't know what we can do about Japan. When the money is going to the government, you can't say they can't make a profit on something bought over there. That is really not within the realm of our controls.

Mrs. HALL. There is some way to make a profit because I heard a shipper from the Port of New Orleans say that Holland, I believe the country is, that imports our corn in bulk shipment, they rebag it and they can still undersell the United States. So there is—there are some irregularities in some of that.

Senator ABDNOR. We are happy to have it. If you find you have some other information later on, we would like to have it because that's the kind of material we are trying to put together. Our biggest problem is trying to undersell France and the countries that we are in competition with. They are underselling us. And we really have no influence over them. And one reason they do it is people are willing to pay more for food in other countries. And they subsidize the farmers of the domestic share and sell very cheap to the foreign market.

We made that wheat flour sale to Egypt earlier this year. All we did was undersell the competition. We just sold wheat flour at a lower price per ton than France was offering. We finally got some of our old customers back, and France is very mad at us because we did that. They were offering lower interest rates than we were. They offer lower prices than we offer.

And our dollar, we have got that to deal with, too, you know, because of the American currency being, in relation to other currencies, so much higher it has put us at a terrible disadvantage. A country like Africa can go and buy wheat in Europe and get more for their dollar, because of the relative values, than they can buying from us. But these are all problems we have to work with.

Mrs. HALL. I guess no farm bill is going to serve—be able to solve the consumers want for cheap food. And perhaps the only thing that would ever solve that is for some of us to go hungry and then we would realize the bargain that we have in food.

Senator ABDNOR. I couldn't agree more. Do you feel that price supports should be considerably higher? You think we can possibly—

Mrs. FISHER. If I might—I have done a lot of discussion with this. In fact, we had—Thursday and Friday I was on the phone practically all day working this out. And I talked with numerous people. And people come back to say the world grain market is set at the Chicago Board of Trade and no matter how low we put our grain prices, some of these countries are going to subsidize their farmers so they are going to sell it. So we might just as well have it up there to where we can get the cost of production and that we have been—

Senator ABDNOR. How are we going to pay for it? We have got \$21 billion into this year's farm program. That is not these other things you are talking about. That is PIK and the support prices, isn't it?

Mr. TOSTERUD. Excluding PIK.

Senator ABDNOR. I have got to add to that. It's three, four times higher than anything we have put in before, And right now when the Government—I am just asking because bucks are going to be hard to find. Have you got any ideas how we are going to sell this?

Mrs. FISHER. What we have to do then is control our production. See, if we don't have this surplus like we have now because the only place where this surplus is here in the United States. If we control that surplus and the farmers held it so the Government can't go out there and any time they want to, like they have here at one time in Texas and so on, the farmers can hold it and sell it when they want to when the market is up, we—we have the feeling that that would help it, that we would have to have—

Senator ABDNOR. What are you going to do this year when we cut back; if Europe goes ahead and Argentina produces considerably more? You might do it for the domestic use, but we have cut back considerably in our production through the PIK program. Yet worldwide, I am told the bushels available for the world are not that much less than they were a year ago because they are producing more while we are producing less.

Mrs. FISHER. When it comes to the amount of grain exported, I believe the United States has such a majority over the other countries.

Senator ABDNOR. We haven't done very well in Russia with the selling of wheat. They were our biggest buyers. This was supposed to happen when we put that grain embargo on.

Mrs. FISHER. That's a discussion that all these people—or about everyone says there that the price is set at Chicago Board of Trade. And the other countries, they are under bidding us right now so if we set our price up, it's going to benefit us. But we have got to control the production so they know that there is just a very limited supply available.

Senator ABDNOR. You have no concern that the other countries are going to agree with that, too?

Mrs. FISHER. They can't produce enough. That's the feeling of so many of the people that I have been visiting with.

Senator ABDNOR. They are doing very well. More and more coming under the plow.

Mrs. FISHER. And like now, there is so much of this land in the United States that has been plowed up, all this fragile land, that all needs to be put back to rest. And if we can get a lot of that land back to grass before we lose it to where in the future generations there would be none available when it's needed—

Senator ABDNOR. Soil bank type—

Mrs. FISHER. Soil bank type and like a sodbuster bill. Now, there are a lot of these different deals.

Senator ABDNOR. You think that farmers are now ready to accept controls and—

Mrs. FISHER. Yes.

Senator ABDNOR. You think they are?

Mrs. FISHER. Every one of my WIFE members that I talked to that is an active farmer said, yes. This testimony here is a result of everyone agreeing 100 percent, every one of the WIFE members in my area.

Senator ABDNOR. I am happy to have your testimony and we thank you very much. We have got a long way to go on this.

Mrs. HALL. May I comment on your last question about mandatory controls?

Senator ABDNOR. Yes.

Mrs. HALL. I think the farmer that is aware of the true picture of agriculture probably would be, but there are many, many farmers that haven't even admitted to themselves that we have got a problem. And so I don't think if you put it up to a vote, that it would probably go for mandatory.

Senator ABDNOR. It would be interesting. Thank you very, very much. You are from Nebraska, from Elmwood?

Mrs. HALL. Between Lincoln and Omaha. Nice to have met you.

Senator ABDNOR. Our next witness is the American Agricultural Movement with Joyce Jobgen. Joyce is here. Joyce has been to Washington to see us and talk to our people and we are happy to have you back here today, Joyce.

**STATEMENT OF JOYCE JOBGEN, SOUTH DAKOTA DELEGATE,
AMERICAN AGRICULTURE MOVEMENT, INC.**

Mrs. JOBGEN. Thank you, Senator Abdnor and Mr. Tosterud. My name is Joyce Jobgen. My husband and I own and operate a cattle and wheat operation in western South Dakota. As a South Dakota delegate, national director and member of the executive board of the American Agriculture Movement, Inc., I thank you for the opportunity to present our members' views on future farm legislation.

The American Agriculture Movement may not be the largest farm organization, but we are an organization made up of actual producers. Even our national president is a full-time farmer. Those who belong to AAM do so for representation, not because of services provided.

I would like to personally thank you, Senator Abdnor, for making these hearings possible. Agricultural direction is an economic issue. It is time we looked at researching the role agriculture plays in this Nation's economy. That is why we are extremely pleased that Congressman de la Garza, on behalf of the House Agriculture Committee, has requested the GAO to do an in-depth agricultural revenue study. This type of study should show the effects of an increase and decrease in commodity prices.

What would these changes do to the social security program, to IRS income, to industry, to the unemployed? I would hope that the Joint Economic Committee would consider doing a similar study. It would be very beneficial in formulating the next generation of farm policy. It is time to look for a new approach. Our present agricultural policies are not working.

AAM recognizes the fact that our Government is not going to get out of agriculture. Therefore, we maintain that if the Government is going to use agricultural produce as tools of international diplomacy, then the Government has the responsibility to insulate the producer from the repercussions.

Our recommendations are to develop a program based on a quota or marketing order concept. Tobacco uses this type of a program. Under such a program the costs of over productions would be the responsibility of the individual producer instead of the Government. Any Government subsidies should be paid at the export level rather than to the producer.

AAM feels there should be a board of agricultural producers, all honest-to-goodness farmers, to assist the USDA in establishing these quotas. These quotas should include domestic need, export need, and national reserves.

The American Agriculture Movement feels that all major commodities should be supported equally to eliminate crop switching due to price. This would avoid overproduction in certain areas, thus depressing prices. The use of these ratios would nearly eliminate

crop switching and tend to stabilize domestic production and world production.

Over the years ratios have been established based on the price of corn. These ratios are: beans, 2½ times the price of corn; wheat 1½ times the price of corn; cotton, one-tenth the price of beans. Rice has no ratio due to the lack of history, but we would recommend rice be placed at twice the price of corn. All other feed grains are already indexed to the price of corn.

Let us assume that the loan rate for a bushel of corn was \$35 which, by the way, is 59 percent of parity. Using these already established ratios, beans would be \$7.50 per bushel, wheat would be \$4.50 per bushel, cotton would be 75 cents per pound, and rice would be \$6 per bushel.

The final step of our recommendations, once these prices were established, would be to tie them to parity. We realize that the parity concept has not been popular with Congress in recent years, but under the present economic conditions and the recognized fact that every farm dollar is turned over five to seven times throughout the economy, it seems the parity formula is a must. All parity is, is equality—a balance.

If loan rates were tied to parity, then when our input costs went up our prices would go up. Likewise, when our costs came down, the prices of our commodities would come down.

With a program similar to the one I have just proposed, everything would be back in balance and we certainly wouldn't have to be talking about freezing prices. All a price freeze will do is put more farmers out of business. Of course, if you want corporations raising your food, then you will support the freeze. But if you want to maintain the family farm style of agriculture, then we suggest you look seriously for new direction.

Just a short time ago a coalition of some 19 farm organizations and commodity groups voted unanimously to oppose a price freeze. This should show how the producers of this country feel. A commodity price freeze would destroy America as we know it. We need industry balance, not a greater imbalance.

In summation, AAM recommends a farm program based on quotas, an agriculture producer board to work with USDA, the utilization of the ratios between commodities, indexing the established prices to parity, and thereby creating economic balance and providing a long-range agricultural policy.

This program will work and it will cost the U.S. taxpayer less than the program we have now. Thank you.

Senator ABDNOR. Thank you.

Mrs. JOBGEN. If you have any questions, I will try to answer them.

Senator ABDNOR. I am sure you would do very well.

Mrs. JOBGEN. There might be one thing. Many things were said this morning. I too have to say that the comments were very, very good. And I think there are a couple points that many times we overlook. And I think it is having a great bearing on agriculture as a whole. And one of them is the definition of an agricultural producer. Anybody that takes \$1,000 from the land is an agricultural producer. And that is not fair to the producer who is trying to make a living off the land. And if we are the No. 1 industry in

America, we shouldn't have to be out subsidizing that industry by an outside income so we can stay in farming.

The other thing, we need to close some of the tax advantages that have been allowed to outside investors. In western South Dakota we are seeing tremendous amounts of outside investors coming in and buying land at outrageous prices, especially pasture-land, and putting it under the plow. It is land that has no business being plowed. And those two things were brought out this morning. And I think they need to be focused on in up-coming policy.

Senator ABDNOR. Going back to working off the farm, I mean you wouldn't try to make them quit farming; you wouldn't count them?

Mrs. JOBGEN. I wouldn't count them as farmers. Somebody that has 10 acres and raises a registered quarter horse is not a farmer.

Senator ABDNOR. You are right. But two thirds of the farmers in this country who call themselves farmers are that kind.

Mrs. JOBGEN. That's right. And that's when USDA statistics come out and say that our farm numbers are increasing. Of course they are. We have all of these 10 and 15 acre tracts on the outside of town that everybody has a horse and they are taking an agriculture exemption. And it's not fair to the producer that is trying to make a living off of the land.

Senator ABDNOR. You called for a Board of Agriculture to help set the quotas. How would you do that? Would you go, as of today, with the acres under plow, or would you go back 5 years?

Mrs. JOBGEN. I think there should be some consideration in looking at the lands that are—have been plowed in the past 6, 8, 10 years as far as fragile lands. I think that should be definitely looked at because we do have a lot of land that has been put under the plow in the last 6 or 8 years that, although it will produce short term, it will destroy the land as far as erosion, both wind and water.

Senator ABDNOR. A lot of land comes under the plow and some of it is usable. This isn't all fragile land. There's some guy who has been out there farming for 25 years and has never added an acre more to his farm. You get that when you start setting quotas. Then some guy who came along in the last 5 years, may have plowed up respectable land for farming, but they both may have to take the same kind of a penalty in the cutback.

Mrs. JOBGEN. That's right.

Senator ABDNOR. That's one of the problems you get into in dealing with quotas.

Mrs. JOBGEN. I think if the situation were addressed to the efficient producer, I know in our own local community, we have producers that take what the Government would classify as fragile land and farm it very well, and it does not erode. It does not blow. And then we also have people that if—have bought land that really are not taking—this is where I come back to the taking your income from the land and having to live on it to be classified as a producer. We have other land that has been bought and put under the plow and they are not taking their income from the land. They are simply farming it, probably for the programs. And that land is eroding. And it's right across the fence from land that is not. Same type of land, but it's a different type of producer.

Senator ABDNOR. Very true. What would you do? Would you cut off Government payments, say, to farmers who are earning half of their income from other sources or would you—how would you go—

Mrs. JOBGEN. If you were to reclassify the producer, first of all, it would paint a different picture. You would be looking—the people of America would see a different picture. They would look at the number of people who actually are producing the food for them instead of inflating this figure and making it look comfortable.

Senator ABDNOR. Then where would you set that number? I mean, who would be farmers and who wouldn't be?

Mrs. JOBGEN. It would have to be a producer, full-time agricultural producer if that is what you are going to take your income from.

Senator ABDNOR. Were you here this morning when that gentleman, Shane McKeown—

Mrs. JOBGEN. I sure was. I know just how he is feeling.

Senator ABDNOR. Would you call him a farmer? Would we have a program that puts him out of business under the definition or are you going to—

Mrs. JOBGEN. I think there are other ways that we can address that situation. And probably one of them is an incentive to pass land on. Say, for instance, I want to sell my land. If I would sell it to a young man and give him an advantage to start, then I would receive a tax advantage by doing so. This would allow the land that is in production to continue to be produced by—and it would put young people back on the land. I know a lot of people in our local area that are not selling because if they do, they are going to pay so much in income tax, so they are sitting on the land and not farming it properly anymore because of their age.

Senator ABDNOR. I don't know. We have got this capital gain. I don't know what, but it isn't such a big thing that it is going to keep them from selling, especially when they split it over a few years. Maybe that's a possibility. I don't mean to argue.

Mrs. JOBGEN. I believe North Dakota put in something on the State level which gives an incentive to the young producer.

Senator ABDNOR. We are certainly looking for something.

Mrs. JOBGEN. I am not really familiar with it, but I think that would be a program that could be looked at, any time we can give some type of an incentive to the young person to get on the land. But right now it is sitting where you either inherit it or you work for some investor that has the money to buy it.

Senator ABDNOR. That is what we were talking about. We have to be careful how we define what a farmer is—

Mrs. JOBGEN. Right.

Senator ABDNOR [continuing]. Who is eligible for a program because you wouldn't want to shut a guy like Shane off.

Mrs. JOBGEN. Definitely. There would have to be a lot of discretion used. And that is where I think the producer board can help the USDA in doing this because they are much closer to the situation than the people in Washington. I have been in Washington enough times where I can see how very easy it is to become isolated from the true problem.

Senator ABDNOR. You have got to come home and find that out, I guess. What do you think about the payment-in-kind program? Has it been effective?

Mrs. JOBGEN. Well, I am closer to the winter wheat end of it. And I believe it really will control production in corn, but in winter wheat, we are not going to see the reduced production.

Senator ABDNOR. Not as much as we would have if we didn't have it?

Mrs. JOBGEN. Right. I guess one thing I can say about the PIK program, it's perhaps probably one of the first times that there was a Government program that actually benefited good producers. At least in our local area, our local ASCS board followed the rules very, very close and did not give the advantages to the—to the producer that was riding through on the county average and so it was—as a result, it was the best producers who participated. The poor producer did not.

Senator ABDNOR. Very good. Thank you very, very much.

Mrs. JOBGEN. Thank you, Senator.

Senator ABDNOR. You bet. Thank you. Our next witness is South Dakota pork producers. Herb, are you alone here or—

Mr. HEESCH. Yes.

Senator ABDNOR. Glad to have you here.

STATEMENT OF HERB HEESCH, REPRESENTATIVE, SOUTH DAKOTA PORK PRODUCERS COUNCIL

Mr. HEESCH. My name is Herb Heesch from Rosholt, S. Dak. I am tucked way up in the northern corner of South Dakota. And I am with the South Dakota Pork Producers Council. And I am a producer farmer.

Senator ABDNOR. We have got a mike there.

Mr. HEESCH. Senator Abdnor, I would like to thank you for this opportunity to testify at this hearing on behalf of the organization I represent and as a South Dakota farmer for the past 35 years. As a person looks back, we all have 20/20 vision. And as we look forward, that is where the real challenge lies.

Just briefly, let us look back and see if the past can tell us something for the future. It seems that agriculture has gone from one crisis to another in the marketplace. I remember when the price of a four-bottom plow tractor cost \$1,800 and the price of grain was not much less than it is today. The average electric bill for farms was only \$15 to \$20. I saw the price of a combine go from \$20,000 to \$80,000 and a ton of fertilizer go from \$50 a ton to \$200 per ton in a short period of time and the price of our commodities not keeping pace with the increases, but actually losing ground. I speak not as an economist or an agricultural expert, but as a South Dakota farmer who has to pay his bills, his taxes and support his family with the money received from the sale of these commodities.

Farming is a way of life, a very good way of life. But it is fast becoming a very stressful life with the high finances involved, the high risk, the uncertain markets and always the uncertain weather. So let us keep this in mind when we talk about the new generation of farm policy.

I do believe the Government will be involved in agriculture in the future. However, it should be involved in a different way than in the past. Probably more so as a monitoring agency or as a regulatory body or watchdog.

Looking at the red meat industry today, we see packing plants closing and their employees going on strike for higher wages when the packer himself is making less than 1 cent per \$1 invested. It has been estimated that the Wilson strike cost \$1.50 per hundred-weight less for the price of hogs or \$1 million per day in reduced buyer competition.

The Government role could be possibly to keep wages in line and by all means to prevent monopolies. The trends in the marketplace have not been good for either the consumer or the producer. Somehow we may need controls on production to maintain a profit for the producer, but this should be done by the producers themselves, possibly their farm or commodity organizations.

Agriculture Secretary John Block said not very long ago that the present farm program was costing each man, woman, and child in the United States today \$100 and that was too much. I do not think that \$100 is very large amount of money to be spent in guaranteeing each one of us the best and most ample diet in the world today when so much money is spent on other things so foolishly.

We all hear about and talk about supply and demand, the free enterprise system and the open marketplace for commodities, but as soon as we get things going good and are getting a price for our commodities, an embargo is placed on the commodity or there is a strike.

A few years ago a grain handler strike in the port of Duluth by only 500 people crippled the agriculture economies of this country for years to come. It was very discouraging and frustrating to us farmers when a little later the National Football League football players went on strike and a Federal mediator was called in to settle the strike when the strike in Duluth was allowed to go on like it did not exist in the eyes of this country. This is a case where the Government intervening would be welcome.

Farm credit is going to be so very important to agriculture in the future. And we must be assured of an ample supply of credit and at reasonable rates to assure the productivity and efficiency of the Nation's farms. We have heard talk of reconstructing the farm credit system so as to not compete with the Federal spending so much. And this must not be allowed to happen.

We also will need adequate research for agriculture in the future to keep up the production, to be able to continue to feed a hungry world. And exports will have to be maintained and expanded to every corner of the globe to keep the balance of payments in line with the imports we will have to have also. We will need to keep an eye on consumer advocates closely who come up with Federal safety laws that can cause producers and farmers many millions of dollars such as the recent nitrate scare in curing meat.

The current PIK program is a lifesaver for many farmers today, but it is a quick fix for agriculture and not a long-term remedy that we need. Many things need to be considered when planning long term, but two things are of the utmost importance and they are productivity to feed the hungry world we live in and profit for

the producer in business. Yes, profit. Profit is the bottom line in any business. Something you need to survive.

Given a chance, American agriculture can continue to be the envy of the world and the backbone of this country and maintain the prestige it so rightly deserves. Thank you again, Senator Abdnor.

But I have one more comment. As I look down the road 50 to 100 years in agriculture, I get scared because I wonder who in the future is going to want to or be able to take the chance to farm with the high finances involved and the uncertainties, who is going to want to put that much money out in the dirt every spring without a guaranteed profit. It scares me.

Now, I have four sons of my own I'm trying to get going and I wonder if it's the thing to do. It scares me a little bit when I look down the road. But I do believe things can be worked out. But I think this Nation has lost track of something. This country 200 and some years ago was established as an agricultural nation and I do believe we have lost sight of that issue. It still is an agricultural nation. It has to be. Everything comes from the ground. Thank you.

Senator ABDNOR. Thank you, Herb. I guess I can hardly quarrel with your statement at all. Those are certainly goals we would like to see. I guess it's how are we going to come up with those answers. Is there any special thing you feel strongly about? You don't want to see your industry becoming controlled by the Government, I suppose.

Mr. HEESCH. Absolutely. That's right. And monopolies in the meat packing industry; one thing that could very easily happen. The trend almost looks like it's headed that way now. And that would not be good for us at all.

Senator ABDNOR. That's right. The market selling places get less and less.

Mr. HEESCH. And these food safety laws—

Senator ABDNOR. We do all we can on that. But that sometimes gets away from us down there.

Mr. HEESCH. We had an Assistant Secretary of Agriculture not too long ago, a female, that kind of raised havoc with our industry.

Senator ABDNOR. We had our problems. I see them concerned about too much sweet in breakfast food, the sugar, the natural sugar. It almost makes you shudder. I don't know if we will have problems getting around that. We do have that certain element over there who think they are going to save the world. It wouldn't be so bad if they had all the facts before they started—

Mr. HEESCH. That's right.

Senator ABDNOR [continuing]. Forcing this on people.

Mr. HEESCH. That's right. And they will come out with reports that are not true, you know. And a thing like that will just raise such havoc with the industry.

Senator ABDNOR. Thank you very, very much. I see our next witnesses are a couple of gentlemen associated with the dairy business. We have Rudy Nef of the Valley Queen Cheese out of Milbank and Lester Jurgenson of Land O' Lakes. I saw Rudy here earlier. There he is. Can we get you to come forward. Rudy, we welcome you for some interesting information today. And we are waiting to hear from you.

STATEMENT OF RUDY NEF, OFFICER, VALLEY QUEEN CHEESE
FACTORY, INC., MILBANK, S. DAK.

Mr. NEF. Senator, I am very happy to be here. Unfortunately, I had to work in my own shop this morning so I am a little late getting down the road. But it's kind of a beautiful day to drive down the highways of South Dakota. Let me get my glasses out here.

Senator ABDNOR. Have you got to the point that you need glasses?

Mr. NEF. That reveals my age. I have a very short prepared statement here which I'm going to deviate from more than stick with, I guess. First of all, thank you for having the hearing and I'm very happy to be here today, Senator. My name is Rudy Nef. I am an owner and a partner of Valley Queen Cheese in Milbank. We are purchasing milk from about 355 dairy farmers in northern South Dakota and a corner of Minnesota and we are also processing the milk from the Roslyn Cooperative Creamery in Roslyn, S. Dak. And for the—I guess for many, many years we have been basically a manufacturer of cheese and shipping in the commercial market, primarily Kraft Foods.

Within the last several months, all of our cheese production, I mean all of it, 100 percent, has been marketed with the Commodity Credit Corporation rather than with those commercial markets. And the answer is really very simple. At the present time the CCC, through the dairy price support program, is the number one market in our country for manufactured dairy products. They set the market price and everybody falls in somewhere beneath that.

Valley Queen—we are a food processor. We are part of the agricultural chain and I can't, in all honesty, Senator Abdnor, can't speak for all our dairy farmers. We are a private firm. We don't run a poll and necessarily ask what their opinions are. But we are smart enough to realize that as they prosper, we prosper with them.

I realize the—I guess about the worst problem you have in the whole agriculture sector is the dairy program. And I would just like to review some things that have happened there. For nearly 30 years the dairy price support program has operated with minimal problems. And many times during the 1960's and the 1970's the commercial market prices were well above support prices and the CCC bought no dairy products and everybody was happy.

The current dairy problem was initiated by legislation passed in 1977 by the U.S. Congress. It is interesting to note what caused that legislation. During the late 1960's and early 1970's, there was a tremendous growth by three large dairy cooperatives in our country—and, by the way, not the one you represent, Lester—two of which were from the South and moved north into the Midwest and one which consolidated and took over most of the Southeast. This financial and market power soon translated into political power and we have what is known as the dairy lobby.

Through financial contributions, politicians became well aware of the power of these organizations. The result of this power was the dairy legislation of 1977 and the current problems which we have—which we are trying to solve at this point in time now, 6 years later.

In March 1982, a dairy symposium was held in Kansas City sponsored by the USDA to address dairy problems. And I would like to quote a paragraph from that hearing given by Mr. Patrick Healy of the National Milk Producers Federation. I am quoting now. "Dairy farmers, acting through their cooperative marketing associations in the National Milk Producers Federation, have taken the lead in addressing this issue." And they are referring to the problem at that point in time. "They have decided that it is essential that those who produce the Nation's milk and who bring it to market have both the expertise and the experience to design an effective program."

I would totally disagree and suggest that turning those producer organizations loose on the national milk program is kind of like letting the fox loose in the chicken coop. I don't think they can handle it. And the deciding force to solve these problems can only be the marketplace. Good economics tell us that a fair price between a buyer and a seller is still the best way to price any product. Allowing large organizations through their political power with Government intervening will always be the poorest way to price anything.

Instead of Government setting target and support prices, the efficient markets that we have can handle the problem and bring good products to the consumer at a fair price. Government should also do everything in its power to restrain large concentrations of economic and political power.

Our dairy producers in northern South Dakota can produce milk as efficiently as anyone in the United States. They only want to be free to produce in a market structure where they know the rules of the game.

I would like to close by saying I read this a couple weeks ago and I would like to use it here today. Doing business with the Government is kind of like sleeping with an elephant. On a cold night it's nice to warm up to, but watch out when he rolls over. And that was not original.

Senator ABDNOR. That's not original. You stay right there. We want to listen to Mr. Jurgenson.

STATEMENT OF LESTER JURGENSON, BOARD MEMBER, LAND O'LAKES, INC.

Mr. JURGENSON. Well, all I can say, Rudy, is I wish I could write a little paper as good as you have. I want to thank you, Senator, for letting me express the views of Land O'Lakes. I am Lester Jurgenson of Garretson, S. Dak. I have been a dairy farmer for 37 years, Land O'Lakes board member. And the dairy industry, I have to admit, has been good to me. And what I am presenting today is a perspective on a national food and agriculture policy written by Ralph Hofstad, president of Land O'Lakes.

Agriculture is the Nation's biggest industry and largest employer. Its assets are equal to about 88 percent of the capital assets of all manufacturing corporations in the United States, and it provides jobs for 23 million people or about 22 percent of the labor force.

Senator ABDNOR. I don't know. Can you hear him back there?

Mr. JURGENSON. Farming itself employs 4.4 million workers, including the farmers who operate the Nation's 2.8 million farms. That's as many people as employed in the transportation, steel, and automobile industries combined.

Another 10 to 12 million people are employed in storing, transporting, processing, and merchandising the output of the Nation's farms. Three million more people are required to provide the seed, fertilizer, and other supplies farmers use for agricultural production and family living.

America's farmers are also among the Nation's—and the world's—most productive workers. Each farmer produces annually enough food to feed 80 people, and together, with only 13 percent of the world's cropland area, they produce nearly 60 percent of the food available for world trade.

This production efficiency translates well at the supermarket and restaurant, where Americans spend less than 17 percent of their disposable income for food. No other people in the world enjoy such economy.

The tie between U.S. agriculture and the world markets and economies has grown dramatically in the past 10 years. America now exports the production from 2 acres in every 5 and employs 1 million people directly in the process. Every \$1 billion of agricultural trade creates an additional \$1 billion in U.S. economic activity and an additional 35,000 jobs.

American farmers are dependent upon strong export marketing. But our strength is being eroded. Several reasons are cited: Weak economic conditions throughout the world; financial instability in a number of countries; the strong U.S. dollar; losses related to embargoes; continued East-West tensions; unfair trade practices by some of our competitors; and restrictive market actions by some of our buyers.

The problems overseas involve huge stocks, weak demand, and successive years of large production. The problems at home are identical, and they're compounded by the most severe cost-price squeeze since the depression of the 1930's and inflation-fed high-interest rates.

Over the past 3 years, prices paid by our farmers have increased by 38 percent, while prices received increased by 20 percent. Crop receipts in 1982 will fall significantly for the third successive year despite record marketings and Commodity Credit Corporation outlays that increased from under \$3 billion in 1980 to nearly \$12 billion in 1982.

Even though farmers comprise only about 3 percent of the U.S. population, their economic well-being has direct economic impact on the entire Nation. Farmers are, after all, operators of the Nation's biggest, most productive industry and its largest employer.

Forecasts are that today's farm production, as efficient as it is, will soon be dwarfed by new production breakthroughs. Technological advances led by genetic engineering, new methods of soil tillage, and computer modeling are projected to revolutionize present farming methods and to produce an undreamed abundance of food and fiber.

This emerging revolution provides additional impetus to the establishment of a basic, continuing and multidisciplinary U.S. food

and agricultural policy. American farmers are producing in the context of global markets and international politics, but they are isolated from our Government's decisionmaking process. Traditionally, U.S. farm programs have been parochial, piecemeal, and short lived, designed basically to deal with periodic economic difficulties at home. Often while dealing with these immediate concerns insufficient regard has been given to the longer term effects.

Additional legislation, administrative authorizations, and regulatory directives dealing with embargoes and other international political matters, problems of labor and transportation, the environment, the general economy, and other areas of concern have been enacted without proper regard for the consequential effect on agriculture.

We urge the establishment of a national food and agricultural policy as an integral part of our national and international economic policy. Such a policy should be consistent with the domestic needs of producers and consumers and must also be responsive to the world food needs and our international trading responsibilities.

We believe such a policy should support the following principles:

First. Preservation of a market-driven, family farm-type agriculture.

Second. An efficient food and fiber production and delivery system.

Third. Enlarging both domestic and world markets for agricultural producers.

Fourth. Maintaining farm income at a level competitive with nonfarm income, that is, to maintain a standard of living and to retain human talent and resources in agriculture.

Fifth. Conservation of our basic natural resources, soil and water.

Sixth. Maintaining and fostering viable rural communities and services.

Finally, the food and agricultural policy should enable the United States to play a role in the international food system appropriate to U.S. productivity, responsibility and vulnerability, and our Nation should organize itself to carry out that policy. That organizational effort should include clearing up the relationships among the 40-odd Federal agencies that have some impact on U.S. food and agricultural policy and establishing a more rational organization of the legislative process in the realm of food and agriculture.

We urge the President to provide the mechanism for establishing the policy we envision and for monitoring compliance with it. A Presidential commission of Cabinet-rank officials concerned with domestic and foreign affairs seems appropriate for the purpose, along with selected agricultural leaders.

The commission should include representation from the Departments of Agriculture, Commerce, Energy, Interior, Labor, State, Transportation, and Treasury, from the Office of Management and Budget, and from the Special Trade Representative, along with farmer groups representing food, fiber, and other interests of agriculture.

We also have a short statement on transportation, Senator, which I will read.

First. We need uniform regulations across the Nation which will simplify and reduce costs of interstate truck operations. Highway user fees should be incorporated into the fuel taxes and all taxes collected should be used for maintenance and control of our highway system. Rural roads and bridges need to be given top priority over the next decade.

Second. We need a viable rail system to supply transportation needs now and in future years. Rail service for rural America is becoming a greater problem with decreasing service and increasing abandonments. Railroads are cooperating less between themselves and the shipper will face increased rates and reciprocal switching costs as a result.

Third. Our inland waterway system is vital to agriculture and must be maintained to assure competitive transportation alternatives.

And that's it. Thank you.

Senator ABDNOR. Thank you, Mr. Jurgenson. It's always good to have you come before the committee. I see you often in Washington.

Mr. JURGENSON. Yes; I will comment a little bit to the people that are here. We were in Washington a few years ago and Senator Abdnor took it upon himself to invite myself and my wife to a noon luncheon in the congressional dining room. And I tell you, Senator, that was the highlight of my wife's trip to Washington. And we thank you.

Senator ABDNOR. Thank you. We enjoyed having that opportunity and wish we could do more of it.

Mr. JURGENSON. I could comment a little bit. Herb Heesch commented a little bit on meatpacking houses going out of business.

Senator ABDNOR. You bet.

Mr. JURGENSON. It's no secret that Land O'Lakes ended up owning three meat processing plants. Last month we sold all three of them, which I'm happy about. Truthfully, there is no money in it for packers. The cost of labor today—and they can lower the price of meat when it goes out of the packing house and when it gets to the store, the price goes right back up and you get consumer resistance. And as a dairy man, I used to think—I have been in it for 37 years—I used to think these people that bottled milk had it made. We own several bottle plants, and it's not so. There is no money in that either to speak of.

That's it, Senator, and I thank you for letting—

Senator ABDNOR. We thank you. Let me just quickly comment on the transportation and we will go on to the others. First, I couldn't agree with you more on that highway users fee. And I introduced a bill like that the very first of the year and I voted for that darn thing. I knew we were in trouble. I like the idea of the added revenues for highways and things which would be needed, although the Federal gas tax was 4 cents from the time it went in during the Eisenhower days. Today it would take 16 cents to build the same road. And our interstates are going to pot. Ours are starting to wear out here in South Dakota.

But this users fee, I thought we were going to be doing something about it. And I introduced legislation on behalf of Mr. Tosterud. Mr. Tosterud was in the transportation field and gave me

some advice and fine assistance when I drew up that bill. There was the additional tax on diesel fuel and the more you use your truck, the more you have got to pay for that road.

Well, finally—I guess mine wasn't as refined as it might have been, and I am delighted that a couple of Senators, Wallop and Boren I think it is, both members of the Finance Committee, may get something moving when they are on the committee. We will see what happens. There is kind of a bill over in the House. So there is some hope on that.

The water system matter was dropped right in my lap. I am chairman of the subcommittee called Water Resources and Public Works. This cost sharing, and what we are going to do about it, is one concern. And I am going slow on the waterway systems because they tell me there is more to this inland waterway transportation that is going on right now. I guess we had some special tax program and put all kinds of people in the barge business and now they are going broke. I have got that for a headache and cost sharing in addition.

But I appreciate getting your comments. Mr. Nef, a moment ago, I think it was the ladies who mentioned we—we got to talking about dairy. Were you in the room?

Mr. NEF. No, I wasn't.

Senator ABDNOR. Apparently there is a considerable quantity of imports, far more imports of dairy coming into this country than we are shipping out. If we didn't have any dairy products going out or theirs coming in, would our dairy supply be somewhat in line?

Mr. NEF. No. No, we are currently running about a 10, 11 percent surplus and total dairy imports amount to about 2 percent. And a good share—a good share of that, Senator, is in fancy cheeses and some other things. There are a couple items that could be directly influenced, but it's a small drop in a big bucket.

Senator ABDNOR. When this is over, I want you and the ladies to get together.

Mr. NEF. I don't have my statistics with me today.

Senator ABDNOR. We need this for the record. I was just wondering, I think the dairy product program is presently costing something like \$2 billion a year. And the gentleman who makes it difficult is the Senator who brings in some cheese from somewhere, all moldy, and sits it on the desk and tells everybody this is what your dairy program is doing. It's difficult to sell this kind of thing. And it becomes extremely difficult down there. What do you think of the new proposals that came out of committee? Are they acceptable? Are they livable, Les?

Mr. JURGENSON. You mean that 50 cent a hundred? Well, it's going to raise a lot of revenue, but as far as my own personal opinion—I am not speaking for Land O'Lakes—I can't see where it's going to curtail production one bit.

Senator ABDNOR. And we do have to curtail production some way. You would agree that we are producing too much?

Mr. NEF. Senator, if I could just expand on that, in this part of the country—and Land O'Lakes is also another example of that—we have been producing butter, cheese, and milk fat for the entire United States. And with the high dairy support program that took effect over a period of years, we now have surplus milk going into

butter, powder, and cheese from areas that traditionally had just enough milk to put in the bottle. So our farmers are competing now with farmers that didn't—from other parts of the country, regional areas, they didn't have to before.

Senator ABDNOR. While we were talking this morning, somebody was saying that down in Phoenix, around the Arizona country, they have 2,500 dairy cows in one place and they get the same benefits as the guy who still produces the same amount of milk that he did 10 years ago. I suppose that's true.

Mr. NEF. In relation to your comment to Mr. Jurgenson, we have visited with all of our producers in recent weeks on the, quote, dairy compromise bill that is winding its way through Congress. They appear at this point in time to be very favorable. They look at this paid diversion program and they say for \$10 a hundred, they will be happy not to produce milk because this is far more than we can make if we milk those cows. And on the surface, at this point in time, they appear interested, that it looks better than they are seeing now. And they also see some daylight at the end of the tunnel possibly in that type of program. There may be some unknown problems coming later, but at this point in time, it's the best horse going.

Senator ABDNOR. Would you have any thought on that?

Mr. JURGENSON. Well, actually we don't like this money they are taking out, but, Senator, I'll tell you this; I would rather do that than incentives taken out which they will—or payments taken out than lose our dairy price support program because we need that.

Senator ABDNOR. I can well imagine how much the prices would drop if we didn't have it. Do we have storage for all the dairy products that we have? I guess if it's dry—powdered milk and things—you can store that. Is that right?

Mr. NEF. I can't relate to that. I hear horror stories, but—

Senator ABDNOR. You said that all you produced here in the last, what, few months—

Mr. NEF. Since about March 5, all of its has gone to the Government, every pound, because, Jim, in all honesty, they are the best market and that way we can return the most—best price to our producers.

Senator ABDNOR. I don't think there is any question that we are going to see something passed very soon. It's out of committee. I am surprised it hasn't been on the floor by now. I guess it's because of the appropriations bill that we have been coming up with. As I said, the total appropriation bill which we passed last week before coming home, that is going to conference for 1984, is \$32 billion. Now, I will grant you there are some things in there that don't belong to agriculture. And it used to be they were the majority. The vast majority of the agricultural appropriations were items that couldn't be appropriated to farm cost. But that isn't true anymore. It's getting more difficult. We are going to try to hold the line on spending, which is going up double and triple in agriculture while we are cutting back, or trying to, in something else. So we are having quite a problem. That is why we are holding these hearings. And I guess dairy is one important part of the bill. We thank you for taking the trouble to come down.

Mr. JURGENSON. Yes. I have one more. While I was visiting one of our directors up at Land O'Lakes, the past week, who was a manager of a dairy co-op in Minnesota. In that dollar and a half, which it will eventually be, they take out, I can still make money. Of course, I am running on my own. But he said, Les, I want to tell you something. We have, a lot of them have assignments on the milk. And he says they have so many assignments already, when they get done taking that dollar and a half out, they are not going to have enough money to live on. It is really that serious.

Senator ABDNOR. Well, I am sure there is going to be a lot of exploring down here before we come up with the answers because the dairy is a strong group and I think they stick together a little better than some of the other areas of agriculture. That helps. So I'm sure we haven't heard the last of this problem. We appreciate your coming.

Next on our schedule is a group of agricultural economists headed by John Thompson, South Dakota State University, for whom I have great respect; along with Donald Scott, Fargo, North Dakota State University; Richard McConnen, Montana State University; Kenneth Nobe of Colorado State, University; and Mark Edelman of South Dakota State University. Very impressive panel.

Mr. THOMPSON. Thank you very much, Senator Abdnor. I am sure I speak for the other members of the panel in expressing our real appreciation for the opportunity to participate in this hearing. I also know that you recognize that the position of a college professor or an academic person isn't necessarily to say this is the kind of policy you ought to have. We don't do that. But we do try to indicate the nature of the problem, what causes the problem, talk about the existing situation and the alternatives that might be followed and then some of the cost and benefits associated with the—

Senator ABDNOR. That is exactly what we like. I appreciate that. Let me say something. Maybe you heard me this morning. But I am putting agricultural economists back into business, at least as far as the Joint Economic Committee is concerned. They forgot you fellows existed, I think. I see those panels time and time again, and some very big names, but we never had agricultural economists. Now we have. We are getting some excellent people. We are looking forward to what you have today because you have statistics and facts and your views are very important in any kind of a farm policy. So we thank you for being here.

STATEMENT OF JOHN THOMPSON, PROFESSOR, SOUTH DAKOTA STATE UNIVERSITY

Mr. THOMPSON. We very much appreciate those comments. I would like to just indicate that agricultural policy is a very catch-all term. And I would like to illustrate this by an experience I had when I was teaching a course. I asked members of the class to play roles such as farmers or ranchers or exporters or importers or consumers concerned about price, the Secretary of Agriculture and so forth. And then had them each defend their particular position. And it became quite obvious in a hurry that a great deal of com-

promise was required if some kind of agreeable policy were to come up.

I'll shorten this a great deal to say that toward the end of the class the Secretary of Agriculture took a look at all of the objectives that we had established and the procedures that we tried to devise to achieve those objectives and said, you know, if my father could see that, he would be unhappy with me.

I think that agriculture economists can identify some important objectives, but we can't satisfy all people with one PIK policy suggestion.

The panel that we have today is a regional panel, so to speak, representing Montana, Colorado, North Dakota, and South Dakota. And we have tried to organize this in such a way that we can cover some of the history and background leading up to some of the policy programs that we have now. And, of course, we have an advantage in that we have learned from past experiences. Then we want to take a look at some of the existing situations and then take a look at some alternatives and some of the cost consequences of the various alternatives.

To start off with, we have Mark Edelman who is the public policy and agriculture policy specialists, extension specialist, at South Dakota State University. He is going to review some of the aspects dealing with farm policy, where have we been and where are we headed.

I'll also introduce the others and they can follow right along. The second speaker will be Richard McConnen who is on the staff and previous head of the Agricultural Economics Department at Montana State University in Bozeman. The third speaker will be Donald Scott who is head of the Agricultural Economics Department at North Dakota State University and finally Kenneth Nobe who—from Colorado State University who is head of the Agricultural Economics Department at Colorado State University. So with that, Mark, we'll proceed with your comments.

STATEMENT OF MARK A. EDELMAN, AGRICULTURE AND PUBLIC POLICY ECONOMIST, SOUTH DAKOTA STATE UNIVERSITY

Mr. EDELMAN. Thank you. Senator Abdnor, I appreciate the opportunity to visit with you today and discuss the complex nature of the problems that we are facing in the next generation of agricultural policy.

First, I would like to compliment you on your committee's printed material. That is very excellent and there is a lot of meat and potatoes in very few pages and that is what I attempt to do in extension work. And I think your staff is to be complimented on a job well done.

Second, when I accepted the request to speak to this distinguished group, I had some reservations that John—concerns that John highlighted a little bit. So let me explain how I view my role first.

I believe that the taxpayers of this State pay my salary to educate and not to advocate. And I'm going to keep in tune with that road today and present some of the facts, destroy some of the myths, without taking sides. I do, however, have a responsibility to

tell it like it is. And, therefore, some people may not like some of the things that I have to say. But the way I survive in this situation is that I outline the alternatives and the consequences. And then each member of the audience can decide what their favorite alternative is.

Today I wish to focus on three fundamental topics related to the future of farm and food policy. First, is a historical description in order to put our present problems in perspective. Second is I will outline some of the basic alternatives and consequences that I feel that you, as voice makers, will be facing in the 1985 farm bill. And finally, I don't think that we can afford to make farm policy in isolation and so I would like to make a couple of comments about foreign policy.

On the historical perspective, prior to the settlement of the Midwest, most of the land that now is used to produce our Nation's food supply was owned by the Federal Government. Family farming was established essentially by a settlement policy that was designed to place ownership of the lands in the hands of those who still tilled the soil. So prior to the closing of the Western frontier, the basic impetus of Government's role in agriculture was primarily limited to settlement and ownership policy and second to scientific input.

It was during this time period, the first 150 years of our Nation's history, that we established the USDA and land-grant university system. Therefore, we essentially had a market-oriented farm policy during that time period.

When the Western frontier closed during the turn of the century, we experienced the Great Depression and this caused a distinct change in Government's role in agriculture. For the first time agriculture intervened in a marketplace to support prices on behalf of farmers. The development of a grain reserve policy was the first attempt of the Federal Farm Board in the late 1920's. It was too little too late.

In the 1930's we imposed the AAA new farm deal. We tried parity price supports. We learned that price supports without production control essentially contributed to the surplus problem. And although there have been many developments in the agriculture economy since the 1930's, the basic concepts are still in effect. The Government has periodically been acquiring reserves, supporting prices and setting aside acreage ever since.

Now, since the 1930's we have entered the age of technological farming. In 1935 we essentially had 6.8 million farms. Today we are down to about 2.3 million farms for a 65-percent decline. The old agricultural stereotype of many pastoral family farms operating in a dispersed open market is no longer an accurate description of what exists. The pastoral approach to family farming simply does not produce what most farm families consider to be an acceptable income level.

Today's farmers are a diverse breed. Not all have the same circumstances and not all have the same perceived problems. And so not all will be impacted the same by a given farm policy. At the end of 1982, 18 percent of U.S. farmers were highly leveraged and I believe these are some of the statistics that were quoted earlier. And maybe I can shed a little bit more light on them. However, at

the same time, about 58 percent of U.S. farmers were in an equity farming position. In other words, their debt represented less than 10 percent of their assets. And it was really the highly leveraged 18 percent of the U.S. farms, that had debt to asset ratios over 40 percent that were sensitive to high interest rates.

I think in order to understand, we have to look down at the breakdown by size of farm. If we look at the largest farms, those who annually sell over \$200,000 of agricultural sales, we are talking about less than 5 percent of the farm units in the United States. However, this less than 5 percent accounts for about half of the agricultural sales, about 40 percent of the purchased farm inputs and about 40 percent of the farm debt and 40 percent of the farm assets. In this group, about 44 percent are in that high leverage category in which 40—they have debt-asset ratios in excess of 40 percent and are, therefore, at risk to higher interest rates.

The moderate size farm groups with annual sales between \$40 and \$200,000 represent about 24 percent of the farm units, but account for about 40 percent of the agricultural sales, purchased input, farm debt, and farm assets. In this group, about 31 percent are in a highly leveraged category or about one in three.

Now, if we look at the group of small farms, and as you accurately pointed out before, about two-thirds—this represents about two-thirds of all the farm units using the census definition of a farm, a thousand dollars in agricultural sales. About 14 percent of this group are in that highly leveraged category. However, 14 percent of 70 percent is much greater than 44 percent of the less than 5 percent of large farms. And so you get down to a policy choice. Do you aim your programs to help those who have the greatest impact on the food system or do you set up your programs aimed at those who represent the largest number of farmers? And that's the policy choice that you have to debate.

OK. What led to the current situation? Well, after almost two decades of chronic surpluses and excess production capacity, American agriculture experienced record incomes and capital gains in the 1970's. We know this. The two biggest factors were inflationary cheap credit and unprecedented export expansion of the 1970's.

Since the mid-1960's, we have been fueling the fires of inflation and we have done this by expanding the money supply and deficit spending. This created cheap credit which encouraged farmers to borrow to buy land and they could pay back their loans with inflated dollars and watch their assets appreciate. Everything was fine as long as inflation was increasing. At the same time, cheap credit also encouraged many developing countries to borrow to buy U.S. food. And over half of our wheat exports go to developing countries that are generally sensitive to interest rates as well as exchange rates.

On the unprecedented exports, there were many causes. We shifted from fixed to flexible exchange rates which essentially devalued our dollar over a third over the course of a few months in the early 1970's. We normalized relations with China. We entered into détente with the U.S.S.R. We had reduced our carryover of the 1960's. Production around the world, except in the United States, experienced abnormally poor yields. So the stage was set during the 1970's for export expansion in the United States.

Now, at the beginning of the 1980's, the bloom is off the export market. We have been fighting inflation with tight credit. Experts and producers alike expected the good times to continue into perpetuity. They simply haven't. We've ended up with record production and reserves and with weak domestic and foreign demand for food.

The exchange value of the dollar has increased by one third. East-West relations are more strained. Pre-PIK carryover stocks are exceeding the records set in the early 1960's. Our production plant is producing 45 percent more corn and 73 percent more wheat and soybeans than 10 years ago. Domestic and worldwide recessions have resulted in weak demand for food. So it's fitting that we ask today where should our farm and food policy go.

Senator ABDNOR. Seventy-three percent more wheat today, you say, than 10 years ago? Did I hear that right?

Mr. EDELMAN. Yes, and soybeans. OK. So let's explore some of the basic alternatives and consequences that I see facing the group of decisionmakers in Washington in the 1985 farm bill. If history is any guide, if recent history is any guide, we will simply stick to the current policy structure with minor revisions. In recent comprehensive farm and food policy debates, the most controversial aspect has been the level of support prices. This debate is currently going on over the 1984 farm support prices.

The point that I would like to make is that the impacts of raising support prices are somewhat different now than they were during the 1960's. In the 1960's we essentially produced for domestic markets. And so we could annually increase support prices with relatively little decrease in sales. However, now we operate in an international market. And we—if we annually increase support prices, then we tend to provide an umbrella for our world competitors to undercut our prices and, therefore, reduce our share of world markets. And so the choice is very simple. We either keep our price supports down, we live with the declining share of the world market or else we figure out some system to separate the domestic and world markets with some sort of a two-price plan and/or export subsidies. Now, that is the first level of decisions.

The second level of decisions, there are several politicians, interest groups and academicians who have been calling for a revised policy structure. If we consider overhauling the policy structure, we basically have three options. The first one is continue the present voluntary program structure. The second option is to move to a mandatory program. The third option is to return to a market-oriented program. So what I would like to do now is briefly explore the consequences of each of these three alternatives.

Under the voluntary programs—which PIK is an extreme example—we idle production capacity at taxpayer expense. It's a basic concept behind the program. Voluntary programs are generally more expensive because slippage occurs. Those who are nonparticipants increase production. Those who are participants tend to set aside their poorest acres and intensify production on the rest. Production volume is reduced for narrow margined agri-business firms. Livestock feed grain prices are increased and this eventually hits the consumer in the meat counter. Finally, as I mentioned before, the price support mechanism tends to allow world competitors to

undercut our selling price and therefore reduce our share of world markets.

Now, under the second option, which is the mandatory program, we use the stick in place of a carrot. In other words, we set up a system where we impose penalties on the noncompliers who don't conform to a mandatory program. We idle production, but not at taxpayer expense. Instead, farm producers lost some of their decisionmaking authority over their own production decisions. A black market may develop if there is an economic incentive to not follow the program. And similar to voluntary programs, the mandatory approach still reduces the volume for the narrow margin agri-businesses. It tends to increase prices for the livestock sector and hits the consumer in the meat counter and also at the same time there is a tendency to provide an umbrella for our world competitors to reduce our share of the world market. Under both the voluntary and mandatory approach, the only way to maintain our share of the world market is to coordinate our production management tools with those of our competitors.

Now, under the market oriented policy, we essentially idle no acres and simply allow the survival of the fittest to take place. Land goes to the most profitable use. Government programs are not perceived as reducing volume for agri-business or for increasing feed grain prices for livestock producers or for increasing consumer meat prices. We are more likely to maintain our share of the world markets. However, there is no guarantee of that. And finally, there is likely to be more farm failures in the short run, particularly given our current situation and circumstances unless the market oriented program is coupled with some sort of income maintenance or income insurance program similar to unemployment insurance. Therefore, the taxpayer expense depends upon the type of income maintenance program adopted.

Now, the third—there is a third level of decisionmaking that has to be—that may be considered in the 1985 debate. There are those who are calling for a long-term focus to our farm policy, and that there has been too much uncertainty under present policy decision-making structures. So, a third level of policy choices involve deciding who is going to decide.

The present system of entertaining major revisions every 4 years has been plagued with the annual emergency changes. And the administration has had plenty of flexibility in the last—in the last few years to shift from a market oriented philosophy to an extreme massive production control program, all under the same basic legislation. The long-term perspective for a politically determined farm policy has many times been said to be the length to the next election.

And so if we are really serious about focusing on the long term objectives, we need to consider changing farm and food policy institutions in the next debate and perhaps a decisionmaking board patterned after the Federal Reserve System where the Farm credit System would allow a longer term view to be imposed. International trading strategies that require secrecy and full information may benefit our position. And it seems to me that presently the multinationals hold no allegiance to the United States in particular and

at the same time do they completely inform the USDA on all of the sales dealings that they are involved in.

Another institutional alternative would be for producers to develop their own cooperative international salesmen, so to speak. In other words, to manage agriculture, much as the auto companies manage agriculture, much as the auto companies manage the auto industry. However, I think the tradeoff occurs here that while you get Government out of agriculture, you also are looking at financing and, therefore, farmer or producer controlled boards would also be looking at producer financing. It goes back to the old revised golden rule; those with the gold simply rule.

We look at a national commission. I think we have to recognize that that commission is going to not only have farmer interest on it, it's also going to have agri-business and consumer interest on it. And so our farm policies would be written with consumer, agri-business, and foreign interests as well as producer interests.

The final topic that I would like to cover has to do with the global perspective. We have to recognize that we are operating in a globally interdependent economy and I think that much of that has been discussed today. And I'm particularly pleased with the amount of international education that has occurred.

For the last hundred years before World War II we essentially operated in an isolationist foreign policy with some breaks. Then with the "Day of Infamy" we changed all that.

We emerged from World War II as the key leader among world politics. We had the military power. We were the only one with the atomic bomb. We didn't have our productive capacity destroyed during the war. We had abundant resources and we accounted for essentially half of the world's GNP.

OK. We essentially practiced the politics of "Big Stick Diplomacy." We set up the Marshall Plan, U.N., IMF, and World Bank. We were able to lead the Western World and back up our threats with military and economic might. We told Canada during the 1960's that Japan was our grain market and for them to back off. And they accepted our threat.

Now, the international scene has changed. There is debate over who is No. 1 in military strength. Many countries have atomic weapons. We represent only about 25 percent of the world's GNP. Germany and Japan together account for about the same amount. We have entered the age of "Minority Coalition Diplomacy" on a global scale.

Some have suggested we ought to revise our international monetary and trade institutions to suit agriculture. I view that the chances of that approach are very slim unless we are able to develop a coalition of interests. We are now forced to develop coalitions in order to change international institutions.

Our economies are interdependent. We cannot threaten trade wars with the EC or Japan without repercussions in foreign policy and other sectors of our economy. Our chances for complete acquiescence on their part is slim because we are often perceived as meddling in their internal domestic affairs. We also must recognize that international markets do not represent an unlimited source of demand for our agricultural production. The world food demand

has limitations of population, of income per capita, weather, domestic policy and national security.

So my final point is that the export market will always add more instability to our farm economic condition than if we operated in just a domestic market. So if we continue to export one out of three kernels, and I expect we will, we are simply going to have to learn to live with more instability. Thank you.

[The prepared statement of Mr. Edelman follows:]

PREPARED STATEMENT OF MARK A. EDELMAN**FARM POLICY: WHERE HAVE WE BEEN AND
WHERE ARE WE HEADED?**

Mr. Chairman, today I wish to discuss three fundamental topics related to the future of farm and food policy. First is a historical description of where we've been in farm policy to put our present problem in perspective. Second, I wish to outline the basic policy alternatives and consequences of the decisions facing us in the 1985 farm and food policy debate. Finally, we no longer can make farm policy in isolation. So, I wish to make a couple of comments about foreign policy.

The Historical Perspective

Prior to the settlement of the Midwest, almost all of the area that now provides most of the nation's food was owned by the Federal Government. Family farm agriculture was established through a public policy designed to place land ownership into the hands of those who tilled it. So prior to the closing of the western frontier and for the first 150 years of this nation's history, government involvement in agriculture was primarily limited to (1) settlement and land ownership policy and (2) scientific input -- that's when we established the USDA and the landgrant university systems. Therefore, we essentially had a market oriented farm policy.

Then the western frontier closed around the turn of the century and the depression hit. The Great Depression caused a distinct change in the government's involvement in agriculture. For the first time, government intervened in the market place to support prices on behalf of farmers. The development of a grain reserve policy by the Federal Farm Board of the late twenties was too little too late and was simply overwhelmed by the magnitude of the conditions. Parity price

supports of the "New Deal" farm policies in the 1930's simply created more surpluses until production controls were added as a precondition for receiving support payments.

Although there have been many developments in the agricultural economy since the 1930's, the basic concepts are still in effect. The government has periodically been acquiring reserves, supporting prices and diverting acreage ever since. So, my point is that the pendulum does swing upon occasion and usually during a crisis.

Now since the 1930's, we've entered the age of technical farming and reduced the number of farms from 6.8 million in 1935 to 2.3 million for a decline of 65% in 50 years. The old agricultural stereotype of many pastoral family farms operating in a dispersed open market is no longer an accurate description. The pastoral approach to farming simply didn't produce what most farm families considered to be adequate income levels.

Today's farmers are a diverse breed, not all have the same circumstances or perceived problems. So not all will be impacted the same by a given farm policy. At the end of 1982, 18 percent of U.S. farmers were highly leveraged with debt levels in excess of 40 percent of assets. These are the ones that are at risk due to higher interest rates. However, 58 percent of U.S. farmers were essentially equity financed with debt/asset ratios below 10 percent.

The breakdown varies by size of farm. The largest farms with over \$200,000 in annual sales represent less than 5% of the number of farms but account for almost half of the agricultural sales and 40 percent of the purchased inputs, farm debt and farm assets. Forty-four percent of these were highly leveraged with debt/asset ratios exceeding 40 percent.

The moderate size farms with between \$40,000 and \$200,000 in annual sales, represent 24 percent of the farms. These account for nearly 40 percent of the agricultural sales, input purchases, farm debt and farm assets. Thirty-one percent are highly leveraged with debt/asset ratios over 40 percent.

The small farms with annual sales of less than \$40,000 represent 71 percent of the farm numbers but account for 13 percent of agricultural sales and about 20 percent of input purchases, farm debt and farm assets. Only 14 percent of small farms are highly leveraged with debt asset ratios over 40 percent. However, 14 percent of 71 percent is still greater than 44 percent of 5 percent. This indicates that the highly leveraged small farms are greater in number than are the highly leveraged large farms. As a result, a policy choice develops between providing assistance for those with the greatest impact on the food system and those who represent the greatest in number.

What led to the current situation? After almost two decades of chronic surpluses and excess production capacity, American agriculture experienced record incomes and capital gains in the 1970's. The two biggest factors were inflationary cheap credit and unprecedented export expansion of the 1970's.

Since the mid-1960's, we fueled the fires of inflation by deficit spending and monetary expansion. This created cheap credit and encouraged many farmers to borrow to buy land and pay the loans off with inflated dollars while their assets appreciated in value. Cheap credit also encouraged many developing countries to buy food on credit. And, over half of our wheat exports go to developing countries that are generally sensitive to interest rates as well as exchange rates.

On the unprecedented exports, there were many causes. We shifted from fixed to flexible exchange rates that devalued the dollar. This made our exports about one-third cheaper to our foreign customers over the course of a few months. We entered detente with the USSR. We normalized relations with China. We had reduced our carry-over of the 1960's. Production around the world, except in the U.S., recorded abnormally poor yields. The stage was set for expansion of U.S. exports.

Now at the beginning of the 1980's, the bloom is off the export market and

we have been fighting inflation with tight credit. Experts and producers alike expected the good times to continue into perpetuity. They simply haven't. We've ended up with record production and reserves, and with weak domestic and foreign demand for food.

The foreign exchange value of the dollar has increased by one-third. East-West relations are more strained. Pre-PIK carry over stocks were exceeding the records set in the 1960's. Our production plant is producing 45 percent more corn and 73 percent more wheat and soybeans than 10 years ago. Domestic and world-wide recessions have resulted in weak demand for food. So it is fitting that we ask: Where should our farm and food policy go from here? In particular: Where do we go in the 1985 Farm and Food policy debate?

Alternatives and Consequences

If recent history is any guide, we will simply stick with the current policy structure with minor revisions. In recent comprehensive farm and food policy debates, the most controversial aspect has been the level of support prices. This debate is currently going on over the 1984 support levels.

The point that I'd like to make is that the impacts of raising or lowering the price supports are different from 20 years ago. When we had excess production capacity in the 1960's, we essentially produced for a domestic market. We could annually increase support prices with relatively little decrease in sales.

Now in the 1980's, we operate in an international market. As we annually increase support prices, our competitors tend to undercut our prices and reduce our market share. So we tend to price ourselves out of the market with higher price supports. Therefore, if we decide to continue the present policy structure, we either (1) keep our price supports down, (2) live with a declining share of world markets, or (3) separate the domestic and world markets with a two price plan and/or export subsidies.

Several politicians, interest groups, and academicians have been calling

for a revised policy structure. If we consider over hauling the policy structure, we basically have three options: (1) continue a voluntary program, (2) move to a mandatory program, and (3) return to a market oriented program. Let's explore the consequences of each, assuming that excess production capacity continues at least till the 1985 debate.

Under the voluntary programs -- of which PIK is an extreme example -- we idle production capacity at taxpayer expense. Voluntary programs are generally more expensive because slippage occurs when non-participants increase production and participants idle the poorest acres and intensify production on the rest. Production volume is reduced for narrow margined agribusiness firms. Livestock feedgrain prices are increased and eventually hits the consumer in the meat counter. Finally, as mentioned before, the price support mechanism tends to allow world competitors to under cut our selling price and reduce our market share.

Under a mandatory program, we use the stick in place of a carrot. Penalties are imposed on non-compliers of a mandatory program. We idle production but not at taxpayer expense. Instead, farm producers loose some of their decision-making authority. A black market develops when producers have an economic incentive not to follow the program. And, similar to the voluntary programs, the mandatory approach still reduces volume for narrow margin agribusiness firms, increases feedgrain prices for livestock sectors, and increases price enough that our world competitors may under cut our share of the world market. Under either the voluntary or mandatory approach, the only way to maintain our share of the world market is to coordinate the supply management strategies of all producing nations.

Under the market oriented policy, we essentially idle no acres and simply allow survival of the fittest ^{to} take place. Land goes to the most profitable use. Government programs are not perceived as reducing volume for agribusiness, increasing feedgrain prices, or increasing consumer meat prices. We are more likely to maintain our share of world markets. However, there are likely to be more farm failures in the short run unless the program is coupled with an income maintenance

or income insurance program. Therefore taxpayer expense depends on the type of income maintenance program adopted.

Now there are many who are calling for a long term focus to our farm policy, and that there is too much uncertainty under the present policy decision making structure. So a third level of policy choices involves deciding who should decide.

The present system of entertaining major revisions every four years has been plagued with annual emergency changes. And the administration has had enough flexibility to shift from a market oriented philosophy to a massive production control program under the same legislation. The long term perspective for a politically determined farm policy is until the next election.

If we consider changing the farm and food policy institutions in the next debate, perhaps a decision making board patterned after the Federal Reserve Board, or Farm Credit System would allow a longer term view to be imposed. International trading strategies that require secrecy and full information may benefit our position. Presently, multinationals hold no allegiance nor does the USDA necessarily have full information.

Another institutional alternative would be for producers to organize and develop their own cooperative board that would manage the farm production much as the auto companies manage auto production. This approach would be producer controlled but also producer financed. Less would likely be spent on farm programs and export expansion out of the treasury. But it would be a way to remove government out of agriculture.

Global Perspective

Finally, we have to recognize that we are operating in a globally interdependent economy. For 100 years, we essentially practiced "Isolation Diplomacy" in world politics. The "Day of Infamy" changed all that.

We emerged from World War II with half of the world's military power and as the only nation with an atomic weapon. We had abundant resources. We had our productive capacity intact. And, we accounted for half of the world's GNP.

We followed "Big Stick Diplomacy". We set up the Marshall Plan, UN, IMF and World Bank. We were able to lead the western world and back up our threats with military and economic might. We told Canada in the 1960's that Japan was our grain market and Canada accepted our threat.

Now the international scene has changed. There's debate over who is Number 1 in military strength. Many countries have atomic weapons. We have about 25 percent of the world's GNP. Germany and Japan combined are about our size. We have entered the age of "Minority-Coalition Diplomacy" on a global scale.

Some have suggested that we ought to revise our international monetary and trade institutions to suit agriculture. The chances of this approach are slim unless a coalition of interests are developed. We are now forced to develop coalitions in order to change international institutions.

Our economies are interdependent. We cannot threaten trade wars with the EC or Japan without possible repercussions in foreign policy and other sectors of our own economy. Our chances for complete acquiescence on their part is slim because we are often perceived as meddling in their internal affairs. We must recognize that the international markets do not represent an unlimited source of demand for our agricultural production. The world food demand has limitations of population, income per capita, weather, domestic policy and national security. So my final point is that the export markets will always add more instability to our farm economic conditions than if we operated only in a domestic market.

Mr. THOMPSON. To proceed, we have had a little bit of history and some hinting about what alternatives might be used from Mr. Edelman. Now we will move to Richard McConnen who will talk a bit about the role of exports in terms of agricultural policy and how it fits into our economy and in this regional area. I hope I have said something accurate there, and maybe you hadn't really prepared that. But I think we ought to get some regional input into here, too, Dick.

**STATEMENT OF RICHARD McCONNEN, AGRICULTURAL
ECONOMICS DEPARTMENT, MONTANA STATE UNIVERSITY**

Mr. McCONNEN. Senator Abdnor, it's a pleasure to be here from the State of Montana. We recognize in Montana that the problems that we face in agriculture are of the same basic sort as the farms in South Dakota, Colorado, North Dakota, and the rest of this region and we realize that we can't solve our problems State by State. But we have to solve them as members of the American agriculture.

Over 50 years ago the first draft of the AAA Act in 1933 was drafted in a conference room in Lindfield Hall at Montana State University by M. L. Wilson and some of his colleagues. There are two things about that that were interesting to me. First of all, the bill passed Congress because for the first time all farm organizations got together and agreed on something that they wanted to have.

Senator ABDNOR. When was this?

Mr. McCONNEN. It was the AAA Act of 1933. You ask, when was that, because it hasn't happened since.

Senator ABDNOR. I really meant when. That is great.

Mr. McCONNEN. The second thing about the AAA Act of 1933 is that M. L. Wilson and his colleagues who drafted that bill saw it as a temporary measure. Of course, 50 years later, it's still a temporary measure.

The best possible set of farm programs for the future will depend on what we want to achieve for our goals and the social, economic, and political environment that will exist in that future. Programs, goals, and the conditions we will live with will, of course, interact.

Assume for the moment we are able to develop operational definitions of our goals in terms of conservation, of resources, maintenance of family farms and adequate farm income. The kind of farm program best capable of achieving those goals will depend upon the kind of environment the future holds. The effectiveness of any particular farm program will depend in a great part on the environment in which we must in fact operate. For example. A market oriented farm program may prove very effective in an environment which includes rapidly expanding export demand, while that exact same policy or program would be grossly ineffective in terms of farm incomes, resource conservation and the economic viability of family farms in an environment which included sharply falling export demands for U.S. farm products.

We do not know what the future holds, but we must consider the future as we design a new generation of farm programs. I think we need to consider at least three issues in this context. First, what

are the likely kinds of future environments, what are the kind of future environments which are most likely to occur. Second, what kinds of farm programs would be ineffective under the most likely future environments. Third, recognizing that we can never predict the future with certainty, what sort of flexibility do we need built into our farm programs to allow us to adjust to future outcomes that we didn't predict.

My purpose today will be to concentrate on a very small, but important, part of the future of American agriculture, the export demand for American farm products and the impact which exports demand can have on the effectiveness of farm programs.

In 1920, 27 percent of cash receipts of U.S. agriculture came from export sales. The percentage fell during the 1920's and 1930's, reaching a low of 6 percent in the 1940's. The 1950's saw us gain about 12 percent of cash receipts from export sales. By the 1960's, this had increased to 15 percent. And by 1980, we finally reached the level that we had experienced in 1927. I am sorry, in 1920.

The 1920's and 1930's brought about a major depression in American agriculture. They also brought about a deinternationalization of U.S. agriculture. The agriculture depression of the 1920's and 1930's and the deinternationalization of U.S. agriculture are obviously interrelated.

The deinternationalization or really the reinternationalization of American agriculture in 1970 brought prosperity to U.S. agriculture. U.S. farm exports were growing at a rapid rate. The value of U.S. agricultural exports did not drop until 1982, but the rate of increase of export sales started to decrease as early as 1980.

From this brief history, we can draw some conclusions which are necessary to keep in mind as we design U.S. farm programs for the future. I am fully aware the world is more complex than the one I am going to describe to you in just a moment. But I think it's useful. It's useful to help us use an abstract model of the world as we look to the future, not to the past, and try to get goals and programs for U.S. agriculture that compliment one another.

To illustrate this point, let's turn to the recent past, however. The 1970's were generally a period of prosperity for U.S. agriculture. Livestock producers had a tough time and there was a rapid growth of grain exports in the 1970's. In general, conditions had begun to deteriorate by the very last of the decade. During the 1970's our farm programs were generally market oriented relative to past policies. However, it would be wrong to conclude that the market oriented farm programs brought prosperity. That can only occur in conjunction with expanding export demand. In the 1970's export demand for U.S. farm products expanded for reasons that have virtually nothing to do with U.S. agricultural producers or U.S. farm programs.

A market oriented farm program for the future will not bring a return to prosperity to U.S. agriculture unless, and I stress this, unless conditions in the rest of the world also bring about a rapidly expanding export demand for U.S. farm products.

During the late sixties and seventies there was another major change that took place in American agriculture. The value of fixed assets, particularly land, increased sharply. We heard the cry farm land is over priced. And indeed it must have been since agricultur-

al land prices have been since agricultural land prices have been decreasing for the past 3 or 4 years. However, the actual story of land prices is somewhat more involved.

If you buy land, you, of course, incur certain responsibilities such as paying taxes and so forth. And you have the right to capture what we economists call full economic rents. The expected stream of economic rents which will occur each year in the future are discounted to get present value. That present value is a good indication of the market value for land. If economic rents are expected to increase in the future, the market value of land will be greater than the present level of economic rent is capable of handling. And that means, in that sense, land will be priced too high. This is obvious, but not irrelevant when the nature of future farm programs is debated.

You know, Melichar, an economist working with the Board of Governors of the Federal Reserve System, has done some interesting work on the value of farm land during the 1960's and 1970's. He found that economic rents for land increased between 4 and 5 percent a year during this period of time. This rate of increase, we will call it good, a rate of increase in economic rents. Using the interest charged on Federal Land Bank loans as a discount rate, he found a very simple model which tracked U.S. farm values very closely. If good is 5 percent, that is, the economic rents are expanding—are expected to grow at a rate 5 percent a year and the discount rate is 10 percent, the market value of land will be about twice as great as can be justified in finance with current levels of economic rent.

For example, in 1978, assume you estimated that the current earning capacity of land would permit you to pay \$250 an acre. The market value of that land was \$500 per acre. Why the difference? When you buy the land, you bet on the future. You bet on the come in. In 1978 most people expected export sales to continue to grow. As a result, they expected economic rents to continue to grow. At \$500 land was not over priced if economic rents were expected to grow at an average rate of 5 percent a year in the future. And such expectations would be reasonable as long as U.S. agricultural exports were expected to continue to expand. However, if U.S. farm exports were expected to stagnate, it's much more reasonable to expect economic rents to either stagnate or grow more slowly than in the past.

While high real interest rates and current cash flow problems have undoubtedly contributed to falling farm land prices, I think there has been a general decrease in expectations about the growth of economic rents in the future from U.S. farm land. Unless U.S. farm exports pick up in the next several years, there will be further decrease in the expected value of future economic rents.

If we go back to Melichar's future simple model, it means that if good falls, the expected growth in economic rents, from 5 percent to 2½ percent, that \$500 land falls in market value by one-third the \$340. The last time we had a collapse in the international market for U.S. farm products in the 1920's and 1930's, land prices fell one-half and in some cases to one-fourth their previous values. It's happened before and it can happen again.

If U.S. agricultural exports either stabilize at current levels or actually fall and this change is perceived as a long term change, not only will current levels of net farm income generated by market forces fail to increase, but we will also see sharp decreases in the value of all agricultural resources which cannot be transferred out of agriculture. And, of course, the major resource there is land. And so I think if we look to the future of land prices, land prices become an important variable in deciding what to do.

Unless we experience a revitalization of U.S. agricultural exports, we will get a revitalization of that age old American agricultural problem, surplus production capacity. In strict economic terms, it makes no sense to talk about surplus production capacity unless we talk about some price which is higher than what economists call the market equilibrium price and, that, of course, is naturally what we do.

We talk about higher prices in the sense of higher incomes for farmers which are socially, politically, and economically acceptable. In doing so, we leave economics as a science and turn to a mixture of politics and economics. Unless U.S. farm exports increase agricultural prices, the resulting agricultural incomes and the value of agricultural land will be lesser than found acceptable by farmers, by agri-business people, by rural communities and States as well as the elected officials who represent those people. In the past, this has been the main reason why the numerous proposals for farm programs have come about, starting from the McNary-Haugan bill in the 1920's, which never became law, to the current U.S. farm programs.

If exports don't increase and the situation described does come to pass, the required decrease—we must have a required decrease in the production capacity of American agriculture. This can occur, within the marketplace with no governmental programs. Once we get to the new equilibrium all may be fine. However, the cost of moving from where we are to where we would have to be would be tremendous in social, political, and economic terms.

In addition, the people who would bear most of the cost of such an adjustment, farmers, agri-business people, the residence of rural areas, would not have been responsible for the slow down in U.S. farm exports which made such sudden adjustment necessary. The adjustments were necessary by an interaction of a set of variables, a slow down of world economic growth, large U.S. deficits along with the required tight U.S. monetary policy, which were in large part responsible for high interest rates and a U.S. foreign policy which perhaps—which may—perhaps is required, but which both increases the level of international tension and causes some customers to back away from U.S. agricultural products as part of their responsive policy and, finally, because of increasing U.S. protectionist trade practices which are in opposition to our stated trade policy.

We hear about acts of the rest of the world, but we also have to be aware of our acts in trade. A good example of this, for example, was the U.S. decision to restrict importation of Chinese textiles. The Chinese turned right around and said, fine, we are not going to buy the kind of agricultural products we told you we were going to buy before you announced this policy on textiles.

If U.S. farm exports do not expand, I think we will be forced to adopt a farm program which will result in a long term reduction in our capacity to produce food and fiber in the United States. I don't think our current approaches to farm policy will be politically acceptable.

The current commodity programs we are well aware of, Senator, will cost about \$21 billion this year. The PIK program may cost as much as an added \$15 billion. A program with a cost of perhaps \$36 billion may increase net farm income by only \$3 billion. Such a program is difficult to justify and I don't think it's sustainable.

One common characteristic of U.S. farm programs since the 1930's has been provisions for voluntary participation. After the AAA Act of 1933 was declared unconstitutional in 1936, incentives to participate in the program are paid for from the general fund. Not surprisingly, the programs have become more and more expensive. I think we have come to the end of that road.

To a considerable degree, programs designed to reduce production capacity of U.S. agriculture will have to be, if this proves necessary, will have to be mandatory and/or financed with taxes levied on U.S. agriculture from the general fund. We may go back to 1933, but if we do need to reduce production capacity of U.S. agriculture, we cannot afford to follow the path we explored between 1936 and 1983.

If, however, we get a long term resurgence of U.S. agricultural exports, the kind of farm programs we will need to enact are more acceptable. They will need to be less restrictive, less expensive and much easier to live with. We will need storage and support programs to ease the pain of short term adjustments. However, it is important to stress again that such programs will have to be much less expensive than the current programs. In addition, they will have to be much more predictable than the program modifications of the recent past which some people have characterized as a jack-in-the-box approach to policy.

Let me summarize. As we move toward a new generation of farm programs, we have to be concerned about the interactions between our goals, the likely social, political, and economic environment and specific farm program alternatives. A crucial variable in that environment is the level of U.S. agricultural exports. With a continuing increase in our capacity to produce, U.S. agricultural exports, even if the present level of exports continue, both commodity and land prices will fall sharply unless we have an acceptable kind of program. If such a situation develops, it would be irresponsible, in my mind, to let all the needed adjustments take place in the marketplace. Both the needed adjustments and the resulting cost would be far too great. If, on the other hand, we get a resurgence of U.S. agricultural exports, it will be relatively easy to develop an effective farm program for the future.

If what I have just said is valid, and I think it is, the first task as we move toward a new generation of farm programs is to gain a better understanding about what influences the level of U.S. agriculture. A word of warning. Beware of, one, variable answers. It's the overvalued dollar, its being or why. And beware of answers which will blame someone else.

Once we have a better understanding of U.S. farm exports, I think the most effective action in terms of farmers and ranchers of this country will be a concerted effort to expand U.S. farm exports which will involve areas such as farm policy, international finance, and those U.S. policies which restrict imports into this country.

If, however, the conclusion is reached that U.S. farm exports will not increase, the job of developing a new generation of farm programs will be a crucial and difficult job. In my opinion, this will be a job that will probably need to be done.

I am pessimistic about the future for U.S. exports, but please realize, like most economists, I was optimistic on the same subject only a few years ago. If such a pessimistic outcome is judged to be the most probable, then I think a major job of the next generation of farm programs will be to bring about an orderly and cost effective long term reduction in the production capacity of U.S. agriculture.

Such programs are not and cannot be popular. However, it would be irresponsible to ignore such possibilities for at least two reasons. First, there is at least some reasonable probability attached to the need for such a program. Second, such a consideration will focus our attention on the basic reason why U.S. agriculture faces the toughest economic times since the 1930's, a stagnation of U.S. agricultural exports. The realization that we must either have farm programs which reduce production capacity of U.S. agriculture or expand agricultural exports may make the difficult task of expanding agricultural exports seem socially, politically, and economically much more acceptable. Thank you.

Senator ABDNOR. Thank you. Mr. Thompson.

Mr. THOMPSON. The next presenter on the panel is Donald Scott who will talk about "Toward the Next Generation of Farm Policy." Mr. Scott is, again, head of the Agricultural Economics Department at North Dakota State University.

STATEMENT OF DONALD F. SCOTT, CHAIRMAN, DEPARTMENT OF AGRICULTURAL ECONOMICS, NORTH DAKOTA STATE UNIVERSITY

Mr. SCOTT. Thank you, Senator, for inviting me to these hearings. The theme of this hearing, "Toward the Next Generation of Farm Policy," is certainly encouraging; but we should be realistic in recognizing the complexity of the issue and the fact that there exists no "quick fix" in establishing the next generation of farm policy. The establishment of a major policy agenda is difficult at best when the alternatives and their outcomes can be examined with certainty.

These are difficult times to be setting farm policy in comparison to the last three decades. We face an uncertain economic environment that is highlighted by the high value of the dollar abroad, high interest rates, a large Federal deficit, high unemployment, and a precariously unstable inflation rate. If that is not enough, we must now set a farm policy agenda that recognizes and incorporates the importance of international trade of agricultural commodities.

Like many of my colleagues, I do not have a simple solution or farm policy agenda to support. I would like to suggest, however, that the appropriate focus of farm policy must be cast in the following framework: No. 1, it must be cast with a longrun perspective, but be flexible enough to allow for shortrun adjustments; No. 2, it must have a focus that is equitable to farmers, the general public and our trading partners; and No. 3, it must be cast with a recognition that we cannot develop agricultural policy in a vacuum; monetary and fiscal policy do impact heavily on the farm economy as do economic and trade policies set by other countries.

A LONGRUN PERSPECTIVE

With respect to a longrun perspective, the argument for a longrun perspective in developing agricultural policy stems from a basic need we all have for long-term planning. I do not know of any corporate manager who, if given a choice, would opt for greater economic uncertainty rather than less, when it comes to corporate planning. Farmers and ranchers are no different; they must make production and marketing decisions that ultimately affect their economic viability and it is not unreasonable for them to be able to make those decisions with some expectation of what the outcome will be.

A longrun perspective is particularly important considering the fact that our current agricultural surplus will continue for some time and the fact that we appear headed for a continued spurt in real economic growth.

Our current situation of huge surpluses highlights the need for a policy that can handle shortrun adjustments. The current surplus is likely to persist for some time, and so the example may be a poor one, but we need a policy framework that can deal with things like periodic surpluses as well as shortages.

From a broader point of view, we need policy that will create longer term changes in land use and insure the continued availability of water. These are the two most important natural resources this country has and their importance to agriculture goes without saying. The mining of water and farming of fragile lands simply is not in the best interests of our society or American agriculture.

Much discussion focuses on the survival of the family farm because of its importance to rural America. I don't think anybody really means or takes that to mean that we must design a policy that insures or guarantees that all those who enter farming will continue having success and no opportunity for failure. I think what is important is that we cannot overlook the importance of the family farm to a viable rural America.

In arguing for a longrun perspective for farm policy, I believe I would be remiss if I did not highlight the importance of agricultural research to a productive farm sector. Over the years, we have held up U.S. agriculture as the most productive sector of our economy. That has not happened by chance. Technological developments emanating from research conducted by the USDA and land-grant institutions have contributed significantly. Keep in mind, however, the leadtime to initiate research and see the resulting product. A

new wheat variety released this year may have had its beginnings 10 to 15 years ago. The important point is that research by its nature is long term in nature and the scientific community involved in agricultural research has demonstrated its capacity to produce. We need and deserve continued support to produce up to expectations.

AN EQUITABLE PROGRAM

With respect to an equitable program, quite frankly, the biggest criticism that I hear of the PIK program, and this comes from farmers and nonfarmers alike, is that the program is too good. If you dig deep into an economist's bag of theoretical constructs, you will pull out the concept of pareto optimum. Loosely translated, it is a situation in which no one can be made better off. I'm not trying to suggest that we can attain such an optimum in setting farm policy, but the point is in setting policy we must be cognizant of those who stand to benefit and those who are asked to pay the costs, either explicitly or indirectly. We live in a highly interdependent society and world and we must consider the impact of our policy not only on farmers, but also on the general public and our trading partners internationally.

Like it or not, we are forced into recognition of the interests of other members of society, as well as taking an international perspective. During the 1970's there was a doubling in the dependence on foreign trade for U.S. agricultural products and other products as well. The important point here is that foreign trade will continue to provide a strong stimulus to our agricultural economy as far out into the future as we care to look.

Similarly, I do not think it is possible today to set farm policy in this country without considering other members of society. We need the support of consumer groups and key lobbies to gain passage of the farm bill. There must be something in it for them.

AN INTEGRATED ECONOMIC AND AGRICULTURAL POLICY

Finally, with respect to an integrated economic and agricultural policy, the final point I would like to make is that monetary and fiscal policy and similar policies in other countries do impact heavily on agriculture. If we need reminders, consider the effects of present fiscal policy that have led to our existing level of public debt and the resultant high interest rates that continue to dampen economic growth in all sectors of our economy. Monetary policy today seems relaxed or more loose than what it was even 6 months ago. It is difficult to set an economic course when you have such uncertainty.

Finally, we know all too well what export subsidies developed by our international competitors do to our own agricultural trade. We have seen the response of our competitors to the PIK program this year. Basically it has been encouragement to increase production for those countries that has been the rational policy to pursue.

Let's take heed of the economic lessons we have learned through the early part of the 1980's. Experience is the best teacher, although sometimes the most painful. Macroeconomic policy does not affect agriculture. Ed Schuh, my colleague at the University of

Minnesota, would contend that agriculture has been victimized by such policy. Furthermore, policy set by other governments also directly affects U.S. agriculture and there is no point in sidestepping that issue.

CONCLUDING COMMENTS

In conclusion, the focus of this hearing and others like it is encouraging and the Joint Economic Committee is to be commended for its willingness to solicit a broad range of input concerning agricultural policy. There is no easy set of answers, and while policy that seemed to serve us well in the 1950's, 1960's, and 1970's may not seem appropriate today, there is much we can learn from them, as well as from some of the painful adjustments and lessons we have learned during our brief encounter with the 1980's. Thank you.

Mr. THOMPSON. Thank you, Don. Our final presenter is Kenneth Nobe who is the head of the Agricultural and Natural Resource Economic Department at Colorado State University.

STATEMENT OF KENNETH C. NOBE, CHAIRMAN, DEPARTMENT OF AGRICULTURAL AND NATURAL RESOURCE ECONOMICS, COLORADO STATE UNIVERSITY

Mr. NOBE. Thank you. Senator Abdnor, I appreciate the opportunity to bring my comments to your committee. And given to the careful analysis and suggestions that have come before, I do have a prepared statement which I do not intend to read.

Senator ABDNOR. We assume you will put it in for the record.

Mr. NOBE. Yes. What I would like to do instead is comment on some of the problems that farmers see on a local scene. We have had several interactions with our farm business association people in recent months and some of those are national issues. Others are very unique to the high plains and some are very local. But I thought in addition to suggestions here for new policy, it might be possibly useful to review how farmers on the ground in some of these issues see some of these issues and recognizing in advance that some of them are not amenable to policy, but are nonetheless indirectly affecting their livelihoods.

I guess farmers in Colorado are no different than anyone else except that they are a very small minority. We have, I think, at this point our best estimate, 26,000 farmers that we could probably invite all to CSU to a homecoming game in the football stadium.

I don't expect to see that day because farmers don't all agree on what's important. But the point is that they are a rather small group and yet agriculture as an economic sector is still the No. 2 industry in our State. When we bring the agri-business components in, both services and then the processing, it's still huge and continues to grow. And while it may involve fewer and fewer people, it does involve tremendous amounts of capital investments.

I guess our farmers are no different than anyone else. When we talk to them in various meetings and the like, we ask them what are you concerned about. And some earlier testimony stated they're concerned with net incomes. I think the significant thing, and this is—I have seen in other reports recently, too, is that while

we might argue at what level of net income or profit that farmers feel comfortable with or profit that farmers feel comfortable with or at least willing to continue to operate, when they drop to the negative side of the ledger, it's no longer an issue of debate. It's a very serious issue.

I thought our farmers were badly off until I had an opportunity over the weekend to review a paper for a forthcoming meeting by John Scott talking about farmers in Illinois. And he had the benefit of 8,000 farm records that he has been analyzing. And they dropped into a net income level in 1981, went into it further in 1982, and increasingly will get worse this year. So that remains a continuing concern of our farmers and I guess that's a worldwide issue.

I travel quite a bit overseas, and I find the same thing in India and places, that at least you must have a level of return that's about inputs to continue your survival. The Illinois data, for example, showed only 1 year since 1960 that financial pictures of the corn and soybean farmer was worse than it is today. And that at least carries over to Colorado in the sense that we have gone heavily into corn production with the mining of the ground water in the Oglalla part of Colorado.

So the first concern will continue, I am sure, to retain net farm incomes at some level above break even. But related to that is a more immediate concern, and several of the speakers have alluded to that, is the heavy investment in land, appreciated value of land during the 1970's, the capitalization of agriculture and now facing the cost-price squeeze so that debt cannot be financed without real problems.

There are aspects of policy that affect interest rates indirectly, but certainly the availability of capital—increasingly our farmers are competing in international or at least the national marketplace for capital. And it's no longer going to the local rural bank that reserves a hunk of capital. Even our local bank is a part of the Western Interstate System, and demands for constitution in California or development of industry anywhere in the western states, you know, competes for those same loanable dollars. That will continue to be a problem in the short run.

And when we look at the long run, if interest rates decline in proportion to land values, in the long term, a farmer can deal with it, but it's also when the reversal occurs that there are still debt commitments tied to previously high capitalized land values and, of course, this leads increasingly to some people losing out in the system. I'm—as an economist, I am personally not too concerned about that except that if it affects the industry as a whole—and Dick and Mark as well have talked about the issues that emerged in the 1930's when the whole sector becomes very touchy about this and unrealistically efforts are made to bail out agriculture, which I think we should try to avoid with agriculture policy, but we should be aware that this is reaching another one of these flash points of high cost relative to returns. A third item that continually occurs in our discussions is a concern with the structural change in agriculture. There is a lot of publicity given to large farmers, extremely large farmers, and a high percentage of the food and fiber they produce, more in the East than in the Midwest and the West. The

other extreme is part-time farmers who have small farms. But the vast majority of our farmers are still in this middle bracket. But the structure of what is a commercial farmer is changing very rapidly. It's no longer landowner verses tenant. A high proportion of our farmers in the middle sized bracket own land and have invested heavily in cash renting of adjacent land, often quite a distance from their home operation with increasing costs of managing that kind of an operation.

We noted in the last effort of the U.S. agricultural census that one new element of farmer in Colorado doesn't even appear in the census data. He is the fellow who lives in the small town like Haxtun, Colo. You would never recognize him as a farmer because he owns—he may own one piece of family land that is a small portion of his total operation and he goes out in the spring and cash rents the sprinkler circles and has all of his machinery in various places and even has no rural address. So he never shows up in the census. And the size of his operation fluctuates every year depending on availability of capital and interest rates and prices of what he hopes to sell. That kind of change in structure makes it very difficult to track where agriculture is going and who is depending on it for a livelihood.

I guess I have a concern, as Mr. Scott was just pointing out, that when we try to deal with this structure of agriculture, and devise agricultural policy to deal with who they think a farmer is, that we tend to forget that, first of all, agriculture goes beyond the producer. It involves the inputs in agriculture, the processing and eventually the consumer, many of whom are now overseas. But it also—it affects other sectors indirectly.

Our experience with PIK is not unlike what Mr. Scott was reporting. The farmers who are in it like it. Some of the other farmers say it is OK, but they are beginning to look at the long term. And the impact on the consequent side has been on a local small machinery operator, the fertilizer stores and the like. And when the local feed store in New Raymer, Colo. goes out of business, no young man is going to come in and pick it out. Once it's out, which happened this spring, it's gone.

The big adverse impact of PIK has been on the rural economy of the nonfarm sector. And agriculture depends on that as a service, the labor force and the like. And I don't think that when decisions are made like to implement a PIK program as a short run quick fix, that we seriously look enough at consequences. In that sense, I would expand on the pareto optimum definition that a program hopefully will make no one better off without making someone worse off. And I have real questions about programs like PIK that may temporarily help some programs and reduce surplus stocks, but has a long term and probably irreversible adverse effect on structure of that rural community and the services that support agriculture.

The fourth element that I would comment on briefly is an increasing concern with the maintenance of our national resource base in agriculture. We, along with parts of Nebraska, Wyoming, and Montana have had a lot of publicity lately about plowing range land for quick turnover of land values, increased land value of crop land verses rangeland. But there is a long-term serious con-

cern about erosion effects, particularly wind. I can recall in my memory two major bailouts by Government to reseed some of those same acres through Government programs. And here, it seems to me, we are setting it up again because there will be a quick turnover of land and the next dry cycle that hits, a lot of it will blow into the Midwest.

Those kind of programs are extremely expensive to taxpayers in general and I am concerned at the magnitude with the modern machinery of the rate which we can tear up land as we have done recently in the plow-out issue.

We have an equal concern with competition for water from other sectors, but one that again caught a lot of attention is the impact of the mining of the Oglalla ground water aquifer which has reached levels of not being able to pump quickly at the southern end, but moving rapidly up through.

Much of our agriculture in the high plains part of Colorado was transformed by the development of pivot sprinklers. Heavy capital investments went into that land and it's only a matter of time when that water will be gone. There are elements of policy there that certainly might consider what to do with that kind of a situation.

The fifth point I haven't heard comment here recently, or at least in this hearing, is the unique position of risk necessary in agriculture generally in the high plains, whether it be in South Dakota or Colorado or Texas, tied to its climatic variability and what society feels is its responsibility to deal with this high level of risk.

The point in particular that I think has a policy implication has been the recent shifting from disaster payments to crop insurance with the expectation that you spread out this risk and minimize these adverse impacts. In our research, we did one of the first studies with wheat farmers. We found generally that farmers aren't too enamored with this kind of a thing and are not responding nearly to the degree that you would have expected them to. And even to the degree that they have, they still argue that in addition—if you have a broadening of this crop insurance program which is now proposed, that there will inevitably be situations of unique natural disaster—the high plains seems to get its share, whether it's hail or drought or whatever—that will probably require, not unlike the kind of flood hazard issues that happen in the more humid East and more recently in California. There will still have to be recognition of natural disasters that could wipe out a whole sector of agriculture in the high plains.

The final point that I would make, farmers, by their nature, what they grow, are increasingly concerned with and cognizant of, in terms of an issue, this whole question of the need to expand the export market that Mr. McConnen has so carefully analyzed and commented on. With this development of our high plains ground water, we have got heavily into export market crops. And what happens to the Colorado farmer will probably more than likely be determined by export policy and future worldwide markets and then local issues that we might try to compose on.

When you are producing almost to the extent of—I do not know what the level is of wheat and corn which we now produce, all es-

entially going in the next market, more so than some parts, that we have very good channels of Colorado wheat moving out, those farmers watch daily, almost hourly, what's happening to world market prices and particularly what's happening in other Government policymaking arenas that affect their welfare. Whether it's the Capitol dealing with the European Common Market threatening to use food as a weapon, all of these things leads to uncertainty and in the fact of uncertainty, farmers tend to be conservative. And also discouraged.

I think that Dick is totally correct that we really have two options in agricultural policy. One is to expand exports. The other is to reduce the U.S. output. No farmer likes to face having idle land, even if he is paid for it. If that land and water once moves out of agriculture, it's not easy to put it back.

There is a need for food and fiber out there in the world. It's different than an economist who identifies a demand and willingness to pay, but certainly some of those needs are being met by our competitors. And how we deal in the international arena in food and fiber policy, in my view, is the most important focus that we have got to put on U.S. agricultural policy. Thank you.

[The prepared statement of Mr. Nobe follows:]

PREPARED STATEMENT OF KENNETH C. NOBE

ISSUES/PROBLEMS OF AGRICULTURE
IN COLORADO IN THE 1980s*

The need for and prospect of new agricultural legislation in 1985 provides incentive for thought about the problems and issues in agriculture to which policy will be directed. This short statement is an attempt to communicate thought and concerns about problems in Colorado's agriculture. Though some are common to the agriculture of the West and of the nation, a few problems and issues are unique to our state. The opportunity to express comments about them is much appreciated.

Our agricultural producers would probably say that prices and incomes are of particular interest to them. Their concerns are illustrated in Table 1. Net farm income, before adjustment for inventory changes, has trended downward and there is little prospect for significant improvement in the near future. Important to gross income for Colorado farmers are cash receipts from sales of crops -- chiefly wheat and corn. These are two crops impacted by the PIK program, and there is hope for enough short-term price improvement so that incomes will be positively affected. Our farmers are certainly interested in those elements of policy that will affect prices, e.g., supply controls and commodity loans, and they will undoubtedly have something to recommend in the coming policy debate.

*Invited testimony prepared by Dr. K. C. Nobe, Chairman, Department of Agricultural and Natural Resource Economics, Colorado State University, for presentation at a regional public field hearing of the Joint Economic Committee of the U.S. Congress on the topic "Toward the Next Generation of Farm Policy," Sioux Falls, South Dakota, July 5, 1983.

Table 1. Net Farm Income, Colorado, 1979-83.

	1979 _r	1980 _r	1981 _r	1982 _p	1983 _f
------(Millions of dollars)-----					
Cash Receipts:					
Crops	\$ 747	\$ 1,017	\$ 1,073	\$ 915	\$ 850
Livestock	2,459	2,211	2,012	2,400	2,450
Total	3,206	3,229	3,085	3,315	3,300
Direct Government Payments:	37	18	48	135	125
Nonmoney Income: ^{1/}	128	155	166	165	170
Other Farm Income: ^{2/}	31	32	39	35	40
Total Gross Income:	\$ 3,403	\$ 3,433	\$ 3,337	\$3,650	\$3,635
Farm Production Expenses: ^{4/}	2,987	3,121	2,958	3,282	3,350
Net Farm Income, Before Inventory Adjustment	\$ 416	\$ 312	\$ 379	\$ 368	\$ 285
Net Change in Inventories:	21	51	-26	NA	NA
Net Farm Income, After Inventory Adjustment	\$ 437	\$ 363	\$ 353	--	--
Income per Farm ^{3/}	\$16,616	(dollars) \$13,698	\$13,074	--	--

r = revised

p = preliminary

f = forecast

^{1/} Imputed rental value of dwellings and value of farm products consumed on the farm.^{2/} Income from recreation, machine hire and custom work.^{3/} Farms in Colorado: 1979-26,300, 1980-26,500, 1981-27,000.^{4/} Includes interest on real estate debt of: \$ 139.6 \$ 170.4 \$ 223.0 \$249.0 NAData sources: Economic Indicators of the Farm Sector, State Income and Balance Sheet Statistics, Economic Research Service, USDA, supplemented by unpublished data, Colorado Crop and Livestock Reporting Service, Colorado Department of Agriculture, Denver, Colorado.

Also important to gross income, especially in 1982 and 1983, are government payments, including deficiency payments and payments-in-kind. Without significant improvements in commodity prices, these are necessary to the maintenance of incomes. But most producers will willingly trade government payments for increased receipts from crop and livestock sales.

Important to farm (net) income are, of course, kinds and levels of expenses. Not many of these expenses can be addressed by agricultural policy, but at least one rapidly increasing expense, interest on indebtedness, will be of concern to policymakers. It is evident from the preceding table that interest on real estate debt has trended sharply upward in Colorado in recent years. A similar change can be found with respect to short-term debt. Total interest payments have come to be one-quarter to one-third of operating expenses in some farming units. These tend to be relatively fixed costs, hard to reduce and difficult to manage.

While the generally high rates of interest are significant to the annual interest costs, important also are levels or amounts of debt. With the recent declines in net farm income, farmers have increased their indebtedness via new loans and refinancing of old debt. Agricultural policy can affect the availability of loanable funds and to a small extent the costs of credit — the interest rates. The operations of the Farmers Home Administration can be directed by Congress and the policies and actions of the Farm Credit Administration can be influenced by policy. Farmers will welcome federal attention to their credit problems.

A problem which lies deep in the consciousness of farmers is structural change in Colorado's agriculture. This change, which is often expressed as lack of opportunity in farming, involves division and/or consolidation of units, such that numbers of small and large size units increase while numbers

of mid-size units (\$40-200,000 gross sales) decrease, plus changes in ownership, with farm units partially owned/partially leased increasing in significance. It is true that structural change may cause some efficiencies in resource use in the larger farms; it may provide opportunity for farming experiences for those who will work off-the-farm; it certainly has been supportive of farmland prices. But, more importantly, it has reduced the number of commercial farms and farmers; it has imposed limits on opportunities for new full-time farmers; it has caused the rural areas' population to decline; and it has affected the viability of small towns and rural communities in ways which are distressing to some persons. Since agricultural legislation affects structural change, it seems to be advisable to consider structural change in agriculture in new legislation. In other words, the adverse consequences of new legislation should be as carefully considered as expected positive effects.

Another concern involves the maintenance of natural resources in Colorado's agriculture - both in terms of quantity and quality. Land and water are critical to our state's agriculture; both are threatened by competing uses, inadequate management and unavoidable depletion. Commercial, industrial and residential growth is significant along the Front Range and in the western region of Colorado. This growth requires land and water and it takes these resources largely from agriculture. There is resistance to this intrusion on the resource base, but it has not found effective expression in land/water use control measures. To the extent that this is a larger problem, as it seems to be in our nation, new legislation should be directed to it. Management of land and water in Colorado has also been called into question by the "plow out" of range lands in recent years and the increasing

awareness of depletion of our ground water supplies via large-scale utilization in irrigated agriculture.

Conversion of rangelands is attributable to the improved commodity prices of the mid- and late-seventies and to the opportunity for significant improvement in land values as a consequence of conversion. Sales often follow the "plow out," and capital gains realized have often been significant. Given the recurring drought cycles of the High Plains, however, it is doubtful if much of this fragile land can be maintained under cultivation without accelerated erosion. In the 1930s and again in the 1950s many of these lands were reseeded to grass cover via massive federally funded conservation programs. To the extent that such a program may be reintroduced is a critical policy issue.

Utilization of ground water is an understandable result of appropriate technology in irrigation and favorable commodity prices. Thousands of acres of land formerly used in dryland wheat production are now employed to produce corn under irrigation. The decline of the water-bearing aquifers on the High Plains has become a much watched phenomenon of concern to farmers. Issues of policy are: What rate of utilization is appropriate? What do we do when "the well runs dry?" What will be the impact on agribusiness and on rural communities of reversion to dryland agriculture?

One other concern, of many which remain, deals with the riskiness or variability of agriculture in Colorado and in the Plains. Many of our farms, producing increasingly for a world market, have become specialized cash grain farms, or even specialized wheat farms or corn farms. This specialization increases their vulnerability to swings in world market prices. At the same time, while yields have increased, weather-caused yield variation in dryland farming regions remains high, and farmers operating on small profit margins

and with substantial debts can no longer remain viable in the face of drought, hail, and other natural disasters. In view of this problem, Congress in 1980 eliminated the disaster payment program and replaced it with an expanded crop insurance program. However, crop insurance participation is still low and research at our university and in other High Plains states has shown that this crop insurance program is a poor substitute for the previous disaster payments, from the farmers' point of view. Even in an expanded form, crop insurance may need to be supplemented by other emergency measures from time to time.

The significant involvement in international trade gives Colorado farmers a great interest in policy that will lend stability to U.S. and world grain markets. Policy elements could include a stockholding program such as the farmer-owned reserve, specialized commodity programs that deal specifically with market instability, and an updated trade policy that recognizes the current realities of international trade. In these times of increasing risk and uncertainty in the farming business, Colorado farmers have a substantial interest in policies that reduce or share their risk of operation.

... These and other problems and issues are the concern of Coloradans within and outside of agriculture. They will surely express their interests, individually and collectively, as the time for new legislation approaches and the debate of issues and policies intensifies. We at Colorado State University appreciate the opportunity for an early input into your deliberations and will be pleased to respond to any requests for additional information you may desire.

Senator ABDNOR. Thank you.

Mr. THOMPSON. Thank you, Ken. I guess we are open to questions.

Senator ABDNOR. Gentleman, you certainly have a lot to think about. And it's something that has to be taken into consideration, no matter which way you go, in trying to draw up a new farm program. I think with what you said, it's pretty obvious that we haven't been doing everything right either; that we maybe have totally disregarded factors that should have been taken into consideration.

As you have been talking, something went through my mind, about—What do we have; how many million farms?

Mr. TOSTERUD. 2.3.

Senator ABDNOR. 2.3. And 66 percent of them are making more income off the farm than on the farm. You really are talking less than 1 million farmers. And you talk about \$32 billion going into a farm program. You would be better off to let them retire and take \$32,000 a piece, if I figured that right.

As you were saying, actually getting only \$3 or \$4 billion of income for all the money that we spent. That tells you something. We are not getting much for our dollar. If nothing else, the taxpayers of this country are going to be up in arms. And one thing, I sincerely agree with is that it isn't any longer just a matter of selling farmers on the program. We are going to have to sell the people of this country. I think that's what Mr. Tosterud and I and this committee had in mind when we called in consumers and other groups to talk to because one gets pretty spoiled. We get spoiled by some of the everyday habits we pick up on cheap food. You have a hard time convincing some people in this country that they are getting a tremendous bargain on their food, but they are. And we have got to make those people realize that. And farmers are not gouging the people. We have got a big selling game.

But we do have an awful lot of problems staring us in the face before we can come up with a new farm program. What do we do; dismantle what we have been doing and start from scratch, and if we do, what do we replace it with? Has anyone given any thought in your circles to what would be a possibility of a new approach?

The commodity program obviously isn't doing what it ought to be doing, working quite the way we want it. We have got an awful lot of grain around this country, a lot of cheese, and butter. We talked about that earlier here. One thing, do you think there is any chance that we can ever get the world together on a program? I mean it isn't going to do any good for us to go unilaterally off in one direction while the rest of the countries say this is our opportunity to take advantage of what the United States is doing. We will produce more. I don't know if that was a deliberate result that we have witnessed today but certainly the world production has offset all the good we have done by the PIK program. So I guess I'm asking is the commodity program the way to go or should we come up with something else? Any of you have any thoughts on that?

Mr. McCONNEN. Senator, in 1963 we had a wheat referendum which was defeated. The Department of Agriculture under the then Kennedy administration, advocated mandatory production controls, supply controls. The Farm Bureau campaigned very hard

against that proposal. And they were successful in getting it voted down by an overwhelming vote by the wheat producers in this country. And they said the issue was freedom to farm. And we still face that.

What happens is that if we stay with mandatory or rather voluntary programs, they are going to be too expensive, I think, to be politically viable. If we turn to mandatory programs, at least a good sector of American agriculture is going to say, no, it imposes too much on our ability to do business. And I think that is a—a conflict that we have got to come to grips with.

My personal opinion is, and I think it's just about as unpopular with Montana farmers as about anything—I could think of some things that would be more unpopular, I guess—but as anything, I think that we face the point that if we cannot expand our export markets, we are going to have to have a farm program which contains provisions for mandatory controlled production, and that's contrary to the traditional farm programs. It's contrary to the philosophy of American agriculture. I believe the alternatives just cost too much and we are not going to be able to support it to the tune again of this year, perhaps as much as \$32 billion.

Senator ABDNOR. I know this is unpopular, but is it something we should think about? The \$32 billion that we have been talking about has been going directly, more or less, into farm programs. Should most of that money go into expanding the exports? Are we ready to get into a—I hate to use the word, trade war? But we are going to have to become competitive.

Mr. McCONNEN. And we have been competitive in the international world. And a trade war can be very tough. A couple of things happened this past year. One, for the first time the United States went into Egypt and made a concessionary sale on flour. Within 3 weeks the French, working with the Governments in Common Market, went into the People's Republic of China and for the first time sold the People's Republic of China wheat, of which we had regarded as our market.

We cannot engage in a trade war and win, I don't believe, or at least American agriculture can't win if we get involved in a trade war. I think what we have got to work very hard for are more open world markets and then be able to compete in those markets at reasonable kinds of prices. And I think American farmers can do that. So—

Senator ABDNOR. Do you think that the other countries of the world haven't been carrying on a little bit of a—have they really initiated some of the problems?

Mr. McCONNEN. Absolutely. Well, two things. First of all, the United States has initiated some reactions that led to decreases in the sale of U.S. agricultural products. I mentioned the case of textiles in China. And there have been other examples as well. But in addition to that, many other countries in the Common Market—this is a good case in point. France has now become the second largest exporter of agricultural products in the world; not because they have the soil, not because they have the agriculture structure, but because they have a farm program which subsidizes agriculture. And they sell it in the international market at a loss. Of course, they have initiated a good many of these programs, but if

we try to meet them and fight them on that ground, I think they have shown the ability and the willingness to go ahead and escalate the level of trade.

Senator ABDNOR. Let me backup. Going back to Egypt, wasn't that our market at one time not too many years ago? Weren't we the ones that were—

Mr. McCONNEN. Well, we sold a good many—a goodly amount of wheat to Egypt on a concessionary basis. But the French traditionally have sold a great deal of wheat in the Egyptian market. And being in Egypt several times in the past, I've gone into the agricultural attaché's office and looked at where the imports of Egyptian wheat came from. And it did come from France. They were not a French market, but they regarded that they at least had a part of that market. And essentially what we did is we ran the French out of the Egyptian, particularly flour, market with concessionary sales. And they responded by going into China, a market that we have regarded as ours.

Senator ABDNOR. They have got to feel the financial pinch just as much as we do. I mean there is a time limit to how long they can go in and operate. In England, Mrs. Thatcher has been very unhappy with that and their contribution to the European Community and won a little bit of a victory on that. That is a growing thing. Do you think they are going to be faced with that as times go on or can they continually go on with the program?

Mr. McCONNEN. My conclusion is that the European Common Market could not continue its expensive food program, but Ed Rossmiller, a fellow from Montana that works in the Foreign Agricultural Service, lived in Paris and he said it costs them just twice as much for food in Paris as it cost them when they lived in the United States in percentage—percentage of their budget. And his—his conclusion was this cannot continue. And then he looked around and he found out it can continue because the French consumer is much more used to paying that level of income than the U.S. consumers and there are no real organizations of French consumers or European Community consumers and in fact they probably have the ability to continue a very expensive farm program for much longer than we do. And it has to do with how the consumer view these expenses. I find that hard to accept, but I take Ed's word for it. And I think it's a good analysis.

Mr. TOSTERUD. Well, I would just like to followup on that one comment. I have also always heard that the common agricultural policy of the European Economic Community is as much a subtle policy as it is an agricultural policy; that is, the key people out in the countryside are doing constructive things, and that there is absolutely no way that they are going to give up on that policy. So we are up against two things; agriculture production of food in the European Economic Community plus the subtle agriculture policy.

Senator ABDNOR. You have got to get the people in the cities and the buyers of food also to continue to pay for it.

Mr. SCOTT. The sense that I have is that the EEC is more committed to a long-term common agricultural policy than possibly any other program. And in that respect, I would expect it to continue for quite some time.

Senator ABDNOR. Is that going on with Argentina, too. Does it extend to some of these other countries outside the European Community or is that the most troublesome to us?

Mr. McCONNEN. The Japanese have a very similar kind of policy. And, of course, it's because of the political structure in Japan. And, again, it looks like it's very stable. In fact, food is very, very expensive to the Japanese consumer. It's probably going to stay—their policy is probably going to be retained in the case of Japan. And it does restrict U.S. exports. Now, the current prime minister of Japan, I understand, has at least been willing to talk about some of these issues with which the previous prime ministers have never been willing even to discuss.

Senator ABDNOR. That's right. I think that is true.

Mr. TOSTERUD. During the Des Moines hearing a couple of days ago, Mr. Colmer, the Dean of Agriculture from Iowa State University, said that he sensed that there doesn't exist, there couldn't exist, a farm policy that could justify the current assets in agriculture; that agriculture has about 1 trillion dollars' worth of assets; and that he was very pessimistic that we could possibly design a Federal policy that would yield farmers an adequate rate of return on that level of financial commitment. I would like your reaction to that.

Mr. NOBE. I think he is right. And a portion of that is land values. They can't go back to half price that they were in the 1930's or one-fourth. I was commenting to Mark at the break, in the San Luis Valley, which is a high mountain area in Colorado, excellent soils, somewhat limited climate, has some transportation problems, nonetheless, good producer, well irrigated, a farmer with 1,000 acres put two pivot sprinklers on and it sold for \$200 an acre. It was not a forced sale. And I asked the guy why in the world did you do that. He said I cannot afford the cash flow and the inflated values. I have got the money borrowed out and I want to pay off my debts. And he said I am going to come back and start over. And he went out and bought another farm. Much smaller.

Mr. McCONNEN. I would agree with the comment that you probably cannot justify the value of the assets at current levels of earnings of agriculture and I would have agreed with that statement if in fact it had been made not in 1983, but in 1977 or 1978. In one sense, I want to say two things. First of all, to explain why I think that is true and, second, I want to come back and I want to say I don't think it's a very relevant statement.

First of all, I commented about L. M. Melichar's model on determining what land is worth. And, of course, the value of land depends not just on what you can earn on the land this year, but what you expect to earn next year and the year after and the year after. And you would expect those earnings to increase in the future. And I then would say those expectations were reasonable as long as exports were increasing. Then in fact you are willing to pay a lot more for land than you could go ahead and justify by current earnings.

And I don't think that agricultural land was overpriced. It truthfully reflected what people expected to occur in the future. I think in retrospect, they may have guessed wrong. But I think those were reasonable expectations at the time and I disagree with Ken and

say I am not sure that those were inflated land prices. They were prices that reflected, I think wildly, widely held expectations at that time.

Now, our expectations are changing, I am going to argue pretty much, because we are changing our expectations about what we think is going to be in the future with regard to exports. However, to come back in terms of a policy issue as we talked very briefly during a break, I would think it would be unreasonable to expect any farm program with this kind of a scenario to go ahead and generate a reasonable return on the current value of agricultural land because built into the current value of agricultural lands are expectations that the future will be better. And I expect that it would be unreasonable to have a farm program that would generate a reasonable return on current prices of agricultural land, even though that is a very popular kind of thing.

If we did in fact have a farm program which generated a reasonable return on the current price of land today, what would happen immediately is the price of land would go up because we would expect that to continue. I think far more relevant, as we look toward farm programs and goals to be achieved by farm programs, are reasonable levels of family income for a family living, enough return so that in fact a business can remain viable in terms of the necessary investment in machinery and in terms of good conservation practice and so forth.

I think, and I hope, that the continuation of family farms—the family farm, there is a lot of rhetoric involved in this and there is a lot of ag fundamentally involved in this. But the record shows very clearly that the family farm has been a remarkable, viable kind of an organization for producing food and fiber.

Now, it may be changing, Ken, and we may have some structural problems, but I guess I would be unwilling to willy-nilly trade the family farm for something else when we don't know whether that something else is going to work. So in one sense the family farm represents a good security blanket as far as the American consumer is concerned.

Mr. TOSTERUD. What you are saying then is that the focus of the farm policy should be the sustenance of a family unit as opposed to the sustenance of the business, is that right?

Mr. McCONNEN. No. I'm not saying that because I think a viable family farm also has to be viable business. And this is not a static kind of a situation. For example, in Montana some figures indicate that four-wheel drive tractors will result in about a 25-percent reduction in machinery cost over the conventional two-wheel drive tractor. This is in dry land areas. I think what is going to happen in Montana because of things like that, because of new technology, I think that the family farm is going to become a larger farm. And it's unit costs of production are probably going to decrease. It's not a static kind of a concept as a way of life. I think that the family farm also has to be a family business that is a viable business.

Mr. TOSTERUD. But how do you value the business such that we can come up with an objective that says we have accomplished something for American farmers in a farm policy; that is, they are getting a reasonable output?

Mr. McCONNEN. I'm not sure how you do that. I know how to tell you when you are not doing that. And that's when you get to a situation where a large number of operators that almost anyone would classify as a family farmer are going out of business just because they can't go ahead and meet their operating expenses and meet the debt that they have to pay. And I think that we are very close to that kind of a situation now. And I am concerned about that. At least in some parts of the country you may be to a situation where in fact if things get much worse for a much longer period of time, going back to the theme I talked about earlier, we reach a point where these land prices start to drop and even more sharply than they have. I think we may not be able to sustain those kinds of operations. And not just operations that are heavily leveraged, but other operations as well.

Senator ABDNOR. Mark, do you have a comment?

Mr. EDLEMAN. There are three approaches. One to be looked at is volume and production. Essentially if you have more volume, you get larger payments. That's essentially what we do now. We had an alternative proposed this morning that you look at the caps on payments. Another approach is—would be one where you do look at family income maintenance and guarantee some sort of minimum income. Those would be three options that I would see.

Mr. TOSTERUD. Don, do you have a statement?

Mr. SCOTT. I have nothing to add.

Senator ABDNOR. We were talking a moment ago, I guess, about the crop insurance. Can that be improved on? Have you studied that crop insurance? That hasn't been a very popular program. Yet, it might be the way we are going to have to go sometime. Could that be made into a more viable program?

Mr. NOBE. I think it could, and it probably will expand as proposed to the other major crops. The main point I was trying to make is that if you take it on a national basis, you can provide sort—it almost takes the form of a minimum income. You know, you have got that crop insured. It's still there. There are areas of the country that are impacted by natural hazards, high plains, and their longer cycles, drought and hail. Those kind of things, just covering that one crop isn't really going to do it for them because it wipes out a—their whole income for a year. And when they are increasingly growing only wheat or only corn, you get that crop hit, just covering returning the cost, you know, the inputs on that, isn't going to do it. So I guess I would encourage an expansion of the crop insurance idea, but not abandoning the disaster payment program concept either, but holding it in reserve in support of this flexible farm policy. When you do get a regional area severely impacted by drought or floods like in California, what have you, they really disrupt the local economy.

Mr. TOSTERUD. The term "income insurance" has been mentioned several times. Mark, could you elaborate on what you mean by an income insurance program and would it be a reasonable and equitable substitute for the traditional commodity programs in your judgment?

Mr. EDELMAN. Well, if you want to get the emphasis off of commodity specific set of programs and if you go to an income insurance concept, you would be looking at the total firm or family

income, which everyone decided to look at. Insurance means that you're making annual premium payments, possibly with some—some subsidy—in which you essentially buy a certain level of income insurance to cover for the bad years in the future. That's what would be involved with that sort of a concept. What it does do, it does tend to separate the commodity price mechanism from the farm income problem, so to speak. And so your commodity prices are left to leave price signals in the marketplace for producers and also there would be a tendency to directly—to directly set up an umbrella in which our foreign competitors could possibly undercut us on price.

Mr. TOSTERUD. Could you see a situation where you would have an income insurance program do away with deficiency programs, target prices, the high loan rate?

Mr. EDELMAN. We are talking about breaking new ground here. Any time you—any time—

Mr. TOSTERUD. I hope so.

Mr. EDELMAN. Any time you do that, you are going to have some risk. And I am a professional economist, not—and an amateur politician, so maybe you would have a little bit better gaze on what the political winds would say to something like that.

Senator ABDNOR. I think that would be a very difficult thing. I know you've dying to ask a question. Go right ahead.

Mr. FRITZEL. I am involved or have been—

Mr. TOSTERUD. Excuse me. For the record, you need to identify yourself.

Senator ABDNOR. Better come down here and give your name and where they can hear you.

STATEMENT OF DALE FRITZEL, FARMER

Mr. FRITZEL. I am Dale Fritzel and our family has been involved in the grain farming business for many years. And the thing that I am concerned about—in other words, not only maintaining farm income, but also justifying the cost of it. In other words—I also pay income taxes, too. And I am concerned about the interest of the consumers and they are in the cost of the farm programs.

But I think, though, that I am wondering why it isn't possible to try to put a price tag on some of these inputs into the farm program such as—in other words, I have gone through the 1950's or the late 1940's and 1950's when we had the price support program and so on. And frankly, I feel that the past few years has—the 3-year reserve program had quite a lot of justification. But I haven't heard anywhere really where there has been a price tag put on that. In other words, I understood that we were creating a reserve of grain to take care of national security possibilities and so on, just as they are in the petroleum industry. In other words, they are supposed to be creating a reserve of petroleum products in case there is ever an emergency. And I understood that is the reason for this 3-year reserve program.

I can—I believe that if you start something like that, there is going to be a whale of a big initial cost. And this is the only justification that I can see for the increase in the cost of the agriculture program this year. Really, maybe we should be starting to pick up

some of the costs of the beginning and the continuation of this 3-year reserve program.

But I think if the public and the farmers were able to sell the public on the—on these costs and then the cost of trying to make additional exports sales and then also the cost of trying to give the farmer some kind of a guaranteed income or something, I don't think that the public would be nearly as concerned if they knew what these costs were as against not knowing and the farmers themselves not knowing. And—in other words, these costs would be so much at such and such a time and they would be tapered off because—in other words, I know that I have 2 years of corn stored and I don't know when it's going to be sold and I don't know at what price, but I do feel that it certainly has good value and it will be sold either by me or the Government at a good, fair price.

And so as a result, some of these moneys that the Government has sewed up in 3-year reserve program is something that can be salvaged either by me paying off the Government or by the Government taking over my grain and selling it. I think they have done it in the past. I think they are going to do it in the future.

So I think that one considerable value would be if we could break out some of the costs of some of the farm programs so that the public and the farmers know what they are. And if this reserve program and building that up is a considerable part of this farm program right now, and that it isn't going to continue to grow so great in the future, we aren't going to be so unhappy. But if it is something that is going to be continuing, it's going to be a little harder to justify it. This is—

Senator ABDNOR. The only thing I can say is I don't even know if anyone knows where the program is to start. When it started out, the budget that we are putting into agriculture this year was never intended to be what it's ending up to be. It's almost an entitlement the way we have the law written because we haven't got the money there to cover it. We have got to come back with extra money to do it because the law says we do. We missed it by a mile. I could have done a lot of things. Certainly your grain, your corn, is going to be worth more because of the PIK program. But if it had not been for PIK and had we continued, I am not so sure the Government or you would have even come close to getting their money out of it. So it's a difficult thing to say.

I don't want to keep these gentlemen here anymore. If somebody wants testimony, we can go ahead. Do you have any other questions?

Mr. TOSTERUD. Do we have any reactions to the gentleman's—
Senator ABDNOR. Go ahead.

Mr. McCONNEN. To go back again to history, the Farm Board in 1929 was established under the assumption that the only thing wrong with American agriculture was it didn't really have an orderly market and so you would kind of even out the flows over a period of time.

We found out from the Farm Board, of course, that it wasn't a problem of just over marketing. It was a question that we were just producing too much to get the kind of prices that we determined to be acceptable, however you want to define that. And so this is why we started in 1933 to try to restrict production. Now, we were

never very successful about restricting production because that has never been very popular.

The farm loan reserve, which I agree with you, I think it is a very good program, was still pretty much aimed at the same idea that we had a—we didn't have surplus production capacity. We just wanted to even out the flow of ag commodities over a few years period of time. And this is why the reserve has a trigger price built into it and the other thing. And I think basically it was a good program.

However, I think the fault with the program is that with the fall off in exports, it's just like we had to phase that result of the Farm Board, and we have to go back and say give them the current level of exports. We just are producing too much to get acceptable prices. And, again, you can argue about how you want to decide what are acceptable prices.

And so I think we have come back to a point now where we either have to expand that export demand beyond what it is currently or if we cannot do that, then I think we have to go back and look at the possibility—in fact, I am going to argue it would be one acceptable price, and, again, not just for ag, not just this year's products, but for the value of land and other resources over the long run. I think that's what we are going to have to face to go back and reduce this productive capacity of American agriculture.

We are caught right there. We can do something about export demands. We can do something about reducing the long-term production capacities; not just the PIK program for this year or maybe next year, but have a long-term impact on production capacity. And that's one thing that no one wants to do. But I think we are caught. We have to do one of those two things.

Senator ABDNOR. Mr. McConnen, we are talking about price supports. We shouldn't engage in competition or a pricing war here. If we go on the way we are—we are losing ground. Our figures, I think, show we are down to 50 percent of the foreign market now instead of the 56 percent we had 1 year ago. If we keep going down, what do we do?

Mr. McCONNEN. What we have to do, Senator, is work very hard to develop a situation in the world where international trade, not just Montana wheat or South Dakota wheat or corn is going to expand, but international trade is going to expand. And that means that we do a lot of things and many of those things don't seem like they are directly related to the issues of agriculture.

An example, I wrote a letter at the request of Bud Ruthold [sic], who is president of the Montana Grain Growers Association, going to a National Association of Wheat Growers seminar the end of the week. And I told about the increasing quota, the U.S. quota, and the International Monetary Fund.

Now, that seems like it's a long ways from agricultural exports, but the international monetary fund was really set up to try to provide the money needed for the transactions in international trade, not—not to—not to loan the money, but provide a transactions basis. And right now with the liquidity crisis in the world, in my opinion, unless the International Monetary Fund gets expanded quotas, we could end up with one hell of a mess in terms of international finance and international trade.

From what I have seen, the bill the Senate passed out was a good bill. The bill which is House prepared is probably not a good bill. It's too restrictive. And I don't want to get into the technical issue, but I want to use this as an example; that when agriculture becomes concerned about its future, I think that they have got to be concerned about a lot more than just ag commodity programs and a lot more than just family income, family farm income, this kind of thing. I think that agriculture has to recognize that they deal with very broad issues.

I think it's interesting to take a look at our dealings with the Soviet Union. Now, we may have absolutely the correct foreign policy as far as the Soviet Union is concerned. I don't want to argue that issue. But what I do want to say is that policy is obviously resulting in a response on the part of the Russians and they have a policy they do not buy grain from the United States except as a matter of last resort. The Canadians have systematically cultivated that market and increased their share of that market as a direct policy objective.

Now, perhaps we are doing exactly the right things, Senator, but it's having an impact on agriculture. And if it has an impact on agriculture, then I think we ought to be concerned about who does pay the bill. The fact is that the Soviet Union does not want to buy grain from the United States unless they can't get it someplace else. And this hurts. And there are a lot of different policies and programs like that which do occur.

I mentioned that with regard to the idea of textiles in China, when you look to the ag aspect of the Peoples Republic of China, you have to be concerned about the three T's; Taiwan, textiles, and tennis. When we granted asylum to the Chinese tennis player, we did it in a manner of political asylum which the Chinese regarded as an insult. We can't do business with people and treat them in that kind of a way, particularly when they have got not a private sector oriented trade sector, but a Government oriented trade sector. We have to be concerned about those kind of issues.

I think that this is not a matter just of the Reagan administration or the Carter administration. We probably haven't been nearly careful enough about the impact of our foreign policies on our trading activity. And I think we have to be more careful about that. It doesn't mean we ignore some broader issues, but we have to be more sensitive to those kind of issues.

The international foreign monetary fund, by the way, is just another case in point of the many kinds of things we have to be concerned with when we are going to go ahead and expand agricultural exports.

Senator ABDNOR. Thank you, gentlemen. I have kept you up here—

Mr. EDELMAN. Three comments. First, on the defining an acceptable price level. I think that depends on who you are. In figuring cost of production, if you look at various debt-asset ratios, you can find as much as a \$4 difference in the price of—or the cost of production depending upon whether you are a highly leveraged operator or whether you are someone who has got your land completely paid off.

On the international trade, it's a two-way street and it's difficult for you to represent South Dakota and go through and ask for free trade for our grain producers and not ask for restrictive policies on meat imports. Now, a lot of South Dakotans think, well, if we are going to have to restrict something, let's restrict something like tiddlywinks. We don't grow those in South Dakota. But the political fact of the matter is that we operate in an urban Congress and they say if you are going to ask for free trade for grains, then you are going to also have to consider entertaining the—free trade for other commodities that you grow in your areas, too. And that's a difficult one to wrestle with. That is one you have to face.

OK. And finally, two reasons why we will never have free trade in the world. One is commodities and second is national security interests. Most countries hesitate to import more than 5 to 10 percent of their food supplies because once you get beyond that point, then you are getting to a point where some foreign interest can essentially dictate your economic situation; like we did to Japan back in 1974 with the soybean embargo. So there are some limitations to ever-expanding free trade.

Those are just three points I would like to make.

Senator ABDNOR. Those are good points.

Mr. THOMPSON. I just wanted to thank you, the agricultural economists, for coming to South Dakota to participate in this hearing. I think we ought to do this more often.

One of the things that occurs to me in our discussions is that we tend to take a look at agricultural policy in terms of what we have, which is normal. But when we think about trying to compete with some of the foreign countries that have a little different view of agricultural policy, maybe sometimes we should sit back and say what is it that we want agriculture to look like in 10, 20, 30, 40 years in this country. And then try to shape an agricultural policy to achieve some of those goals. I know that we would run into problems, but on the other hand, there may be a place where we would say after the number of farms get so low we don't want it to get any lower and that in the interest of both the urban and the rural people, we ought to devise a kind of program that can at least provide a floor below which this industry will not go. And I think that we are getting to that place where we are going to have to take a little broader look at what we want agriculture to look like in the future and maybe design programs on the basis of that as well as our current and short run kind of problems. This is a bit philosophical, but once in a while you have to kind of back up and—

Senator ABDNOR. I think you make a very good point. You tell people like me and all the other politicians down there that we ought to do something on a long-term basis and take a long forward look instead of doing things that are going to make us popular back home. I think—and I include myself when I say this—that politicians have a tendency sometimes to look at the year instead of down the road at what we are really doing. We just have to broaden our sight. I think we are going to be forced into it one of these times.

Mr. Thompson. I think one of the real problems is that nonagriculturalists really do not know what they are for in terms of agri-

cultural policy. They are confused. And maybe we have a responsibility to help along those lines.

Senator ABDNOR. That's true. Make people understand it, yes. We thank you for coming. I really think this has added a great deal to our hearings and more and more I am realizing we probably should have started out with you gentlemen so we could have got reactions as we went down the panel participants. But we do appreciate the fact that you have come so far to help us and I can assure you your testimony will be reviewed and looked at many times between now and the next farm program. Thank you.

I know there was a gentleman back there who wanted to have a chance. You do represent the NFO, is that right?

**STATEMENT OF DELTON MINDER, SOUTH DAKOTA STATE
PRESIDENT, NATIONAL FARMERS ORGANIZATION**

Mr. MINDER. Thank you, sir. I didn't come here prepared with anything written or anything. I have been listening all day. My name is Delton Minder. I am from Milbank, S. Dak. Same place as Rudy is from. I am State president of the National Farmers Organization here in the State of South Dakota. And I work on the road with the national organization in the specialty department.

I guess the thing that irritates me probably more than anything else is the economists. I guess there is a need for them. Sometimes I wonder what it is. They talk about too much; too much corn, too much wheat, too much hog, too much dairy products, too much everything. I am 56 years old and I guess I—ever since I was old enough to understand anything, that is all I have ever heard is too much and once in a while not enough. And they look upon it as a curse. I look upon it as a blessing.

I wouldn't want one of these four guys sitting here at the table to sell our Ford cars, Chrysler cars, General Motors. I would fire them. They are so negative. Let's get positive. By God, we have got the product that every single human being has got to have.

We should never look at food as surplus. Surplus is a word we should take out of our vocabulary. Surplus is something that is described by Webster's Dictionary as something that isn't needed or wanted. In my book, it's always needed. Right when I get done eating a full meal, I don't want anymore, but it isn't very long and the want is there. The need is also always there.

So I think we should get rid of that word "surplus" because that word is producing thinking that you should give everything away because there is too much. From a buyer's side, that's beautiful. If I was on that side representing the buyer, I would think that would be just wonderful. I would let me—producers just let me steal the whole works. There has got to be a fair price level to agricultural producers and I don't think the Government should do it. Does that shock you, Jim?

Senator ABDNOR. No. I want to hear how you are going to do it, that's all.

Mr. MINDER. I think farmers should be doing it themselves through their own group, through collective bargaining like it's done in every other group. Why shouldn't food have a price from the farm level? It's priced immediately after it leaves the farm

level. Why shouldn't it be priced at the farm level? Put on the market what the market will absorb. Then let the farmers handle that so you guys wouldn't have to worry about that. We have got a program for that. All we need is farmer participation.

There are all kinds of commodity goods. One compresses against the other. Promotions and all the other gimmicks have never sold it either. Why don't farmers do it for themselves? Wouldn't you guys feel a lot better if farmers were pricing their own production?

Look at the Common Market countries. Look at Sweden, look at Norway, look at Finland. They have a policy over there.

I read an interview of a farmer from Sweden by the name of Rady Norquist in the paper up here in Roberts County. He was over here and he couldn't understand the agricultural policy of this Nation. He said over in Sweden through the years they found out they want to keep the same people on the same land throughout the generations from father to son and again father to son. That way that land is—land produces the most. Once you lose it so that an outside investor controls this land and has just a slave, you might say, to do the work, that nation cannot feed itself. And I think I agree with that wholeheartedly.

We need the same people on the land, the people that love the land. They are the people that should be the producers on this land. Wouldn't you agree with me, Jim? And through collective bargaining we can do that. We have got the right. Congress gave us that right in 1922. It would be better for everybody. But the route that these guys were going up here, we are getting no place.

Expanding exports, we expanded exports from 1972 up until 1978 by 600 percent. It didn't help. It's got to be priced first. So that's what we are saying. Let's get out of this negative attitude. Let's get in a positive attitude. Negative doesn't sell anything.

Senator ABDNOR. I am not arguing with you, but the only thing I would ask is how are you going to convince the farmers to line up with you?

Mr. MINDER. OK. That is where the Senators and Representatives can do something, too. Make it socially acceptable. Farmers never have done this before. To them it has to be socially acceptable, right?

Senator ABDNOR. I don't know. I am listening. Go ahead.

Mr. MINDER. That is what I find. I work with them every day. When you say it's socially acceptable, they will do it. They are scared of contracts, to use the tool contract. Every other business uses it. They use it. You talked about credit here today. That is a contract. But they don't sell their production. Maybe I ought to give you an example of what an export buyer—and I don't know if you guys deal with them—but an export buyer told me in 1979 that, you know, it's our own fault as farmers that the prices of grain are so low. He was in the export business of grain. I said we produce too much, like these guys sitting here, you know. What he shocked me with, he told me this: Well, no, he said that isn't the problem at all. Well, what is the problem, I asked him. He says we aren't a dependable supplier. That really shocked me. We are not a dependable supplier. Now, you lost me someplace. Go back and explain it. Here is what he said. He said the worst thing that can happen to him as an export buyer is to have grain producers with

money in the bank, grain in the bin, and all their bills paid; the worst thing that can happen to him. We can't get the grain out of those people until they have a need for money so we are going to have to keep the need for money by keeping the prices low.

Now, that is totally different than what we heard here today. We are being told it's that surplus holding the price down. No, I think the farmers better get their production organized, get themselves organized, their production, give the buyer what he wants, where he wants and when he wants it. That will solve the problem. And that's the way a number of buyers have already told us that.

Senator ABDNOR. You think we could control our own production?

Mr. MINDER. Right. We can control our own. Put on the market what the market will absorb. Wouldn't that be a much simpler way?

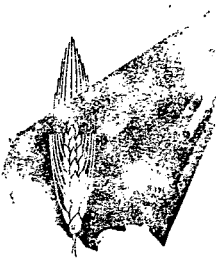
Senator ABDNOR. I guess if you can make every farmer believe this and get into—

Mr. MINDER. Why don't you guys as Senators and Representatives use your influence and tell farmers, look, fellows, the way things are going, there isn't going to be a farm program so if you want things better for yourself, you better get together and do for yourselves. I wouldn't, in your position, tell them what to do and how to do it. Let them do that. But at least make it socially acceptable. Thank you.

Senator ABDNOR. With that, I think before I lose my reporter, I will adjourn this meeting. And thank you for turning out. Hopefully we are started on the next generation of a farm policy. And maybe it will be born right here in South Dakota. It is certainly off to a good start. I thank you all very much. The committee stands in recess.

[Whereupon, at 5:10 p.m., the committee recessed, to reconvene at 8 a.m., Friday, July 8, 1983.]

[The following information was subsequently supplied for the record:]



U.S. Durum Growers Assn.

PROMOTING THE PRODUCTION AND MARKETING OF
DURUM AND SEMOLINA

PROPOSED STATEMENT OF THE
U.S. DURUM GROWERS ASSOCIATION
ON
"TOWARD THE NEXT GENERATION OF FARM POLICY"
BEFORE THE
JOINT HOUSE-SENATE ECONOMIC COMMITTEE
JULY 5, 1983

The U.S. Durum Growers Association was organized in 1957 to represent the specialty class of wheat known as durum. Durum wheat has unique qualities and has a limited, but important market. Its primary use is in pasta products and in North African countries is used in a cereal-like preparation called Kuis-K s.

Historically, 85 percent of the U.S. production of durum has been in North Dakota, however, in recent years production has expanded to Arizona and California, due to plant breeder advances and premium prices.

Our organization has some specific recommendations to make in the formulation of farm policy:

We favor freezing the target prices.

We favor lowering of loan rates to allow U.S. wheat to be more competitive in world trade -- 50 to 60 percent of durum wheat production is exported.

We favor a policy of responsible reserve stocks, but this should not exceed 30 percent of our annual domestic and export needs.

Page 2
 U.S. Sheep Growers Association

We believe the reserve stocks should be reduced to their normal carrying capacity.

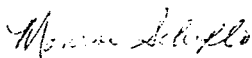
The majority of this should be on a farmer-owned enterprise with a bonus paid to owner.

We favor a trigger mechanism for the release of these stocks based only on the average price of lambs, not on the national average for sheep, as it presently is.

The selective use of export subsidies should be practiced to enable competitive in the near term until world stocks are reduced to the point that farmers can receive adequate returns from the marketplace.

Finally, we trust, considering the over-capacity we have in sheep production today, we favor some form of long term land retirement program. We feel this would be good for soil conservation, wildlife, recreation, and also be less costly for the government. Such a direct cost and administrative costs.

Thank you,



Monroe Schefle, President
 U.S. Sheep Growers Association

THE EFFECTS OF PAYMENT-IN-KIND (P.I.K.)
PROGRAM ON SMALL AGRICULTURAL BUSINESS

Mr. Chairman, my name is J. D. Lynd, Executive Secretary, South Dakota Association of Cooperatives and Chairman of the South Dakota Ag Unity Group.

The co-ops being represented here are owned and controlled by South Dakota Farmers.

South Dakota Association of Cooperatives is a state wide association representing all types of co-ops doing business in South Dakota.

The local co-ops I represent are in the farm supply and marketing business handling fertilizer, chemicals, fuel, farm supplies and marketing grain in some cases.

I appreciate the opportunity to come before the committee this morning in order to discuss farm programs as well as look at subsequent programs and implementations policies. While our Association's have experienced some decline in farm supply sales this year with the implementation of the P.I.K. Program, it continues to have widespread support. Our Association's recognizes that before we experience any appreciable increase in market prices, a substantial reduction in carryover stock must take place. Therefore, it is necessary for a strong acreage reduction program such as P.I.K..

We are always effected in South Dakota by changes in farm programs because South Dakota per capita is the most agricultural state in the nation.

Some of the problems we think can be avoided in the future deals with the implementation of programs and timing. With the implementation of the P.I.K. Program, budget and projections were already set before the P.I.K. Program was around. This means the merchandise was in the warehouses ready to service the acres based on last years sales and projections for the current year. This caused two problems in particular, one is the potential for tying up working capital in carryover merchandise. The second which may even result

in a greater impact on small business, is the lack of operating capital and the cost of interest has caused price cutting in some areas in fertilizer and chemicals. Because of the inability to afford to carry over merchandise it has caused dumping at cost or near cost, which has created a competitive situation which has been detrimental to all agri-businesses in these areas.

The cost of suddenly shutting down plants and later starting will cause production cost in these plants to increase far beyond what an orderly supply control program would create.

While supply management programs may be necessary at times, we are concerned about the United States position in agricultural exports. The position of several other nations in their promotions of exports, the amount of foreign subsidies, and the efforts in credit programs, financing and promotions that other exporting nations are using.

While we may need supply management programs we need also to double our efforts in being creative and innovative in finding ways to increase our share of exports.

A full scale evaluation should be made of USDA's export programs, including their market development efforts. Over the last three years our major competitors in the agricultural export market have spent an average of 39¢ for every dollar of product exported. It is critical for USDA to make a stronger commitment to these programs which creates new demands for U. S. Agricultural products overseas.

In summary, we believe that future agricultural policy should be on going and long range. They should protect producers in periods of low prices, work toward stable growth of export markets, and supply and demand adjusters to keep the system from wide swing.

Much can be done to soften the impact on business and agriculture by decisions being made ahead of budget, ordering, and plant decisions.

Mr. Chairman, members of the Subcommittee on Agriculture and Transportation of the Joint Economic Committee:

My name is Melvin Beck from Washington, D.C. where my wife and I own and operate a farm and ranch. I want to thank Senator Adner for making this agriculture hearing possible. It is a privilege to be able express my personal concerns as a producer.

I oppose legislation to freeze the target prices to the 1983 level. It would be as disastrous to our economic recovery as the government grain embargo, since we receive 100% of the market price.

The proposed freeze would eliminate minimal increases in the target prices, approved when Congress enacted the four year farm bill. Now the government wants to renege. It is an insult to the farmer asking him to sacrifice income while their expenses constantly increase. The producer will put himself out of business if he continually has to borrow against their equities to produce food below the cost of production which subsidizes the consumers of this nation and the nations we export to.

Support for the freeze is based on a belief that lower farm price supports will reduce production, the fact, inequity prices for commodities cause overproduction, as we attempt to raise more to compensate for lower prices, this also hinders good soil conservation.

Farm income is the "Heart Beat of America"

as new wealth comes from the land each dollar earned turns over in the economy 5 to 7 times. With our raw materials priced at about 50% of parity, our nation is losing nearly one half of its would be generated income. With parity for agriculture, America's largest industry would have earned income to buy goods and services, which would produce national prosperity and employment on a mass scale.

As a producer and consumer I do not like subsidies the real solution is parity price for our commodities equal to cost of production and a fair return on investment and labor.

I believe in supply management with a quota system to determine the domestic and import needs this could be done with a producer board and guidelines from U. S. D. A. With the quota system there would be no expense to the government, as the producer would be responsible for overproduction this would also stabilize the food supply in case of natural disasters.

Agriculture is the victim of our farm policy when it is paid to shut down our food factories with world wide hunger.

It is unfortunate that some farm groups and economists deal in theory instead of reality needed to establish a workable farm policy.

Thank you W. Howard Beck.

POLICY STATEMENT OF THE SOUTH DAKOTA LIVESTOCK ASSOCIATION

Before Sub-Committee on Agriculture

On behalf of the members of the South Dakota Livestock Association, an affiliate of the National Cattlemen's Association, I thank you for the opportunity to express our views concerning farm programs.

Although our association represents primarily the beef feeding and related industries of South Dakota and the beef cattle industry as a whole nationally, we recognize that in order to maintain a strong economic atmosphere within our industry, all segments of U.S. agriculture must be economically sound, as well as the economic status of our nation.

An indication as to the condition of agriculture as it exists in our country today is illustrated by the fact that the net income to U.S. agriculture this year is estimated to be about equal to the cost of our present farm program. This indicates to us that the taxpayer, rather than the consumer, is supporting agriculture.

We feel that several issues need to be addressed with open minds and the courage needed to get the agricultural economy back on its feet.

First and most important -- we need to have a government that is willing to get its "fiscal house" in order. It cannot continue to spend more dollars than it is receiving. The beef industry is a highly capitalized industry and we cannot continue to compete with government in the money markets for the capital to operate our businesses at the prevailing high interest rates.

Secondly -- America has had a low-cost food policy for so long that the food consumer has come to consider low-cost food as a right, rather than a blessing. American agriculture can no longer absorb the skyrocketing costs of production without a corresponding response of higher returns for these products. This higher return will have to come either from the marketplace or from some form of government subsidy.

Our nation's cattlemen embrace the open market framework and the concept of price determination through open competition and the free working of competitive forces and will oppose any legislation to jeopardize the free market system by government actions.

We need to take a stronger position in our dealings with other nations in the matters of trade. Other countries impose import taxes or duties on our products and, in turn, use these monies to subsidize their own agricultural industry by dumping their surpluses on the world marketplace at "cut-rate" prices. In other words, using our dollars to undersell us.

Furthermore, we cannot continue to allow other nations free access to our markets without a corresponding access to theirs. We cannot afford to be "Mister Good Guy" any longer in matters of world trade. We need to get back to the days of the old-fashioned, hard sell American Businessman. We feel that businesses should be given a freer hand in negotiating foreign sales of our agricultural products rather than have foreign marketing almost completely under the control of the political whims of our State, Commerce and Agricultural Departments.

The strong U.S. dollar has also greatly hurt our exports. Ways must be found to rectify this inequality in foreign exchange and also in our balance of trade or we will have to revert back to the days of the barter system.

We need to establish ourselves as credible suppliers of farm products. A great deal of the present farm surplus problem relates back to past embargoes, dock strikes and cargo preference laws.

The National Cattlemen's Association strongly opposes ANY governmental intervention that has the effect of restricting U.S. exports of any agricultural commodities except to those countries that pose a direct threat to our national security.

We cannot afford to cut back on research. Because of our past leadership in agricultural innovations, America's labor force has been released from the fields and thereby has enabled us to become the world's industrial giant. We need to continue research in genetic engineering, disease prevention and control and in the development of new and better products. If we slow down our research efforts, we lose even this advantage to other nations.

Past farm programs have encouraged the plowing up of our precious grasslands, adding to an already serious wind and water erosion problem. These lands should be harvested by ruminant animals, not by combines.

American agriculture needs more than an emergency, band-aid PIK program. We need a long-range, domestic and world market-oriented program, free of day-to-day political manipulations; a program that the American farmer-businessman can base long-range planning and practice upon; a program that will not alienate our urban consumers, for we need their support to have a successful program.

William A. Daniel
 12th V. President
 S. Dak. Livestock Assn.

Testimony to Senator James Abdnor
and Joint Economic Committee's
Subcommittee on Agriculture and Transportation
Tuesday, July 5, 1983
Town House Motel - Sioux Falls, SD
by Fr. Leonard Kayser
Sioux Falls Diocesan Director
National Catholic Rural Life Conference

Senator Abdnor and members of the subcommittee:

I am Fr. Leonard Kayser, pastor of St. Francis Parish in Estelline
and St. John's Parish in Castlewood; I am the Sioux Falls Diocesan Director
for the National Catholic Rural Life Conference

Last evening I went to a local restaurant for supper. One of my parish-
ioners visited with me telling me again how he was forced off the farm he had
rented for 21 years. This parishioner now works for a millionaire land owner.
Recently his brother died of a heart attack at an early age, having suffered the
same degradation of spirit.

Last week a young couple of my parish were asked to sign papers allowing
the sale of their farm assets to liquidate their loan at the bank. They are
third generation farmers of the area.

Last week also a farm reared young man asked my advice about starting
farming on his own. FmHA has refused to even talk seriously with him about his
buying a presently viable farm unit.

Day after day this situation hits me right between the eyes in my par-
ishes and across eastern South Dakota. We are dealing with complex economic
and technical issues, but none is as great as the moral issue we are dealing with.

Farmers from the local area worked with me in 1978 to initiate a process
of consultation regarding agriculture in the Heartland. The issue was clearly
identified by the Catholic Bishops of twelve States as a moral crisis in the
Heartland. Their 1980 Land Statement: STRANGERS AND GUESTS: Toward Community
in the Heartland, identified land ownership and control of the Heartland
breadbasket as our greatest moral issue of the day. Whoever controls this land

will control, not only its people, but world markets and the socio-economic status of literally billions of people.

It is clearly a policy issue of American agriculture which must be addressed. It is necessarily a moral issue -- a people issue, not one of acres and bushels and pounds of production -- though these are quite obviously involved. As Hazel Henderson (1980 in OMNI) says: "You can't get social directions or moral prescriptions from the data."

The current crisis in agriculture here in the Heartland has been created by a vacuum in agricultural policy. Vacillating power structures have made hamburger out of our people -- family farms always get ground up in the violence of land and food policy abuse. The continuing movement to monoculture, demanded and created by these power struggles, is the single greatest cause for eliminating the traditional farm families and is also the single greatest cause of loss of precious topsoil in our country. Monoculture is the policy of colonialism. In a sobering sense, the grain belt of America has acquired the characteristics of a colony. If there has been any policy which has facilitated this situation, it must be identified as federal tax policy as it relates to agriculture.

It is not my task as Church to analyze scientifically the data and the consequences that these practices have had on our human society. The Church considers it her task always to call attention to the dignity and rights of those who work, to condemn situations in which that dignity and those rights are violated, and to help to guide changes so as to ensure authentic progress in society. (cf. #1: John Paul II: "Laborem Exercens" - On Human Work)

In 1975 Catholic Bishops of Appalachia spoke of the powerlessness of their people in their pastoral: THIS LAND IS HOME TO ME, because of the concentration of ownership and control of their coal resources. The Catholic Bishops of the Heartland in 1980 spoke in the same terms - the only exception being that they call for land reform BEFORE the fact, whereas in Appalachia,

it is after the fact.

Our Judeo-Christian heritage teaches and verifies that there is a natural marriage between the land and its people. Separation or divorce of the two promises destruction of the entire community.

I was in Uganda, E. Africa in 1971 in January when the popular government was overthrown. All the efforts of that people aided by technicians from our country to establish a just and adequate land reform, were halted and devastated. Now they are starting all over again. They know that unless the land is widely owned and distributed, they can never develop economically so that human progress will be assured.

In November of this past year I was with a study group going to Nicaragua and Costa Rica to learn of their efforts in land reform. The Nicaraguan people fought a popular revolution based on Scriptural hope to free themselves from the injustices and tyranny of the Somoza regime. The 1979 Triumph facilitated a Literacy Campaign which enabled them to undertake massive land reform so that all the people could enjoy the dignity of being independent contributors to their society. Our nation is determined to destroy their hopes of implementing the universal laws of Leviticus and the Year of Jubilee. "The land belongs to me, says the Lord, and to me you are only strangers and guests." (Lev. 25/23)

When, oh when will we ever learn?! "In the beginning God created the heavens and the earth." (Gen. 1/1) "The one who guarantees these revelations repeats his promise. I shall indeed be with you soon. Amen." (Rev. 22/20) These are the beginning words of Genesis and the closing words of Revelation. We would do well to heed them.

A PERSPECTIVE ON A NATIONAL
FOOD AND AGRICULTURAL POLICY
BY RALPH HOFSTAD

Agriculture is the nation's biggest industry and largest employer. Its assets are equal to about 88 percent of the capital assets of all manufacturing corporations in the United States, and it provides jobs for 23 million people or about 22 percent of the labor force.

Farming itself employs 4.4 million workers including the farmers who operate the nation's 2.8 million farms. That's as many people as employed in the transportation, steel and automobile industries combined.

Another 10 to 12 million people are employed in storing, transporting, processing and merchandising the output of the nation's farms. Three million more people are required to provide the seed, fertilizer and other supplies farmers use for agricultural production and family living.

America's farmers are also among the nation's - and the world's - most productive workers. Each farmer produces annually enough food to feed 80 people, and together, with only 13 percent of the world's cropland area, they produce nearly 60 percent of the food available for world trade.

This production efficiency translates well at the supermarket and restaurant, where Americans spend less than 17 percent of their disposable income for food. No other people in the world enjoy such economy.

The tie between U.S. agriculture and the world markets and economies has grown dramatically in the past 10 years. America now exports the production from two acre in every five and employs one million people directly in the process. Every \$1 billion of agricultural trade creates an additional \$1 billion in U.S. economic activity and an additional 35,000 jobs.

American farmers are dependent upon strong export marketing. But our strength is being eroded. Several reasons are cited: weak economic conditions throughout the world, financial instability in a number of countries, the strong U.S. dollar, losses related to embargos, continued East-West tensions, unfair trade practices by some of our competitors and restrictive market actions by some of our buyers.

The problems overseas involve huge stocks, weak demand and successive years of large production. The problems at home are identical, and they're compounded by the most severe cost-price squeeze since the depression of the 1930s and inflation-fed high interest rates.

Over the past three years, prices paid by our farmers have increased by 38 percent, while prices received increased by 20 percent. Crop receipts in 1982 will fall significantly for the

third successive year despite record marketings and Commodity Credit Corporation outlays that increased from under \$3 billion in 1980 to nearly \$12 billion in 1982.

Even though farmers comprise only about three percent of the U.S. population, their economic well being has direct economic impact on the entire nation. Farmers are, after all, operators of the nation's biggest, most productive industry and its largest employer.

Forecasts are that today's farm production, as efficient as it is, will soon be dwarfed by new production breakthroughs. Technological advances led by genetic engineering, new methods of soil tillage and computer modeling are projected to revolutionize present farming methods and to produce an undreamed of abundance of food and fiber.

This emerging revolution provides additional impetus to the establishment of a basic, continuing and multi-disciplined U.S. food and agricultural policy. American farmers are producing in the context of global markets and international politics, but they are isolated from our government's decision-making process. Traditionally, U.S. farm programs have been parochial, piece meal and short lived, designed basically to deal with periodic economic difficulties at home. Often while dealing with these immediate concerns insufficient regard has been given to the longer term effect.

Additional legislation, administrative authorizations and regulatory directives dealing with embargos and other international political matters, problems of labor and transportation, the environment, the general economy and other areas of concern have been enacted without proper regard for the consequential effect on agriculture.

We urge the establishment of a national food and agricultural policy as an integral part of our national and international economic policy. Such a policy should be consistent with the domestic needs of producers and consumers and must also be responsive to the world food needs and our international trading responsibilities.

We believe such a policy should support the following principles:

1. Preservation of a market-driven, family farm-type agriculture.
2. An efficient food and fiber production and delivery system.
3. Enlarging both domestic and world markets for agricultural producers.
4. Maintaining farm income at a level competitive with non-farm income (to maintain standard of living and to retain human talent and resources in agriculture).
5. Conservation of our basic natural resource (soil and water).
6. Maintaining and fostering viable rural communities and services.

Finally, the food and agricultural policy should enable the United States to play a role in the international food system appropriate to U.S. productivity, responsibility and vulnerability, and our nation should organize itself to carry out that policy. That organizational effort should include clearing up the relationships among the forty-odd federal agencies that have some impact on U.S. food and agricultural policy and establishing a more rational organization of the legislative process in the realm of food and agriculture.

We urge the President to provide the mechanism for establishing the policy we envision and for monitoring compliance with it. A Presidential Commission of cabinet-rank officials concerned with domestic and foreign affairs seems appropriate for the purpose, along with selected agricultural leaders.

The Commission should include representation from the Departments of Agriculture, Commerce, Energy, Interior, Labor, State, Transportation, and Treasury; from the Office of Management and Budget; and from the Special Trade Representative; along with farmer groups representing food, fiber and other interests of agriculture.

TOWARD THE NEXT GENERATION OF FARM POLICY

FRIDAY, JULY 8, 1983

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 8:16 a.m., in the city hall, Boise, Idaho, Hon. Steven D. Symms (member of the committee) presiding.

Present: Senators Abdnor and Symms.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR SYMMS, PRESIDING

Senator SYMMS: The Joint Economic Committee public hearings on the next generation of farm policy will now come to order. We are very pleased to have Senator Jim Abdnor from South Dakota here with us. He has been the mainstay of the agriculture hearings. Within the last week we have had representatives from 17 States in an effort to get a long-term viewpoint of what's happening in American agriculture. At the eight Washington hearings on the theme "Toward the Next Generation of Farm Policy," we heard from 28 experts addressing a variety of subjects ranging from farm policy in the post-PIK era to the consumer interest in farm policies from agriculture trade policy to the economic condition of rural and agriculture business, conservation, financing in the 1980's. The testimony has been comprehensive, controversial, and certainly thought provoking.

In our first hearing, Secretary Block identified three basic options for future farm policy. Continued current programs turn to protective policies as employed by the European Economic Community, or begin the movement toward a greater commitment to a more market oriented U.S. agriculture. In strongly recommending the third option, the Secretary requested congressional authority to set target prices and loan rates. He acknowledged that while some farmers would flourish under a more market oriented U.S. agriculture, others would not and would be forced out of farming.

Representatives of major farm operations testified during the second hearing. As might be expected, the entire spectrum of Federal farm policy was presented. We heard recommendations ranging from a more market oriented agriculture to strict supply control and income support programs.

A panel of our four prominent agriculture economists testified during our third hearing. Almost in unison they argued for farm

programs that were more flexible and capable of being adjusted in response to changing domestic and international economic conditions. They did not hesitate to recommend that loan rates should be reduced to stimulate export sales; and target prices should be frozen or lowered to discourage production. They stated that the farmer owned reserve program was not being used as originally designed, and strict supply control programs would be with us for some time.

The consumers' interest in farm policy was the subject of the fourth hearing.

Given the divergent recommendations on the panel of witnesses, it is a very difficult hearing to summarize. Perhaps it's sufficient to say that the administration's witness and the witness from the Consumer Advocacy Group had very few areas of agreement.

The third witness presented a very interesting thesis which he referred to as a triangle of interest in agricultural policy. The triangle being the inherent conflicts and complementarities between farm, food, and foreign policy objectives. All three of which must be fully recognized and respectively addressed in any future agriculture policy.

Administration officials from the Department of Agriculture, State, and the Office of U.S. Trade Representative were witnesses at the fifth hearing. No surprise here. But the point was made that the Reagan administration must avoid counterproductive turf battles between these three Government agencies. All three agencies are on record in opposition to any future agriculture trade embargoes.

Agribusiness and rural communities, the unsung warriors of agricultural depression were discussed during our sixth hearing. Production agriculture generates 20 million off-farm jobs, and is the lifeblood of thousands of rural communities. The present economic plight of America's 2.4 million farmers is truly only the tip of the iceberg.

Conservation was the topic of the seventh hearing. A critically important point was made. Agriculture's sustainability must be both economic and environmental and continued degradation of agriculture's resource base—soil and water—will eventually make profit a moot point.

The committee's final Washington hearing dealt with the very complex and challenging topic of financing agriculture in the 1980's. Because of agriculture's desperate financial condition, farmers are becoming increasingly dependent on Federal lending institutions. However, a recently completed 1979 farm finance survey performed by the Bureau of the Census revealed that almost one-half of all farmers were totally debt free.

One, of course, cannot begin to adequately summarize the findings of eight congressional hearings, 28 witnesses, and 20 hours of testimony. But in my mind, there was one over-riding concern expressed or implied by virtually every witness, and that concern was the absolute frustration over the failure to design and implement public farm policies and programs that would reflect the full competitive clout of U.S. food production and distribution system in the international marketplace.

Senator Abdnor, we welcome you here to our State. With your approval, we will deviate from the order of the witness list, and take the witnesses as they arrive. I see the Governor is here.

We welcome you to Idaho. We are a State in which agriculture is our No. 1 economy. Just for your information we're first in potatoes, first in barley, and I could go on down the list. Second in lentils and dry beans, alfalfa seed, Kentucky bluegrass seed, and so forth. Agriculture is the lifeblood of our State.

We appreciate your coming to our State so that people here have some input. As I have already stated, by the end of today's hearing, 17 to 19 States will have been represented in the three field hearings you have held in South Dakota, Iowa, and now here in Idaho.

I might also say that the Joint Economic Committee called us this morning from Washington to tell us the latest unemployment figures. During the month of June in 1982 it was the single largest increase in employment of any time in the history of the Republic. Over 300,000 new jobs were found. We now have 102,454,000 people who are employed in an alltime high in this country. The unemployment numbers have dropped to where we no longer have double digit unemployment. If you include the military, we're at 9.8 percent. So, it appears that the recovery is underway. And we hope some of that spills over to agriculture.

OPENING STATEMENT OF SENATOR ABDNOR

Senator ABDNOR. Thank you, Senator Symms. I am very pleased to be here. I haven't been in Idaho for a great many years. This is a beautiful State. I saw a little of it last night, and hope to see more of it before I leave.

I'm extremely interested in this subject of agriculture. Steve and I have comparable careers in the Congress. We started out in the House at the same time and entered the Senate at the same time. We served together on two resource board committees, also the Joint Economic Committee and the Committee on Environment and Public Works. I knew he was a hard worker and a very dedicated person, but this is the first hearing where we are out at 8 a.m. He's an early riser and works long hours.

This has all the indications of being an excellent hearing and that's what we're looking for.

I just want to say that when I first went to the Joint Economic Committee, I attended several hearings at which leading economists of the Nation appeared. And I was quite taken aback because they never mentioned the word agriculture. Finally I got disgusted because I am a farmer, and I told them what I thought of the necessity of discussing agriculture—something that makes up 20 percent of the economy.

Well, we created a subcommittee called Agriculture and Transportation of which I am chairman. I was successful in finding an outstanding agriculture economist to head up the subcommittee, Mr. Bob Tosterud. I swiped him from the Department of Agriculture. And we've been having great success with our hearings ever since.

We had a number of them last year. Steve, do you have the report—they're out on the table. You'll see the first year's findings,

and I would seriously recommend that everyone pick up a copy of that. We've had to have reprints made. I think you'll find the basic material is excellent. We started with the Secretaries of Agriculture. We brought in all the former Secretaries of Agriculture. We brought in consumer groups. We brought in writers. We brought in commodity people. We brought in the farm groups. And the statistics and facts are extremely interesting.

So this year we wanted to start out on the subject "Toward the Next Generation of Farm Policy," because we are going to be writing a farm policy in another year. True, the Joint Economic Committee won't do this, but we're working very closely with Senator Helms, chairman of the Senate Agriculture Committee, and with the chairman of the House Agriculture Committee. They've endorsed these hearings. They're working closely with us. We're bringing in interested groups to talk about the farm problems and where we want to go. And I really question whether the Agriculture Committee itself would ever have gotten around to doing that.

Everyone has shown a tremendous interest in this. If we had some quick answers, it would be wonderful, Steve, but the more we do, the more difficulties we run into. But as Steve said, as of today we've had 17 States represented. And this is what we want to do, to go out into the grassroots and talk to the people that have to live under these programs. So that's the purpose here. We appreciate your being here. Some of you have come a long way. We know that the results of these hearings will prove your effectiveness.

Again, we thank you for being here today, and I am particularly pleased to be able to join you, Steve.

Senator SYMMS. Thank you, Jim. We've started early—I see our Governor is an early riser, too, and I also see that he's here and ready to start with his testimony.

We're happy to welcome Governor John Evans as the first witness in this hearing, and while the Governor is coming up, I'll make a comment that those of us from Idaho consider this God's country. Jim had the opportunity last night, Governor, to visit a special part of God's country, and that was Sunny Slope. His airplane got here about 6:30 or 7, and I rushed him right out there to see it.

Senator ABDNOR. Governor, you have a beautiful country. And of course, he let me know about that long before. [Laughter.]

Senator SYMMS. I hope we can take him up to Arrow Rock Reservoir to see the lifeblood of the State. See where the water is coming from. Jim is also chairman of the Subcommittee on Water Resources of the Committee on Environment and Public Works and very interested in irrigation reclamation projects. We say that for Phil Reberger's benefit. Hopefully, if we get through before sunset, we'll drive you up to Arrow Rock this afternoon.

Senator ABDNOR. Fine.

Senator SYMMS. We'll get an airplane to take you up.

Senator ABDNOR. I'm really looking forward to it.

I just want to say one thing, Governor, that I really noticed in our hearings. I don't mean to cut off any of your speech, but I wholeheartedly will agree to go anywhere you want me to go—even South Dakota. In working with agricultural groups I've noticed a

wide variety of differences. Sometimes it's very difficult in Washington to get five farmers to agree about something when they're all from different organizations. And when you're only 2½ to 3 percent of the people, it's a little difficult to convince a bunch of city folk when we don't know what we want.

But I've been noticing a marked difference in this. The other day in South Dakota, we had our farm groups together, and I couldn't believe what I was hearing. We do have a way to go, but I think this crisis we've been in has caused our farm groups and everyone to realize we do have to work together.

I just want you to know I really appreciate you taking the time to give us the benefit of your leadership.

Senator SYMMS. Governor, go right ahead.

STATEMENT OF HON. JOHN EVANS, GOVERNOR, STATE OF IDAHO

Governor EVANS. Thank you very much, Senator Symms. Welcome to Idaho, Senator Abdnor. It's nice to have you here, we as Western Governors, and we include North and South Dakota as part of our West. Governor Janklow has become a very close working governor with me, and we appreciate the good work that he does as Senator Symms appreciates the good work that you do representing your State in the U.S. Senate.

I am pleased to have the opportunity to address this committee on the matter of national farm policy for the future.

As you are well aware, Idaho's No. 1 industry is agriculture. National policy relating to this industry, therefore, has a profound effect not only on the economy of our State, but on our entire way of life for all Idahoans.

Most Western States are in the same position. For this reason, it is essential that the State, and the Western States in particular, have a strong voice in the formulation of a future national farm policy.

Many American industries are facing stiff competition from foreign producers and manufacturers. The automobile and steel industries are two examples. However, the United States is second to none in the production of food commodities. According to some economists, it is our one world-class industry. Therefore, we must carefully formulate farm policy for the future that will allow us to retain that status.

PARTNERSHIP—PRIVATE INDUSTRY-STATE-FEDERAL

We must develop a strong working partnership between private industry, the State, and Federal Government. The American farmer should be allowed to do what they do best, produce food. They are the experts, and they have the capability to feed the entire world.

The States can support their effort through wise land-use planning policies that safeguard our agricultural land by developing our State water policies that result in fair allocations of water to irrigation, energy, consumption, and recreation, and by supporting the research that allows us to continue improving our crops.

The Federal Government, also, has an essential role in this partnership. This morning, I would like to touch on some of the ways

that Federal Government can provide support to the American farmer now and in the future.

INTERNATIONAL TRADE

Our Western States are looking in the direction of increasing trade with the Pacific Rim countries. The Federal Government must provide a greater assistance to the Western States in developing these new markets.

Some of that assistance involves U.S. foreign policy, negotiating international trade agreements and so forth. But other assistance can be provided closer to home.

For example, Idaho is one of the few Western States that does not have an International Trade Office within our State. Because of this, Idaho's international trade affairs must be administered entirely out of Salt Lake City, Utah. This is despite the fact that there is an international trade satellite office in Spokane, Wash., a mere 30 miles from the Idaho State line. And most of our export products are shipped via the ports of Seattle.

Another example, Idaho has been placed within the jurisdiction of the Chicago Customs District. Again, despite the fact that there are two customs districts within 400 miles of Idaho at both Portland and Seattle. Obviously, we are part of the Northwest, not the Midwest.

These are just two examples of where Idaho's best interest in international trade affairs are not being served by the Federal Government. In addition, these decisions have been made without consultation with the Governors. This is in contrast to President Reagan's policy of New Federalism partnership with the States.

International trade can be successful and profitable venture for American farmers, particularly in the Western States, but we must have the support of the Federal Government in formulating policy.

CREDIT

A second area where the Federal Government must play a significant role is the area of farm credit.

We must develop a long-range lending program for farmers that will insure the continued existence of the family farm.

The family farm has proven to be the most efficient unit of food production, but high interest rates are jeopardizing the farmer's ability to finance his operation.

The high cost of transportation and shipping is another barrier faced particularly by Western States food producers. The Federal Government must begin to address the issue of railroad tariff reform.

BIOTECHNOLOGY AND RESEARCH

A third area where the Federal Government can provide support is in the area of biotechnology. Appropriately funded research programs are essential if American agriculture is to retain its status as a world-class industry.

Agriculture is a mature industry. So are some of the other American industries such as steel and the automobile industry. We

must learn a lesson from what has happened to these other industries. We cannot sit back and rely on past successes in our basic industries. We must take advantage of the new research available to us so that we can maintain our competitive edge.

We States are doing what we can to support research at our universities, but the individual States are having enormous revenue and budget problems, as I recognize the Congress of the United States is having also. We need more assistance from the Federal Government in adequately funding agriculture research.

This is an appropriate role for the Federal Government to assume because agriculture research not only assists food producers, but provides widespread benefits to the Nation and to all of the world.

PUBLIC FUNDS

I would also be remiss if I did not take this opportunity to address the issue of public lands as they pertain to agriculture. Many food producers, including the livestock industry, are dependent upon our public lands. The Federal Government must develop future agriculture policy that is based on the wise multiple use of that land.

Again, this is an issue of particular concern to the Western States because most of the public lands are here in the West.

I have expressed my opinions on this matter many times, and I will not go into detail at this point. But I do want to emphasize the importance of the Western States having a strong voice in the decisionmaking when public land policies for the future are being determined.

CONCLUSION

In conclusion, the formulation of a future farm policy for our Nation will not be an easy task. There are many complex issues that must be addressed in the development of such a policy. It must be a policy that does not result in putting the American farmer out of business.

There will be an increasing demand for food in the Nations of the world as we approach the year 2000. American farmers are knowledgeable and successful. We must develop a future national farm policy that supports that private enterprise and allows American agriculture to continue as a world class industry.

The Governors, representing their States, stand ready to participate in formulating a national farm policy. And we will do anything we can to assist you.

As I mentioned earlier, the development of a successful national farm policy can best be achieved by a strong working partnership between the agriculture industry itself and State and Federal Government.

I would be pleased to address this matter at greater length and in more detail with you committee members at such time that is convenient to you and to my schedule also. Thank you very much for allowing me to participate.

Senator SYMMS. Thank you very much, Governor. I appreciate your statement greatly.

Jim, the Governor comes from a part of the State where they grow a great deal of dry land wheat. Jim is a wheat farmer in South Dakota.

Governor, you know, in my opinion, this PIK program that is now underway is typical of many of our farm programs in that we always try to do things for the short term. And Senator Abdnor's emphasis on this entire hearing has been the long-term program.

In your close association with people in the wheat farming industry, how do you see the future after PIK? Would we be better off with a Federal policy that emphasized foreign exports more than supply management. As you're probably well aware, with our supply management programs every time we reduce production in the United States, they increase it in Argentina, Australia, and Canada. And it's like a guy clapping with one hand. Because their production goes up, ours goes down. I think we're down to 50 percent of the world production, is that right, Bob?

Yes, 50 percent of the world. We used to be almost 60 percent. But other countries are taking up that part of the market.

If the Federal Government is to play a role should it be in terms of trying to help with exports even to the degree of export subsidies as opposed to direct subsidies to farmers?

Governor EVANS. Well, I don't think there's any question about it, Senator. I think it's very important to look to that export market for our principal opportunities in agriculture. For an example, here in Idaho, Senator Abdnor, 90 percent of our wheat goes overseas; 90 percent if it. I think that's a startling fact of the importance of that export market to the State of Idaho. I don't think there's any question that we had to move in the direction of some kind of an emergency PIK program. And I support Secretary Block, President Reagan, you Senators who supported that particular program. In the short return, we have no choices. We had those surpluses hanging over the market, and we had the farm industry in this country on its knees.

I've been working very closely with Secretary Block on this particular issue, and was very pleased when he announced almost a year ago at the National Governors' Summer Session that he would probably extend the PIK program for another year. And I noticed just this last week that that extension has now gone into effect.

Once again, it's a very essential program, in order to solve the short-term problem. But Senator, I agree with you, to whatever extent I possibly can, any way that we can develop those overseas markets, it's going to be to the advantage of our agriculture in the United States.

Senator ABDNOR. Thank you. You know, Governor, I think we in South Dakota and North Dakota are now thinking about becoming part of the West.

Governor EVANS. You are part of the West.

Senator ABDNOR. I always felt like that. I attended all of the meetings.

Senator SYMMS. Jim was a former Lieutenant Governor of South Dakota.

Senator ABDNOR. As a matter of fact, I'm going up to Bismarck on the 17th or so of August. I think Governor Janklow said I

should come up. And I'll probably get in a lot more trouble there than I am here today. But it's going to be discussing cost sharing. And I have that hot topic in my water resources subcommittee.

Governor EVANS. I don't envy you in solving that particular problem either, Senator.

Senator ABDNOR. That's going to be a tougher one, or just as tough as this because we don't want to hurt someone with assessments and fees. But I'm looking forward to that meeting.

I might say, when you're talking about that customs that I want to look into it. I just happen to be chairman of the Subcommittee on Appropriations that heads up all of the treasuries, including customs. This is ridiculous to go to Chicago and—

Governor EVANS. We felt that way, too, Senator, as you obviously know.

Senator ABDNOR. I just wanted to ask you, I'm not trying to put you on the spot, this is a tough, hot question, and I don't know what I'm going to do yet.

How about this freeze on the target prices and loan rates. I'm sure you've been following that. As a matter of fact, I think the Secretary says if we're going to go with PIK, how we carry it out depends on the response to, I think, this provision on freeze. And I think it's in the Ag bill. I am not on the committee, but I think the bill will be picking up, because the Ag Committee is made up of fellows and ladies who are very close to agriculture, and they apparently went along with that idea.

Do you have any thoughts on that, being in the wheat business?

Governor EVANS. I'm sorry, Senator, I have not been following that particular issue as closely as I possibly should. So I really will have to reserve my observation.

Senator ABDNOR. I wasn't trying to put you on the spot.

Governor EVANS. It's a technical program, as all of us recognize.

Senator ABDNOR. Well, some people suggested putting all the money in the ports and storage, and putting more emphasis on exports. Forty percent of what we have produced has got to be marketed overseas. And as Senator Symms pointed out, if we've got 80 million tons of wheat worldwide, that's only going to reduce the amount by 20 million. That means that somebody has been raising a lot more while we have cut back. We can't go that route every year with restrictions or cutting back.

We only have so many "buts", and I think a lot of people will vote depending upon whether the money goes to find new markets or to be competitive with the European Economic Community, which has taken much of the market away from us. It's a tough, difficult decision. At our hearings we find out that we shouldn't get involved in a trade war with the European Economic Community. Yet you can't let them take all the markets away from us. So it's a problem.

Governor EVANS. It seems to me, Senator, and I'm sure you've reflected on it in the time that you've served in the Congress and public life, but agriculture has been the sacrificial lamb in international trade, the international policy as we develop here in the United States. When you think in terms of the two largest nations in the world, the U.S.S.R. and China have been purchasing large blocks of our agricultural products, particularly our grains, and all

of a sudden they're backing away, they're going to Argentina, they're going to Australia, they're going to other nations that are producing the European nations. And here we are, the finest and most efficient producer of grain in the entire world and can produce it at lower cost, but we can't compete because those nations are subsidizing their particular program for exports of that grain to those countries. And we're sitting here in a situation, and in serious trouble in agriculture today.

So anything that we can do, anything you can do as a Congress to develop those programs of international trade will be a tremendous benefit to agriculture and to this Nation and to the world into the future.

Senator ABDNOR. I just feel we're going to have to keep agriculture alive and healthy.

What role do you see the Governors playing in formulating this farm policy? I don't mean to prolong this but—

Governor EVANS. What we have done as a Western Governors' organization and as a National Governors' organization, Governor Schwinden now serves as the chairman of the Agriculture Committee. Schwinden is from Montana. We'd like to see our committee—I serve on that Agriculture Committee of the National Governor's Association. We'd like to see our committee work very closely with your committee to formulate the program, particularly the development of those international markets in the Far East. Particularly here in the West. We can see the opportunity in the Pacific Rim countries to open those markets to a greater degree than ever before.

Once again, it's dealing with international policy, international trade, foreign affairs, and we're now faced with sacrificing our agricultural grain production and export as a result of that conflict with fibers, the cotton that—or what was it, the fabrics that were being exported to the United States, and the embargo of that. So it's a very critical issue that we can work very closely with you. We've got some very talented men representing the agricultural States of this country. And we'd like to be able to work with you.

Senator ABDNOR. Thank you.

Senator SYMMS. Governor, I'll just ask one last question. I don't want to prolong this either, but Secretary Block has asked us in the Congress to give him more flexibility on adjusting prices and loan rates. Of course, the argument they use is that the administration wants to have more authority so as to be more flexible in the export business. Do you share that opinion? Should we give the Secretary of Agriculture more flexibility to adjust those prices? I don't want to put you on the spot, but—

Governor EVANS. No, no, you're not really putting me on the spot at all because I'm an administrator myself. I'm the executor here in State government. And I think it's imperative that we have as much flexibility, not only at the State government executive level, as well as the congressional and Federal level. If we do not allow some substantial leeway, then they're not going to be able to make the necessary moves that are actually working in the interest of agriculture.

And as long as that's the overall goal, we should all pull together and give that flexibility.

Senator SYMMS. I don't mean to put words into your mouth, but just as a recap, you're saying if we're to spend x number of billion dollars on farm programs, that you'd prefer to see the emphasis put on getting the stuff out of the country and exporting it rather than supplying management because—

Governor EVANS. I think you're going to have both, Senator. I think you're going to be faced with some reduction in supply management, a reduction of acres of production of grains in this country. We're just oversupplying the market, and until we can develop that oversea market, it really is an international issue in that we've got to raise the standard of living of the Third World countries to a level that they can afford to buy the food. And somehow we're going to have to stimulate worldwide economic recovery.

The last 2 years of this Federal recession has brought the entire country to its knees. Our entire world to its knees. And if we go ahead and move, move the standard of living all around the world, then it will be a natural flow of our agriculture production to satisfy the needs of those hungry people.

Senator SYMMS. Thank you.

Senator ABDNOR. Thank you. Thank you very much, Governor.

Governor EVANS. It's great to have you here and bring the committee hearing here.

Senator SYMMS. Well, thank you. We have found—I've also held highway hearings in different parts of the country this year, and what we find is that Congress gets a different perspective when we are out in the country than when we have a hearing in Washington. Normally the same people end up testifying, and it's certainly helpful to have a broader range of viewpoints.

Politically, in farm policy there's enough blame to go around for everybody. We've had embargoes under Republicans and Democrats that have really hurt our foreign trade. We've had supply management programs, the dairy support program which is now really in a mess. Our cattlemen suffer from PIK because we try to force the grain prices up. It helps the grain farmer, but hurts the cattle feeder.

The dairymen are subsidized where the cattlefeeder is not. It's very complicated, and there isn't a simple answer.

I was going to ask you one other question, and then I'll let you go.

In general, in the past few years, we've had weak production when we have acreage controls. Senator McClure has long argued that we should not have acreage controls. That we should have production controls and allow people to have a quota so that they can grow so many bushels of wheat and be in the program. But his experience is based on the relationship with his family and the farm in the Grangeville area. It's not unlike your part of the State where there's a lot of wheat production.

But would you agree with that as a concept; that we should have production controls as opposed to acreage controls because like the PIK program we've reduced production by 80 million bushels, and then somebody else increases it. Our farmers seem to be ingenious enough that they can pour the fertilizer on the field, and take the poor field out. Would you want to make one comment on that?

Governor EVANS. I think we have to maintain some flexibility in that area. No. 1, obviously what we're trying to get to in any controls of supply is really a production control. And as you point out, we're most ingenious as farmers when we take out acres in the least productive acreage that we take out, and we produce the very—the greatest amount on the few acres we have left.

Obviously, that's the direction to go if we can get production control in the process. But I think it's going to be a very difficult challenge for you to secure the support of agriculture on a national basis to achieve that particular goal.

Senator SYMMS. Thank you very much.

Governor EVANS. You're welcome.

Senator SYMMS. We appreciate your being here. We have a panel called for, but the way the table is set up here, it isn't going to be easy to get a panel up here.

Is Max Hanson in the room?

Tom Ballow, executive director, department of agriculture, State of Nevada. Is Tom here?

OK, let's get to the university crowd. Is there any State director here? Keith Kelly or Keith Ellis?

OK, we'll go to the university. We've got Neil Meyer who will be here from the University of Idaho speaking for Mr. Miller. Mike Martin and Wayne Thomas. Mike Martin is from Oregon State University, and Smith Greig is here from Washington State University. Why don't we get all the witnesses up here, and we'll allow each of you to make a brief statement; and then we'll have questions from all of you. I apologize for the setup here.

First, let's hear from Neil Meyer from the University of Idaho. We'll have a little vandal preference here.

STATEMENT OF NEIL MEYER, COLLEGE OF AGRICULTURE, UNIVERSITY OF IDAHO, MOSCOW, IDAHO

Mr. MEYER. Thank you. I appreciate that. Yesterday they asked me my favorite song, and I told them Idaho, of course.

What I would like to do because I think you're all familiar with a lot of the problems we have. And I'd like to just point out three.

I would like to suggest that of the major problems affecting agriculture, some of them—two of them, at least, that I will bring up fall outside of traditional agriculture policy. One of these is obviously—or at least appears to be obviously, is a problem with the fluctuating exchange rate. And I view that as a result of the monetary fiscal policy. I think if we trace through the effect that the high-interest rates have on the demand for dollars to invest in this country, they always have a very depressing effect on our wheat prices as Governor Evans mentioned.

Approximately 90 percent of Idaho's wheat is exported. A number of other commodities are lower, but the exports are still important. But that has a very price depressing effect on things at the local level.

The second point, which you've already talked about is the competition in world production. Argentina's production is up 12 percent for this year, at least planted acreage. The Canadian production is up 6 percent, and the Australian plantings are up 42 per-

cent. So there's a potentiality of having a good supply of wheat in the world.

Now, that to me suggests that we need to look at loan levels that are lowered to take away that incentive. At the same time, we do need some type of loan levels to insure cash flow for the farmers.

Now, most farmers went out in the midseventies and geared up to produce to feed the world. They responded to a plea of government policy. They did it very well, and now they are having to service that debt load. And the example in the paper shows that a 9 percent cut in price requires them to increase their production by 21 percent to maintain the cash flow to pay their debts.

The last point I'd like to emphasize is to raise the question of why agriculture, and particularly export agriculture should be called upon to support the merchant marine industry, which is an industry for national defense, which presumably we all benefit from. In other words, I'm talking about cargo preference, and should agriculture be required to bear that burden, or should that be borne out of national defense or some other area that's covered by, you know, by the total government rather than just the given sector.

I'd like to emphasize within the dairy industry, you've already mentioned the fact that we have oversupply. Somehow we've got to get the production down. And I personally believe that we either have to increase demand or decrease supply, that's not independent of prices. And somehow we've got to bring the price down to do both of those.

The specific point that I would like to see in the new policy, it must provide a cash flow to the farmers as they continue to serve that debt, which they undertook in response to government incentives that were provided in the midseventies. We need to lower support prices to a level that discourages the expansion in foreign countries. And I realize that's a tightrope one, but you ask an exact number, and I can't tell you. But it's a tightrope because we've got to make it so it's not profitable. At the same time, we've got to provide the cash flow to our farmers, or we're going to break them. It's a difficult question which you gentlemen are going to have to work with.

On the question of the strong dollar, certainly we in Idaho have a very definite disadvantage. A strong dollar discourages exports and encourages imports. Both of which create problems in employment, price levels and all those things. I think that has to be dealt with in a broader context than strictly an agriculture policy. I think somehow the burden of the requirement to ship dry bulk commodities, namely grains in U.S. merchant ships, that has to be changed. And that national defense burden should be borne by the total society rather than just agriculture.

And the last one, you've already alluded to is the question of contract sanctity. We've had, what, five or six different embargoes over the last 10 years in one form or another. I ask the question quite often of the public, how many times would you go to the same diesel dealer when he turned you away. It wouldn't be long, and you'd figure out another source of supply, even if it costs you more money. And I think that's a question that needs to be dealt with. Thank you.

Senator SYMMS. Thank you very much. We'll let all the university panel testify, and then we'll have some questions for you. Mr. Meyer, thank you very much for a good statement.

Mr. Mike Martin from Oregon State University.

STATEMENT OF MICHAEL V. MARTIN, DEPARTMENT OF AGRICULTURE AND RESOURCE ECONOMICS, OREGON STATE UNIVERSITY, CORVALLIS, OREG.

Mr. MARTIN. Thank you for inviting me over to Idaho. It's nice to be over here where it's sunny and not raining as it is in the valley.

Senator SYMMS. Glad to have you here.

Mr. MARTIN. I'm sorry I don't have a prepared statement. I was called upon to substitute for people higher up at the last moment.

Senator SYMMS. All right.

Mr. MARTIN. Let me just quickly run through and summarize what I'd like to mention to this group.

First, or basically the theme of my statement is that the challenge before Congress and before you Senators is to really create a first generation of agriculture policy. What I'm suggesting is that we cannot attack the next generation of agriculture policy in a piecemeal fashion. What has evolved for students of the history of agricultural policy is a patchwork of programs which address short-term issues and then were modified as conditions changed.

What we have today then is a quiltwork program which is not comprehensive or comprehensible in my view. And I think that's a substantive problem of agriculturalists and our trading partners understanding what it is the United States is trying to do with agriculture. That is, we don't understand it ourselves. We have contradictions and conflicts within that policy, and they need to be resolved. And it's a hell of a challenge, I must confess.

I make the argument that we must change that for at least four observations. And let me just quickly run through those, and then let me outline four priority areas that I think Congress must address.

First, agriculture is now a heterogeneous industry sector. It wasn't 50 years ago, it was much more homogeneous. But today it is a broad mix of producers, suppliers, traders, merchants, consumer interests, and a variety of other individuals who are organizations who are involved in what we call agriculture. And therefore, any program which affects one in one way or another affects the other.

As was pointed out by Senator Symms what's good for the wheat producer in North Dakota may not be good for the wheat producer in Idaho. What's good for the cattle rancher in Oregon may not be good for the corn producer in Nebraska. What's good for the vegetable farmer in California may not be good for the consumer in Chicago. So we have this problem of a tremendous heterogeneous system.

Second, contemporary agriculture is fully integrated into the broader national macroeconomy and the global economic milieu. As Neil Meyer pointed out, in the last couple of years I think anyone who has observed would argue that monetary policy has got a greater impact on agriculture than what we call agriculture

policy. And not simply the exchange rate that has been strictly detrimental to the international trade development, but a variety of other ways that has penalized agriculture. And I think more severely to the society as a whole.

Transportation policy, cargo preference decisions or that set of policy are decisions about users fees, waterway development systems, deregulation, all of which have had a tendency to destabilize agriculture in some unique ways.

Third, our fundamental comparative advantage in agriculture, our resource base is becoming increasingly fragile. Our water resources are being depleted in some parts of the country, and are not fully usable in others. We're facing problems with severe, and I think intentionally severe in certain parts of the country, soil erosion as a result of monoculture, agricultural practices which are forced upon the farm by economic conditions, and which we have not addressed I don't think very effectively.

Again, we have a patchwork of programs to deal with soil conservation. They tend to be national in scope, but the problems tend to be regional. And so, we need to address that.

And for the fourth observation is that over the last 50 years agriculture has evolved as a valued industry. It buys commodities from outside of agriculture, brings them to the farm, converts them to raw food and sells them to producers. And if you look at that chain of production and distribution, agriculture—the production of agriculture, the farmers are the most competitive. And in a sense, in the weakest competitive position. They face oligopolies on one side and oligopsonies on the other. And as a result, all instability in the system tends to be reflected back to the farmer. That structural problem is inherent in the system, but is also part of the root problem that farmers face today. So what do we do?

Let me quickly run through four things that I think are important. They reflect only my interests, and certainly are not complete.

First, I think we need an explicit policy with respect to agriculture exports. Now, we have taken agriculture exports as axiomatically good. But there are some damages that come from agriculture exports. And one is that it increases price instability. We've seen world market prices or stability reflected back on U.S. farmers in large magnitudes over the last 10 years. While the average price of farm products rose almost double in the 1970's relative to the 1960's the price instability more than tripled. And that instability is a risk.

Those of you who farm know that risk is a cost of doing business. And that's a high cost for small farmers. I'm not suggesting that we back off exports, I think exports are indeed the growth market. And if we're going to rejuvenate the health of agriculture, it's going to come from some export growth. But I do think it's important that we decide explicitly the extent to which we're going to be involved in international markets, and recognize both the benefits and the costs, and certainly deal with the cost side to the extent we can.

I think also we have to integrate our agriculture trade policy and international development policy. Governor Evans pointed that out, I think, exactly correctly. The problem with agriculture ex-

ports today is not simply promoting them overseas, the problem is that 49 percent of the world's population live on an annual per capita of less than \$330 a year. That 85 percent of the ports of the world cannot accommodate the type of ship we ship from here, and as a result, the system which we export from simply is not keeping up very well with the potential growth markets. And so, all the promotion in the world will not solve those problems until we develop sound agriculture trade and development policies which interface appropriately. And I think that maybe should be the top priority for the next two decades.

I think we need to develop, as I suggested earlier, a very sound research management policy. And it must be rooted in the notion that the resource management problems are regional in nature. And therefore, must be sensitive to each region's unique problems and address those in a flexible manner.

And I will say parenthetically, though it's not part of my testimony, that I'm very concerned about USDA's decision to remove their ERS staff, their economic research staff from field locations and centralize them back in Washington. I think that's exactly the wrong thing to do if you put input in the policy process. And I think the Senate ought to look into it. But barring that from happening, I'm going to just say that it's personal because I believe that that provides some sensitivity to the unique problems of various regions for the policy analysis process.

And finally, what I want to suggest is that we have to reconfront the problem of world hunger. The World Food Conference of the 1970's addressed a very important problem. And that is incumbent upon the United States to do something about it. The OECB countries made a pledge, and it's been largely forgotten, I think, in the last 6 or 8 years. Yet President Carter's Commission on World Hunger says, yes; that there are still 800 million people that are severely malnourished. And maybe another half a billion who are very close to being severely malnourished. And we have to come to grips with that problem. We rank no better than 13th in proportion of our food—or our proportion of GNP that we give in aid. And I think that's a sign that we need to rethink where we stand on that.

Well, let me conclude by restating what I said at the outset. That is, that I hope this generation of agriculture policy will be the first generation, true generation of agricultural policy. Not a mix of programs, but a comprehensive policy.

I suspect that our democratic capitalist system is not very good, if it has weaknesses, it's not very good at those long-run planning, or long-run foresighted program approaches.

What I certainly applaud are the efforts that you folks are doing. I appreciate your coming out in the country and giving a chance to a professor to get up and say something to a group besides students, though I enjoy that as well.

Sorry for not being briefer. Thank you very much.

Senator SYMMS. Mr. Martin, we are going to try to have all of the witnesses testify in each panel, and then ask questions. But would you restate what you said about the ERS?

Mr. MARTIN. Yes. The Economic Research Service of USDA has had field staffs at various universities around the country. And

that's gone on for a long time. At Oregon State we happen to have about six people. There are several at other places as well.

Senator SYMMS. Do you have any at the University of Idaho?

Mr. MEYER. Well, some of the people at Aberdeen are in that. Same at Kimberly.

Senator SYMMS. OK.

Mr. MARTIN. And USDA has decided to centralize those people, I think for budget reasons, in Washington, D.C. Some of us who work closely with those people, and I've worked in sort of a merged project with several USDA economists, and I think it gives the States a chance to have their unique problems filtered in one way or another to the USDA people who do the analysis.

I'm not privy to all the input that went into that decision, but from my own standpoint as a researcher and one who wants to work with the Federal Government, I think it adds to the critical mass of the analysis we get. I'm concerned that that pull out is going to be damaging.

And I've expressed that to the people in Washington, D.C. My department has done the same. Other university people have done the same. I don't know where the decision stands, but at least for the moment, they're going ahead. And I threw that in parenthetically because that is not a major policy issue. But I think if you're going to make good policy, I hope you'll take good information. And I think it's part of giving that good information.

Senator SYMMS. Well, I think it's a logical thing. I've always said that Washington, D.C., is 7 square miles surrounded by reality. So I think almost any policy we make outside Washington is better than what we make in Washington.

Mr. MARTIN. And having come from the Midwest myself originally, from Minnesota and now living on the west side of the Rockies, I've discovered that for many people they think that the agricultural world ends somewhere in eastern Colorado. And it's nice to remind them that we do produce important products out here.

Senator SYMMS. Right.

Mr. MARTIN. And that message gets back to folks that keep track of that.

Senator ARDNOR. You mentioned Minnesota. We've had Mr. Schuh appear before our committee in Washington a couple times. He brings us back to reality.

Mr. MARTIN. I worked with Mr. Schuh last year for a year, and he brings me back to reality frequently as well.

Senator SYMMS. Thank you very much. We'll have some questions in a moment.

On the witness list, we have H. Alan Luke, but I've been informed that Mr. Smith Greig—are you testifying for Mr. Luke, or is Mr. Luke here?

Mr. GREIG. Well, Mr. Luke and I were going to testify together, but he was to appear after I was to appear. So with your permission, I'll go ahead. He can't get here until about 10 o'clock, I don't think.

Senator SYMMS. OK.

Mr. GREIG. He knows what I'm going to say, so if you have him on the program later, it will be fine.

Senator SYMMS. OK. Your entire statement will be included in the record. Please go right ahead.

STATEMENT OF W. SMITH GREIG, PROFESSOR OF AGRICULTURAL ECONOMICS, WASHINGTON STATE UNIVERSITY, PULLMAN, WASH.

Mr. GREIG. Thank you. First of all, I appreciate being here, appreciate this opportunity. I do not necessarily represent Washington State University, I represent only myself and Mr. Alan Luke, perhaps.

Some time ago I wrote a paper entitled "A Proposal for Changes in the Rules Under Which Farmers Produce and Market Agricultural Products." I first presented this at the Western Agriculture Economics Association in 1973. And at the encouragement of some of my friends, I recently shared this document with the Senate and House Ag Committees. As a result of this, one Senator had this proposal reviewed by the Congressional Research Service. And the Senator then asked me to specifically prepare a dairy policy statement.

I will not go into any detail on this proposal for changes in the rules under which farmers produce and market commodities. Essentially, I say that Congress has been trying to fine tune an unworkable program for the last 50 years. And that a completely new approach is needed and desirable. And that would be one of changing the system so the farmers have some control themselves to have an oligopolistic production marketing system rather than an atomistic marketing system. I will say no more on that paper.

I would like to go into some detail on the second paper which is "A Proposal for Self-Determination in Dairy Production." I will not read the paper, I'll just pick some highlights from it.

But at no time in recent history has milk production exceeded commercial sales so greatly and at such a cost to taxpayers. The current governmental program will cost from \$2.3 to \$2.5 billion a year. Well, this proposal is for a self-determined dairy program that would create stability, insure adequate production of milk and dairy products at fair prices, promote the greatest possible efficiency among milk producers and the dairy product industry, drastically reduce or eliminate the need for Government price support programs, and center the authority and responsibility for a realistic and equitable dairy program in the farm producers—or the dairy producers.

Essentially, we will change the system from one of price supports to a self-determined and largely self-administered program from the dairy producers. However, we would keep the complete framework of the current Federal and State milk market orders.

Fundamentally, the basic concept of this proposal is to shift governmentally controlled and price supported systems to a self-correcting free market system under a program organized, planned, and administered by the dairy producers.

Essentially, the program would involve this sort of process: All dairy producers would by law, submit a first intention to produce milk for the next year, or for a certain period of time. The total results—the result of the total production would be tabulated in

the national office, and an estimated price made, premarket price determined for that estimated production.

All right, this information would be sent back to all the dairy producers. And if the volume was high and the price was low, some people would cutback. And if the volume was low and the price was high, some people would come in. So you would iterate this process. A flow from the dairy producers into a national headquarters, tabulate total production, estimate price, send it back to the farmers. You would iterate this process three or four times until price and supply, supply and quantity demand are in line, and you had a price which was acceptable to the industry.

So it would be a self-determined program rather than a governmentally controlled program. Once you had the price in line with supply—the quantity demand and supply in line with the reasonable price, then the system would be frozen. Then by law, each dairy producer could produce only what his last intentions to plant were. Then, the whole system would be a free market price system.

We're only really talking about the price for manufacturing milk. The price for grade A milk, grade A fluid milk is centered on market orders usually adjusted to the manufacturing price. So the only price we're determining under this system would be the free market manufacturing price for milk.

Now, we recognize that you couldn't put this program into effect immediately. It would be a disaster to the dairy industry because there's probably a surplus of 1 million dairy cows. There's a surplus now of 16 to 17 billion pounds of milk.

We propose that a system like this somehow, some way, Congress has to get done to surplus milk production. I don't think you can keep buying milk at \$2.3 and \$2.5 billion a year.

Once you could get the surplus milk production down to say around 5 billion pounds a year, then you could put a system like this into effect. It would be a farmer self-controlled plan with no price supports.

We believe this system would work, this paper by myself and by Mr. Alan Luke. We think this program would work on dairy. And with slight modifications, we think it would work on all the price support items, including wheat, corn, rice, cotton, and grain sorghum. The other paper I have submitted uses wheat as an example.

Senator SYMMS. Do we have that?

Mr. GREIG. Yes. The other paper is "A Proposal for Changes in the Rules Under Which Farmers Produce and Market Agricultural Products." I submitted two papers. Here's the second paper.

Senator SYMMS. Thank you. Without objection, we'll put the papers in the record.

[The papers referred to follow:]

A PROPOSAL FOR CHANGES IN THE RULES
UNDER WHICH FARMERS PRODUCE AND MARKET
AGRICULTURAL PRODUCTS

W. Smith Greig^{1/}

The Need for New Rules (Laws)

The rules (laws or lack of laws) under which farmers produce and market agricultural commodities are both archaic and obsolete. The rules of the game should be changed.

Our current rules in price supports of wheat, corn, grain, sorghum, cotton, rice, and milk cost taxpayers from around \$5 billion a year to as high as an estimated \$15 billion a year in 1983. Government, since the mid-1930s, has been trying with a mix of acreage controls and price supports to moderate widely fluctuating production and prices of our major agricultural commodities. The sum of the results is an ever-increasing cost of governmental payments and governmental controls--and, at present, disastrously low farm prices.

Government for nearly 50 years has been modifying and trying to fine tune the acreage control and price support payments on our major crops and the price of milk under different governmental programs. And, the 50 years of governmental effort in these exercises have resulted in monumental costs and, in my opinion, monumental failure.

The very concept of governmentally controlled acreages and price supports in agriculture is fallacious within itself and runs counter to the concept of the American free enterprise system. Rather than continuing to try to fine tune this apparently unworkable system, the complete concept should be junked and a more efficient and equitable system of production

^{1/} Professor of Agricultural Economics, Washington State University, Pullman, Washington 99164. February 20, 1983.

and price determination should be instigated. The following is a proposal for a new system of production and marketing of agricultural commodities, which can be very effective without governmental acreage controls or governmental price supports.

In most forms of business endeavor in the U.S., managers, with research, can to a large degree pinpoint competitive efforts. However in farm production, a farmer, who competes nationally and internationally with millions of other farmers, has neither the tools nor the funds for even a gross estimate of competitors' actions and their possible consequences. Competition in most U.S. business endeavors is largely oligopolistic while farm production is atomistic.

Under an atomistic farm production system, in the production of any single crop (or commodity), individual farmers have practically no information concerning total plantings in their region, in the U.S., or in the world at the time they plant their crop. When individual farmers plant they have practically no information on total quantities that might be produced and, therefore, little or no information on expected price levels and on expected gross or net returns (exceptions are crops produced under current U.S. governmental price supports or acreage restrictions--and these programs will be eliminated as unnecessary and/or undesirable).

In contrast to agricultural production, in business and in most forms of production or manufacturing, if errors in information or analysis are perceived, the corrections or adjustments can begin almost at once. The production can be stopped immediately, curtailed, or speeded up. This is not the case in agricultural production; effective changes can be initiated only annually on most crops and only after a longer period on some crops and commodities.

In agricultural production, as a result of lack of information, supplies of many crops (commodities) can fluctuate widely, causing great annual (or longer) fluctuations in prices, profits, and losses.

The uncertainty and widely fluctuating prices exact a cost someone must bear--either consumers, farmers, government, or all three. Many studies suggest that the total quantities of food needed in the U.S. would be produced at lower but more certain prices, than under our current systems.

The U.S. needs to change from atomistic decision making by millions of farmers to a system of oligopolistic decision making at the farm production level. Please Note! The concept is for oligopolistic decision making not monopolistic decision making. Most of non-agricultural production decisions in the U.S. are oligopolistic decisions. Our American free enterprise system is largely a system of competition among oligopolists.

The U.S. needs an oligopolistic farm production and marketing system with some limited controls--mostly an informational system that farm producers can voluntarily react to, and some control by government to enforce what farm producers have voluntarily agreed to do.

This paper is the base line for a proposal for "A Strategic Informational Marketing System and Controls"---(SIMSAC).

SIMSAC is designed to attain the following objectives:

1. Eliminate the costly farm programs of acreage restrictions, price supports, storage programs, etc., of our major crops of wheat, corn, grain sorghum, cotton, rice, and milk. Other agricultural commodities could also easily be placed under SIMSAC.
2. Provide a fair value and fair profit to producers and marketers.

3. Dampen the tendency toward over production, widely fluctuating production, and widely fluctuating prices.
4. Permit shifts in location of production to least-cost areas.
5. Be a highly competitive system, where production decisions are made by industry under an oligopolistically competitive system.
6. Be a system under which consumer interests are protected.

Assumptions for SIMSAC

SIMSAC would be based on the assumptions that producers (farmers, marketers, processors) and consumers are rational economic individuals. The second assumption is that schedules can be developed to predict price-quantity relationships for any given sized crop. Further, it is assumed that regional or area price-quantity relationships can be developed with a reasonable degree of accuracy. (These assumptions will be explained in more detail later.)

Mechanics of the System

The mechanics of how SIMSAC would work will be illustrated using an annual crop--wheat. A system for milk requires only some simple modifications.

Each major wheat-producing state or region would have a Regional SIMSAC board (Figure 1). For example, there might be 10-12 state or regional boards. Further, there would be a National SIMSAC board for wheat. The regional and national boards would consist of producers, handlers (storage operators, shippers, processors, exporters) and consumers.

Well before the planting season for wheat, potential wheat producers would send to their Regional SIMSAC their First Wheat Planting Intentions. The Regional SIMSAC tabulates acreage times normal yields in

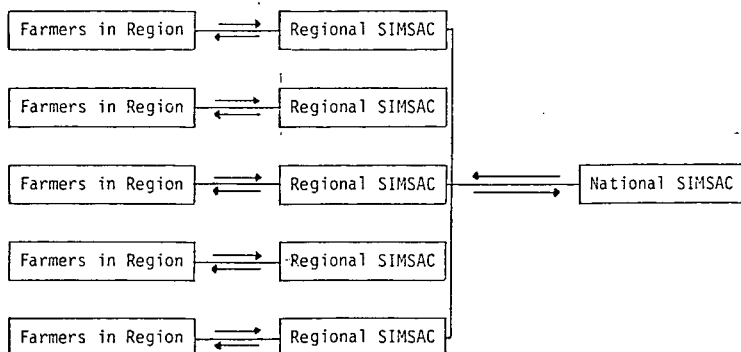
FIGURE 1. Organizational Chart for SIMSAC

Individual FarmersPlanting Decisions
(Acres)Regional SIMSAC

Summarization, interpretation, transmission of data between farmers and National SIMSAC. Recommendations to Regional Farmers.

National SIMSAC

Summarization of expected production, price predictions, recommendations to Regional SIMSACS. Final approval of planting intentions--subject to veto by Secretary of Agriculture.



its region and sends it to the National SIMSAC board. (The ASCS office in each county has detailed data on wheat acreages by farm and average yields from current price support programs.)

National SIMSAC tabulates projected U.S. wheat production and makes price predictions based on carry over, potential U. S. and foreign supply, U. S. demand, foreign demand, consumer income, competing crop supplies, etc.; i.e., National SIMSAC makes a U.S. and regional price prediction based on U.S. farmers' First Intention to Plant wheat. (Again, I shall return to this later.)

National SIMSAC reports total expected wheat production to all Regional SIMSACs and projected National and Regional prices. The Regional SIMSAC advises all wheat farmers in the region of the projected outcome of the First Intention to Plant. Each intention to plant is legally binding on each farmer. At every iteration of the process farmers, by law, must plant exactly that acreage they specified in their intentions. National SIMSAC or Regional SIMSACs may suggest to their farmers that expected production is too high or too low, but the final decision rests with the farm producer. For example, any region can suggest another iteration of the process or suggest a Second Intention to Plant.

The process is repeated under a Second Intention to Plant--now farmers have some idea of regional and national potential production and expected price. Some farmers and some regions may want to increase intentions to plant--others may want to reduce acreages, depending on whether it appears more profitable to do so or not with fuller information.

The process is iterated several times until the system is in apparent equilibrium, and then National SIMSAC freezes the system. However, the U.S. Secretary of Agriculture has veto power over stopping the process.

When the process is stopped, then farmer must, by law, plant exactly the acreage they specified in their last intention to plant. The major role of government is in enforcing the law;--i.e., see that no one "cheats" on acreages planted.

Once acreages for individual farmers are decided and this acreage "enforced" the complete marketing system reverts to a completely open market system. There are no guaranteed prices, no governmental price supports, storage programs, etc.

Who Supervises the Iteration Processes and Price Prediction Analysis?

The complete process is an industry process--growers make the decision regarding acreages and price predictions and must live with the results of their own decisions. Government may assist in the process--both of data tabulation and price projections--but government does not control the system--except in the acreage enforcement.

Government may have veto power or approval power before National SIMSAC can freeze the iterations. This would only be used in rare cases when government considered that consumer or national interests were not being fully considered.

The Regional and National SIMSAC boards are facilitating rather than controlling or supervisory rather than directing. The ultimate decisions are farmer controlled.

Time Involved in Iterations

Modern communications systems and use of computers for price prediction models could feasibly make the time involved in obtaining an intention to plant; regional tabulation of data, transmission to National SIMSAC, price prediction, and transmission back to Regional SIMSACs and the

nation's farmers nearly instantaneous. Certainly a complete iteration could be accomplished within a week.

Can Accurate Price Predictions Be Made?

Farmers, in their own minds, must have some price expectation when they plant their crop.

The individual price expectation may be based on a formal or informal price analysis. National or Regional SIMSACs would provide a formal model of price expectations based on work of highly trained industry economists (with backing of data and analysis from governmental sources). Farmers who disagree with the formal SIMSAC price expectation model, can make planting decisions based on their personal price expectations. the SIMSAC process does not guarantee its price predictions--price predictions are to facilitate decisions of farmers--not to control or direct the decision-making process.

Who Pays for the Cost of the System?

Government ASCS county and state office personnel could be used in tabulations of intentions to plant, and tabulation of normal estimated production. Governmental offices could be used to facilitate but not to control SIMSAC operations. No additional governmental employees above those currently employed in ASCS, the Crop Reporting Board, etc., would be needed.

Application to Other Commodities

The system can be modified to adopt to perennial crops such as citrus, apples, peaches, grapes, cherries, and such commodities as broilers, eggs, turkeys, pork, etc., if production and price fluctuations are deemed unreasonable.

Advantages of the SIMSAC Plan

1. The costs of current acreage control and price support systems would be eliminated.
2. The industry would control itself and, by acting through its own best interest, could control marketings to result in fair or just returns.
3. It would not prevent new entrants into the production or marketing system. Any grower (marketer, processor) could expand or enter the system at any time. Whenever growers (marketer, processor) decided they had a more efficient production (marketing, processing) scheme he could put it into effect at any time or any place.
4. Any value of restrictions on marketings would not be capitalized into the value of the assets of any particular group of individuals or particular farms or firms.
5. Industry locations would not be fixed. Production would be free to move to least-cost production areas. This would be a principal benefit of the plan, because it would encourage economic development, and it would encourage the least-cost production and marketing systems.
6. The plan would encourage interregional competition; any time competitive relationships might change, the results would immediately show up in changed regional SIMSAC offerings to plant or to market.
7. The governmental role would only be that of providing information and in enforcing what the industry has voluntarily agreed would be in its own best interest.
8. Consumer interests could easily be protected by the veto power of the Secretary of Agriculture, or, even by having consumer representatives on the regional and national SIMSAC Boards. The whole plan would offer free entry, severe competition among areas, and production in

the least-cost production areas. These aspects would result in reasonable prices to consumers through a system that would continuously call for cost reductions.

9. Even if the computer simulation model were not exact, some of the most knowledgeable people in the industry would serve on the regional and national SIMSAC boards. This would serve to adjust the simulation model to the practical aspects of the real world.
10. The plan would be highly flexible. It would tend to adjust automatically to changing production and to changing demands, tastes, and preferences of consumers.
11. In the case of annual crops, the industry would agree to planting (and agree to accept market prices for the resulting crop). Thus, there would never be necessity for non-harvest or diversions or marketing controls. Further, there would be no build-up of supplies with their associated storage costs and market dampening effect in succeeding years. Thus, SIMSAC would be an efficient system from the standpoint of resource use.

A PROPOSAL FOR SELF DETERMINATION
IN DAIRY PRODUCTION¹

W. Smith Greig and H. Alan Luke²

BACKGROUND

At no time in recent history has milk production exceeded commercial sales so greatly and at such a cost to taxpayers. The current (1983) government program of purchasing surplus dairy production will cost from around \$2.3 to \$2.5 billion not including hundreds of millions of dollars to transport, store, finance, and administer the program. Disposal of government-owned surplus products has created both domestic and international embarrassment. Clearly, a better approach is needed for stabilizing the dairy industry.

PURPOSE OF PROPOSAL

This proposal is for a self-determined dairy program that would create stability, insure adequate production of milk and dairy products at fair prices, promote the greatest possible efficiency among milk producers and the dairy product industry, drastically reduce the need for and cost of government price support programs, and center the authority and responsibility for a realistic and equitable dairy program on the U.S. dairy producers.

1 A policy proposal submitted to the Joint Economic Committee at the Boise, Idaho hearing, July 8, 1983.

2 Professor of Marketing and Agribusiness Management and Professor and Extension Dairy Marketing Specialist, Washington State University, Pullman, Washington 99164.

This proposal suggests a change from governmentally determined price supports to a self-determined and largely self-administered program for dairy producers. However, much of the framework of current Federal and/or State Milk Market Orders would remain under this proposal.

DETAILS AND SHORTCOMINGS OF CURRENT DAIRY PROGRAMS

Around 80 percent of the grade A milk produced and sold in the U.S. is regulated under Federal Milk Market Orders. Most of the other 20 percent is subject to State Milk Market Orders. Over-order prices are negotiated under most orders, thus fluid milk prices are not set (by and large) either by the orders, nor under the federal price support program. The price supports only apply directly to manufacturing milk, but the support of manufacturing milk (nominally to \$13.10 per hundredweight) directly may affect fluid milk prices. Around 138 billion pounds of milk will be produced in 1983--but commercial sales will be only around 121 to 122 billion pounds and the non-commercial quantities of 16 to 17 billion pounds will be removed by the government in the form of manufactured dairy products, ^{at} price support equivalents, which are yielding dairymen an actual return of about \$12.70 at average butter fat test. Total governmental outlays for production in 1983 are expected to be around \$2.3 to \$2.5 billion.

There are currently around 121,000 producers selling milk under federal orders and records of production of each of these producers is maintained by the Federal Milk Market administrators. State orders also have detailed records of their producers.

The efficiency, equity, and stabilizing effects of Federal and State Milk Market Orders are not questioned and these Federal and State Orders would remain basic operational units for milk production, pricing, and sales.

SELF-DETERMINATION VS. GOVERNMENT CONTROLS

Fundamentally, the basic concept of this proposal is to shift governmentally controlled and price supported systems to a self-correcting free market system under a program organized, planned, and administered by dairy producers.

THE GENERALIZED PROGRAM

This program of self-determination would be as follows:

1. All dairy producers would by law, submit a first intention to produce milk for the following year (or some specific time period);
2. Total U. S. production would be tabulated and an estimate of national free market prices would be made;
3. The estimated free market price would be sent to all dairy producers;
4. Each farmer would analyze potential profits and/or losses based on this "first" intention to produce milk;
5. With the profit and/or loss expectation, a "second" intention to produce would be submitted, etc.--that is, intentions to produce and the estimated price analysis would be repeated (iterated) until quantities produced would be in line with estimated needs and at a market clearing price. That is,

when a point is reached that free market prices would establish an equilibrium point between production and commercial demand;

6. Then, the process is stopped and, by law, each producer could only market the quantities they submitted in their last intentions to produce.

Prices for manufacturing milk would be a free market price, with no governmental price supports. Prices for Class I milk under Federal or State Milk Marketing Orders would be fixed, subject to negotiations for services and other over-order amounts, exactly as at present.

PROGRAM DETAILS

Some suggested details are as follows:

Producers would submit their intentions to produce through their currently organized Federal or State Milk Market Order administrator. While the controlling mechanisms are the farmer producers themselves, the facilitating mechanism for tabulating intentions to produce milk could easily be through existing administrative facilities. Order administrators have a complete record of past milk production by each grade A producer in their Order area. Intentions to produce for each Order region would be tabulated by an industry committee with assistance by and use of facilities of the Market Order administrator.

Results of each Market Order region would be sent to a national headquarters tabulation of national intentions to produce. It would estimate the national free market manufacturing milk price based on that particular intention to produce.

The National headquarters tabulations and price predictions would be industry controlled and operated--National headquarters could hire its own econometricians, milk marketing experts, or responsible consulting firms. It should expect facilitating governmental assistance, but not governmental control, in predicting free market prices that might result from any given iteration of possible production.

Increases and/or decreases in production would ultimately depend upon free market prices. The predicted prices for manufacturing milk are not guaranteed nor are they governmental support levels. The prices are predicted for planning purposes only. The actual price received would be a free market price.

The Federal or State Market Order committees could consist of dairy producers, processors, distributors and consumers, as would the National committee. With assistance and facilitating mechanisms supplied by government--but again, without governmental control.

After each free market price estimate for manufacturing milk, the National committee would send price estimates to each Federal or State Market Order region, and the regional committees would disseminate the results to each dairy producer. When the results of production intentions, supply, and prices are reasonably in line the process is "frozen" and each producer may produce only that specified in their last intentions.

REPEATING THE SELF-DETERMINATION PROCESS

After the self-determination process is initiated the true test is whether supplies of milk for manufacturing purposes are in line with

commercial demand. And, that a reasonable price is obtained with current production.

If supply, demand, and price for manufacturing milk are not reasonably in line, then at the discretion of the national committee, the complete "self-determination" process would be repeated. However, a minimum time lapse of at least three months must occur between "self-determination processes." After the initiation of the program and after the "bugs" are worked out it would be expected that the complete "self-determination process" would occur only from one to two times a year.

GOVERNMENT AREAS OF RESPONSIBILITY

Government areas of responsibility would be:

1. Supervision of the legal aspects--that is, to insure that no one cheats after specifying his final intention to produce. This would be very simple in that each producer's record of production is kept under the authority of existing orders. A producer would simply not be paid for any milk produced in excess of his last intentions to produce. And, a penalty would be charged for "under" production.
2. Facilitation of program processes--i.e., providing assistance in collection of tabulation of production intentions, price prediction models, dissemination of results to producers, etc.

ADVANTAGES OF A DAIRY SELF-DETERMINATION SYSTEM

1. The industry would control itself, and by acting through its own best interest, could control marketings to result in fair or just returns.

2. Costs of current price support systems would be eliminated.
3. The proposal would not prevent new entrants into the production or marketing system. Any producer (processor, distributor) could expand or enter the system at any time. Whenever any producer (processor, distributors) decided they had a more efficient production (processing, distribution) scheme, they could put it into effect at any time or any place.
4. Any value of restrictions on production would not be capitalized into the value of the assets of any particular group of individuals or particular farms or firms.
5. Industry locations would not be fixed. Production would be free to move to least-cost production areas. This would be a principal benefit of the plan, because it would encourage economic development, and it would encourage the least-cost production and marketing systems.
6. The plan would encourage interregional competition; any time competitive relationships might change, the results would immediately show up in changed regional intentions to produce.
7. The governmental role would only be that of providing information and in enforcing what the industry has voluntarily agreed would be in its own best interest.
8. Consumer interest could easily be protected by the veto power of the Secretary of Agriculture, or, even by having consumer representatives on the regional and national committees. The whole plan would offer free entry, severe competition among areas, and production in the least-cost production areas. These aspects would result in reasonable prices to consumers through a system that would continuously call for cost reductions.

9. Even if the price prediction models were not exact, some of the most knowledgeable people in the industry would serve on the regional and national committees. This would serve to adjust the model system to the practical aspects of the real world.
10. The plan would be highly flexible. It would tend to adjust automatically to changing production and to changing demands, tastes, and preferences of consumers.
11. The industry would agree to intentions to produce and agree to accept market prices for the resulting production. Thus, there would never be necessity for governmental purchases. Further, there would be no build-up of supplies with their associated storage costs and market dampening effect in succeeding years. If government decided that some surplus supplies of manufactured dairy products were necessary and/or desirable from the standpoint of national welfare, then government could buy and stockpile dairy products just as it does other strategic materials.

TIMING OF PROGRAM IMPLEMENTATION

The current surplus milk production is not to be directly blamed on dairy producers nor is the surplus necessarily related to Federal or State Milk Marketing Orders within themselves. Milk producers have responded as rational economic men to well-intentioned, but perhaps ill-advised, federal legislation concerning price support levels. The serious disruptions of reducing U. S. dairy herds by perhaps 1,000,000 cows should not abruptly and completely be borne by the dairy producers. Therefore, direct immediate instigation of a program of self-determination by dairy producers is not suggested.

But, as the dairy surplus is reduced, by whatever means Congress may suggest, to a level of an excess of around 5 billion pounds of milk per year compared to the present 16 to 17 billion pounds, a program of self-determination should be instigated. Contrary to past dairy policy legislation, a program of self-determination would be continuously self-correcting.

APPLICABILITY TO OTHER PRICE SUPPORT SYSTEMS

With slight modification, the proposal of self-determination in the dairy industry would apply to other U. S. price support programs including wheat, corn, rice, cotton, and grain sorghum.^{1/}

¹ See W. Smith Greig (1983). "A Proposal for Changes in the Rules Under Which Farmers Produce and Market Agricultural Products." White paper submitted to Senate and House Agricultural Committees. February 20, 1983.

Senator SYMMS. Now, let's see, Alan Luke is not here. Is Mr. Wayne Thomas, professor of the School of Agriculture, University of Alaska, here?

Wayne, welcome to Idaho.

Mr. THOMAS. Thank you very much.

Senator SYMMS. Alaska is the State which grows the biggest—what is it, cabbage?

Mr. THOMAS. Cabbage; yes, sir. We're known for our cabbage and other things.

STATEMENT OF WAYNE C. THOMAS, AGRICULTURAL ECONOMIST, AGRICULTURAL EXPERIMENT STATION, UNIVERSITY OF ALASKA, FAIRBANKS, ALASKA

Mr. THOMAS. Thank you very much for inviting me today. I've got a prepared statement that I gave to one of your aides, and I've got a couple of other things I'll give to you afterward.

I'm going to summarize some things. The first point I'd like to make is that I'm taking a fairly parochial view here today. I'm taking a view relative to the State in which I live, and as you are probably aware, we're not attached to the 48 States, and we do things a little bit differently there.

And the thing we're doing now is we're trying to develop our agriculture, whereas there are parts of the United States that are trying to reduce the amount of acreage in production. We're in the process of increasing ours.

The State has as of 1978 around 20,000 acres in production, and it has since sold over 100,000 acres of State land for agriculture development. And this year, we have something in the new lands of

about 18,000 acres in production of the new 100,000 acres that we're in the process of clearing and other things.

The question that might be asked by you or anyone else who wonders why in the world we're doing this at a time when everyone else is going the other direction; an easy answer is that when the State began its agriculture policy development for new agriculture in 1976, the Federal policy was fence-row-to-fence-row production. And so we started at a time when everybody was in an upbeat, and now we're at a time when people, policymakers, and farmers in the United States are generally at a downbeat situation. We're still in an upbeat situation.

The State has invested \$60 million to date in agriculture development activities. And these investments include farm loan programs, roads, electricity, and project administration.

The primary reason for doing all of this is for in-State market. We only produce approximately 10 percent, and I think that's a higher figure of what we consume locally. So the prime justification of going through with this is to expand the in-State production.

The second and major justification, I think, is we have such a small private land base in Alaska, that we're trying to expand it and create some more economic development beyond the oil development.

We're looking at the possibility of going to about 1 million acres at the most by the turn of the century, which is less than 7 percent of the cropland found in the State of Idaho, so it's not very big.

I'll just go through this briefly because you've got it in front of you.

There's a table in the prepared statement that indicates the types of activities that we're going to try to develop. Feed grain from the standpoint of slaughter cattle and market hog development and forage production. We do expect to do a little exporting of oilseed crop which is called rapeseed, which we can grow very similar to—we have very similar climatic conditions in the internal valley of Alaska to the Northern Peace River country of Alberta. And they're a major rapeseed grower and producer.

And we also produce barley. So the two crops that will be the bulk of our production will be rapeseed and barley.

Given the background I've given you, the brief background, there are several programs which could be helpful. And again, I take a parochial view. The reason I've done that is because you've gotten a lot of good advice from people here and other places regarding the major national issues as they affect the bulk of the farmers, so I'll take the smaller view.

The key issue, as far as we're concerned, is the continuation of the nonrecourse loan program, the deficiency payment program. We think from the standpoint of our farmers here and our farmers in Alaska, and I think generally nationally, we think it's a key program because it does provide a low side risk—it limits low side risk to the farmer.

We would argue that from an efficiency standpoint, where you place the loan payment is the key issue. And we've discussed that earlier. And that's a difficult technical question. But we think it's a very important program.

The State of Alaska has just enacted, the legislature has, the governor is just about to sign it, we assume, a State nonrecourse loan program to cover new farmers in Alaska that are not eligible, basically for the Federal program. And the plan, although it's only a 2-year program is to continue that program for the new farmers with the expectation that as Alaska farmers establish themselves, they'll participate in the Federal program.

The other important area that we're most concerned about is actually agricultural research and extension activities. Research is particularly important. You get a perception from Washington that agricultural research is less important than it used to be. We disagree, particularly for our case, but I think nationally it's the case also.

We have a small grant from the Agriculture Research Service to do conservation tillage work. And that's work that's important to us, and we think important to Northern-tier States.

We have other activities that we do with our research. And what we're trying to do is prove farm efficiency. And I'm beginning to pick up some things in the press that farm efficiency is less important to us. And I disagree very much. I think if we're going to remain competitive in the world that agricultural research is very important. At the Federal level, and at the State levels as well. And again, the point was made earlier, so I don't need to emphasize that again too much.

We also have received some substantial help from a company called the Soil Conservation Service, U.S. Department of Agriculture, which you are familiar with. We consider that a very important agency, one that is probably not very much politically exciting, but we think exceedingly important to the agricultural industry. We recommend its support.

We have a small problem relative to Federal range land in Alaska. We have an industry—a commercial industry of reindeer production. We have continuing battles between various groups, particularly the bureaucracy between Federal Government over not necessarily how to manage the land, but how to manage wildlife versus commercial species. It's a problem that most Western States have. It's a common problem.

We're of the impression that the possibility, the idea that one could declare certain areas, priority ranges for either wildlife, recreation and/or commercial livestock or reindeer activity, that's an issue that I think we need to, at least as far as Alaska is concerned, need to spend some time with—the Federal Government needs to make better—to study that think and make some more decisions on it.

I have a paper on "Public Policy in the Future of Alaska Reindeer" that I'm going to give you for your information.

Concluding remarks, we think the Federal programs are important, particularly the nonrecourse loan program for stability of the agricultural industry, and which you still want to emphasize the efficiency point. So you have to construct a program, difficult to do, that gives you some stability within the industry as well as creating efficient agriculture.

We are a strong commitment in Alaska, and I think you should nationally, the Federal Government should reward research and

development activities. Without that, I think mature agriculture will become a fairly inefficient agriculture.

We would like to see some more consideration of priority use on range land policy in the United States. Thank you.

[The prepared statement of Mr. Thomas follows:]

PREPARED STATEMENT OF WAYNE C. THOMAS

Thank you for inviting me to testify on the next generation of farm policies. I am an agricultural economist with the Agricultural Experiment Station, University of Alaska-Fairbanks, so you will not be surprised that my emphasis today will be on how those policies may be beneficial to Alaska agriculture.

The state of Alaska has begun an expansive agricultural development program. Since 1978, when we had a cropland production base of less than 20,000 acres an additional 100,000 acres has been sold to farmers and is either in some stage of land clearing or in the first years of production (see Lewis and Thomas, 1982). This year, approximately 18,000 acres have been planted in barley, grass seed, and hay from these new lands.

It may seem strange to you that Alaska is increasing its agricultural production while many Federal farm programs are currently attempting to reduce U.S. agricultural production. Remember, during the 1970s, U.S. national policy was fence-row to fence-row production and Alaska began its agricultural development planning in 1976. The state has invested around \$60,000,000 in farm loan programs, roads, electricity, and project administration.

Alaska agriculture is trying to serve an in-state market that obtains less than 10 per cent of its food from local sources. Finally, as you might expect, agricultural development is a popular concept with Alaska's citizens as a means to private land ownership and economic development.

You might ask, what does the future hold for Alaskan agricultural development? Alaska production, measured on a national scale, will not be large -- even by the beginning of the twenty-first century. At most 1,000,000 acres of cropland might be in production, but the figure will probably be closer to 500,000 acres. By way of comparison, 1,000,000 acres

is less than 7 per cent of the cropland found in the state of Idaho. Second, the bulk of Alaska agriculture will be sold inside the state. Livestock production and processing will expand, hay production will serve a relatively large pleasure-horse population as well as commercial livestock; and production of potatoes and other vegetables will increase for in-state consumption. Alaska will probably export some grain and rapeseed, an oilseed crop, beginning within the next 5 years. However, the primary reason for establishing a feed-grain industry in Alaska is to facilitate local livestock production. Alaska's history suggests that, without this feed base, Alaska's agriculture will not expand significantly. Table 1 presents the crop and acreage requirements tentatively planned for Alaska agricultural development during the next ten years.

You might ask why the state is undertaking any agricultural development, given the current depressed state of agriculture in the United States. Alaska, like any other state government, is concerned about employment, its economic base, and general population and settlement patterns. Alaska's economy is presently centered around oil development and government expenditures with a major fishing industry hugging the coastline. Government and oil tend to concentrate people in major urban areas. Even Prudhoe Bay on Alaska's North slope is becoming a major urban area (at least by Alaskan standards). Given this, state government is trying to broaden the economic base, and in the Tanana and Susitna Valleys of interior and southcentral Alaska, agriculture is one of the few options available. Also, generally speaking, Alaska agriculture has substantial support by the general public as an industry worth developing.

Table 1: Expanded Crop and Acreage Requirements for Alaska Agriculture, 1984-1994.

Crop	Tons Required	Acreage
<u>Feed Grain</u>		
Slaughter Cattle	29,000 ^{1/}	
Market Hogs	40,000 ^{1/}	
Dairy	17,400 ^{1/}	
Other Livestock	10,000	
Total In-state	96,400	105,000 ^{2/}
Export	150,000	163,000 ^{2/}
Total Feed Grain	246,400	268,000 ^{2/}
<u>Harvested Forage</u>		
Total Beef Cattle	211,200	132,000 ^{3/,4/}
Dairy	38,400	24,000 ^{3/}
Other Livestock		24,000
Total Harvested		180,000
<u>Other Crops</u>		
Feed Grain Seed		12,000
Other Seed, Oilseed, Vegetables, and Others		25,000
		37,000
TOTAL CROPLAND		485,000
<u>Grazing Land</u>		
Total Beef Cattle		690,000 ^{5/}
TOTAL GRAZING		690,000

1/ 1.45 T x 20,000 slaughter cattle = 29,000 T

.40 T x 100,000 hogs = 40,000 T

2.90 T x 6,000 dairy cattle = 17,400 T

2/ Assumes a yield of 1.15 T/ac and that $\frac{1}{4}$ of the land is fallowed.

3/ 1.6 T/acre x 66,000 total beef cattle x 2 acres = 211,200 T

4/ 1.6 T/acre x 6,000 dairy cattle x 4 acres = 38,400 T.

5/ Includes the harvested forage requirement for slaughter cattle.

15 acres x 46,000 beef cattle (does not include 20,000 slaughter cattle) = 690,000 acres.

Source: Alaska Agricultural Action Council, Department of Commerce and Economic Development, State of Alaska, 1514 South Cushman Street, Fairbanks, Alaska.

Given this background, there are a number of Federal agricultural programs which would be helpful to a small but growing Alaskan agriculture.

A Floor Price Program for Grain

Alaska farmers, like other U.S. farmers, are concerned about uncertainties in the market place. A common policy is evident in most of the grain-growing countries of the world: some type of government supported price program is available to grain farmers. The reasons are simple. Government intervention provides an incentive for farmers to plant their crops, thus providing a continuing livelihood for their families and a reasonably certain grain supply for society. Thus, some of the economic risks are passed to the society to ensure production. The importance of food security to a society determines in part the level of price-support programs and overall government control in its agriculture. The United States, with a massive agriculture, tends to have less-structured government agricultural programs than do smaller, less food-secure countries like, for example, Norway. Our Federal commodity programs are aimed at trying to keep agriculture efficient at the same time government provides some price protection which benefits both the society in general and the farmer in particular.

Returning to specifics, a continuing centerpiece of U.S. farm policy is the nonrecourse loan program for grain farmers. Farmers in Alaska are generally not eligible for participation in the nonrecourse loan program because they do not have a past history of production and are trying to expand, not reduce, acreage in production. The 1983 Alaska legislature has just passed an Alaskan version of the Federal nonrecourse loan program which does not require either production history or acreage reduction. With

expected approval by Alaska's governor, this program will be in place for this year's crop. It is hoped that this will be a continuing program for individuals farming new land (current state legislation expires in 1984). As Alaska grain farmers become established, they can take advantage of the Federal nonrecourse loan program because they will be able to meet the eligibility requirements. For the overall stability of American grain agriculture, including grain farmers in Alaska, I suggest that you continue with the floor price mechanism created by the nonrecourse loan program.

Agricultural Research and Outreach

Since agricultural development began in Alaska, serious consideration has been given to soil and water conservation. With a grant provided by the U.S. Department of Agriculture, research on conservation tillage in Alaska has begun in earnest. Our small research team is involved with studies in residue management, fertilizer placement, weed and disease control, and economic considerations. The Agricultural Research Service, U.S. Department of Agriculture, has not only provided continuing research funds but also scientific expertise. The results of this research on agriculture on new lands will have application not only in Alaska, but also in the northern-tier states of the conterminus U.S.

My perception is that agricultural research and extension, particularly through the Agricultural Research Service, Cooperative State Research Service, and Federal Extension Service, is not considered by many in Congress to be as important as it once was. Research and development activities are keys to an efficient agriculture. Farm efficiency can be increased by applying appropriate farm conservation techniques as well as genetic engineering and other agricultural research activities. The Congress should continue strong

support on efficiency grounds alone for the Agricultural Research Service and through formula funds to the states from Hatch, McIntire-Stennis and Smith-Lever Acts. If we become less efficient, we will become less competitive on world markets.

Relative to Alaska, one other Federal agency plays a very important role in soil and water conservation issues. The Soil Conservation Service, U.S.D.A., has been a key factor in providing soil surveys and soil-management information to Alaska's farmers and their state government. Alaska's agricultural projects have been organized around the soil mapping provided by SCS and information from SCS ■■■ has been used for such things as wind-break policy and land clearing design. I am convinced that the future of agriculture in the United States, including in its newest area, Alaska, depends in large measure on the continuation of a strong Soil Conservation Service.

Administration of Federal Reindeer Range

One agricultural activity within Alaska that is very directly affected by Federal policy is the reindeer industry (see Thomas and Arobio, 1983). On Alaska's Seward Peninsula, nearly 30,000 reindeer are found in 14 herds. By Federal law, these animals are owned by local Eskimos. Through 1971, the herd owners had only one Federal land manager, the Bureau of Land Management (BLM). Since passage of the 1971 Alaska Land Claims Settlement Act and the 1980 Alaska National Interest Lands Conservation Act, the reindeer range on the Seward Peninsula has been subdivided into at least three land-management systems, the BLM, the National Park Service (NPS), and the State of Alaska. These government agencies are currently coordinating their activities relative to the reindeer range. I recommend that, whenever the Congress addresses Alaskan land management issues, it continues to place

priority on reindeer grazing for the Seward Peninsula. Because of the harsh conditions found on the peninsula, reindeer grazing is the only continuous economic activity that can utilize the range. Where conflicts occur with cyclical and seasonally migrating caribou, I recommend that the BLM and NPS study the conflict with a view toward agricultural and societal needs.

Concluding Remarks

I hope you find my comments helpful. The key points, as far as I am concerned, are for continuation of Federal farm programs that promote stability in the agricultural industry and which also emphasize farm efficiency. I believe that not only the farmer, but society, benefits from limiting downside risk.

Efficient farms result also from a strong commitment to research and development activities. In my view, society benefits substantially from well-funded public research and extension activities.

Finally, I would like to see Federal range policy, particularly as it relates to Alaska reindeer, emphasize single-use priorities for sections of the range. Other portions can be reserved for multiple-use management. While not an easy issue, placing priorities on Federal range could put the various Federal land managers on notice of important economic and/or societal decisions.

Thank you, I would be pleased to answer any questions.

Senator SYMMS. Thank you. Is Mr. Luke here? Mr. Luke is not here.

Senator ABDNOR, do you have questions you'd like to ask the panel?

Senator ABDNOR. Well, they give us a lot to think about. They have some whole new proposals which we certainly need to talk about.

But Mr. Meyer was talking about high currency. To me, isn't that really one of the first big problems? Isn't that one of the bigger problems we're confronted with when we talk about our dollar being so high? Mr. Schuh hammered away on that 1 year ago, and it's more correct today. Do you have any ideas how we're going to get around that? Is there anyone that would like to volunteer a thought on how we might attack this problem?

I mean, if we're going to start out at a disadvantage—by how much would you say our dollar is greater than the yen or the European franc or—how much of an advantage do we have to give them, 25 percent, 30 percent? I've never figured it out.

Mr. MEYER. Well, let me try to answer it by using the analogy that I used in talking with farmers this past year in talking about this very issue

We have basically a free market per dollars in the world. And I would place a lot of our problem on the present deficit that we are running. And basically, I think it's 1981. Between the various Federal programs, not only the deficit, but the guaranteed loans and the other type of entitlement programs, at least according to the data that I have received and used, approximately 79 percent of the savings available in this country were soaked up financing the various types of Federal deficit.

Now, when you go into market, and you have to commandeer 79 percent of the available supply—I think if you have ever tried to buy all the property in a given block, you get an idea of what happens to the prices. And that's basically driven the interest rate up.

Now, these high interest rates have made it very attractive for petro dollars and other types of investment dollars to come in and force the dollars up, which has undercut agriculture's position.

Now, with flexible exchange rates, which is synonymous with the free market and dollars, we don't have the control that we had previous to 1972 when we basically controlled the exchange rate. And when we weren't exporting, it wasn't an important issue. We sold basically to our own, you know, our own country. But when we move to the export market, which came about as a result of policy changes in the early seventies namely by the Soviets and later by the Chinese, this whole issue became very important.

Nationally, 60 percent of our wheat goes overseas. I think it was 64 percent in 1981. That's made it a much bigger issue.

Senator ABDNOR. Well, why don't some of the other countries that we're talking about—they're as bad as we are in deficit spending, aren't they, and in inflation? We're not the only ones. It's not a good situation. I'm sure Senator Symms doesn't want me to get into this because he's on Finance and works with it all the time. And I agree with everything you say, but I'm just trying to figure out what is taking place in the other countries.

Mr. MEYER. Well, obviously, again, I'm going on research that other people have done, I haven't done it myself. But the impacts of these deficit policies of other countries tend to increase the variations in prices, which has been commented on this morning. When one country goes in and tries to fix its currency, tries to stabilize the rate, they either drastically increase the money supply if they're buying the currency, or drastically decrease it if they're selling it.

So, in actuality, the fluctuations are increased by this free flow of dollars in the international exchange market.

Senator SYMMS. Well, Doctor, we have this exchange rate that can fluctuate. There's a perception in the world that the United States is still the safest haven for currency. But also, there's almost a dual perception that in addition to this being a safe place, our credibility in foreign policy has been so badly damaged by fighting one war in Korea, and losing a war in Southeast Asia that now the perception in Central America is that the Communists are going to take over—the Americans are going to leave. And you can stand on a corner in any South American country and almost feel the money running to the United States.

Would you agree with me that we have to establish a foreign policy which will demonstrate that they don't have to bring their money to the United States for it to be safe. Do you think that has any impact?

Mr. MEYER. I don't know. I don't feel qualified to comment on that. But I would acknowledge that fact that if you think the money—that's part of the factor that creates that demand for dollars. I mean—

Senator SYMMS. For example, I talked to a woman in Peru who owned a piece of property. She's married to an American State Department official. She owned a piece of property in downtown Lima that 1 year ago was worth \$60,000. Two or three months ago, she was trying to sell it for \$30,000, and her comment to me was "I would rather have \$30,000 in the bank in Miami than a \$60,000 piece of property in Lima, Peru, when I fear that the left-wing military government may take over any time."

And this perception is out there.

If you go to Hong Kong, people are concerned. So money is pouring out of Hong Kong and coming here.

El Salvador, Rio de Janeiro, the exchange rate at the Embassy, for example, in Rio is different than on the street because the market out there is saying that the American dollar is stronger and safer.

I think unless we can coordinate our foreign policy with our agriculture policy we'll never get the dollar stabilized. Again, the Japanese yen, who wants to go to Japan? I mean, it's a great producing country, but the people around the world, they want to come here because they're free here. Even though Japan is a democratic country and a free country in many ways, it isn't like it is in the United States. They want to come to the United States. The Japanese yen is undervalued, and we're at a real disadvantage. We have to compete with French wines in this country. They just kill us with the cheap French franc. And it's very destructive, I think to the economy. I keep harping to the Finance Committee, and Jim has heard

me say it many times, we're going to have to address getting a dollar stabilized in a worldwide monetary approach that will restore some kind of an exchange rate, a fixed exchange rate with respect to some kind of a commodity standard.

Also, we have to restore confidence in the fact that the whole world isn't going to come unglued, so that they don't all have to run here.

Our foreign policy has been one that keeps throwing someone else to the alligators, hoping they'll eat us last. And that kind of philosophy is part of what's wrong with our agriculture. Because we don't have the confidence out there. So everybody is trying to get here.

You know, the property owners in El Salvador leave the country because they don't perceive that they can hang on to what they have. So the people that need to stay there and fight try to flee and come here. We don't have any place to go. So eventually, it will end up that the Americans will see the importance of it.

But, has the university done any studies on this, or the ag-econ department?

Mr. MEYER. We have not looked at the foreign policy aspects. Some guys, namely Jim Jones in our department who has worked very much with Mike has looked at some of the impacts of foreign trade; namely, the Pacific Rim and also the central European countries.

Senator SYMMS. Mr. Martin, you're a resource economist, do you have any comments to make about the dollar?

Mr. MARTIN. Well, Senator, I think your point if well made, that there's a combination of economic and psychological factors. If the people believe that the dollar is valuable, it is valuable for the mere belief in it. And it's a combination of things, I think, which has contributed to the strength now.

We were told many years ago by Marshall and others that if we waited long enough that would adjust in floating exchange rates. And, unfortunately, that accounts only for economic factors. I think the situation in Poland has certainly had an impact on the value of the dollar. Instability of the Middle East has had an impact on the value of the dollar. The simultaneous effect of domestic, monetary, and fiscal policy has had an impact on the value of the dollar.

It's one of those things that I think we're going to have to live with for awhile. And I certainly hope it's resolved because I think Neil's point is exactly right, that has been the single largest tax on agricultural export. And it has given many of our competitors a real chance to make some inroads in markets that were traditionally stronger than ours. Many Pacific Rim countries, particularly this effects us in the Pacific Northwest. Most directly, many of the Pacific Rim countries that used to be heavily oriented toward U.S. purchases have now disaggregated, as for instance, the Canadians and the Australians begin to produce soft varieties of wheat which compete with those produced in this region.

Senator ABDNOR. Which countries particularly?

Mr. MARTIN. Well, I think South Korea, Taiwan, Philippines, Malaysia, and Indonesia, which we looked upon as a great growth market because of their oil, and which did not come forth for rea-

sons of transportation differentials and currency differentials. They're just changing the patterns in which they purchase.

Senator ABDNOR. Are they buying different kinds of wheat now?

Mr. MARTIN. Oh, they're buying different kinds of wheat, slightly different, but it accomplishes the same final end. And they're buying it from other sources.

Senator ABDNOR. Through Europe?

Mr. MARTIN. Well, and I think Australia's soft white wheat has made some heavy inroads in certain markets that once were fully captive by this region in the country. With the exception in 1972, Korea has always bought at least 96 percent of their wheat from the United States. And out of that, more than half was soft white wheat traditionally. That's begun to change for a combination of reasons, the value of the dollar, also the sense that the United States is not as reliable a supplier as it used to be. And the general notion that good food security policy requires some diversification of your purchases in any case. And I think that's an indication.

I'm more familiar with Korea, as Neil knows, than some of the other countries because I've done some work there. But I think it's a good indicator. It's a newly industrializing growth economy. Of the growth we had in exports in the last 10 years, 90 percent have come from centrally planned economies and those kind of economies. And in the last 7 years, it's all come from the newly industrializing developing economy. South Korea being a leading one. While they're changing their policy, they're making a change in their import policy that's been encouraged by the value of the dollar and rewarded by the value of the dollar. If you're diversifying at the same time, you're getting a better price from the Canadians, or from the Australians. It looks very good.

Senator ABDNOR. Let me ask one question, and then I'll shut up on this subject.

I certainly realize that there's no quick fix, and a lot of things need to happen to really have a balance like we need. I'm trying to come up with some temporary solution to this problem. It will probably make more trouble than it will good.

Mr. MARTIN. Well, I think yes, the quick fix may be dangerous. But I think we're on the right track. I think there is a sense that the world economy is beginning to show a bit more vitality.

As you know the old saying, "When the United States sneezes, the rest of the world catches a cold." It's not quite as bad as that anymore. The U.S. economy is not as large a percentage of the world economy it used to be. But our recovery, I think, is beginning to be felt in other economies around the world. I think just that alone will begin to bring it into place.

Mr. Schuh estimates, at least in some of his suggestions, that the U.S. currency—the U.S. dollar is at least 19 percent over value relative to a pool of other currency. And that there's a time—that we're entering a period of some shaking out of that. We'll begin to see—if we don't get a—I heard on the news this morning that the prime may be going up again. I hate to hear about that. But if we don't get that rapid upward movement in domestic interest rates, I think we'll start to see some confidence return in holding the yen, holding the mark and holding the franc. That will in itself begin to

make some adjustments, and the Eurodollar market will begin to rejuvenate a bit.

Senator SYMMS. Well, we want to allow our counsel to ask a couple of questions. He's an ag-economist with a great deal of experience. I just want to make one appeal to those of you in the university community in research. And that is, to apply some of the energies we have to tie our foreign policy and our agriculture policy together, so that there is a direct link. Now, I'll give you a good example.

When President Carter was in office and the Russians invaded Afghanistan, his response was a grain embargo to the Russians.

Now, in my opinion, we should have done what I have been calling for, for a long time, and that is to give every single person in Afghanistan that's willing to fight the Russians, a rifle, 1,000 rounds of ammunition, an antihelicopter hand-held missile, a shoulder-held antitank weapon, and let them show the Russians they don't want them in Afghanistan.

But we shot ourselves in the foot, so to speak. We canceled the sale of wheat. When Reagan took office, I made that appeal to him. I think he should have lifted the embargo the day he took office, not waited a few months. But at least, he finally lifted it. But he was getting advice from the State Department that we had to play hard ball, so to speak, with the Soviets. At the same time, President Carter imposed the grain embargo on the Russians, calling for \$200 million in foreign aid to support the Communists in Nicaragua.

I think this is such a confusing thing for the world. They think if the Americans don't know their right hand from their left, we'd better get our money, sell all our assets, and take it to the United States and at least get ahead of the nationalization and the slaughter that comes from a Communist takeover and the genocide that follows it.

I would urge you in the university community to spend some of your efforts on what a gutless foreign policy does to American agriculture. You know, I've made the statement before, if we had built the B-1 bomber back in the seventies when President Ford wanted to, President Carter wouldn't have been in a position where he had to try to resort to a grain embargo as a weapon.

We used American agriculture as a weapon. If we had been strong enough militarily, we could have sold the Russians anything we wanted to for cash. And as long as we're strong enough militarily, they're no threat to us. But when we get ourselves into a position where they're stronger than we are militarily, then we start trying to use other methods.

And I would appeal to you to apply some of the research at the universities—all our universities—to show how this affects American agriculture. Foreign policy has to come from a consensus of the people. Of course, leadership starts at the top. In my opinion, the leadership in foreign policy has been sadly lacking in the last 25 years in Washington.

It certainly has been enhanced by the world perception that President Reagan is a strong leader, but it certainly still has, I think, a lot of room for improvement.

Our counsel may have some questions. He's an ag-economist, and we have our ag-economist here today. So, here's Bob Tosterud on our committee.

Did you want to first react to that, Mike?

Mr. MARTIN. Yes; you are an ag-economist, I know that for a fact. I'm glad to see you up there. I'm glad to see that one of us made it up—one of the members of the crew made it up to the front. That's very good.

Mr. TOSTERUD. There are several specific questions that have been asked, and I think we've had about a dozen ag-economists, farm-policy specialists from a variety of States during the last couple of hearings. Generally, they have all been asking the same questions—one of which is whether current farm policy is equitable.

As you're all well aware, we've got a farm program that yields benefits in direct proportion to volume. That is, the larger the farm, the more Government payments you get.

Are current farm programs reaching the farmers greatest in need?

Wayne, do you want to try that one? If not, how do we design a more equitable farm program?

Mr. THOMAS. Well, the question is, Do you really want to design an equitable farm program? I don't think that's well—I think we're afraid to ask that question because if in fact we design a farm program that benefits the farmers, the most needy farmers, I think then those generally are in my view the smaller farmers. And they are producing—they are not our true agricultural producers, or at least in the sense of the quantity production produced relative to number of farms.

From a farm efficiency standpoint, I think I'm fairly unsympathetic to designing—making the major emphasis of farm program toward small farms, just because I think it makes us a more inefficient agricultural producer as a nation. So you have political problems then.

The way you made—I would say, since I'm not a politician I can say this, I would design a program to minimize—just put a sufficient amount of equitability in a program so that you can make it sell. And that's the position I would take.

Mr. TOSTERUD. But we've all heard in the popular press of the farmer in Iowa or Illinois or someplace getting a half-million-dollar PIK payment.

Mr. THOMAS. Yes.

Mr. TOSTERUD. You know, farm or no farm; perhaps that's a little too much.

Mr. THOMAS. I think you can make a case that you can cap the program in some manner. I guess, again, when you're down to such a small group of the population anyway, you're going to have some farmers that will receive large payments because they're large farmers. That's true. But I guess I'm not as disturbed about that as some others. Again, I would like to have the farm industry being an efficient industry. And I'm prepared to make the trade-offs. But then again, I'm not a politician, so I don't have to worry about those kind of trade-offs.

It's not a good answer in the sense of a politician's answer. But I'm really concerned that what we're doing with our American agriculture is we're—it's becoming—we're making it an inefficient agriculture because we're trying to be equitable.

Senator ABDNOR. Maybe we've had too many of those political answers.

Mr. THOMAS. But we're trying very hard. And in the case—I think we're—if you look at what other countries are doing—particularly the major agricultural exporters, again, I didn't get into this point because I felt that Alaska is a topic in which there is no one talking for it. So I decided I would mention that.

But I'll get off of that and on to what I consider important issues relative to national policy. But I'm concerned that other countries are beginning to emphasize, you know, much more efficient production than we are.

And the Australians were brought up several times. The thing you should realize about Australia, though, is that they have a major drought, and they're coming back from just a drought situation. But if you study their agriculture at all, you'll see that their farms are getting larger, and they are much more concerned, I think, about efficient issues than they are about equitable issues.

Mr. TOSTERUD. Well, are you saying our farm policy is causing these inefficiencies?

Mr. THOMAS. Yes; I think our farm policy in trying to become—to create an equitable farm policy, I think we are losing, beginning to lose some efficiency in our farm.

Mr. TOSTERUD. Are you saying, therefore—

Mr. THOMAS. From our research standpoint—there is a substantial effort from a research standpoint to have small farm research, agricultural research. In other words, we're trying to force the reallocation of the sources to satisfy this equity issue in Government resources. We're putting research dollars into it; we're trying to change our farm programs around so that they will try to support the broad sector of the farmers. And as we do that, we're taking away from the area that I think makes us the strong agriculture. We're reducing the support for the efficient agriculture in trying to broaden the base of farm policy. And I think it's a mistake.

Senator ABDNOR. Do you think, Doctor, that generally, in this country, our farm groups, farm organizations, and farmers themselves, are realizing from the changes taking place over the last couple of years, that we are no longer totally dominating the world market in agriculture; that we have some pretty strong competitors. I always say we're the most productive group of farmers in the world. But some of those other statements—do you feel that we don't recognize this in a lot of our groups in this country?

Mr. THOMAS. It's my opinion that if you look at the farm magazines, Farm Journal and such like that, I think there are some—they're very convincing in the press, and I think probably I think it's a question of what segment of the farming community you really talk about.

Again, see, the problem is, we're becoming more and more a part-time farming society—or agricultural society. And in a democracy, that's where the votes are. So even you farm constituency, if

you're responding to your farm constituency, you need to take more account of the issues of what affects the smaller farmer, the part-time farmers.

So I say, the politicians are beginning to, you know, they must respond in a democracy, or at least to some extent to the pressure within the farm community for different programs. So I think the only—in my view, again, maybe this is naive, but I think the only groups that are really aware that we may be having a problem are the ones that are still, what I consider, the substantial commercial—the commercial farmers. Once you get close to the edge of not being a commercial farm, then I think those—now, that's a generalization, there's probably some ignorance in that. But I think the perception has changed within our farm constituency also.

Mr. TOSTERUD. Nevertheless, we do have a situation where 10 percent of the farmers, or something of that order—

Mr. THOMAS. Produce 90 percent of the—

Mr. TOSTERUD. Yes, and they also get 90 percent of the Government payment.

Mr. THOMAS. They also produce 90 percent of the output. The question of the hour is, what do you do? If you want them to produce less, then you go through the process that we're going through now.

Mr. TOSTERUD. But are Government payments an incentive for a farm loan of that size?

Mr. THOMAS. In my view, there is—I think the point was made by one of my colleagues here, you have to have some, I think, some minimum base for which you keep your—to create stability in agriculture. In other words, I am very much in favor of some kind of a floor price program.

Personally, I think one of the things, and from a farm policy standpoint that we don't do well here, and if you look at the Australian scene particularly, is that maybe the way we can get away from the concern about the large farmers receiving such a large portion of the subsidy payments is to—in other words, we protect against low side risk. We do it well here. In fact, our low side risk protection is the world base price for grains. What we don't do at all is protect the consumer, the general public, the high side risk, if you will.

I think the only out of, you know, if you want to have some more equitability in your farm programs is to have some kind of a program in which you have a high side bound. And that gets you into a fairly complex agricultural program.

It's interesting, if you look at—a good example is the U.S. sugar program versus the Australian sugar program. The U.S. sugar program had a low side bound. It went through 1974, and the world prices just skyrocketed. The Congress threw out the U.S. sugar program.

The Australian program had a low side bound and a high side bound. And the same program exists today. And the reason it does is because there were price limitations on the high side. And it was more acceptable to the Australian general public.

Mr. TOSTERUD. So we do have a high side bound in terms of our trigger prices and farm loan reserve program.

Mr. THOMAS. You do, but that's a fairly new—in my opinion, that hasn't really had a—you know, if you look at the 1970's, that didn't have that much effect really. I mean, that's a program which we created in response to the 1970's, I think. And it may have more impact than, you know, the question is, what's supply doing? Is it—what kind of shifts are you seeing in supply curves. See how effective that program would be.

Mr. TOSTERUD. Perhaps we should let others react.

Mr. THOMAS. Sure.

Mr. GREIG. I don't wish to respond directly to that question, but I do wish to indicate that Alan Luke is now here who is a dairy marketing specialist, and who shared the paper with me on the dairy program.

I wondered if you would permit Mr. Luke to make a few comments.

Senator ABDNOR. Before you sit down, let me ask you, do you think the dairy farmers are beginning to accept something new in the program?

Mr. GREIG. Senator, my own personal opinion is that in the near future the farm lobbyists won't make the policy. If it goes on as it has then, the consumer lobbyist will be making the policy. And if something is not done on the \$21 billion farm policies costs the Government this year which is one-tenth of the national deficit this year, I think if something isn't done by the farm groups themselves or by the group in Congress representing the farmers, that the consumer groups will take over and do something.

Senator ABDNOR. Good point.

Mr. TOSTERUD. That relates to my question to Wayne. The fact that the Congress has to try and sell a program to taxpayers and consumers that provides a half million dollar benefit to a family business is going to be increasingly difficult.

Mr. GREIG. Yes. May Mr. Luke make a few statements?

Senator SYMMS. Yes.

STATEMENT OF H. ALAN LUKE, EXTENSION DAIRY MARKETING SPECIALIST, WASHINGTON STATE UNIVERSITY, PULLMAN, WASH.

Mr. LUKE. Thank you. I am the agriculture economist working in the field of dairy marketing at Washington State and Oregon State Universities. Not having been here when Mr. Greig presented his points of view, I will attempt not to cover the same ground.

We are at certainly a critical point in the evolution of regulation of the dairy industry by the Government. We're about to see some radical changes take place. The dairymen are, in response to your question, certainly ready for something different. And they should be ready for something different.

The reason they are ready for something different, however, are not fortunate. It's a fact that the program that has been in effect the last 30 years approximately, or over 30 years has failed because of certain things, including particularly political intervention at one time or another.

The support program is based on a parity concept which was not successful, it's been in trouble many times since it was instituted.

And the dairymen are now looking toward what would be a non-competitive sort of structure.

The proposals to pay dairymen \$10 a hundredweight to reduce milk production are getting a lot of impetus. And few doubt that we'll avoid that kind of program entirely.

I'd like to point to the experience across the board in British Columbia where a control program was instituted many years ago when a base was fixed for individual dairy farmers. That has developed a capitalized value today which makes it necessary to pay about five times as much to market the milk from one cow as that cow herself would cost. It has resulted in a wide spread of prices between what the product itself represents, surplus to the Canadian market, and the market for the local fluid products, a difference of almost \$20 a hundredweight at the present time in U.S. money.

The kind of program that we may be headed for here under this new evolution of bill H.R. 1875 leads us in the direction very promptly.

The proposal that is put forth here at this meeting is to allow dairymen to set their own goals, enter into arrangements, rearranged each year which would be reflective of their estimates of ability to produce at certain costs. The rules to operate that program could be totally flexible. The dairyman would be asked, perhaps, to indicate what he wanted to produce. It wouldn't be necessary that he be forced to enter into that agreement. But any kind of alternative arrangement could be worked into which would allow the production capacity to be properly regulated in terms of the demand without the threat of overproduction. Government could become involved, but not necessarily so.

That's all I have to say. Thank you.

Senator SYMMS. Thank you very much.

Are there any other questions we want to ask of our State extension group?

Mr. TOSTERUD. Well, if Mike would have a reaction to—

Mr. MARTIN. Your question on equity, Bob?

Mr. TOSTERUD. Yes, the question on equity.

Mr. MARTIN. Well, I think you're right. I think the issue you pointed out is an important one. That we have to deal with a consumer and a taxpayer that is going to resist, I think, high—at least the visibility of very high payments to a single enterprise. I think the tractorcade on Washington taught us something about how people respond to those things. It struck, I think, from the people out in the urban areas unusual that farmers protest in Washington with tractors that cost more than many of their homes. And the argument was, if they could afford to drive their tractor to Washington, they certainly didn't need any more support.

I disagree with that. But I think that's a perception that was given.

I think the other problem is, and I'm sure you're aware of it, Bob, is that it's not just agriculture policy that rewards, and I think in an inequitable fashion, large enterprises. And I think if we're concerned about the preservation of the family farm, we have to look at some other kinds of policy.

I think tax policy rewards largeness. We have a whole series of systems which reward people for accumulating land even if it's not

to produce on it necessarily. Or to take a capital gain benefit from it. And to accumulate other sources of wealth which allow them for one reason or another to change their taxable income. And I think that's a policy we have to look at as a way of thinking about the equity of all programs for agriculture.

And as suggested before at the outset, I think we need an integrated program. I think we need to back up and ask ourselves before we ask the equity question, what does agriculture look like? I mean, what kind of agriculture do we want 20 years from now? Do we want the family farm that we at least think we know to continue to exist? Do we want to be a leader in the world markets? What kind of resource conservation, how do we want to stretch the resources that we have in perpetuity figures? And then design a program which gets at that.

And if there are equity issues built into that, then we address them. But I think that's the first thing we have to do. I think we have to come to grips with the fact that the family farm is an issue that was raised. And I think it's an important one. I for one think it needs to be preserved. If not for economic reasons, for social, and cultural reasons.

Senator ABDNOR. Well, just going back to the temporary situation, didn't we hear some testimony that there's much more of a supply in dairy products today than there was 10 years ago? Didn't I hear something like that? And the vast extra production is not coming so much from the dairy farmers as we used to know it, I understand we have dairy farms today with 2,500 cows. Isn't this what is happening? A program such as we have stipulates no limit. Maybe it's done more harm.

Mr. MARTIN. I think we reward bigness to the notion that largeness was efficient. And I don't know that we've already decided where those efficiencies end for both political, social, and economic reasons. And I think we need to think about that a little more. Because I'm not sure that a 2,500-cow dairy operation is particularly efficient. I don't know.

Senator ABDNOR. Well, I was visiting back in my State, and in one area there were two dairy farmers, two relatively young fellows. One was still using a lot of manual hand labor. The other gentleman was bigger and had all the latest equipment. Of the two, the fellow with the limited equipment was doing better than the other. And maybe you have a point there, I don't know that bigness is totally the answer.

Mr. MARTIN. There are certainly some economies of size. I don't know where they end. And I think we have to think about that again. And that's what I'm suggesting, that we think about the next generation of farm policy. We think about what it is we think we want it to look like, and come as close as we can to that.

Senator SYMMS. I'm sure Mr. Luke and Mr. Greig know that Ron Tukey from Washington State University did a paper on this subject about bigness. And it related, primarily, to orchards. He made the point that the only place the bigger orchard has an advantage over the small one—if they have a comparative amount of knowledge to draw from—is in either the ability to borrow money or market the crop. But otherwise, there's no advantage. Because every 40 acres takes a manager. And there's no way you can escape

that. It's highly sophisticated. And that's relatively true of the kind of agriculture we have here in this State where it's highly intensified. You know, seed crops, potato crops that are carefully monitored with respect to irrigation and other fertilizer application. It requires very close scrutiny and management. If you look at the big processing plants, they got out of the business. They can buy potatoes cheaper from the farmer than they can grow them themselves. They couldn't get the kind of management they required to actually grow potatoes as easily as they could buy the product from the smaller, but more efficient, farmers in many cases. So, I think there is a point there.

Well, I want to thank you all very much. I did have one question for the gentleman from Alaska.

Just for my edification, and it would be interesting for our record, is Alaska self-sufficient in food? Do you have the capability to grow enough food if you had to?

Mr THOMAS. In some crops we do, but I would say probably half of what we consume we could probably produce. Because we can't produce apples in Alaska.

Senator SYMMS. Do you have a dairy industry in Alaska?

Mr. THOMAS. We have dairy. It produces about 16 or 17 percent of what we consume.

Senator SYMMS. I was interested in the fact that you're trying to get some more land into private ownership. What is it, 96 percent is owned by government, is that right?

Mr. THOMAS. There is less than 1 percent owned by the private sector, excluding when you had the 1971 Land Claim Settlement Act, the Native people of Alaska will control about 14 percent. So eventually, that will be about 15 percent.

Now, the State of Alaska will control another third of the State. And that's where land sales are coming from. The State is trying to sell some of its land. It has to. There's basically a public mandate to sell some of it.

Senator SYMMS. I think it's rather interesting that when we had the Alaska wilderness bill before the House, some of us thought the acreage that was put into wilderness just for national security was too great. It is really somewhat of a moot point to have an area five times the size of the State of Ohio in wilderness—off limits for any kind of energy or mineral development. The State of Georgia had more private land in it than the State of Alaska, and Georgia is a relatively small State. But there's actually more private acreage in Georgia than there is in Alaska.

Mr. THOMAS. The impetus for agriculture to a large extent is coming from the State's decision that it must sell some of its land.

Senator SYMMS. Thank you all very much. I appreciate all your testimony, and your long journey to be here. Your entire statements will be part of our record. We appreciate it very much.

We'll now go back to the State directors. We have three State directors that are here now, Tom Ballow, Keith Ellis, and Keith Kelly.

Tom Ballow is here from Nevada. If you will all come forward, we'll have all of you make brief statements, followed by some questions for the entire panel. Hopefully Steve Gillmor and Max Hanson will be here.

Please go ahead with your statement. Excuse me for a moment, I have a brief interview. I have to go outside.

**STATEMENT OF THOMAS W. BALLOW, EXECUTIVE DIRECTOR,
DEPARTMENT OF AGRICULTURE, STATE OF NEVADA**

Mr. BALLOW. Senator Symms, thank you very much. My name is Tom Ballow. I'm executive director of the Nevada State Department of Agriculture.

Members of the committee who are here, first of all, I would like to say that Gov. Richard Bryan from the State of Nevada certainly appreciated his personal invitation to attend the hearing. But was unable to be here today, and asked me to attend and participate fully in the hearing.

I really want to extend our appreciation to you in having a hearing out in the West. I know you're aware of the cost involved for people from the Western States to testify before Congress. It takes a lot of money and a lot of time to travel to Washington, D.C., to be able to say a few words. And we certainly appreciate your interest in our ideas and our problems in holding your hearing out here in the West where it's convenient for us to participate.

First of all, I'd like to talk a little bit about water. As you from the West know, the future growth of agriculture in the West is closely tied to the availability of additional water for agriculture and other uses. One of our biggest problems today is the other needs for water, industrial and municipal, competing with agricultural water and they're taking agricultural water out of agricultural uses.

We have just had one of the wettest years on record in the West. Rainfall and snowpack exceeded 200 percent of normal in many areas of the West. Flooding is still occurring along the Humboldt, Carson, Truckee, and the Colorado Rivers in our State. This is proof that there are excess waters in some winters that could be stored and used in dry years.

In this regard, we urge this committee to look at the need for an enlarged upstream storage capacity in the form of new dams or making existing facilities more efficient. We urge you to consult with State Governors, State water agencies, State legislatures, and local governments to develop an up-to-date list of new water projects. These efforts should be directed toward flood control, irrigation, hydroelectric power, recreation, wildlife, municipal, and industrial water uses. We feel this is essential to any long-range policy in the West.

We also feel that more funding should be provided for research into desalinization of salt water or brackish water, and into replenishing water in underground aquifers.

Next, I'd like to talk a little bit about the long-range policy for our farm programs. With respect to Federal farm programs, one thing is very clear. We need long-range steady reliable policies that producers can rely on year after year, administration after administration. We cannot afford a program that says, plant all you can this year; and next year says, don't plant, but set your acreage aside in conservation uses. This yo-yo, plant, don't plant, approach is expensive and is contributing to soil erosion and other farm

problems. It makes the Government appear unreliable to our farmers in countries that rely on us for part of their food supply. It makes prices fluctuate more than necessary, and it generally creates an unstable, unreliable farm economy.

We must have a long-range steady reliable farm program. I don't think I can stress that too much. I've been around this thing for a long time. I've seen it go up and down. Plant all you can, and then the next year they say, try to put it all in conservation uses. And if any of you have seen that, you can see that the conservation uses that you put this land into takes a lot of expense. It takes a lot of money to establish these shrubs and pastures and so forth. And it's expensive to plow it out again. So I just don't think we can afford that anymore.

TRADE BARRIERS

We believe that agriculture is one area where the United States can offer the best of the world. Our farmers and ranchers have proven that we can produce high quantities of high quality food for ourselves and for export around the world. Trade barriers, however, in the form of tariffs, import duties, quotas, monetary constraints, and others reduce the distribution of our agricultural products to meet world needs.

Even trade barriers the United States places on nonagricultural products are held against us in trade negotiations. We urge the Congress to work aggressively to reduce and eliminate export and trade import barriers of all kinds.

We must recognize that we are no longer a U.S. economy. We are part of the world economy. We must recognize this fact. We must admit it and participate fully and competitively in it, or it will pass us by.

ENERGY

We all remember the energy crunch and the resulting efforts to produce alcohol and electricity from biomass. When the price of fuel came down temporarily, we must have slackened these efforts.

We urge Congress to review these accomplishments and get us back on a steady track to develop our energy resources.

U.S. agriculture needs lower price fuel and fertilizer, and some assurance that it will be available on a long-term reliable basis.

I'd like to talk a little bit about public lands. I think that has come up with respect to Alaska. And I think that most of you are aware that in Nevada 78 percent of our land area belongs to the Government, to the Federal Government.

Mr. TOSTERUD. How much?

Mr. BALLOW. Seventy-eight percent. And in some of our counties, like my own home county, 99 percent. And the local economy is tied very closely to these public lands. The farmers and ranchers, their livelihood depends upon this land. So this is very important.

And I think in respect to Nevada's economy, we feel our relationships with the U.S. Department of Interior are critical to use as the relationship with the U.S. Department of Agriculture and their farm programs. So we think it's a very critical thing.

There are many things that the Federal Government does not do on its lands that a prudent land manager should do, and would be forced to do. But nobody can force the Federal Government to do these things.

To give you an example, on rodent control in Nevada, we have a lot of trouble with ground squirrels and rabbits, jackrabbits primarily. And you have a farm out there surrounded by public lands, the public lands dry up. The farm is the only green source of fresh palatable forage, so here they come off the public lands and onto the farm lands. And it's very damaging and costly.

And so we would urge you to be a good manager on the Federal lands, and try and get the Department of the Interior to do more in controlling not only rodents on its land, but predators which come off the public lands and damage the livestock. But also, on noxious weeds. We have noxious weeds in our State that if they ran on the private lands we can control them. But when they're on Federal land, we can't accomplish much with them.

On wild horses, this is a very controversial issue, but there is legislation still pending before Congress that would provide the Bureau of Land Management and Forest Service ability to sell the excess amount of wild horses and get them off, and still maintain adequate herds for other purposes.

And we urge that this legislation be passed. They need it as a management tool. We do have an excess of wild horses in several areas that are damaging public lands.

And with that, I will close by expressing my appreciation to be able to come and talk to you. Thank you.

Senator ABDNOR [presiding]. Well thank you. We're glad to have you as part of our group.

I can certainly relate to your problem. We also have a prairie dog and coyote problem in my country.

What are those horses? You say there are other uses.

Mr. BALLOW. Well, the wild horses enthusiasts like to maintain the herds there to observe and watch and so forth.

Senator ABDNOR. OK. That's what I thought, I just wanted to make sure.

[A short recess was taken.]

Senator SYMMS [presiding]. The committee will proceed with the witnesses. We can now have our State directors that are here, Tom Ballow, Keith Ellis, and Keith Kelly. If Steve Gillmor and Max Hanson are here also, please join the directors at the witness table.

We've changed our arrangement here, I think it will be a little better. We can probably hear you all right without worrying about any microphone, but it is there. Maybe if you could pass the mike back and forth, it might make it more helpful for the people in the audience.

We'd like to have the panel of directors of State departments of agriculture of the surrounding States come to the table. We have Nevada, Washington, and Montana. Is Keith here?

Oh, here he is, come on up, Keith.

Steve Gillmor and Max Hanson are not here.

Tom, why don't you start. We've got you at the top of the list, and then—

Senator ABDNOR. Tom has already given his statement.

Senator SYMMS. Oh, I'm sorry.

Mr. BALLOW. Yes; thank you. I made my statement just before we took the break.

Senator SYMMS. I'm sorry, I apologize.

Mr. BALLOW. I think Keith Ellis is ready.

Senator SYMMS. Keith, go right ahead.

STATEMENT OF M. KEITH ELLIS, DIRECTOR, DEPARTMENT OF AGRICULTURE, STATE OF WASHINGTON

Mr. ELLIS. Senator Symms and Senator Abdnor, we thank you for the opportunity, and I bring the appreciation also of Governor Spellman from the State of Washington.

I would like to read from a prepared text concerning the question toward the next generation of farm policy.

The current agricultural dilemma is the result of the good, the bad, and the nonexistence of ag farm policy at the county, the State and Federal levels. It's clear that the present direction that the U.S. agriculture is not in the best interests of Government, its citizens or the people who invested deeply in agriculture.

As a person who has looked all his life to agriculture as his vocation as well as avocation, I'm pleased to have this opportunity to represent the State of Washington at this congressional public hearing on the next generation of farm policy.

The State commends you on your foresightedness in addressing this most important subject.

The issues of food and fiber have changed remarkably since the thirties when we saw the last great efforts by Congress to stabilize the agriculture sector, both politically and financially.

Most of the agriculture legislation, both at the State and Federal levels since the thirties has been in the form of fine tuning and half-soling this old and now mostly archaic legislation. A time has come for us to sit down and rethink where we want to be at agriculturally in this Nation for the next 200 years.

We did not arrive at the position we're in today in agriculture by accident. We have been on an unerring route. A plan laid down by our forefathers when the foundation of the Constitution was being formed. It was not by chance that Ralph Waldo Emerson wrote of the farmers in his immortal stanza:

By the rude bridge that arched the flood, their flag to April's breeze unfurled.
Here once the embattled farmer stood and fired the shot heard round the world.

Farmers' grievances contributed to the American Revolution. This was natural since 90 percent of the population lived on farms and farmers had special reasons for revolt. Trade restrictions on farm products coupled with the remnants of a feudal system called quick rent, which was a yearly fee charged on land owned by title no matter how it was acquired were the primary cause for the farmers' discontent.

Thus, for this early date was the foundation of agriculture to be laid that has carried us for the last 200 years.

Among the cornerstones of this foundation were the principals of a free unfettered export market, coupled with the preponderance of family farms, sprinkled with large plantation type holdings in parts of the South.

Prior to the Revolutionary War, the restrictions on colonial trade varied from time to time or from 1621 on. But the Navigation Act of 1660 may be regarded as representative since it repeated earlier restrictions and added new ones. And under this term of 1621, ships engaged in colonial trade had to be British. Does this remind you of anything? They had to be British owned; they had to be British built, and there had to be at least three on the crew that were British subjects.

More important to the farmer, all the sugar, tobacco, indigo, ginger, and fustic, and other woods used for dyes exported for the colonies had to be sent directly to England. In 1706 molasses and naval stores were added to the list. Regulations affecting the sale of farm products took two forms.

One, the imposition of heavy duties on colonial products; and two, restrictions on trade with the French, Dutch, and the Spanish West Indies. These restrictions were frequently violated by the New England Traders.

At the outbreak of the Revolution, farmers were utterly dependent for their growth and prosperity on the sale of farm produce to oversea markets. Export food products increased substantially after the Revolution. And from 1790 to 1807, there was a heavy European demand to supply the deficiencies caused by crop failures and the Napoleonic War.

Trade fell off in 1808 when the Federal Government under President Jefferson's leadership approved the first of a series of embargoes and nonintercourse acts in an attempt to force the British and French agreement with the American views on farming and shipping rights.

Thusly, the stage was set, and the power of trading worlds were told that the farm program for the United States was going to be one with a backbone predominantly of family farmers. The decision to make responsibilities would remain in the hands of he who tilled the soil, and would be based on free trade.

This issue was written into law through a series of governmental actions, the Ordinance of 1787, the Homestead Act, the Reclamation Act and many others.

We have a long—we have long since congratulated ourselves on this decision which perhaps achieved a greater degree of consensus than any other in the era of agricultural policy.

Our agricultural system had in it such sufficient flexibility to accommodate itself to a wide range of climate and geography, and also to the various cultures of the immigrants that came here to farm from all over the world.

Now, nearly 200 years later, we find ourselves addressing and wrestling with a very interestingly enough similar sounding problem.

For example, what type of agriculture should we have into the year 2000, family, corporate, cooperative? We're plagued with export problems, maritime bottom preference type laws, domestic versus imported labor type problems, restricting export, import laws, embargoes, overproduction. And the question who shall direct agriculture, the farmer, the banker, the EEC, the Government, the environmentalists, the conservationists or all of the above? Shall we curtail production until it matches consumption, thereby giving

our markets to countries like Canada, Australia, Brazil, and the common market who are not so inclined?

This is only a partial list of the problems, but it is sufficient, I submit, to portray the dilemma.

So where do we go into the next generation of farm policy? It's always an interesting exercise in problem solving to first find out how come we got where we're at. I hope this beginning statement has partially answered that.

I submit to you that we should review this history carefully, then keep the good and discard the bad.

The good that still remains of our forefather's strategy on agriculture is that ours should be a system built around the family farm with a competitive mix of large planation or corporate farms with the decision basically being left to the farmers.

The bad is the trap that we have fallen into by unwise Government interference and intervention. There is little question that Government should play a role in agriculture. The Government needs to be concerned that there is a reasonable supply at an affordable cost of food and fiber. It must assure that agriculture has the means and the capability to be a high confidence supplier of food and fiber indefinitely.

The dilemma then is, how do you insure the latter, and also insure a free enterprise system in agriculture. And I suggest, partially, the following—

Senator SYMMS. Keith, before you go ahead, we really welcome your entire statement, and it will be made part of our record. Rather than reading all of it, you might take the highlights, so that we can get through our lengthy list of witnesses. But I do appreciate your very competent statement.

Mr. ELLIS. I will attempt to summarize.

I suggest the following: And I have it first, and I think it's the most grievous.

The problem with agriculture is profitability. On a nonpartisan basis, we should recognize that American agriculture cannot survive on a free enterprise basis and live with the current and past politically expedient premise of cheap food. As efficient and productive as American agriculture is, there is no way without it being subsidized that it can supply food at the ridiculous figure of 16 percent of our disposable income.

I have lots of other things to say on that, I'll move off from that particular one, though. But I would like to remind you that only a few years back the American family was spending 20 percent of their disposable income for food.

Senator ABDNOR. How far back was that?

Mr. ELLIS. That only takes you back into the 1960's, mid to late 1960's, so it isn't all that far back.

Rather than Government subsidization of farm programs on a commodity by commodity basis, the Government should increase its efforts to help the farmers in the following ways: And these are mostly generic in nature. It doesn't matter whether you're a dairy farmer, or whether you raise cherries in Wenatchee or cotton in Dixie.

Government should help us with transportation. They should help us with our farm to market. Improve water and rail transpor-

tation. And particularly as far as inadequate locks and dredging is concerned. The Government should be deeply involved, more deeply. Instead of backing away, they should become more deeply involved in basic agricultural research.

We're living today on the wisdom of our forefathers 50 years ago who were willing to take of the tax dollars to see that we had a good basic research program. And we should do as much for those that come after.

The Government should take a more active role in consumer education to where the citizens of this United States understand the true cost of production. The true use and necessity of pesticides. The true facts in short about all of agricultural industry. And they've got to give us some help in the financial area. I won't, in the interest of time, go into the finance. But most certainly, FHA needs to be overhauled and brought into the 20th century, and put back into the business of making loans to farmers, not into the housing and all of the other situations and crepepaper that has been hung on that organization.

Then the Government most certainly ought to be able to come in and give us a lot of help with marketing, both domestic and export. The Government should proclaim a Monroe Doctrine as it were on foods, laying out the rules of which food type exports could be embargoed, so the entire buying world would understand the rules. And we suggest that food cease to be used as a weapon and as a tool by the Department of State.

Senator SYMMS. I hope we enforce the Monroe Doctrine that you're suggesting better than the present one which is not being enforced.

Mr. ELLIS. Well, that one is getting kind of ancient, too. But I think it has to be something that gets dramatic. Now, the Monroe Doctrine put us in good step for a long period of time. And all of a sudden, somebody started bending the rules, and nobody stopped them.

We've got to expand the use of Public Law 480. We've got to inaugurate, I think, a barter plan with those countries that need our food but have not wherewithal to pay us. Nigeria, for instance, has a burning need for wheat and rice. They have no money, but they've got lots of oil. That seems to me a good atmosphere for barter.

We've got to beef up the foreign agricultural service. We've got to reduce the ability of the State Department to damage food sales in the export by heavyhanded negotiations in trying to save dying industries. For the few millions that would have been saved in the textile industry, it's cost us billions of dollars in the grain industry. And the loss of sales of grain to China to almost, not quite, but almost going to offset all the gains that were made in the PIK program.

We've got to address the energy supply and rates. During the periods of high supply, now is the time when we need to move in with the technology and move from the hydro plants into real plants so we can develop the technology that we're going to need to be efficient in those particular instances.

We've also got a grievous situation in the West as far as electrical energy is concerned. The BPA's current financial condition dic-

tates that they have to raise their rates. Everytime they raise their rates, they reduce the usage. And this destroys the premise on which they've got to be operative, they're a volume operator. And they're killing off the volume buyers. And if we continue in the direction we're seeing right now, a lot of the privately irrigated land in the State of Washington is going to return to sagebrush and sand because of our inability to pay those prices that they're getting ready to charge us.

They must recognize the fact that agricultural electricity is basically used during the peak flows of the river when we're exporting huge amounts of electricity into California and into other areas. Agriculture in the Northwest needs to be extended the same privileges on being able to purchase power at reasonable rates as our neighbors in California.

We've got to have soil conservation, most certainly. But the best soil conservationist in the world is the farmer. But when he's trying to take all of his wherewithal to meet the mortgage at the bank, there's little left over to practice what he knows in the way of soil conservation. We're cash flow farming our farms.

One of the other things, we've got population shifts. And as population shifts, the water problem that we've seen in the West is going to be a water problem all over the United States. Because the competition between agriculture, industry, the power consortiums and the recreationalists will shortly be intolerable. The Government must move rapidly to insure that water for agriculture is available and at prices that are affordable.

In summary, I just would like to say that the Government should also recognize that the demise of the family farmer is not a product of capitalistic greed, but is the end result of a cheap food policy that has forced agriculture to search for its salvation in the economies of scale.

The ultimate consumer has been the worst enemy of the American farm in their unreasonable demands for cheap food. The next generation of farm policy should concentrate on allowing agriculture to be private and profitable. Thank you.

Senator SYMMS. Thank you very much for an excellent statement, Keith.

Now, we'll have Keith Kelly from Montana. And then we'll have some questions.

STATEMENT OF KEITH KELLY, DIRECTOR, DEPARTMENT OF AGRICULTURE, STATE OF MONTANA

Mr. KELLY. Thank you, Senator Symms and Senator Abdnor for holding the hearing out in the West.

For the record, my name is Keith Kelly, director of the Montana Department of Agriculture.

To begin with, I believe that a more appropriate title for these hearings might really be, "Farm Policy, a Must for the New Generation of Farmers." I say this because the closest thing to an agriculture policy that we've had in this country—we've not had one, we've just had short-term, 4-year farm programs enacted by Congress and in some fashion implemented by the administration in power.

Our farm programs were developed in the thirties to address a specific set of circumstances for a generally homogeneous agricultural sector. Some examples of our short-term, 4-year programs have been AAA, the land bank, soil bank, wheat certificates, and now PIK.

I'll ask the question along with Director Ellis, how can we justify 1930's solutions to 1980's problems for a vastly different agriculture?

It's vastly different in a couple of ways. Today we have expansive corporate farms, part-time family farmers who earn half their income away from the farm. And in the middle, the bona fide owner-operator family farmer earning all of their, or the most part of their income from the farm. The structure of agriculture not only has changed, but our agricultural markets have become global in nature. In the last 30 years, as has been alluded to, we're a world market. Two out of three bushels of wheat, one out of two bushels of soybeans and one out of four bushels of corn find home on a foreign table. These changes must be addressed by a farm program period. And a farm policy to address the farm program. I don't believe, however, that we can develop any new effective farm program without first formulating a national agricultural policy. And that's to go along with where do we want to be with our national agricultural situation in the year 2000, 2020 or 2040.

It's my belief that agriculture is a very integral part of the national and world economy, yet without goals or policy, agriculture will continue to be compromised. As long as the Secretary of Agriculture remains quite low on the list of cabinet heads to consult in any major policy decisions, agriculture will continue to be compromised and to lose ground.

Perhaps with the exception of the Homestead Act and the Morrill Act in the 1860's, at no time in history have we established any long-term goals for agriculture. I'll amend that further, perhaps back to the Jeffersonian days. Nor have we developed an action plan by which we intended to accomplish our goals. And as a fact, I believe we're just wandering around out there, and that's a major contributor to our difficulties in our American agriculture today. Since 1975, 100,000 family farms have disappeared. And this is equivalent to more than every farmer in Montana, Wyoming, Utah, Colorado, New Mexico, and Arizona. And this is since 1975.

In 1975, U.S. agricultural exports were \$21.6 billion and increased each year through 1981 to \$43.8 billion, or a 103 percent increase.

The trend of bankruptcy of family farms started during this period, after the first Russian grain deal and during the period when our agricultural exports were increasing. Yet, last year more farmers went bankrupt than any other time in our history.

If farms were experiencing trouble when agricultural exports were increasing at a rate of more than 17 percent, I hate to imagine what the results would be in a decline of the exports that we're experiencing at the present time.

Recently, about 2 weeks ago at the Western Governors' Conference in Kalispell, Mont., Mr. Lester Thurow, professor of economics at the Massachusetts Institute of Technology pointed out that agriculture is the only sector of our economy where we remain a

world-class competitor. The United States has lost its competitive edge in the world as a supplier of steel, automobiles, electronics, and various other commodities.

U.S. agriculture produces more high quality food and fiber more efficiently than any other country. And yet, for the first time in 13 years, U.S. agricultural exports dropped by 11 percent and are expected to drop another 8 percent this year. The decline will push our value of exports down to about \$35.9 billion, slightly higher than they were in 1979. It's kind of ironic that these declines are coming when world food demand is increasing. But I don't know how ironic it is in light of the untimely government intervention in the form of embargoes and other trade barriers over the course of different administrations over the last dozen years. World grain demand has been increasing since the 1970's to 94 percent. But the U.S. share of world demand only increased 16 percent.

If you look for a long-term goal where we want to be with our agriculture, we have to look at where the projections of the world's population growth is going to be in the year 2000. And it indicates increases in population of 5 percent in Europe, 45 percent in Latin America and 70 percent in Africa. With world population average increase by year 2000 of 32 percent. And that's the question to ask, who's going to feed that increased 32 percent of the world population? Based on this, and the expected increase in the standard of living that's been going on around the world, world food consumption or demand should increase by a probable like amount or slightly more.

Given these projected increases, it behooves us to formulate ways that will insure that U.S. agricultural production will be in a position to supply a large portion of this increased demand.

A common thread running throughout the evolution of American agriculture has been our cheap food policy. What our so-called cheap food policy represents is not so much a commitment to cheap food, but rather it represents America's lack of commitment to insure a healthy agriculture, an industry that is basic and vital to the Nation and the world.

Agriculture employs one out of five American workers, more than any other economic sector in the country. Forty percent of our land base produces for international markets, and in Montana 75 percent of our grain production is now being exported.

Rather than criticizing other countries for subsidizing their agriculture, perhaps the United States should begin to understand why other governments have such a strong commitment to maintaining a healthy agricultural industry in their country. It is time to begin the process of developing long-term policy goals which will maintain agriculture as part of the backbone of the American economy, which I think it is. Especially when it employs one out of five people.

Only through the development of such goals can the U.S. agriculture hope to maintain the world-class competitor that we are now in agricultural goods.

And I'll just touch very briefly on some of the goals that may be worked in combination to address part of that.

One goal might be the establishment of a timeframe in which the United States wants to achieve a given percent of the world agri-

cultural market. If anything, in our daily life, we have to set goals to strive for. And we should develop a policy to address those goals. To insure that this goal is met, our plan could include making agriculture, or should include making agriculture a priority in GATT Conferences. In the past, we have tied our hands behind our backs and traded away agriculture in the GATT agreements since the early 1960's.

Perhaps we ought to look at again the development of bilateral agreements. Canada and Australia, they do have bilateral agreements with various countries. And yet, we have shied away from that. Perhaps that's an option we ought to look at at least in quantities of grain.

Another thing that ought to be looked at is the inclusion of the Secretary of Agriculture in all the foreign policy decisions. Using agriculture commodities as a political diplomatic tool without any regard to the domestic agricultural economy is very shortsighted in my belief.

Expansion of the Public Law 480 program for market development. President Eisenhower, it's been some 25 years ago, developed Public Law 480, food-for-peace program. Yet, it only offers 1 percent of the budgets compared to the defense budget. And yet, we're using Public Law 480 in food-for-peace. Maybe we ought to relook at the dual pricing system for domestic and international markets, differential in prices of commodities. And there's many other steps that could be included.

Next week in Washington, Secretary Block is holding an ag summit to discuss with agricultural leaders mutual concerns. Governor Schwinden of Montana as chairman of the Agriculture Committee of the National Governors' Association will be attending that summit. And one of the topics will be, again, the short-term problems discussed in controlling production levels. With specific production goals in mind first, I believe then a program could be developed that would not require excessive Government intervention. But would integrate many different elements geared toward the same goals. And maybe we ought to look at the Armstrong bill where we could limit sodbusting which adds to overproduction for speculative reasons.

We could encourage marginal land already in production to be retired with a conservation PIK program and long-term contracts. We should include cross-compliance between wheat and feed grains in any future PIK or other acreage reduction programs. We've got a \$21 billion program on our hands, and yet right now it looks like the wheat ending balance is going to be just about the same starting the program.

We've got the Montana wheat farmers raising feed grains; and we've got the Midwest feed grain producers, I think, raising wheat.

Perhaps our private financial institutions could discourage overproduction through carefully designed credit availability programs. Perhaps there's something that should be looked at there.

Any Federal policy will have a direct affect on the structure of the agriculture sector, so the development of a national agriculture policy will require decisions about what that structure should be.

Statisticians have demonstrated many facts about farm size and efficiency. But if you measure efficiency under the economist rules,

and I take exception to some earlier comments stated today by one of the economists, the old economic rule is, you look at efficiency, you look at land, labor, capital, and management. And I believe the family farmer today, he is more efficient in land, labor, and management. But when it comes to capital, he has a very difficult time competing.

Small farms, they're about 66 percent of all the farms in this country. They produce 9 percent of the sales, the bona fide family farms comprising 27 percent of all farm products, and 35 percent of all the farm sales. The largest farms which comprise 7 percent of the farm sector produce 56 percent of the farm sales.

In comparing the efficiency of these various types of farms, criteria other than simply capital must be considered. I think we have to look at land, labor, or management in that formula.

If we support traditional American values, which I believe most of us do, we will work to insure the prosperity of the 721,000 bona fide family farmers. And that may be a \$200,000 income for family farmers. I'm not gearing it to exact sizes.

But we must insure their prosperity, the family farms that comprise the middle group of the agricultural sector. For it is the local owner operator on the land that will patronize the local suppliers, participate in PTA or run for the school board and vote for local bond issues. Without that family farmer, as has been demonstrated in States like California, our rural communities will lose much of their vitality and the qualities that characterize rural life.

Many States, despite national trends, are taking measures aimed specifically at preserving the family farm. Several States, including Montana, provide low-cost loans to young and beginning farmers, as well as tax breaks to farmers who sell out to beginning farmers. Federal policymakers should recognize the motives behind these programs. I think we're making the statement on the importance of that middle range of bona fide owner operating family farms.

The Nation appears to be on the road to economic recovery. But without a parallel recovery in the agricultural sector, our single largest employer, 1 out of 5 in this country upon which this Nation depends, any hope for long-term economic health is an illusion.

Thank you very much for the opportunity to testify here today.

Senator SYMMS. Thank you very much. Thank you all for your excellent statements.

Senator Abdnor, do you have any questions?

Senator ABDNOR. Yes. First, I'd like to say, I really appreciate these people coming as far as they have.

Senator SYMMS. Maybe I should ask one question that you may be able to answer.

You mentioned something here about the cross-compliance. If the farmer, say a Montana wheat farmer, has been growing wheat and he participates in the PIK programs, takes his production out of wheat and grows barley, is that what is happening?

Mr. KELLY. That's correct. The PIK program, and I'm not the master of understanding that, I don't think I'll understand that ever in total. But if they participate in the wheat part of the program, the gentleman that use to work for our department retired, and he was able to increase his barley production substantially. And in total, he got about as many acres planted. He's fully com-

plying with the PIK program as had he not complied at all. So he's got a pile of barley to compete with somebody's corn out there in the midwest, I suspect.

Senator ABDNOR. I'll tell you, that PIK program, Steve, I think up in my country, for instance, southern South Dakota, the wheat is a milder crop. And some of them go into the wheat and plant barley also, and they're not penalized in the wheat. They used to have a cross-compliance. I'm not sure why something like that isn't thought of.

Senator SYMMS. Well, I had one farmer tell me that he was going to return the favor to the Government for all the damage they had caused him in taxes and regulations and mismash foreign policy. He was going to comply with the wheat part of it, take the PIK payment, and grow barley. And I was wondering if he could do that legally.

Mr. KELLY. Yes.

Senator SYMMS. You're saying that they can do that legally?

Mr. KELLY. Yes. And that's being done quite a bit in Montana, and I suspect other States. Total production figures nationwide indicate that wheat production isn't going to fall off that much. But I want to emphasize that the PIK program is a needed program in the beginning, if it was set up to work right to get a cash flow out in the rural communities. And I think that's why the heavy participation in Montana. It's the second heaviest participating State because it did offer a cash flow situation for some very tight economically stressed farming situations.

Senator SYMMS. Well, I think Congress made the point that we have one third of our wheat out of production. But we're going to have our fourth largest crop in history. So something must be happening.

Senator ABDNOR. I don't think you can have the long-range programs. As someone mentioned here today, it appears we're putting \$21 billion in other farm programs, and that doesn't include the \$9—or \$12 billion more for PIK. And some of the economists and Senators from other States are just not going to sit still for increases like that; 300 and 400 percent while you're trying to hold the line on something else. But it certainly is a very needed thing. There's one overriding statement made in the hearings of South Dakota, and I'm sure in Iowa, that we ought to have a well planned and long-term policy instead of from year to year, as someone said earlier. One year they do one thing, and the next year somebody is told something else. And it just doesn't allow for any efficient planning and budgeting at all. It keeps your farm off balance.

I just have to say this about cheap food. At one of our hearings we brought in the consumers, and I was trying to get this one gentleman representing the consumer to say that he would be willing to pay more for food if we did get a practical policy for him. And I tried to get him to say that for a long time, and he finally had to say that. Somehow, we are spoiled in this country. People want about 16½ percent, whatever the figure is, they think they're paying plenty. But farmers are falling behind. And until we find a reasonable figure for their product, they're just not going to fare well.

And the consumer is going to have to put in more money. I don't think the Government can subsidize the food growth. Over in Europe, they pay 22 to 28 percent in the common market. Again, as somebody said here, they're willing to do it. They're willing to do it in Japan because they've had a shortage of food one time. Our people think there's an endless supply or quantity. And under the present conditions there is, but there may not be if farmers can't make ends meet.

So I don't know. I've been screaming about that, and I'm about ready to tell the world and the public in this country that they better get ready to pay more for their food because they're going to have to if we're to keep a decent agricultural system which is the backbone of this country.

So, that's a speech rather than a question, I guess. But I just want you to know that I completely agree with you.

Let me say, all of these things you suggest, like Mr. Ellis said, are great. But it's going to take more Government money. How are we going to finance a water program? I'm for a water program. As Steve said, I'm chairman of Water Resources and Public Works which handles the corps projects. We haven't had an authority for a water project for years. Of course, the Bureau of Reclamation hasn't done much better. They're only putting a couple billion dollars in. One fellow in Washington who owned one, talked in terms of billions. Nevertheless, in dollars and for what it costs to build, it's nothing to what it was 15, 20 years ago.

We want to build programs. There is great discussion on cost sharing of water programs. We had one presentation from Secretary Gionelli—Secretary of Army—supposedly speaking for the Cabinet level group. Secretary Watt said afterward that he didn't necessarily agree.

I'm going to meet with the Western Governors in Bismarck and get into this discussion soon. Because it is a problem. But I don't think we are going to see water projects being built like we have in the past where we've always had a tradeoff—we'll put a dam here, you take one there. I think those days of having that kind of luxury are gone. To pick very carefully, and how to finance them is a real question. But I don't know how much State and local governments can take on.

Somebody here mentioned locks. There are a lot of locks. We need one at Bonneville in the worst way, I'm well aware of that. I've had hearings out there. And Senator Hatfield isn't going to forget it. We need locks at St. Louis. But we're getting total at one end—we've got to have 100 percent financing for the users' fee. And I think that's impossible. But we've got some problems. Are the States starting to realize, though, that there is going to have to be some outside money put into this? That it can't all be done by the Federal Government?

Mr. KELLY. Yes, I think so.

Mr. ELLIS. To answer your question on where does the money come from, I suggest that we quit spending our money on a commodity-by-commodity basis. Because you fatten one and poison the other. And you take those moneys and spend them generically for agriculture, so we profit across the board in those things that are

generic in nature. We all need roads. We all need transportation. We all need marketing. We all need research.

Let me give you an example: the dairy industry. I have my own philosophy of what's the problem with the dairy industry today. But despite that, as you move into the dairy programs, it's difficult to do anything there that doesn't affect some other part of the agricultural sector.

The PIK program—and I submit the PIK program was necessary—it's got lots of problems, I wish we had something following it up to help it.

But in spite of that, here's a situation where we actually clubbed the livestock industry over the head. We're increasing the costs of their inputs. And here's a segment of our economy that isn't subsidized.

I could go on and on about the livestock industry. And instead of the Government subsidizing livestock, they're continually throwing roadblocks in their way or land management programs. The grazing fees, all sorts of environmental problems. And here we're doing nothing for the beef industry. But are we short of beef today? We certainly are not. Do we have too much? Well, that depends on who you talk to.

But at any rate, the free enterprise is out there working.

I don't think anybody ever was or ever is going to be intelligent enough to put together a commodity-by-commodity Government program. And if they did, we couldn't afford it.

And I don't feel that we ought to be subsidizing one agricultural industry in favor of another. And take those dollars and put into generic health for agriculture.

Senator SYMMS. I want to ask a question. Washington State is a State that has really gone in and planted massive acres of orchards—apples, grapes, and so forth—in recent years. But I was told last night—and I wanted to verify this in the hearing today—in Washington State, there are growers who are taking farm ground out of wheat production, planting grapes and getting PIK payments for it. Is that true?

Mr. ELLIS. I can't tell you if that's true. But if somebody did it, there's nothing in the law that would prevent it from happening.

I would say this, though, with the grape plantings and the size of the grape plantings, that wouldn't have been a significant thing. But there's nothing in the law that would prevent that from happening; 60 percent, incidentally, of all of the—well, it's not quite that, it's down in the neighborhood of around 40 percent now—of all the apple trees in the State of Washington have yet to bear an apple. So here is an industry that is not subsidized. They're out there betting their own dollars on risk capital.

Senator SYMMS. Sounds like there's going to be a lot of apples to eat.

Mr. ELLIS. Yes, a lot of apples.

Mr. BALLOW. Could I ask a question about Senator Abdnor's question about the water financing?

Senator SYMMS. Yes.

Mr. BALLOW. It's my personal feeling that water in the West is our most valuable asset. And it's going to get more and more valuable as our population increases.

And in our own State, we had our Truckee-Carson irrigation district, which was the first reclamation project that was done in the United States. It was called the Newlands project. It was started by Senator Newlands of Nevada. And that reservoir was built in 1915.

Well, about 5 years ago our farmers and ranchers that were a part of that irrigation district sent their final payment into the Federal Government on that entire loan from the Federal Government, and that project was paid off.

The Federal Government did not want to lose control, and they sent the check back. And I think this was very bad.

But I think in the future, you're going to be able to finance these projects based on the value of the water. And I think when you talk about recreation, wildlife, and municipal and industrial uses for this water, you can get the initial financing to go ahead and get a payback program. They'll pay for themselves over a period of years, and you'll be traveling free after that. And we really need some of these projects.

Senator ABDNOR. We certainly do. It's hard to realize, Senator Symms, but during discussions on the Bureau of Reclamation Act—and I'm backing up now—somebody pointed out there's been more money put into Washington's transit system than we have in all the reclamation projects in the West.

Senator SYMMS. Yes, since 1902. More money spent on the subway in Washington, D.C., than all of the water projects, and reclamation projects combined in the West since 1902.

Senator ABDNOR. I wish we could get off water because it's not part of the agricultural program, but certainly is a part of ag survival.

I agree with Secretary Watt, and we wrote him a letter earlier expressing some of our thoughts. But some States are just going to have to take into account the ability to pay when we talk about projects. Some States are blessed with far more wealth than other States, and they have to have water projects and water supplies too. Some States have had past commitments.

My State, certainly not a rich State, gave up 500,000 choice acres of land to make the big Missouri River reservoir possible. It's a good strong program. And all the benefits of it have not been in my State. It's taken care of the flood control of the South. It's taken care of water transportation on the river now, and we love to have that. The power that comes from it goes mostly to the other States. We're not a public power State. So when we talk about financing water projects—and it's got to be a broad subject—it's not going to be a very easy one to address. I'm going to be addressing that when I go back. But that's another subject.

Let me tell you something about small farmers. At our hearings I was surprised to learn—and this is true—that two-thirds of the farmers in this country make more money off the farm than they do on the farm. That's getting to be a trend. That doesn't represent, I don't think, the real farmers of the country. I don't know how much consideration you're going to put into that aspect. It's good, I guess, because it keeps really small farming. But we don't find those situations in South Dakota. And I doubt if you find them in Idaho.

Senator SYMMS. There are a lot of small farmers that work in the processing plants in the Caldwell area who have a small farm.

Senator ABDNOR. These are things you have to address. I mean, we certainly don't want too much of our program costs going to too few. But somewhere, I don't know where, the fine line will have to be drawn. How do you handle that? Do you have any thoughts on how you're going to put the small farmer—I mean the young farmer in? There is an age limit and the average farmer is getting to be older and older. How do we attract young farmers?

Mr. KELLY. Well, I just pointed those figures out. I'm not saying we get rid of the large farm or the corporate farms. I just point those figures out to say this is a trend that's been evolving. And to continue to evolve, I think, we will concentrate our lands into very large holdings. But there are probably outside interests that may be sitting around a boardroom making decisions on when to plant, or how to raise a crop out there. And I submit to you that if I worked for one of them, I'm probably not going to be as likely to get up at four in the morning and pull the calf. If it's my cow or calf out there, I think that the owner-operator type of agriculture, as I understand our university system, that is you most effective producer of agricultural commodities. But they cannot compete in the capital market.

And it appears to me that that is the group, that bona fide owner-operator that may hire seasonal labor and whatnot, those are the people that we ought to address our farm policy and farm programs for.

The very big one—you know, I question how much they need it. They can take advantage—they have been able to take more advantage of the tax programs. And you couple that with the farm programs which they have been taking advantage of. And especially, PIK, which there's no upper limit on payment limitations. That gentleman there in the center there can produce it better than anyone else. And that's the one we ought to look at and gear our farm programs on.

On a smaller farm, I may be one of them. I may be 20 acres out there and work for the State government and raise four head of calves a year. That's just about going to get me up to fill out an income tax form to be a bona fide farmer.

I can take care of myself, where that gentleman should be able to take care of himself by supplementing his income or subsidizing his operation in some manner. But that middle sector there that is really out there trying to make a livelihood of it, I think really deserves and warrants the attention.

Senator SYMMS. Another one of my duties is chairman of the Debt Tax Subcommittee or the State tax. And in the 1981 Economic Recovery Act we made some major changes in the State tax. Is that going to be helpful in allowing family farms to stay together and pass them on, in Montana, Washington, and Nevada?

Mr. KELLY. OK, I'll respond for the State of Montana.

Yes, it's helping them, but only to the point that is that son or daughter going to come back if the long-term outlook there isn't for any money on the farm or ranch. And we're seeing a substantial amount of sodbusting going on in Montana with good cattle outfits. I'm talking about 30,000 and 40,000 acre operations. That the one

family farm operation, that he just couldn't make it in the cattle business. So he sold out to the highest bidder, which happened to be a guy for perhaps speculative reasons was going to come in there and plow some ground under and resell it to somebody else down the road. But there still has got to be profit to the bottom line or making some money in there somewhere.

Passing the tax down and giving the State tax a break, that helps out for a while. It's not a permanent solution.

Mr. ELLIS. I'd have to agree with that. I think we do a lot of cosmetic things, but it's difficult to do them equitably. The question was asked, should somebody back in the Midwest have gotten one-half of a million dollars off PIK? Nobody has talked about what that individual's costs were. He's a big operator. His costs are substantially more than some small operator.

The question that I think needs to be asked on that one-half of a million dollars, is what was his production costs. His production costs, he might be somewhere in the neighborhood of three-quarters of a million dollars. Really, the only difference between a corporate farm that goes broke and a family farm that goes broke, the family farm goes plop, and the corporate farm goes bang. The amount of money and time and talent and capital that gets put into one of those is astronomical. Many of them have made it, many of them won't. But I think that's the free enterprise system. I think those that can ought to be out there, if they can compete. If they can't compete, they shouldn't be.

I do not think that we ever ought to have a farm program that subsidizes the inefficient.

Senator SYMMS. Well, let me ask you one more question, and we'll let you three gentlemen go.

But when I was on the House Ag Committee before going over to the Senate, the Merrill Lynch Financial Brokerage Co. came up with a plan to allow investors in New York to buy land in Iowa, with the idea that they could participate in the growth of land market. Well, since that time, the price of farmland has gone down. So I don't think anybody has made a big fortune on it.

But I was very interested in the fact that on the House Ag Committee, there were only two of us that voted against the resolution, myself and one other Congressman, to outlaw this type of activity, because of the fear that somehow outside capital was going to prevent the family farmers from farming. My argument was that if you allow somebody else to buy the farm and lease it, you give a young farmer the opportunity to start farming. You also make the opportunity for an old farmer to retire. If somebody wants to put money up so the young farmer can get into farming, all he has to buy is a tractor and combine, or whatever. He doesn't have to invest in \$1 million for land.

Do you have any comments about that?

Mr. ELLIS. Yes; I think you were a prophet before you time. Because I think we're going to see an awful lot of astute young farmers who have been well schooled in economics. And they're going to make the decision that he doesn't want as much capital tied up in land as he's got tied up in land. And he's going to be very willing to let somebody else hold the land title, and let him concentrate

and use his capital strictly as far as production is concerned. And I think we're going to see an upsurge in that.

Senator SYMMS. Well, isn't that a helpful way to get a young farmer in?

Mr. ELLIS. You bet. And most of the young farmers that are coming in today are coming in precisely that way.

Mr. KELLY. Just one comment on it. Just so the program is structured that it isolates the speculation in the land. That would be my only observation. That perhaps in the past, we've had—the land values are certainly beyond, right now, the levels in Montana of what their production capabilities are. I mean, that's why farmers are going broke. They can't service debt on land value that's sitting out there right now. But they can pay off the debt, if they turn around and have somebody become the realtor. And that's the only question.

If you can design or structure it, so we just do not—we reduce or minimize the speculation on investment of land as a hedge against inflation or whatever. And that appears to me in the past several years has been probably one of the real downfalls in agriculture, that's been the runaway on land prices.

Senator SYMMS. Well, there's been great concern because there were some benefits that foreigners could get if they bought land. And they didn't have to pay the tax like somebody that's an American.

But, you know, it seems like we always shoot ourselves in the foot. If we have a problem with foreign ownership of American agriculture, all Congress would have to do is pass a simple law that said they have to have an American partner. That's what they did in Mexico. And immediately we could get back some of the money that we've been sending all over because they can't haul the farms away.

Somehow, we have just been fearful of this. And the parochialism in our agriculture policy is probably partially what's lead to the dilemma we're in. There's so much parochialism.

I appreciate your comments, Mr. Ellis, about the one farm program hurting the other one. I think you properly pointed out that the cattleman has sure taken it over farm policy the last few years. And they've never come to Washington to ask for anything but to have us keep out. The fact is the Idaho cattlemen lobbied against the bill to extend credit to beef producers a few years ago. And properly so because they wanted to go ahead and take their lumps and get it over with and get supply and demand back in relationship.

I have no more questions.

Senator ABDNOR. That brings up one point about cattlemen. We've had this cattle checkoff system. You're talking about research. Research is important, and twice now a bill came up for vote among cattle people throughout the Nation.

Senator SYMMS. We let them vote by the head of cattle instead of by the farm—

Mr. BALLOW. Each farmer had a vote.

Senator SYMMS. That's what I mean.

Senator ABDNOR. But the point is, don't you think there are some cases in research where we're going to have to call upon the farm-

ers who have farmed themselves to have this checkoff system to help?

Mr. BALLOW. Well, with respect to the beef checkoff program, our ranchers in Nevada voted on it twice, as I recall. And it was in the neighborhood of 80 to 83 percent in favor of this self-supporting program.

Senator SYMMS. I think it was in Idaho, too.

Mr. BALLOW. And after it was defeated at the national level and everyone went ahead and established their own State beef checkoff program. And now each rancher is putting up 50 cents a head for that.

Senator ABDNOR. You just said that my Secretary of Agriculture is quite a guy, as we have discovered. You'll be hearing from him. But we're talking about cattle ranchers at this hearing. We think out in South Dakota that everything west of the river raises all the cattle. But he's got some competition. And there are far more cattle in the eastern part of the State. But they're still making a big deal about where the cattle are located. And you have to give them the right to vote.

How are we going to convince those people?

Senator SYMMS. What we have to do is one man, one vote. One cow, one vote.

Senator ABDNOR. Maybe that's the way.

Senator SYMMS. Thank you very much.

Mr. ELLIS. For whatever it's worth, the common census that I gathered talking with other directors, secretaries, and commissioners of agriculture, if that was put to a vote again, it would pass.

Senator ABDNOR. Don't you think that the farmers are beginning to realize that they have to work a little more closely together? That we can't have these great differences. Aren't they beginning to realize that? I hear that out in the hearings from farm groups testifying. They're not as far apart in their philosophies and thoughts. There's just no way we can afford differences if we're really trying to sell these farm programs across the board.

Mr. ELLIS. I think that the fellow this morning that said that if we don't settle this agriculturally, it's going to be settled for us by nonagricultural people. And we might not like what we do to ourselves, but I submit it would be better than what a nonfarm secretary will do to us.

Senator SYMMS. Thank you all very much.

The next panel is Ray Poe, manager of the Idaho Farm Bureau from Pocatello. Steve Goodwin, National Farmers' Organization from Hazelton. Glen Beweese, State master of the Idaho State Grange from Meridian. And Roy L. Holman with the Utah-Idaho Farmers Union. Would you all please come forward. If you could summarize your statements and try to stay within our 5-minute rule, which we haven't done very well with so far this morning.

Senator ABDNOR. I'd just like to say something. These gentlemen have all been waiting very patiently for us to bring them forward. Up to now, we've heard from some important people with a great contribution to agriculture. But these are the guys that live with and practice it.

Senator SYMMS. These are the real farmers here.

Senator ABDNOR. Maybe they'll have a lot of comments on some of the things we've been talking about.

Anyway, we're happy to have you with us. You're the guys who really have to live with the legislation we pass.

Senator SYMMS. Is Terry Murphy here? Terry, would you come up?

I understand that Terry Murphy is the president of the Montana Farmers Union. Could you join us at the table here? Is it correct, you have to leave right away for a plane connection?

Mr. MURPHY. If it's convenient for you gentlemen, I'd sure like to.

Senator SYMMS. Well, maybe these—if it's OK, we'll let him go first.

Are you also a farmer?

Mr. MURPHY. Yes, sir.

Senator SYMMS. What type of farming?

Mr. MURPHY. Nonirrigated wheat, barley, and cattle in Jefferson County, southwestern Montana.

Senator SYMMS. So a lot of your wheat would come through the port in Lewiston, I suppose?

Mr. MURPHY. Yes, it does.

STATEMENT OF TERRY MURPHY, PRESIDENT, MONTANA FARMERS UNION

Mr. MURPHY. Senator Symms and Senator Abdnor, I thank you for the opportunity to address the issue of farm policy in America. And I'm sorry that I don't have written copies to give to you.

My name is Terry Murphy. I am president of the Montana Farmers Union, which is Montana's largest farm organization, headquartered in Great Falls.

Generally, we believe having a Federal farm policy or program is preferable to having none. Certainly there are vast differences in various programs, effects, and philosophies. We think the new program needs to be tailored to a set of long-term goals rather than as a reaction to crises as we've had in recent years.

Some of the long-term goals, in our view, should be: No. 1, to provide employment for Americans. The more private entrepreneurs there are in their own business ventures, which includes family farms, the less people need to be standing in unemployment lines. So here we see both an economic and a social aspect for the need for long-term dependable farm policies.

Farm programs as we know them, in my view at least, were started in the 1940's. Not because people loved farmers, particularly, but because raw material production at profitable prices was crucial to the war effort. To avoid monetizing and mammoth debt to finance World War II, we monetized production instead, and were able to enter the 1950's in good financial shape as a nation and as individual farmers.

We feel there were some features of those programs which have good potential for meeting 1980's needs as well.

Supply control through mandatory allotments, including cross-compliance, CCC loans at cost of production plus, and soil conserva-

tion were portions of those programs that need to be considered again.

Now, such programs worked for farmers as well as the public. And I think it's illustrated by the fact that in the 1950's, total farm debt in the Nation just about equaled that year's net farm income; 1 to 1. Now farm debt is about 11 times the annual net farm income.

In the years of that program, the U.S. Treasury actually profited, there being no net taxpayer costs at all. I realize some of those provisions may offend the traditional American free-market ethic, but the reality is that the rest of the world does not operate or even pretend to operate on such a free market. As individuals, American farmers cannot economically compete in a world market where all the other farmers are represented by their governments.

A coordinated U.S. policy administered by Uncle Sam is necessary, I believe.

No. 2, the creation of debt—excuse me, the creation of wealth from the land is a national necessity. Increasing farm exports at less than cost of production is a self-defeating exercise for our Nation. Targeted production of the amounts of storageable wheat and feed grains to meet an existing market demand would be more in our national interest than to simply produce unlimited amounts hoping that we'll somehow find a buyer for it.

Further, Congress must in the farm bill or otherwise, prevent further erosion of our export markets by U.S. imposed embargoes. Committed U.S. sales of prime produce must not be interrupted for any reason, short of an actual state of war involving America itself.

In the last 9 years, one Democratic and two Republican Presidents have done more damage to farm prices in oversea markets than Russia, Japan, Canada, Australia, and the European Common Market combined.

We gave away our markets, nobody took them away from us. In our interest, we must not allow it to happen again.

No. 3, funding for basic research has been given good support by Secretary Block. But a larger, long-term commitment is needed. Public-sector funding cannot be totally supplanted by private research grants. We need both. And a long-term Federal commitment to research and to production methods, crop development, and soil science is really needed to move toward the goal of sustainable, profitable agriculture, which does not deplete our soil fertility and water quality.

Another area of concern must be tax policy. We have with good intentions created a proliferation of tax credits, accelerated depreciation, capital-gains treatment, and so forth. But in many cases, the effect has not been as good as the original intent.

I realize that we're here to talk about farm and nontax policy, but the two are tied together so tightly, we must look at both.

Much of what is viewed as efficiency by large corporate or investor-owned farms, is not production efficiency at all. But merely money management and tax accounting efficiency, which is not readily available to the small- or medium-size, full-time farmer. I maintain that an actual cost of producing food for the consumer, without the use of investment credits, depreciation, and capital gains, the medium-size family farm will beat the very large farm

hands down. But the current farm and tax policies are pushing us toward the large operator, to our detriment, I believe.

So in quick recap, strict production controls for surveying a real market; soil conservation and economic stability; research; dependable export policy; and a straightforward tax policy are some priority areas we commend to you.

And I thank you very much.

Senator SYMMS. Thank you very much. We appreciate your excellent statement.

Ray Poe, farm bureau.

STATEMENT OF RAY POE, DIRECTOR OF COMMODITIES, IDAHO FARM BUREAU FEDERATION

Mr. POE. Thank you. I have a complete prepared statement that you should have before you. And this is a summary of that statement.

Senator SYMMS. Your entire statement will be part of our record.

Mr. POE. OK. Senator Symms, Senator Abdnor, members of the Joint Economic Committee, my name is Ray Poe. I am the director of commodities for the Idaho Farm Bureau Federation. The Idaho Farm Bureau is a private, nonprofit, general farm organization made up of 39 county farm bureaus representing approximately 23,000 member families in Idaho. Nationally, farm bureau is 3,200,000 member families strong.

A market-oriented farm program is needed for prosperity. The Government's payment-in-kind program has bought time but not prosperity for agriculture.

We have gained a little breathing space for a couple of years, but the real debate on farm programs has just begun.

Congress has not made essential domestic spending reductions necessary to eliminate inflationary expectations. Federal farm programs cannot escape spending restraints if we are to gain control of runaway Federal spending.

U.S. farm policy has to stop artificially propping up farm prices for political purposes, and start meeting foreign competitors by relaying support prices to world prices. The current decline in farm exports is, in great part, attributed to the lack of price competitiveness.

Keying U.S. farm policy to a world market price offers advantages. It would require producers and farm policymakers to pay close attention to the world market prices first rather than last as often is the case.

Permanent production controls as a policy option would result in a public utility status for farmers with U.S. agriculture headed in the same direction as the common agriculture policies of the European Economic Community. These are farm policies of high guaranteed prices, and with excess production siphoned into the world markets through export subsidies. Each year farm prices are decided at political sessions in Brussels, not in the marketplace, through a system that treats farmers as workers in a public utility.

The U.S. farmers refuse to be led down this path. Instead, we must move in the direction of clearer market signals to assure efficient production and increased trade.

This country has not reached its farm export limits as some now suggest. Argentina, for example, in the late seventies linked its support price to the world price and became a major grain exporter.

Another policy alternative would be for the United States to continue spending excessive amounts supporting agriculture. Expenditures which have increased from \$2.8 billion in 1980 to over \$20 billion in 1983 with little to show for it, except reduced net income in massive commodity stockpiles. And this year's remedy, PIK is a temporary, stock-reducing program that fails to confront the fundamental problems today plaguing agriculture.

The need for a PIK program shows inflexible Federal farm programs are incapable of dealing with changing United States and world production, marketing, and economic conditions.

Farm bureau's legislation proposal, H.R. 2811, the Agricultural Recovery Act of 1983, was introduced last April in the House as an example of a market-oriented approach that will lead to long-term agricultural prosperity. This measure calls for a freeze in target prices and loan rates. Actions that will signal our competitors that we have adjusted U.S. farm policies to the reality of changing world conditions.

Farm bureau's support for a market-oriented agriculture hinges on the belief that all future farm programs must do three things. Allow farmers to take maximum advantage of market opportunities at home and abroad without Government interference. Encourage needed adjustments in resource use. Reduce the need for future Government intervention.

Present programs clearly violate these fundamental objectives. The bottom line is that agriculture must become lean and mean if it is to prosper in the rest of the eighties and into the nineties.

This will not occur if Government is allowed to constantly interfere in producer decisionmaking by inflating our cost of production while at the same time creating farm programs that price us out of the market and encourage other countries to increase production.

Farm Bureau members are working hard toward world market-oriented agriculture. Thank you.

[The prepared statement of Mr. Poe follows:]

PREPARED STATEMENT OF RAY POE

SENATOR SYMMS AND MEMBERS OF THE JOINT ECONOMIC COMMITTEE:

MY NAME IS RAY POE. I AM DIRECTOR OF COMMODITIES FOR THE IDAHO FARM BUREAU FEDERATION. THE IDAHO FARM BUREAU IS A PRIVATE, NON-PROFIT, GENERAL FARM ORGANIZATION MADE UP OF 39 COUNTY FARM BUREAUS AND REPRESENTING APPROXIMATELY 23,000 MEMBER FAMILIES. NATIONALLY, FARM BUREAU IS THREE MILLION 200 THOUSAND MEMBER FAMILIES STRONG.

FARM BUREAU LEADERS BELIEVE THAT TO DEVELOP THE RIGHT POLICY SOLUTIONS FOR FARM AND RANCH PROBLEMS, WE MUST FIRST ASK THE RIGHT QUESTIONS AND EXAMINE ALL OF THE LOGICAL ANSWERS.

QUESTIONS NEED TO BE RAISED ABOUT FARM PROGRAM EFFECTS ON THE LONG-TERM ECONOMIC HEALTH OF AGRICULTURE AND ON THE NATIONAL ECONOMY--AND THE PROPER ROLE OF GOVERNMENT IN DEALING WITH PRIVATE FARMING AND RANCHING.

SINCE THESE HEARINGS ARE AIMED AT CONSIDERING THE NEXT GENERATION OF FARM POLICY, IT IS WELL TO FIRST CONSIDER THE NATURE AND WISDOM OF CURRENT FARM PROGRAMS.

WE NEED TO RECOGNIZE THAT "PIK" --THE PAYMENT-IN-KIND PROGRAM, IS AT BEST, A TEMPORARY, SHORT-TERM MEASURE DESIGNED TO DO CERTAIN LIMITED THINGS.

IT IS NOT A PROGRAM DESIGNED TO RAISE FARM PRICES THIS YEAR.

RATHER, PIK WAS DESIGNED:

1. TO REDUCE FUTURE GOVERNMENT FARM PROGRAM COSTS...
2. TO IMPROVE NET FARM INCOME BY REDUCING PRODUCTION EXPENSES...
3. AND, TO ALLOW THE MARKET TO OPERATE BY REDUCING BURDENSOME STOCKS OF FARM COMMODITIES...

SAID SIMPLY: THE PURPOSE OF PIK HAS BEEN TO ALLOW MARKETS TO OPERATE SO THAT FARMERS AND RANCHERS MAY RECEIVE ADEQUATE INCOME FROM THE MARKET--RATHER THAN FROM

GOVERNMENT.

THE CONDITIONS THAT CREATED A NEED FOR PIK HAVE CAUSED FARM BUREAU MEMBERS AND LEADERS TO SERIOUSLY ASK WHERE CURRENT FARM POLICIES HAVE GONE SO WRONG THAT AN EXTENSIVE PRODUCTION CONTROL PROGRAM IS NECESSARY.

TO US, IT HAS LONG BEEN OBVIOUS THAT CURRENT FARM PROGRAMS HAVE BEEN OUT OF TOUCH WITH MARKET REALITY--THAT THEY HAVE ENCOURAGED PRODUCTION COMPLETELY OUT OF LINE WITH MARKET DEMAND.

FARM BUREAU HAS INTRODUCED LEGISLATION--"THE AGRICULTURAL RECOVERY ACT OF 1983"-- THAT IS MARKET-ORIENTED IN DEALING WITH BASIC ECONOMIC FARM PROGRAM ISSUES.

UNTIL UNCERTAINTIES ABOUT FUTURE ECONOMIC POLICIES ARE ELIMINATED, WE WILL HAVE A DIFFICULT TIME WRITING SOUND FUTURE FARM PROGRAMS, WHICH CURRENTLY ARE GEARED TO THE EXPECTATION OF EVER-HIGHER INFLATION AND A WEAK DOLLAR.

IF THE COUNTRY BECOMES COMMITTED TO A LONG-TERM, STABLE ECONOMIC POLICY--WE MUST TAKE A LONG HARD LOOK AT BASIC PROVISIONS OF CURRENT FARM PROGRAMS.

IF CONGRESS BECOMES COMMITTED TO LONG-TERM POLICIES THAT REDUCE TAXES, ENCOURAGE SAVINGS AND INVESTMENT, ALLOW PRIVATE SECTOR CREATION OF MORE JOBS AND TRADE TO PRODUCE LOWER INFLATION AND HIGHER LIVING STANDARDS...

--THEN WE MUST RECOGNIZE THAT CURRENT FARM PROGRAMS ARE OUT OF STEP WITH THESE OVERALL OBJECTIVES.

THE NEED FOR A PIK PROGRAM SHOWS HOW PRESENT INFLEXIBLE FEDERAL FARM PROGRAMS ARE INCAPABLE OF DEALING WITH CHANGING U.S. AND WORLD PRODUCTION, MARKETING, AND ECONOMIC CONDITIONS.

THE PIK PROGRAM HAS BOUGHT TIME--BUT IT HAS NOT "BOUGHT" PROSPERITY FOR AGRICULTURE. WITH PIK WE HAVE GAINED A LITTLE BREATHING SPACE FOR A COUPLE OF YEARS, BUT THE REAL DEBATE ON FARM PROGRAMS HAS JUST BEGUN.

THIS DEBATE SHOULD BE AIMED AT FORCING FEDERAL FARM PROGRAMS TO STAND OR FALL ON THEIR OWN MERIT.

IT IS NATURAL TO BLAME OUR PROBLEMS IN AGRICULTURE ON SUCH THINGS AS THE WEAK WORLD ECONOMY...

--OR UNFAIR TRADE PRACTICES AND THE STRONGER DOLLAR...

--OR TO POINT TO EMBARGOES--AND THE RECESSION...

--OR TO BLAME OUR PRESENT DIFFICULTIES IN AGRICULTURE ON A LONG LIST OF OTHER FACTORS.

THE DAIRY INDUSTRY WAS HEALTHIER WHEN DAIRY PRICE SUPPORTS WERE FLEXIBLE AND ALLOWED TO MOVE UP AND DOWN WITH MARKET DEMAND.

GOVERNMENT-SET PRICES AT EVER HIGHER LEVELS, HAVE GIVEN EFFICIENT PRODUCERS CLEAR SIGNALS TO INCREASE PRODUCTION.

AT THE SAME TIME, EQUALLY CLEAR SIGNALS TO CUT USAGE AND TO LOOK FOR SUBSTITUTES, HAVE GONE TO THOSE WHO BUY U.S. FARM PRODUCTS.

AS STOCKS HAVE BUILT TO BURDENSOME LEVELS--THE MESSAGE IS CLEAR. TO REDUCE TAX-PAYER COSTS AND IMPROVE FARM INCOME, WE MUST ONCE AGAIN LEARN TO PRODUCE FOR CONSUMPTION, NOT FOR STORAGE.

DURING THE YEARS OF HIGH INFLATION AND INFLATIONARY EXPECTATIONS, WHEN CREDIT WAS CHEAP, FARMERS MADE MAJOR INVESTMENTS IN TECHNOLOGY WHICH SUBSTANTIALLY IMPROVED YIELDS AND TOTAL OUTPUT.

AT THE SAME TIME, EXPORTS OF MAJOR COMMODITIES INCREASED DRAMATICALLY. BUT MUCH OF THE U.S. DOMESTIC AND EXPORT DEMAND WAS BASED ON INFLATIONARY, NOT REAL, ECONOMIC GROWTH.

BY THE END OF THE 1970'S, INFLATION CUT DEEPLY INTO FARMERS' INCOME BY SHARPLY INCREASING PRODUCTION EXPENSES AND REDUCING PURCHASING POWER.

AS PRODUCTION COSTS INCREASED, SO DID THE POLITICAL PRESSURE ON CONGRESS TO HELP FARMERS "KEEP UP WITH INFLATION". THESE POLITICAL PRESSURES CAUSED FARM PRICE AND INCOME SUPPORTS TO BE RAISED AND THE FARMER-HELD RESERVE TO BE OPERATED WITHOUT REGARD

TO MARKET REALITIES.

WE ARE ALL FAMILIAR WITH THE LOWER MARKET PRICES THAT HAVE RESULTED.

WITH INFLATION ON A DOWNTREND, IT HAS BECOME DIFFICULT FOR GOVERNMENT TO MAINTAIN THESE HIGHER GOVERNMENT-SET PRICES IN THE FACE OF BUDGET RESTRAINTS.

FARM PROGRAM SUPPORT AND RELATED ACTIVITIES HAVE RISEN IN COST FROM \$2.8 BILLION IN FISCAL YEAR 1980...

--TO \$4.0 BILLION IN FISCAL YEAR 1981...

--TO \$11.7 BILLION IN FISCAL YEAR 1982...

PIK IS THE LATEST EFFORT TO DEAL WITH THE TWIN PROBLEMS OF LARGE STOCKS OF MAJOR COMMODITIES AND THE BURGEONING COSTS OF FEDERAL FARM PROGRAMS.

PIK IS A VOLUNTARY PROGRAM.

IF IT DOES NOT WORK, THE NEXT ADMINISTRATIVE ACTION WILL MOST LIKELY BE SOME FORM OF MANDATORY PRODUCTION CONTROLS.

PIK IS NOT A NEW IDEA, AND THE CIRCUMSTANCES OF LARGE STOCKS AND HIGH GOVERNMENT COST ARE NOT NEW. SIMILAR CIRCUMSTANCES AND SIMILAR PROGRAMS PREVAILED IN THE EARLY 1960'S.

WHAT IS NEW IS THAT U.S. AGRICULTURE HAS CHANGED DRAMATICALLY. IN 1960 THE FARM ECONOMY RELIED PRIMARILY ON DOMESTIC MARKETS FOR ITS OUTPUT. IT NOW DEPENDS HEAVILY ON EXPORT MARKETS FOR MUCH OF ITS INCOME.

OUR NEED TO REMAIN INTERNATIONALLY COMPETITIVE MUST NOT BE OVERLOOKED IN WRITING AND ADMINISTERING NEW U.S. FARM PROGRAMS.

MUCH OF OUR LOSS OF EXPORT MARKET-SHARE HAS BEEN DUE TO OUR DIMINISHED PRICE COMPETITIVENESS WITH OTHER MAJOR EXPORTERS.

SUBSIDIZED COMPETITION GENERALLY RECEIVES A LOT OF BLAME, BUT USDA STUDIES SHOW THAT ONLY ABOUT ONE BILLION DOLLARS OF EXPORTS HAVE BEEN LOST DUE TO SUBSIDIES OVER THE LAST 2 YEARS, WHILE YEARLY U.S. EXPORTS HAVE DECLINED BY OVER SEVEN BILLION DOLLARS.

WHAT ARE OUR CHOICES BEYOND PIK?

THERE ARE TWO PATHS WE CAN TAKE. ONE LEADS TO USING OUR PRODUCTION AND MARKET ADVANTAGES TO THE FULLEST EXTENT, THE OTHER LEADS TO SHUTTING DOWN THE U.S. FARM PRODUCTION PLANT AND, EVENTUALLY, TO PUBLIC UTILITY STATUS FOR PRODUCERS.

THE FIRST OPTION REQUIRES THAT FUTURE FARM PROGRAMS BE KEYED TO THE WORLD MARKET AND WORLD MARKET PRICES MUCH AS ARGENTINA DID IN THE LATE 1970'S WHEN IT PEGGED ITS GOVERNMENT SUPPORT PRICES AT 80 PERCENT OF THE WORLD PRICE FOR CORN. AS A RESULT, ARGENTINA'S EXPORT MARKET SHARE STOPPED WITHERING AND BEGAN TO GROW.

KEYING U.S. FARM PROGRAM POLICY TO WORLD MARKET PRICES WOULD ASSURE OTHER ADVANTAGES. IT WOULD REQUIRE U.S. PRODUCERS AND FARM PROGRAM POLICYMAKERS TO PAY CLOSE ATTENTION TO WORLD MARKET PRICES FIRST, RATHER THAN LAST, AS IS OFTEN THE CASE.

THIS APPROACH DEMANDS THAT PRODUCERS WORK AGGRESSIVELY TO REDUCE COSTS AND TO BECOME MORE PRICE COMPETITIVE.

IT RECOGNIZES THAT THERE IS A TREMENDOUS FOOD AND FIBER PRODUCTIVE CAPACITY IN THE WORLD BECAUSE OF MODERN TECHNOLOGY AND PRODUCTION TECHNIQUES--WITH MORE ON THE WAY.

TO CHOOSE THE SECOND GENERAL POLICY DIRECTION--IN WHICH WE ATTEMPT TO LIVE WITH PRESENT PROGRAMS AND THE PROBLEMS THEY HAVE CREATED...MEANS STILL MORE OPTIONS.

WE CAN: CONTINUE TO SPEND \$20 BILLION PER YEAR ON A COMPLEX SET OF PROGRAMS OF STOCK ACCUMULATION...

FOLLOWED BY PROGRAMS OF STOCK DISPOSAL SIMILAR TO PIK...

--AND EVENTUALLY MOVE INTO DIRECT EXPORT SUBSIDIES...

--OR, GO FOR MANDATORY ACREAGE REDUCTIONS OF 40 TO 50 PERCENT AS WE SEEK TO MAINTAIN FARM PRICES AT LEVELS ABOVE WORLD MARKET PRICES AND LOSE OUR MARKETS...

--OR, SOME COMBINATION OF THESE OPTIONS.

OBVIOUSLY, THE DOMESTIC AND INTERNATIONAL IMPLICATIONS OF THESE POSSIBILITIES ARE SERIOUS.

FARM BUREAU'S SUPPORT FOR A MARKET-ORIENTED AGRICULTURE HINGES ON THE BELIEF THAT ALL FUTURE FARM PROGRAMS MUST DO THREE THINGS:

1. ALLOW FARMERS TO TAKE MAXIMUM ADVANTAGE OF MARKET OPPORTUNITIES AT HOME AND ABROAD WITHOUT GOVERNMENT INTERFERENCE...
2. ENCOURAGE NEEDED ADJUSTMENTS IN RESOURCE USE...AND,
3. REDUCE THE NEED FOR FUTURE GOVERNMENT INTERVENTION.

PRESENT PROGRAMS CLEARLY VIOLATE THESE FUNDAMENTAL OBJECTIVES.

WITHOUT BASIC REFORMS, U.S. AGRICULTURE IS HEADED IN THE SAME DIRECTION AS THE COMMON AGRICULTURAL POLICIES OF THE EUROPEAN ECONOMIC COMMUNITY. THESE ARE FARM POLICIES OF HIGH GUARANTEED PRICES AND WITH EXCESS PRODUCTION SIPHONED INTO WORLD MARKETS THROUGH EXPORT SUBSIDIES.

EACH YEAR FARM PRICES ARE DECIDED AT POLITICAL SESSIONS IN BRUSSELS--NOT IN THE MARKETPLACE--THROUGH A SYSTEM THAT TREATS FARMERS AS WORKERS IN A PUBLIC UTILITY.

U.S. FARMERS AND RANCHERS REFUSE TO BE LED DOWN THIS PATH. INSTEAD, WE MUST MOVE IN THE DIRECTION OF CLEARER MARKET SIGNALS TO ASSURE EFFICIENT PRODUCTION AND INCREASED TRADE.

THIS COUNTRY HAS NOT REACHED ITS FARM EXPORT LIMITS AS SOME NOW SUGGEST.

BEFORE WE CAN REACH OUR EXPORT POTENTIAL--WE MUST FREEZE FARM PROGRAM TARGET PRICES AND LOAN RATES TO SIGNAL OUR COMPETITORS THAT WE HAVE ADJUSTED U.S. FARM POLICIES TO THE REALITIES OF CHANGING WORLD CONDITIONS.

WITH A DOMESTIC MARKET FOR AGRICULTURAL PRODUCTS THAT IS, AT BEST, GROWING ONLY SLOWLY, U.S. AGRICULTURE MUST LOOK TO EXPORT MARKETS IF WE ARE TO GROW AS AN INDUSTRY.

OTHER COUNTRIES HAVE ALSO CHOSEN TO COMPETE FOR THESE MARKETS. THE BOTTOM LINE IS THAT SUPPLIES AVAILABLE FOR EXPORT ARE GREATER THAN WHAT THE IMPORTERS CAN PAY FOR WITH THE INFLATION RATE DOWN AND THE COST OF CREDIT UP.

U. S. AGRICULTURE CAN GROW TO THE EXTENT THE WORLD ECONOMY GROWS AND MORE PEOPLE HAVE MONEY TO SPEND ON MORE FOOD.

THE WORLD ECONOMY WILL GROW ONLY TO THE EXTENT CREDIT IS AVAILABLE TO EFFICIENT BORROWERS--AND IF MARKETS ARE ACCESSIBLE TO WORLD TRADE.

CREDIT UNWISELY USED TO PROP UP BANKRUPT NON-MARKET ECONOMIES IS CREDIT NOT AVAILABLE TO THOSE WHO HAVE THE MARKET INCENTIVES NEEDED TO PRODUCE WHAT THE WORLD WOULD LIKE TO BUY.

PROTECTIONISM IN INDUSTRIAL GOODS AND THE SERVICE INDUSTRIES MUST BE REPELLED. WITHOUT ACCESS TO OUR MARKETS, POTENTIAL FOOD IMPORTERS WILL NOT HAVE THE HARD CURRENCY THEY NEED TO BUY FROM US.

THE NEED WILL CONTINUE FOR HUMANITARIAN FOOD AID--WHICH CAN HELP DEVELOP NEW FRIENDS AND NEW MARKETS--ALTHOUGH PAYING CUSTOMERS ARE OUR ONLY LONG-TERM HOPE FOR INCREASED NET FARM INCOME.

A SOUND DOMESTIC ECONOMIC AND MONETARY POLICY IS ESSENTIAL IF U.S. FARMERS AND RANCHERS ARE TO BENEFIT FROM OUR COMPARATIVE ADVANTAGE IN FOOD PRODUCTION.

RAPID INFLATION THAT ENCOURAGES SPECULATIVE LAND INVESTMENTS DOES NOT ALLOW THE GROWTH IN PRODUCTIVE INVESTMENT THAT IS NECESSARY TO KEEP U.S. AGRICULTURE MODERN, HIGHLY EFFICIENT AND PRICE COMPETITIVE.

TAXES ON PETROLEUM PRODUCTS THAT RAISE THE COST OF PRODUCING FOOD HURT U.S. FARMERS' COMPETITIVE ADVANTAGE, AS DO CARGO PREFERENCE RULES AND SIMILAR REGULATORY OBSTACLES.

THESE INCLUDE ENVIRONMENTAL ACTIONS THAT NEEDLESSLY LIMIT FARMER ACCESS TO NEW PESTICIDES AND RESTRICT EFFICIENT FARMING PRACTICES TO LESSEN OUR COMPETITIVE POSITION.

THE BOTTOM LINE IS THAT U.S. AGRICULTURE MUST BECOME "LEAN AND MEAN" IF IT IS TO PROSPER IN THE REST OF THE 1980'S AND INTO THE 1990'S.

THIS WILL NOT OCCUR IF GOVERNMENT IS ALLOWED TO CONSTANTLY INTERFERE IN PRODUCER DECISION-MAKING BY INFLATING OUR COST OF PRODUCTION WHILE AT THE SAME TIME CREATING FARM PROGRAMS THAT PRICE US OUT OF THE MARKET AND ENCOURAGE OTHER COUNTRIES TO INCREASE PRODUCTION.

FARM BUREAU MEMBERS ARE WORKING TOWARD WORLD MARKET-ORIENTED AGRICULTURE.

Senator SYMMS. Thank you very much for an excellent statement. Could you tell me who introduced the legislation you mentioned in the House?

Mr. POE. I couldn't tell you for sure. I've got a complete copy of that legislation, probably you do also. But the one who carried the bill, I'm not real sure.

Senator SYMMS. Thank you very much, Ray. Steve Goodwin.

**STATEMENT OF STEVE GOODWIN, NATIONAL FARMERS'
ORGANIZATION, HAZELTON, IDAHO**

Mr. GOODWIN. Senator Symms and Senator Abdnor, I appreciate the opportunity to present our views in regard to agriculture in farm programs. I am Steve Goodwin, a farmer from Jerome County.

The National Farmers' Organization is a collective bargaining organization for agricultural producers. We believe farm income must come from the marketplace through prenegotiated forward contracts.

As for Government farm programs, we believe an entirely new approach is needed. Such a new program: No. 1, should be designed as permanent legislation; No. 2, should not force us to depend on the U.S. Treasury for farm income; No. 3, should encourage producers of the major grains, oilseeds, and fiber crops to plan production, bargain for better prices and maintain at their own risk such inventory as they wish to carry over as income assurance in case of crop failure in the following year; No. 4, should be administered by a bipartisan board of producers appointed by the President.

This program can be devised using the following elements: No.1, a minimum price arrangement comparable to the minimum wage provisions now established by statute. Such a minimum price adjusted for quality and location differential should be initially set at 80 percent of parity; No. 2, national marketing orders, as the means of administration contact with producer referendums to implement the programs; No. 3, a price-supporting nonrecourse loan program, restricted in amounts of coverage and availability to owner-operators and tenants whose primary source of income is farming.

A farmer-owned reserve be continued as reassurance to the general public. Nonfamily corporations, conglomerates, foreign owners, and institutions should not be eligible, and neither should the land owned by such entities.

We believe it is reasonable to claim that broad acceptance and support for our bargaining concepts would make a domestic farm program operated by the Government unnecessary. We recognize, however, that buyer influence with the leadership of a number of organizations and individual producers present commitments to bargaining. It is also acknowledged that long-term financial commitments for concrete and steel structures discourage some producer organizations from changing directions of price-support policies, even though they might be inclined to seek a different approach.

Consequently, we have for some time thought that an independent group to better prices would be compatible with ongoing in-house programs of all organizations. We believe a new approach is

required because we are still steadily moving too many average size owner-operator farmers each year. In view of the record, we simply cannot claim that farm programs are of any great value in stopping this trend.

Gentlemen, I have been a farmer for 40 years now. I think the last 2 years are by far the worst as far as return on capital investment, as far as net farm income in that 40-year period.

The old programs have been systematically used to serve the expansionary goals of very large landholders who can accomplish their purposes with lower price support levels and payments more readily than individual producers.

Incidentally, they also have the political influence to continue these free rides as long as we run programs in the current fashion.

Cost of programs have escalated to a level that we seriously risk losing all by congressional action.

There appears to be good reason to doubt that continued expansion of exports can be relied upon to take off surpluses in the export market

Objective and calm appraisal of accomplishments of all our farm program efforts in the last 20 years under both political parties certainly must disclose that the old programs that once served farmers in their fashion now serve other elements of our economy much better than farmers. I am certain an accurate accounting of the cost of the programs over the 20-year period would not compare favorably with the accomplishments.

In summary, we urge that all think as farmers in dealing with this challenge to develop a new domestic farm policy. We do not serve our fellow farmers well by continuing to cherish the concept and motto of the international traders or the politicians who so easily fill the air with conversation about free markets, holding our share of export markets, balance of trade requirements, and other secondary concerns.

We owe it to farmers in this country to come up with the programs that can be operated largely by producers to control supplies entering the market at prices that would be at profitable levels. That is the real challenge.

We believe adequate farm income must come from the marketplace. It will only come through prenegotiated forward contracts. Thank you very much.

Senator SYMMS. Thank you very much. We appreciate your statement.

Glen Beweese, the State master of the Idaho State Grange.

STATEMENT OF GLEN BEWEESE, STATE MASTER, IDAHO STATE GRANGE, MERIDIAN, IDAHO

Mr. BEWEESE. Senator Symms, Senator Abdnor, I don't have copies of this, but I will get some copies and send them to your Boise office.

Senator SYMMS. OK, thank you.

Mr. BEWEESE. The Grange is a farm internal organization with a long record of programs benefiting and supporting farm interests. There are 10,000 members in the State.

We believe consumers must be made aware that agriculture production in the United States is largely responsible for a high standard of living. And that the financial well-being of farmers contributes to the financial well-being of others in our economy.

Agriculture provides job opportunities; and farmers are major purchasers of machinery, cars, oil, gas, and an endless list of supplies needed to keep the farm going.

We strongly support sound trade agreements and the reduction of barriers to trade with other nations. Our farmers need this export market and their commodities to provide a higher production for this Nation's trade deficits.

Trade of agricultural commodities should not be disrupted through embargoes, unless the embargoes apply to all trades.

We support Government programs and agencies that seek the conservation of our natural resources. We recommend the continuation of conservation programs that are designed to protect our land, water, and other natural resources.

We support research, education, extension and marketing programs provided by the extension programs of land grant colleges, and the work of the county agent.

The Grange feels extension service programs should primarily be directed to the improvement of the rural life of the Nation. We support adequate funding for the agriculture extension service from Federal, State and county levels.

Emergency needs for family farmers should continue to be supported by FMHA by extending loans and assisting in management decisions when economic setbacks occur due to natural disasters, low prices, high interest rates or commodity embargoes.

At this time, we believe the PIK program will work well to assist grain growers, and has indeed already raised the price of grain.

This program is being ably watched by the local ASCS committees, and has been widely accepted by farmers.

We favor a support price for dairy products, or not less than 72.5 percent of parity in 1983. And not less than 75 percent of parity in 1984 and 1985.

We urge the disposition of the large stocks of dairy products on a free basis if necessary to prevent large accumulations of dairy product stock.

We believe world hunger is a primary cause of political instability, and will continue to work for an adequate international food supply and encourage increased food production in developing countries.

The Grange believes that the the family farm is in keeping with the free enterprise system, and offers more assurance of an abundant supply of food at fair and reasonable prices to consumers than any other system. Thank you.

Senator SYMMS. Thank you very much.

We'll now hear from Roy L. Holman, president of the Utah-Idaho Farmers Union. Roy, welcome to Boise. We're glad to have you up from Utah.

**STATEMENT OF ROY L. HOLMAN, PRESIDENT, UTAH-IDAHO
FARMERS UNION, SALT LAKE CITY, UTAH**

Mr. HOLMAN. Thank you, Senator Symms and Senator Abdnor. I appreciate the opportunity to testify here today. Glad to know that you people in Washington haven't forgot us out here. Occasionally we wonder if you back there know we're still out here. We appreciate you coming out.

I'm Roy Holman. I'm president of the Utah-Idaho Farmers Union, a general farm organization representing the interests of family farmers and ranchers throughout Utah and Idaho.

The economic situation that farmers and ranchers find themselves in today is nearly identical to where they were in the early thirties. For many agricultural producers, the last few years have been an economic disaster. Farm prices today, as in the early thirties had been falling for several years.

Farm income has declined each of the last 3 years, and the prices farmers and ranchers receive for their commodities have remained below 60 percent of parity for 2 years, unparalleled since the Great Depression. Agriculture, our largest single industry is gripped by the highest rate of bankruptcies in two generations.

Prior to the midthirties, the Government had little if any involvement in the agricultural sector. Farmers and ranchers were basically on their own; and foreclosures, liquidations and forced sales increased at a rapid rate. The farm industry was rescued from near economic annihilation by cooperation with the Federal Government through many successful programs that you are no doubt aware of. I would like to mention only a few. Reclamation; rural electric cooperatives; Farmers Home Administration; soil conservation; agricultural research through the land-grant colleges; price supports and acreage controls to name just a few.

These programs had a very important effect. Most notably for farm producers and their economic well-being, but it also affected productivity. These programs were long range and provided farmers and ranchers with a sense of certainty and confidence. With that assurance of some stability, they began to move. Buying better equipment, investing in fertilizer, paying attention to research, and in general, just doing a better job of farming.

Presidents and Congress were led into believing that farm programs had outlived their usefulness, and that they were becoming too costly. We are hearing statements that agriculture would be better off without farm programs. And we hear the chant, get the Government out.

These programs worked, and worked well for the benefit of all concerned for 40 years. Do you live in a home comfortably for 40 years and then burn it down? No, I think not. During that time a home undergoes changes and requires upkeep and remodeling. That is what our farm programs need, some remodeling, some changes, not abandonment. Those cooperative efforts of the 1930's to rescue that failing industry have created this Nation's and the world's most efficient and productive industry.

During the first 40 years after the Agricultural Adjustment Administration Act was signed into law, the goal of maintaining orderly marketing conditions to provide fair prices to farmers and

protect the interests of the consumers was substantially met. Farmers Union believes there is no need to reinvent the wheel. The basic components of a fair farm policy for the future are available.

Between 1933 and 1973, with basic farm programs in place, the worst declines in a net farm income ranged from 13 to 28 percent. These programs helped to level out the peaks and valleys of boom and bust agriculture which had previously existed to the benefit of agriculture, consumers and the Government.

Prior to 1933's farm programs, farmers and ranchers were victim to wildly fluctuating incomes, as well as markets monopolized and rigged by processors and handlers. Net farm income of American farmers dropped by 60 percent from 1919 to 1921. And by 70 percent from 1929 to 1932 under the free market conditions then prevailing.

Under the market-oriented approach of the 1970's, the drop from 1973 to 1976 was 44 percent. And net farm income has dropped by another 44 percent since 1979.

The first essential ingredient to a fair farm policy in the future is an economic yardstick to measure the fairness of farm prices, and to serve as an indicator for future policy. We believe that the parity index is the best and most recognized standard. The parity concept is by no means perfect, however, it has been modernized and recalculated, and is a realistic economic barometer to agriculture as is the Consumer Price Index for America's workers.

Utah-Idaho Farmers Union voting delegates at our last annual convention in Pocatello, Idaho last January adopted policy which reaffirmed our support for the family farm system of agriculture in America. Our delegates pointed out that family agriculture is the cornerstone of a strong and free American society.

Since 1796, Congress has expressed its allegiance to the family farm structure of agriculture. And President Thomas Jefferson reflected his belief that agriculture is the backbone of our society. Congress repeatedly has made this commitment and has adopted policy to fulfill this goal.

I guess a pertinent question here would be whether national policy should be involved in determining what role family agriculture plays in future food production. I think it is evident that as you get fewer producers of any commodity, it is less than beneficial to consumers.

Our organization believes the great achievements and overwhelming abundance provided by family farmers and ranchers is a result of commitment and efficient and cooperation between family agriculture and Government.

Post-PIK grain policies must contain economic security for American farmers while providing food security for the Nation's consumers. Long-range farm policy must not continue to be crisis-to-crisis policy decisions with only short-run implications. Band-Aid remedies to problems are not as cost effective or easily administered as a long-range supply management program could be.

The heavy participation in the PIK program is an indication of farmers' interest in supply management programs for surplus commodities must be effective and provide long-range stability designed to keep stocks at targeted carryover levels for national security. Had a long-range plan been in place in the early 1970's, along

with prudent use of production controls, the high costs of the past 2 year's farm programs may well have been avoided.

Farmers Union believes that embargoes, suspensions and restrictions on agricultural exports should be exempted from foreign policy consideration. Farm product embargoes have cost us foreign markets, added to surpluses, increasing taxpayer's expense, damaged exporting companies, created the image of an unreliable supplier, and ultimately bankrupted many family farms.

We should evaluate import and export policies which allow substandard and contaminated red meats into our boundaries, and allow over 400 million dollars' worth of casein in each year, which is made into imitation dairy products which displaces domestic production. Many of the trade barriers American cattlemen, sheep producers, and dairy farmers are confronted with in international markets are not consistent with reciprocal trading policies.

We should have continued commitment to the food for peace program to share our food abundance with a hungry world. And also an important builder of new markets for our farm products. Increased funding could help use our current grain surpluses to help needy nations.

Major components of domestic farm policy cannot be designed for dependence on export markets.

Although farmers and ranchers make up only a small percentage of America's population, American agriculture is our largest industry with assets exceeding \$1 trillion. Agriculture employs more than 23 million people, or over 22 percent of this nation's labor force.

The combined agricultural industry which produces, transports, processes, manufactures, and sells our food and fiber accounts for approximately 20 percent of the gross national product. And I trust that you recognize that agriculture exports account for the single largest positive portion of America's international balance of payments.

The Utah-Idaho Farmers Union does not believe that Government withdrawal from agriculture is the answer. Nor do we believe that the Government can guarantee profitability in agriculture. We believe it is essential that the agriculture sector and the Federal Government have some kind of cooperative partnership to jointly develop the necessary long-range goals consistent with economic security for farmers and ranchers, and food production capabilities to provide food security to American consumers and the world.

Thank you very much for this opportunity.

[The prepared statement of Mr. Holman follows:]

PREPARED STATEMENT OF ROY L. HOLMAN

Mr. Chairman:

I am Roy L. Holman, president of the Utah-Idaho Farmers Union, a general farm organization representing the interests of family farmers and ranchers throughout Utah and Idaho. I appreciate the opportunity to appear before this Joint Economic Committee and address the Future of American Farm Policy. On behalf of Farmers Union and its members, I wish to commend this committee for your interest and foresight in holding these important hearings.

Before I discuss the subject of the future for agriculture, I would like to preface my remarks with a brief look back at some significant farm policies and programs that did work in the past and were beneficial to the farmer, the government, and the consumer.

The economic situation that farmers and ranchers find themselves in today is nearly identical to where they were in the early 1930's. For many agricultural producers, the last few years have been an economic disaster. Farm prices today as in the early '30's had been falling for several years.

Farm income has declined each of the last three years and the prices farmers and ranchers receive for their commodities have remained below 60 percent of parity for 2 years, unparelled since the Great Depression. Agriculture, our largest single industry is gripped by the highest rate of bankruptcies in two generations.

Prior to the mid-1930's, the government had little if any involvement in the agriculture sector. Farmers and ranchers were basically on their own, and foreclosures, liquidations and forced sales increased at a rapid rate. The farm industry was rescued from near economic annihilation by cooperation with the Federal Government through many successful programs you are aware of. I would like to mention only a few: Reclamation; Rural Electric Cooperatives; Farmers Home Administration; Soil Conservation; Agricultural Research through the land-grant colleges; price supports and acreage controls and I could go on. These programs had a very important effect, most notably for farm producers and their economic well-being, but it also effected productivity. These programs were long-range and provided farmers and ranchers with a sense of certainty and confidence. With that assurance of some stability they began to move. Buying better equipment, investing in fertilizer, paying attention to research, and in general just doing a better job. The American farmer became the envy of farmers throughout the world and became the leader in domestic industry through efficient mass production. This phenomenon continued for some forty years, then things began to change. Presidents and Congress were led into believing that farm programs had out lived their usefulness and that they were becoming too costly. We are hearing statements that agriculture would be better off without farm programs--"Get the Government out."

These programs worked and worked well for the benefit of all concerned for 40 years. Do you live in a home comfortably for 40 years, then burn it down? No, during that time a home undergoes changes and requires upkeep and remodeling. That is what our farm programs need--some remodeling, some changes, not abandonment. Those cooperative efforts of the 1930's to rescue that failing industry have created this nation's and the world's most efficient and productive industry.

During the first 40 years after the Agricultural Adjustment Administration Act was signed into law, the goal of maintaining orderly marketing conditions to provide fair prices to farmers and protect the interests of the consumers was substantially met. Farmers Union believes there is no need to re-invent the wheel. The basic components of a fair farm policy for the future are available.

Between 1933 and 1973, with basic farm programs in place, the worst declines in a net farm income ranged from 13 percent to 28 percent. These programs helped to level out the peaks and valleys of boom and bust agriculture which had previously existed, to the benefit of agriculture, consumers, and the government.

Prior to 1933's farm programs, farmers and ranchers were victim to wildly fluctuating incomes as well as markets monopolized and rigged by processors and handlers. Net farm income of American farmers dropped by 60 percent from 1919 to 1921 and by 70 percent from 1929 to 1932 under the free market conditions then prevailing.

Under the "Market-Oriented" approach of the 1970's the drop from 1973 to 1976 was 44 percent and net farm income has dropped by 44 percent since 1979.

--The first essential ingredient to a fair farm policy in the future is an economic yardstick to measure the fairness of farm prices and to serve as an indicator for future policy. We believe that the "parity index" is the best and most recognized standard. The parity concept is by no means perfect, however it has been modernized and recalculated and is a realistic economic barometer, to agriculture as is the consumer price index for America's workers.

--Utah-Idaho Farmers Union voting delegates at our last annual convention in Pocatello, Idaho adopted policy which re-affirmed our support for the family farm system of agriculture in America. Our delegates pointed out that family agriculture is the cornerstone of a strong and free American society.

Since 1796, Congress has expressed its allegiance to the family farm structure of agriculture and President Thomas Jefferson reflected his belief that agriculture is the backbone of our society. Congress repeatedly has made this commitment and has adopted policy to fulfill this goal. I guess a pertinent question here would be whether national policy should be involved in determining what role family agriculture plays in future food production? I think it is evident that as you get fewer producers of any commodity, it is less than beneficial to consumers. Our organization believes the great achievements and overwhelming abundance provided by family farmers and ranchers is a result of commitment and efficiency and cooperation between family agriculture and government.

--Post-PIK grain policies must contain economic security for American farmers while providing food security for the nation's consumers. Long range farm policy must not continue to be crisis-to-crisis policy decisions with only short-run implications. Band-aid remedies to problems are not as cost-effective or easily administered as a long-range supply-management programs. The heavy participation in the PIK program is an indication of farmers interest in supply-management programs for surplus commodities must be effective and provide long-range stability designed to keep stocks at targeted carry-over levels for national security. Had a long range plan been in place in the early 1970's along with prudent use of production controls, the high costs of the past two year's farm programs may well have been avoided.

--Farmers Union believes that embargos, suspensions and restrictions on agricultural exports should be exempted from foreign policy consideration. Farm product embargos have cost us foreign markets, added to surpluses increasing taxpayer expense, damaged exporting companies, created the image of an unreliable supplier and ultimately bankrupted many family farms.

--Evaluate import and export policies which allow sub-standard and contaminated red meats into our boundries and allow over \$400 million worth of casein in each year which is made into imitation dairy products

to displace domestic production. Many of the trade barriers American cattlemen, sheep producers and dairy farmers are confronted with in international markets are not consistent with reciprocal trading policies.

--Continued commitment to the "Food for Peace" program to share our food abundance with a hungry world and also an important builder of new markets for our farm products. Increased funding could help use our current grain surpluses to help needy nations.

--Major components of domestic farm policy cannot be designed for dependence on export markets. Generally, world production is adequate to meet world demand providing a buyers market. When infrequently production falls short, it is generally due to a major crop disaster and provides large exporters expanded markets. U.S. export markets have been affected by world economics and politics. Since 1967, when the International wheat agreements expired, there has been no world floor price and grain prices have drifted below the cost-of-production providing an atmosphere where competing governments subsidize their farmers to maintain markets.

Although farmers and ranchers make up only a small percentage of America's population, American agriculture is our largest industry, with assets exceeding \$1 trillion. Agriculture employs more than 23 million people, or over 22 percent of this nation's labor force. The combined agricultural industry which produces, transports, processes, manufactures and sells our food and fiber accounts for approximately 20% of the gross national product and I trust you recognize that agriculture exports account for the single largest positive part of America's international balance of payments.

The Utah-Idaho Farmers Union does not believe that government withdrawal from agriculture is the answer nor do we believe that the government can guarantee profitability in agriculture. We believe it is essential that the agriculture sector and the federal government have some kind of cooperative partnership to jointly develop the necessary long-range goals consistent with economic security for farmers and ranchers and food production capabilities to provide food security to American consumers.

Thank You.

Senator SYMMS. Thank you all very much.

I have just four questions that I'm going to ask. And I think you can answer them with a yes or no response. So we're interested in each one of your opinions. I'll start over here with Terry on this end and just go around the table.

The first question is, Do you agree—we want a yes or a no—do you want to freeze target prices?

Mr. MURPHY. No.

Mr. HOLMAN. No.

Mr. POE. Yes.

Mr. GOODWIN. No.

Mr. BEWESE. No.

Senator SYMMS. Yes or no, would you rather give more authority to the Secretary of Agriculture to set target prices and rates? In other words, more flexibility?

Mr. MURPHY. No.

Mr. HOLMAN. No.

Mr. POE. No—would you repeat that?

Senator SYMMS. Should the Congress give the Secretary of Agriculture more authority so he has more flexibility to set target and loan rates. Maybe I didn't make my question clear to all of you.

Mr. POE. I change to a yes.

Mr. HOLMAN. No.

Mr. GOODWIN. Yes.

Mr. BEWESE. Yes.

Senator SYMMS. And do you think that the—this question is not a yes or no, but do you think we should have programs that are voluntary or mandatory supply control programs?

Mr. MURPHY. Well, Senator, I think we need to have a combination, depending on the situation we're in. In oversupply times, I think we definitely need the potential—or the possibility of using mandatory supply controls to keep from really hitting the depths as we have.

Senator ABDNOR. Do you think the farmer ought to be allowed to vote on whether they want mandatory?

Mr. MURPHY. Yes, I do, sir. Yes, sir. I think a national referendum would be very helpful.

Mr. HOLMAN. I feel the same way. I think the farmer should have the opportunity to decide.

Senator SYMMS. Ray.

Mr. POE. I feel also the same way. Although, I think that would be limited to a certain extent. And it could be modified, if we would create a more world market-oriented agriculture, I don't think it would be necessary to have as many controls.

Senator SYMMS. Steve.

Mr. GOODWIN. That's what the farmer referendum is.

Mr. BEWESE. I think the farmer should have a say in what's going on.

Senator SYMMS. Now, as you know—the last question I have comes up continually—our foreign competitors subsidize agriculture. We spend billions of dollars in agriculture programs, but we only go part way.

Secretary Block has called for some export subsidies. Senator Helms went, at the request of the administration, to the GATT

meetings last year in Geneva, Switzerland. He has the reputation of being a free market conservative, but as far as he was concerned, because the way the Europeans were handling their agriculture, he said, "we have a billion pounds of cheese in storage. How much do you want of the stuff on the market? And when they realized that he was serious, they got down to some serious discussions. Although, I don't know that anything major was resolved. Maybe some bilateral agreements.

But how far—or how willing would you all be to support the U.S. policy to go into a bona fide trade war? Should we go part way, all the way? Would you want to comment on that? In other words, full blown export subsidies, and just go out and match the markets and go get those markets back that we've lost?

Mr. MURPHY. I would approach it very cautiously, Senator. I think there are some limited ways that it might be beneficial. But in the long-run, a full blown trade war would neither benefit us nor the Europeans. And hopefully, negotiations can lead to maybe meaningful supply controls on both sides of the Atlantic. I would much rather go that route.

Senator SYMMS. I'll let each one of you comment on that.

Mr. HOLMAN. Well, I would just say that I think we need to negotiate these prices. A price war with foreign countries wouldn't accomplish anything for us. It would be a disaster, I think.

Canada has implicated that they would be willing to sit down and negotiate price, and have done—

Senator SYMMS. Well, let's get specific here. Senator Abdnor and I are going to have to vote on this sooner or later. Senator Helms has introduced a bill—he's chairman of the Agriculture Committee—and he's tired of it. He said, "I'm tired of the mistreatment of the American farmer." He's saying, set everything aside and make a mandatory dairy dump on the world market to get rid of all of our surpluses. Sell it for whatever we can get out of it, but push it out on the market, clean out the warehouses before we go any further with this to get the attention of the other countries.

Would you vote yes or no on it?

Mr. HOLMAN. Well, that's kind of a tough one to say yes or no on. But I think with the starving people we have around the world, maybe it's not a bad idea to get that food out to people that really need it. And we even have them in this country, starving.

So, yes, let's get that out to the people that can use it and need it. I think it's ridiculous, the situation that we're in, with all the food we have people starving here and abroad.

Senator SYMMS. Well, if there are people starving in this country, the reason is either communications or lack of nutritional education. Because there are certainly a lot of programs to provide subsistence for everyone. With food stamps, and other Government subsidy programs. They shouldn't be starving in this country. I agree with you, there are a lot of starving people in many countries in the world.

But, Ray, how would you vote, yes or no, on the Helms bill?

Mr. POE. Well, I would have to go yes.

Senator SYMMS. The Helms bill just says, OK, if they want a trade war, we'll fight the trade war, and we're going to show you how the cow eats the cabbage. That's really what it amounts to.

Mr. POE. And I think that that's, you know, it sounds a little tough, but we've got to do something. And I think that's the way we're going to have to go. It may have some short-term effects that we won't like, but I think in the long-term it's going to create this world market, and we're going to have something that we can live with and we'll be better off in the future.

Senator SYMMS. Steve.

Mr. GOODWIN. Well, it is a little tough to answer with just a yes or no without knowing every circumstance. But maybe it doesn't matter to the Government, the Government owns stock. But it matters to a farmer. A market without a price has no value.

Mr. BEWESE. I would say, yes, get the surplus out on the market. It's one way we'll have to compete. Maybe get things back in line with the other markets.

Senator SYMMS. Not only in agriculture. The Europeans, the French particularly, then the Germans, the Brits, and the Japanese, have tremendous interest rate subsidies on their heavy industrial equipment. And it's cost us thousands of jobs in this country because we don't have competitive financing arrangements for, say, producing steam turbines and things like this, where we have the expertise. In fact, we taught most of them how to build them. But then they go in and get the business, and it lasts for years. If General Electric loses a generating plant, say in Indonesia or New Guinea, which they did last year to the French, then all the supply, all the equipment for years goes back to them. And they get it by subsidizing interest rates and took it away from our competitors.

And the same thing is true in agriculture. I don't know how we're ever going to get to a situation where we can have free trading if we don't make some rules and then stick by them and make everybody play the game by our rules. That's really what Senator Helms is trying to do. We absolutely must have some trading rules in the world, according to which everybody must live. Or we will play by their rules until they want to come back and play by ours.

Mr. HOLMAN. I would agree with that. I think one example, of course, is the import of dairy products. And this is one of the problems with the dairy industry; where we're importing tremendous amounts of dairy products into this country. Those products go right on to the market, and our products go into storage. I think we need to take another look at that. I think it's a little bit ridiculous to expose our dairy people to that type of thing, and other individuals, too.

Senator SYMMS. Jim.

Senator ABDNOR. Well I've gone through these same questions, trading with other countries and trade wars. I was over in Europe, and it gets rather exasperating. In fact, I've talked with these people, and you'd think we were the bad guys in this whole thing. And we've seen our market slip away from us. I guess they think it's all right to sell for less than they produce. But one thing about it, the people are willing to pay more for food in the European Common Market. They can subsidize their domestic price of food, but we don't have that luxury in this country. Our people still want it as cheaply as possible, but credit and interest rates are used against us. We've got enough problems just with the differ-

ences in our currency between countries, let alone having people cut the prices.

It's great to say we ought to work this out, but I think we've been trying to work it out. GATT's been going for quite a while. I think it was just last month that our group was over in Europe, and they say we're talking. I don't know if they're close to any kind of an understanding or an agreement. So I don't know what the answer is going to be. But it's a problem that we've got to contend with.

We have just made one movement so far to really combat what they're doing to us, and that's our flour sale to Egypt. That meant just simply joining in with the traders and giving them some of our excess wheat so they can sell it for a lesser price than the French have been selling to Egypt. I think that was our market at one time, but we pretty well lost it. That sale was a great boost, at least momentarily, as far as prices go. I think things went up a little for a few days. It didn't last long, but it made quite a mark, and certainly left a big mark on Europe. They're still talking about that situation. In this country, though, I read where it created over 8,000 jobs in the economy at one sale. And that's important to us, too. It made quite a contribution toward the balance of trade, which is important.

I just wonder how long we can sit back and say we're going to keep talking. We're talking. It's great, but it gets expensive, too.

Then this comment about freezing the target prices and loan rates, what do we do? I recall reading an article recently by Secretary Block about how the program of PIK will be closely associated with whatever we're going to raise the target prices to, whatever we're going to put most of our dollars into. But PIK is expensive; \$9 to \$12 billion this year. If you have a program that's costing around \$21 billion, plus whatever PIK is going to cost, that's expensive. I think it's great, I don't want to criticize, I want to see farmers do well. But I'm a realist down in Washington. When we're dealing with this budget and the problems we have, that \$21 billion alone represents a 300- or 400-percent increase over the—

Mr. TOSTERUD. Twelve billion.

Senator ABDNOR. Twelve billion in 1 year. Yet it was down to \$4 billion a couple of years ago. We're conceivably talking about a \$30 to \$32 billion cost to a farm program. That's great, but we—I'll bet we can't go on for many more years selling that to the Congress. So, you know—

Mr. MURPHY. On that subject, Senator, I would just say that we need to close the gap between the loan level and the target price because that gap is the net cost to the Treasury with the loan, commodity loans being repaid with interest, you don't have that problem. But the thrust of it—

Senator ABDNOR. Well, the price before they're going to repay it—I mean, that's great. You say that's just a loan, and it doesn't count on the budget.

Mr. MURPHY. Well, it counts only if in the long term, 3-year term of it, or whatever, the market price is never forced up to a level to bring about a loan redemption and the Government takes possession of the wheat. They can come out behind on that if we go on for the long term.

But really, to the farmers, as any businessman, a small profit is preferable to a large loss. And there is no use for us to keep producing massive quantities of commodities to force into the world markets at lower and lower prices just to have a big share of the market. We need to have—whatever share we have, even if it's a small one, needs to produce a profit. And I think we can tailor a farm program that will make it better for our country and our farmers.

Senator ABDNOR. Does that mean then we're going to have fewer farmers to produce less?

Mr. MURPHY. Possibly, possibly.

Senator ABDNOR. I guess this is the thing that—

Mr. MURPHY. It's an enigma.

Senator SYMMS. If I could just interject something here, I think what we have to do, which is the purpose of this hearing is to try to formulate a long-term program. But if we decide to go into a trade war, as some are suggesting, then we have to figure out where we're going to be 5 years from now, and are we going to stay with it once we start it, or are we just going to do it halfway? Because our halfway foreign policy with respect to the military program that we went into in Southeast Asia has cost us dearly in economic, social, and agricultural terms. Everybody in this country has paid in spades for it because of our failure to follow through with something we started. If we start a trade war, we can't go halfway. We're going to have to go all the way through.

And the question comes up, do we really have the political clout in Washington as farmers, because I can tell you that in Japan they don't have one man, one vote. The farmers have a disproportionate share of the vote in the Japanese Diet. One congressman, or one representative as they call them in Japan, who represents the farm district has 20,000 constituents. His colleague who has the same amount of vote in the Japanese Diet, the legislature, has 2 million people in Tokyo. So the farmers have the clout over there. When we sell them wheat, they don't let the wheat miller buy the wheat, they buy it—the Government buys it. Then they turn around and sell it—they buy it from us for say \$5 a bushel, and then turn around and sell it to the flour miller for \$10 a bushel. And they take the \$5 a bushel and subsidize the Japanese rice grower. And then he goes in and takes the rice business away from our Louisiana and California rice producers. And so our wheat farmers are paying for losing the business that our rice producers should have. We have the ability in this country, in Texas, Louisiana, California, and Arkansas, to really produce a lot of rice. And yet, we get beat over the head by the Japanese program.

I'm not so sure that I'm not ready to take it to them and fight them. But it really concerns me—if we don't know where we're going, we'll end up going halfway. And halfway is going to end up being a disaster. That's what I'm concerned about with some of these suggestions.

Senator ABDNOR. This is a lot broader subject than just farming because their automobiles are coming in. They can look at our wheat situation and see what we're going to do.

Senator SYMMS. That's right. The farmer may lose.

Senator ABDNOR. Twenty years ago we were a real dominant force in this world trade, and they had to come to us. But I guess we've proven that isn't necessarily true today. Russia didn't go through any great suffering because we refused to sell them grain. Unfortunately some countries still can produce a lot more than they're doing, and would be delighted if they could do something to foul us up.

We have the China textile industry coming in, and they cancel out our grain sales temporarily. That's one of the greatest expansions of our markets that we're looking at.

Senator SYMMS. I think that's a good point. That's what I wonder, if the farmer will take it in the ear.

Senator ABDNOR. In the last couple of days the President did something on specialty steel. The specialty steel that's coming in. I heard on the news today that Mrs. Thatcher was screaming because she's been cooperative. And frankly, given how agriculture in the European Community is in trouble over there, she's been fighting. But we've got her down on us now. She's been a pretty good ally in some respects.

This thing is so broad and so deep that it's a very difficult problem.

Senator SYMMS. Steve.

Mr. GOODWIN. My thought on it is, if we go into that trade war, then the Government had better be willing to pump a lot of money into it because the farmers can't put anymore into it. We can't produce for any less money than we're producing for now. We're not going to go into a trade war and lower prices. And the farmers out here support because they can't unless the Government is behind them and subsidizing them to do so.

Senator SYMMS. Well, I think it's worthy of mention, and I think this is very, very critical to the way the country goes. I'm certainly hesitant to see us get into a trade war knowing how politics in this country works, that with an election every 2 years, we have an inconsistent policy on most of these things. But we're in a dilemma. The Federal Government is spending 25 percent of the gross national product of the United States, most of which is going for people-type programs. If we don't get that under control, then I'm afraid that we won't have the reservoir to start fighting an interest subsidy war or whatever in a trade situation; that we won't stay with it for a long enough period of time. It won't be sustainable. So we'll end up, as Senator Abdnor points out, with the American wheat farmer subsidizing the Japanese rice industry indirectly. If they start buying wheat from Canada or Australia or somewhere else, then we end up getting hurt, too.

Senator ABDNOR. Let me give you another example. I find myself in a dilemma. I've never voted for foreign aid. I know there has to be some foreign aid, but I think it's been overdone and usually we get it as a package. The other day they put \$8 billion into the International Monetary Fund. I heard about the bailout of the banks and all that. That's a common term. Yet, I don't know who is getting more from that bank than the farmers. I mean, our third biggest customer is Mexico, and they were in need of more loans. It gets to be a very complicated thing.

Are you gentlemen for the IMF program? Have you any money through it? I'm just curious. What does it mean to agriculture? I guess we went ahead with it, or is that in the supplemental report?

Senator SYMMS. It passed the Senate. I don't think it's passed the House yet.

Senator ABDNOR. What are you feelings on that? That's another area of great expense, putting money into that. It's a very important tool when it comes to making grain sales and farm sales around the world.

Senator SYMMS. Of course, under the rules of the IMF they can't buy as much foreign stuff. They have to produce it at home.

Would you vote for or against the IMF I'll put you guys on the spot here.

Mr. POE. I don't feel qualified to comment.

Senator SYMMS. Thank you all very much. It's been a very enlightening hearing.

Our reporter has been very patient. She's been going for 4½ hours.

I had hoped when we started this morning that we could go straight through, but I don't believe it's practical to do that. I think the committee will stand in recess until the hour of 1:30. Then we'll start up with our next witness list which will be Vicki Patterson, Cal Nelson, and Mark Peperzak, along with Alex Sinclair talking about the dairy problems. They're people who are actively involved in it.

So we'll stand in recess until 1:30.

[Whereupon, at 12:31 p.m., the committee recessed, to reconvene at 1:30 p.m. the same day.]

AFTERNOON SESSION

Senator SYMMS. The committee will resume our hearing. I appreciate the patience of all of you waiting so diligently all day to testify. And we look forward to hearing your testimony. We'll move right on if we could have our next panel. Vicki Patterson, Cal Nelson, and Mark Peperzak, please come forward.

I think that Cal Nelson had to depart, so I will ask that his statement be made a part of the record at this point. In addition to speaking as president of the Nelson-Ricks Creamery Co. in Salt Lake City, Utah, he also was speaking on behalf of the National Independent Dairy Foods Association.

[The statement of Mr. Nelson follows:]

STATEMENT OF CAL NELSON, PRESIDENT, NELSON-RICKS CREAMERY CO., SALT LAKE CITY, UTAH, AND NATIONAL INDEPENDENT DAIRY FOODS ASSOCIATION

I am associated with one of the few remaining independent cheese manufacturers in the Western States. We are primarily manufacturers of cheese in Utah and Idaho. We have managed to survive the unfair competition from farm cooperatives primarily because we have sold our products on a quality basis.

Just recently, we were offered the purchase of the only independent dairy in Salt Lake City. After careful analysis, we decided the future in this industry was limited since the new material would be controlled by one large cooperative, meaning we would be forced to buy from our competition. In addition, we would be competing with a corporate cooperative that was exempt from Federal income taxes and limited control from antitrust laws. We ask any Congressman desiring to go into a personal business if he could compete with competition that has all these advantages.

We think the time has come for the Congress to seriously consider the loss of revenue the taxpayer is experiencing through the exemption of income taxes by corporate farm cooperatives.

Approximately 6,000 farm cooperatives were surveyed in 1976 by USDA which found that on aggregate net profits of \$1.9 billion, these co-ops had only 5.7 percent of their net income in taxes. This is one-third of the rate at which their proprietary business competitors paid.

How does this happen? Well, the laws allow no income taxes on co-op profits, which are returned to the owners or members. Most co-op profits go to owners as refunds, or do they? Most cooperative distribute 50 percent or less of their net income to patrons or owners in cash, and the rest is retained as capital, with the owners receiving certificates evidencing the retained earnings.

The certificates may be noninterest paying, and redeemable on a long-term basis. This gives the cooperatives substantial amounts of tax-free, no-interest funds for expansion. USDA has estimated that approximately \$3.8 billion in tax-free equity capital was on hand for co-ops in 1976. This was about 49 percent of the total of \$7.7 billion.

The following figures are tax estimations for the cooperatives with positive margins (profitable) among the 100 largest cooperatives: Total State and Federal tax liability, 4.4 percent; section 521 cooperatives, 1.5 percent; and nonsection 521 cooperatives, 5.3 percent.

In view of the looming deficits we are faced with in the future, Congress must look at this tax loophole. It is another example of those that benefit the most from the Federal Treasury always paying the least in taxes. But even more destructive is the fact that in the dairy industry, these advantages are used to unfairly compete against tax-paying smaller competitors, thousands of whom have gone out of business forever in the past 25 years.

The average American individual and small business taxpayer should not be forced to subsidize this loophole in our tax system. We can no longer afford the luxury of exempting special interest groups. Certainly the looming deficits must be reduced by making our tax system as fair as possible. Thank you.

Senator SYMMS. Alex Sinclair is here with Mark and we welcome Alex, who is also with Aurora Capital. I've known Alex for a long time and I know he's a very competent economist among other things. So, we look forward to his testimony.

Vicki, please go right ahead.

STATEMENT OF VICKI PATTERSON, DIRECTOR, INDUSTRY AND GOVERNMENT RELATIONS, IDAHO DAIRYMEN'S ASSOCIATION, AND UNITED DAIRYMEN OF IDAHO, BOISE, IDAHO

Ms. PATTERSON. Senator Symms and Senator Abdnor, I'm Vicki Patterson. I'm the director of Industry and Government Relations for Idaho Dairymen's Association and United Dairymen of Idaho.

I would like to preface this statement by assuring you that the ideas it expresses do not come from staff, a board, administrator or committee. They come direct from the dairy farmer who attended meetings held in various parts of the State and who said exactly what he and she thought should be done about the problems we face every day.

We are a major industry in Idaho. There are approximately 2,000 dairies in our State milking 170,000 cows. The estimated milk production for 1983 is 2.3 billion pounds or approximately 267 million gallons. We employ over 14,500 people in industry related jobs and our cash receipts are over \$300 million.

Idaho is the third largest milk producing State of the 12 Western States and we rank sixth in the United States in the production of cheese. Dairymen also produce 30 percent of the beef in our State. We rank 17th in the Nation in total milk production.

Because of several economic factors, Idaho has been regarded as one of the 13 States designated as "dairy production States of the future." It is among the Western States that led the Nation with milk production per cow in holding 7 out of the top 10 positions. Idaho is seventh in the West and in the Nation in this important indicator of milk production efficiency averaging over 13,000 pounds per cow annually.

State income from dairy marketing in 1980 ranks the dairy source as fourth in the State of Idaho. Dairy income is indeed important to the economic well being of our State.

Obviously, in our sparsely populated State, the dairy industry must look to Western regional markets as well as national and international outlets. As a result, the economic clout of Idaho's dairy industry is directly related to costs to operate—costs to move product to distant markets—and income that is based on supply and demand.

To achieve distribution and marketing efficiency, the majority of the Idaho dairy farmers are linked together through dairy cooperatives, and in these organizations they have made significant investments in transportation, equipment and in plants with land, building and processing equipment to facilitate direct as well as indirect consumer marketing. In addition, they have expanded and improved their facilities to have some of the Nation's most efficient production units.

Idaho's dairy industry has been expanding in recent years with dairy representing one of the few attractive options in agriculture. Each current year reflects record dairy cattle counts—more milk production per cow—and more total milk for marketing. 1982 showed an increase of 8 percent over 1981. 1981 increased 11.7 percent over 1980. These production increases exceeded national gains, but are similar to other Western States production growth. In 1980, the Western States produced 11.7 percent of the Nation's milk supply—today they produce 19 percent, and it will be at least 20 percent by 1985.

With this increase in Idaho's milk production, all segments of the industry became more efficient in operating because the milk has been absorbed in general in existing facilities. The added volume has made the farm units more efficient—milk haulers have realized transportation efficiencies—and plants have been operating at maximum capacity for more of the time. It is this expansion over the past 2 years that also has added more employment to the labor market—an estimated 12 percent.

Our dairymen are progressive and up-to-date. By referendum, they have voted to assess themselves to fund one of the best advertising and promotion programs in the country. The funds are governed by the Idaho Dairy Products Commission, members of which are elected by their fellow dairymen.

Idaho does not take a back seat to anyone and doesn't intend to be left behind. And through the fine dairymen who sit on our commission and board of directors of the Dairymen's Association, along with our congressional delegation, we won't be.

It is difficult for anyone in the dairy industry to think very far ahead today without looking to Congress, the U.S. Department of Agriculture, Secretary Block, and the President. Although no

magic solution has been found to deal with the surplus problem, most of our people feel at least comfortable with most of the concepts contained in H.R. 1875 undergoing so much discussion at the present time in Washington.

No one is absolutely sure that it will solve the problems, but there is a chance and it must be worth a try. While no dairy farmer wants his income cut, either by price or by production restrictions, the economic realities are that it will have to happen. This program at least provides equal treatment for all dairy farmers regardless of where they are or how they market their milk.

Gradual reduction of the support price, the incentive plan to encourage the farmer to cut production and funding for a national promotional program can all be tools in reaching our immediate goals.

We are all aware that we need to get further into the big leagues in the promotional field and more funding is the key. We strongly support a national promotional effort along with our individual State programs. We would like to see the national checkoff concept to be a part of the present package.

However, there are what we feel to be some definite problems which should be resolved before its passage. We feel it would be in the best interest of the dairy industry to hold off, work out the difficulties and return with a promotion plan in the future.

For instance, in the present draft there is no provision for control of the funds. There should be a guarantee that the promotion be handled through the already existing national promotional educational program handled by UDIA, the American Dairy Association, and the National Dairy Council. That vehicle is in place.

We have a major concern that the establishment of another committee or commission could create chaos. States already participating in the promotion program should have a portion returned to continue those already established programs. The amount should be credited for contributions to qualified local or regional programs should be spelled out in the bill.

The incentive program should be workable and encourage those dairy farmers who choose to contract under the program to cut down production with an incentive rather than penalty.

LONG RANGE

We must be allowed to compete in the foreign market. The dairy industry along with others cries to be allowed to export product. The demand is there now and a broader demand is viable if we are allowed to supply it. Idaho is in the exporting business, and very successfully, with products ranging from wheat to housing. Our products too must be allowed to go to other countries. Even if we began with surplus on a give-away program, the market can be built.

There is an imbalance when countries are allowed to import into our markets in direct competition and we are deterred from exporting. Negotiations have been underway with the Taiwan Government. They'd like to import calculators in return for our export of dairy products. It is unfortunate, but probably the calculators will

flood U.S. markets while dairy products, which should be exported, pile up in warehouses.

We also feel that any dairy products imported into this country should not only pay import duties, but also a promotion fee such as our farmers pay to advertise and promote the use of dairy products.

In the future, an even stronger emphasis will be placed by our industry on increased standards and quality control. Those controls will not eliminate the good producer. We, as an industry, are proud of our product and search daily for ways to improve it. In Idaho, research and extension are strongly supported nationally as well as on a State basis.

It is a time when dairy farmers need research and extension services to avoid loss of economic technology, to improve animal health and crop production and to advance marketing research.

We support a continued emphasis on the national level on teaching nutrition in the schools not only for the health of our most valuable product, the youth of tomorrow, but for the protection of those industries that provide those products included in the basic four diet. Eating and other health habits acquired at an early age stay with us indefinitely. The consumer buyer of tomorrow is in school today.

Milk programs through the school lunch program should be increased in the future. Our direction has been mixed up. We need to change gears and go forward. Milk in the schools should be doubled, not cut back. Certainly as long as there is any surplus, no child should be deprived of that nutrition to balance his or her diet. In many cases, it is the only milk a child receives and school is the only opportunity for learning about good nutrition.

We also see a valuable role the food stamp could pay in providing better nutrition to our less fortunate. Today, food stamps are used to buy any junk food the user desires. But, wouldn't it be far better for all concerned if a portion of each food stamp allotment could be used only to purchase meat; another portion for vegetables and fruits; another for dairy products; and the remainder for general food purchases?

This would result not only in better nutrition for food stamp users, but also in increased consumption of farm products. The same system worked well for rationing during World War II, and it would work today to help our underprivileged to achieve a better diet as well as improving the agricultural economy.

The dairy surplus situation in this nation is serious to the taxpayer, the consumer and the producer.

The nationwide promotional program, opening up the world export market, quality control, the school programs and a change in the food stamp program are all legitimate ways of balancing out the surplus, increasing consumption and consumer demand.

A gradual reduction of the price support and the incentive program to encourage farmers to reduce production may solve today's problem for now and the near future. But, in concert with these Band-Aids must come more efficient operation of the CCC so that once we get the industry out of trouble this time, it will not reoccur. Reaction time must be fast—immediate.

In the meeting in Boise, the group looking at long-range policies agreed that less Government control should be the ultimate goal. But, Government farm programs can't be totally eliminated. We need sufficient production to supply demand. Peaks and valleys in growing crops must be balanced out. But, the farmer must continue to have help in his battle with nature to feed our nation.

So, we looked elsewhere for solutions and formulated a plan for consideration. This plan in effect places a ceiling on the amount the Government will pay out in price supports. It would leave the present support program intact except that a limit of 5 billion pounds milk equivalent would be set on the amount of surplus dairy products which would be purchased by the Government. This 5 billion pounds is the amount the Government states it now uses for the armed services and other Federal needs.

Under our plan, if it appeared that Government purchases might exceed that 5 billion pounds in a year, reductions would begin in the support figure. Those reductions would be triggered by a precise formula and each reduction would result in dairymen cutting back milk production. The formula would also allow the support price to rise again whenever the market could support increased production.

The preciseness of the formula and its automatic implementation is the key to the success of this plan which must not be affected by individuals, departments or political considerations. Essentially, it means that the dairy industry will operate on the inflexible rule of supply and demand.

Imports would be figured in on an "at implementation of program figure." If imports were allowed to exceed the "at implementation figure" they could not be figured into the 5-billion pound figure, but would be added into the triggering figure and not be the catalysts to cause the drop in the support price.

This could handle the dairy dilemma and eliminate the needs for continuous legislation and farm bill, after farm bill. It may mean that some dairymen will be forced out of business but that probability has to be faced. In the long run, it can only mean better management, more efficient operation and a healthier economy for the dairy industry.

Last, we would like a complete review and revision of farmers home policies with policies in place based on those used by this country's other lending institutions.

We're independent people in Idaho and our farmers are probably the most independent of all. It must be pretty unusual for you gentlemen of the committee to hear a group asking for less Government support rather than more, for less money rather than bigger handouts, but that's the kind of people we are. We still believe in the principles that made this country great, in free enterprise and a free marketplace. It may cost us some lumps and bruises to get back to those ideals, but we can handle them. Anyone who has to get up at 4 a.m. 7 days a week to milk a herd of stubborn cows can handle anything.

Thank you for giving me the opportunity to express some of the views of our industry. More forums such as this one will benefit all of agriculture.

Senator SYMMS. Thank you, Vicki, for some very positive suggestions. It was an excellent statement and when we get to the question part, I want to question a little bit more about how that would work on reducing price supports, because I certainly think that's a direction we need to be taking. Mr. Peperzak.

**STATEMENT OF MARK PEPERZAK, PRESIDENT, AURORA
CAPITAL, TWIN FALLS, IDAHO**

Mr. PEPERZAK. Thank you, Senators, for permitting me to be here today. I don't have a prepared statement, so I'll try to get one to your office at a later date, hopefully. I didn't have time to do it.

Senator SYMMS. That's fine. We'll listen and our recorder will get it down if you don't get it done.

Mr. PEPERZAK. If I may, I'd like to diverge a little bit from the dairy thing and comment on a couple of things this morning which I found rather important.

First of all, I kept hearing over and over again, "Family farming is the only way to go. It's the most efficient." I kept hearing over and over again, "Agriculture is free market. It's supply and demand." And I kept hearing over and over again, "There's a world food shortage." I think all three of those notions are nonsense.

First, as evidenced by our own success, there are a number of corporate farms which I think are extraordinarily efficient, much more efficient than family farms. And I think if there were some up-to-date studies done, you would find that things have changed rather dramatically.

Senator SYMMS. Mark, for the record and for Senator Abdnor's identification, would you tell him how many cows you milk.

Mr. PEPERZAK. We have a—we operate five dairies in two States; three here in Idaho and two in Colorado. And we produce close to 300,000 pounds a day out of 6,000 cows. We also farm approximately 10,000 acres of crops, which includes crops from potatoes, sugar beets, wheat. We're in PIK—farming beans and set aside ground this year. And we got into this—

Senator ABDNOR. Are you the president of Aurora Capital? Is that what you call yourself?

Mr. PEPERZAK. The company is called Aurora Capital. We're a holding company that holds those various operations. We hold other related kinds of businesses.

Anyway, it's a corporation. It's a corporate farming setup. We started here in Idaho in 1976. And we did it not for—somebody mentioned this morning—tax shelter reasons. We did it for the simple reason of profit. And we find ourselves extremely profitable and very efficient in displacing a number of small dairy farms and farmers. Buying smaller farms out adjacent to bringing them in.

But, I think the notion that we don't have people who get up at 4 in the morning and work until 9 at night to accomplish the same goals that the dairy operator has is absolutely false. We do have those kind of people. As a matter of fact, we find in today's kind of sociological society that those people are very ready and willing and able to do that for you and not have the financial risks that go

along with operating a farm or a dairy under the current economic circumstances—let somebody else have the money risk.

But, we're just one company. There are other companies around the country that have done the same thing. And there's very little heard from them, generally speaking, because they are not part of the organized groups of Farm Bureau and National Farmers' Organization. Even Vicki's group I have very little to do with although we're probably the largest dairy operator here in the State of Idaho. Even our co-op refuses to represent us, I might add, in our views.

But, to make a long story short in that respect, we've tried to export our technology, our management, our dairies. I've been around the world several times trying to sell our cattle, trying to sell our products. I've met with very little success. And I think we have a few ideas to offer.

Fundamentally the problem in this country is that we're making too much milk. Everybody knows that. Why are we making too much milk? Because there is not a free market for milk. There is a guaranteed market for milk. As long as there's a guaranteed market for our milk, somebody's going to make it if it's guaranteed at a price, at a profit.

And I don't see any way of getting around that until you do away completely with the Government program. And since that's politically unacceptable, that isn't going to happen until we start talking about price support drops. Well, quite frankly the price support drop is not going to cut production any unless the—unless the price support is dropped to a point below our profit level.

In our particular case, I'll be very specific, I have capacity to milk 9,000 cows at two times a day. I milk three times a day because cows are expensive. The moment I know for sure that the price drop will occur in September, I will add the other 3,000 cows and increase our production. It's a natural thing to do. I have increased our production 30 percent this year over last year because I thought we were going to have a 50 cent assessment on December 1, another 50 cents on April 1.

As it happened, it didn't come until April 15, but our program was set to take care of it. And we indeed are producing 80,000 pounds of milk a day more now than we were a year ago. That was the reaction. And that is the reaction you're going to get from a business run dairyman who has the capacity, No. 1, and has the capital, No. 2, to fulfill his goals.

The FHA is very much responsible for part of this problem because even though the dairy profit has been there for some time and everybody's known it and everybody wants to get into it, it's a very highly capital intensive business. Which means that you have to have the money to get into it. There are very few farmers—individual farmers, family farmers or even small companies for that matter—interested in putting the kinds of capital together necessary to buy a substantial herd of cows. A couple hundred cows cost a couple hundred thousand dollars. The FHA took its part in this thing by financing this productivity capacity. And this productivity capacity I would—I don't know the precise statistics, but I think if someone looked into it—if you took all the FHA dairies that were built in the last 5 years and calculated what their production is,

that's probably what the over production in this country is, exactly that. And so, in that sense, I think the Government has some moral responsibility to just take care of that problem.

In any event, if the dairy price support program was not there, I'm sure the price for milk would be higher because I'm sure there would be many less dairies which we need and I'm sure that those of us who would be left—who would be left would be producing it at a higher price and we'd be making more of a profit. We're making a profit now. We will make a profit after the proposed H.R. 1875 goes into effect.

One thing that kind of concerns me about the FHA dairies that I should mention is that the FHA insisted that a lot of dairymen, especially here in Idaho, build certain size farming operations, build a 10 on a side dairy, build an 8 on a side dairy bar, capable of handling 400 or 500 cows, but only milking 100 or 200.

The net result is with the price reduction, they may actually have to increase their herds, which they'll have the capacity to do. You've given them the tool to increase their production without spending more money and facilities. There's a lot of excess capacity that's been created in the last 5 years, both through Government programs and by private people.

The proposed solution that everyone seems to be hanging their hat on, which is the reduction in the dairy price support program, may or may not be coupled with some kind of incentive program. I frankly think it's a short-time solution to a long-term problem. And at that, I'm not sure it's a solution. I don't think it's going to cut back the total Government expenditure and that's what we are talking about.

If the Government feels \$2 billion is too high now, it's certainly going to feel that \$2 billion is too high next year. And I think that's what's going to happen. I think that the only kind of program that will work is some kind of a program that addresses the issue of production itself. There is a demand for x production and that's what you take care of, not the price of that production.

I'll give you an example. If you told General Motors that you'd buy every car that they produced at a profit, they would make all the cars they could possibly produce as long as they had the capacity to do it. And as long as you give them a profit and they have the capital and the capacity, they will do so. That's what's happening here. Anything you're—you have to address production. And I think I read—I wasn't here for it—but I read Smith Greig's presentation and he had one of the first proposals I heard addressing the issue of production. Now, the National Milk Federation and several dairy groups have wanted to base the solution of the problem on some kind of quota or base, which is again addressing production. The administration is opposed to it because that's not within free market or within supply and demand spirit.

Well, let's be honest. There is no such thing as free market in the milk industry. It doesn't exist. If everything you produce is guaranteed to be purchased at a price, supply and demand doesn't apply. It just simply isn't there. So, I mean unless you get rid of that one fundamental flaw, how can you talk about that this is not part of it, as long as—what I'm saying is, if you're going to go half-way, go all the way.

So, my solution is that there indeed be some kind of base history, quota plan, a target, a bidding process—however you apply it. There are numerous ways. I think Smith Greig had a pretty good way of doing it. Based on that, you have incentives to produce less than that and penalties to produce more. Make it a two-edge sword. But there should be no more milk produced than is needed.

Now, I grant you at the end—what you'll have at the end of this is some kind of common-market-type system which may not fit with our feelings of free market, but we don't have it anyway, so that would be my plan.

The second part of this—if we would have a long-term program, the second thing that should be applied is that the Federal Government should provide—and this applies to a lot of other products too—but I'll relay a story that horrified me. I was in the country of Oman a year and a half ago and I was attempting to build a dairy for the Oman Development Bank. They wanted us to bring in 700 cows and manage their dairy and produce milk for them. They're importing all of their milk currently from New Zealand at a price equivalent to \$40 hundredweight. I asked them why they couldn't get it from the United States. Well, we can't get it from the United States. For reasons that were completely beyond me.

But, this is what horrified me. Here I am bidding on this process. I go down to the American Embassy to get the assistance of our agricultural attaché. We don't have one here. There is one agricultural attaché that services the entire Middle East that spends 2 days a month in each country gathering statistics.

He's not here to help you do something like that. What's going on down the street at the Swedish Embassy? They've arranged for the King of Sweden to come down there to promote Alpha Lavalle. They have a full-time staff member in that country doing nothing but promoting the interest of dairy—never mind the agriculture—just dairy companies to sell their product, to sell their development capabilities. And of course, they got the contract.

I might add they just finished a \$75 million, 5,000-cow dairy operation in Saudi Arabia, which went under, but they're promoting it.

But, that's the point. We don't have that kind of support. And when we travel overseas as a guest in a country like that, we're severely restricted. We're a private citizen. We're not a member of government. We're not a member—we don't have access that all of these other people have. And it makes it very difficult.

Of course, it makes it even more difficult when my competitor from Holland says, well, my Government is giving me \$350 a head as a direct subsidy for every cow I sell over here. I said, Oh, my God. Do you have—first of all, you save \$500 on shipping. You get another \$350. And the Omandi comes to me and says, That's OK. I still want your cow, if I can figure out how to get it because your cow's a better cow and everybody in the world knows it.

But, that's part of our problem. We need a concerted effort on the Government's part to help us do exporting of not only our technology, but of our dairy products as well. The Middle East, Africa, Southeast Asia, to a lesser extent are all importing huge amounts of dairy supplies. None of it's coming from the United States, as we have very little help.

I think I'll leave it at that and turn it over to my compatriot here.

Senator ABDNOR. That attaché—is he just a work through or would he do the selling for you or would he accompany you or—

Mr. PEPERZAK. Well, for example, you have to know about the opportunity before you can go after it. It's very expensive to travel, as you know. The first thing he could do is identify that this country—the one that he's operating in—has an opportunity—they would like to have a dairy. They would like to have—you could extend this beyond just dairy.

The Government could certainly publish, through all of their various publications, some kind of journal, Hey, here are opportunities. These people want cows. And if you would like to be involved and getting involved, contact so and so.

They don't actually have to actively be involved in the market. I understand that Alpha Lavalle is partially owned by the Swedish Government. So, there is a direct link there. I also understand that several of the European companies are directly owned by the European governments. So, we don't have that kind of situation.

But, nevertheless, this is the world we're competing in. And we have to come up with something to compete with. As it is, as you all know, this currency thing is a disaster. We have to overcome things that others—our currency thing was not a disaster a few years ago. We were having the same problems a few years ago.

But, I'm saying that we should make some effort as a country, just like Japan incorporated once Africa as a country to sell what we have. And we can't do it—as a private dairy producer living in Twin Falls, Idaho, I'd have a hard time selling our services around the world without Government assistance. I can't do it in today's environment. I get more help from the United Nations and the World Bank, only because my father is an officer with them. They have programs, but their programs are not directed toward the American producers; they're directed toward the European producers because they're scaled that way.

Senator SYMMS. Thank you very much, Mark. That's very interesting testimony. I've got some questions I want to ask, but first let's hear from Alex Sinclair, Sinclair & Co., from Twin Falls. And then we'll have some questions.

**STATEMENT OF ALEX SINCLAIR, SINCLAIR & CO., INC., AND VICE
PRESIDENT, AURORA CAPITAL**

Mr. SINCLAIR. Senators Symms and Abdnor, I appreciate the opportunity to be here. I'm Alex Sinclair, Sinclair & Co.; also executive vice-president of Aurora Capital. I've prepared a very brief statement and I will go ahead and read it so that I stay brief. And we'll go from there.

Most Government programs are designed to solve short-run problems; but, in most cases the "help" generally hurts the party it was supposed to help when considered over the long run. I will attempt to explain how well intentioned programs are hurting agriculture currently.

FHA is bankrupting good non-FHA farmers by keeping poor farmers in business.

Example: Potato farmers in Maine are now 75 to 80 percent FHA financed and most loans are around \$2,500 per acre on land selling for \$500 per acre. If FHA had never tried to help, Maine would be farming less acres but the average farmer would be making a profit and the area would be more prosperous and the Government would be collecting taxes instead of providing a disguised form of welfare. Potato farmers in other States have been hurt by this subsidized competition.

Example: FHA was encouraging dairy loans a couple of years ago because they "penciled out"—this was occurring at the same time that there was a surplus of dairy products being purchased by the Government. This example represents new competition, but some of the financing went to people who did not have farm or dairy experience.

High Government target prices and loan rates encourage our competitors to capture more of our foreign customers and to even place more foreign land into production when an overall surplus exists. It even tells our own farmers to switch to surplus "supported" crops during bad times.

PIK is further harming the long-range recovery of agriculture by artificially providing an umbrella for our competitors. If loan rates and target prices had been lower, PIK would not have been necessary. Economics would control production.

Example: Canadian wheat acreage jumped 7 percent after the announcement of the PIK program. South America is continuing to expand.

What should be done?

One, FHA should not be allowed to make new agricultural loans unless an event has occurred that is outside of the farmers' control—extreme weather, bankruptcy of a grain elevator, et cetera. If the Government wants to protect agricultural credit until we are out of the bad times, work on a guarantee of 80 percent of the total credit via commercial lenders. This type of program should only be available on new extensions of credit and only when all prices are depressed.

Two, Government food reserves should be limited and once filled, no more Government support will be provided in any form. This prevents a huge buildup of surpluses that depress prices.

Three, Government loan and target prices should be reduced in line with a limitation tied to No. 2 above. This would expand our exports.

Four, the dollar is too high and we are further priced out of the market because of this. Reduce the deficit so interest rates will come down and the dollar will drop to a realistic level. This is the real answer to the current problem.

Historically, two-thirds of our wheat crop, one-third of our corn crop and 40 percent of our soybean crop has been exported. In fact, 40 percent of the total U.S. agricultural production is normally exported. Since agriculture is our largest industry and our largest exporter, bringing the dollar into a proper balance is the most important thing that can be done.

Gentlemen, I am involved in agriculture and want it to be profitable for all of the farmers that know what they are doing.

I've got a couple other comments that are not in my prepared statement. The export subsidy question that was brought up this morning, I'm sure it would have caused less flack than the steel tariff and support that was announced yesterday.

EMBARGOES

If we could have eliminated the embargoes, I don't think the seriousness of our current problems ever would have gotten here. The embargoes that go back to the soybean embargo to the Japanese because prices got high, stimulated the Japanese to spend all kinds of money in Korea, mainland China, and South America. If you really look back on the South America development of land, it was started by Japanese capital after we told them we were cutting off their food supply.

Japan had been and still is, thank God—they do a lot with other people though, but—are our largest food customer. Brazil was not a known factor in soybeans at the time of our soybean embargo and is No. 2, only to the United States, in soybean exports today. And the way we're going, they may pass us by. Embargoes in any form, unless we're actually at war with the country involved should not be allowed. The damage is so pervasive, that it's unbelievable.

[The attachment to Mr. Sinclair's statement follows:]

SINCLAIR and COMPANY, INC.

Town Falls, Idaho
83301
202 Shoshone Street East

BROKERS SPECIALIZING IN MARKETING
POTATOES, CATTLE AND GRAINS

New York, New York
10013
6 Harrison Street

MARKET REPORT

NUMBERS TO PONDER IN REGARDS WHEAT PRODUCTION AND EXPORTS

TELEPHONES
200-731-6011
Idaho Toll Free 1-800-612-0807
U.S. Toll Free 1-800-635-0821

Total Wheat Production (metric tons (1)):

	1981/82	% of Total Production	Exports Tons	% of Production	Production 1982/83	Production 1983/84
Russia	88.0	19.4			86.0	
U.S.	76.0	16.8	50.3	66.2	76.4	61.6 est. (2)
China	57.5	12.7			63.0	
EEC	54.4	12.0	15.5 (3)	28.5	59.5	
India	36.5	8.0			37.8	
Canada	24.5	5.4	17.5	71.4	27.6	(4)
Australia	16.4	3.6	12.0	73.1	8.7 (5)	
Turkey	13.2	2.9			13.8	
Pakistan	11.4	2.5			11.2	
Argentina	7.8	1.7	3.8	48.7	14.0 (6)	
	385.7	85.0	99.1		398.0	
Others	66.6	15.0	1.9		75.0	
Total World	452.3	100.0%	101.0		473.0	

- (1) One metric ton of wheat equals 36.7437 bushels.
- (2) Declines in U.S. production projected mainly due to the Payment-In-Kind program which would amount to approximately 3% of world production.
- (3) EEC exports total about 15% total exports, most are subsidized exports.
- (4) Estimated Canadian spring wheat acreage increased 2 million acres or 7% after announcement of the U.S. Payment-In-Kind program.
- (5) Australia just harvested a disastrous crop due to drought.
- (6) Argentina wheat production has jumped dramatically even though dry weather hurt their corn crop.

We believe it prudent to consider hedging or forward contracting your P.I.K. grain or new crop wheat.

P.I.K. is providing an umbrella for competing countries to increase production and capture a larger chunk of the world export market. Canadian wheat acreage is expected to jump 2 million acres, mainly due to our umbrella.

The real problem for U.S. agriculture involves the fact that our grain was too expensive to our foreign customers before P.I.K. due to the abnormal strength of the U.S. dollar and the deteriorating financial condition of our customers.

There are two principal reasons for the strength of the dollar: 1) high real U.S. interest rates and 2) the U.S. is viewed as the safest place to have money and many foreigners have moved a percentage of their net worths into U.S. investments.

How do I hedge my wheat? You call Sinclair and Company and sell for future delivery the number of bushels you wish to protect. Sinclair and Company protects you against a decline in wheat prices and you agree to reimburse Sinclair & Co. for any advance in prices. You move your wheat through your normal channels.

ALEX SINCLAIR / WALT BURDICK / JACK MULLOWNEY

Mr. PEPPERZAK. Can I follow up on that for a minute?
 Senator SYMMS. Sure.

Mr. PEPPERZAK. The world food storage is rapidly disappearing because of this situation. As a matter of fact, according to the people at FAO in Rome, Food Authority Organization, there is no world food shortage. There's a distribution problem, but our embargoes—the reason the Omandis wanted a dairy, they wanted to make sure they were self-sufficient in dairy even though it costs them a fortune. Same with the Saudis

Every country in the world wants to be self-sufficient in food and the capital that has gone that way in the last 20 years is extraordinary. The point I'm making is for the long-term future policy of this country, you have to look in terms of a diminishing foreign market for whatever reasons. The world is going to produce their own food and they don't need us anymore. We're going to have less farmers in this country. And that's the long and the short of it, and you have to recognize that in you long-term thinking.

India is overproducing so many potatoes, they came to this State to look for somebody to help make them a potato chip factory so they could get rid of their excess potatoes. Indian used to be a starving country.

Senator SYMMS. Let me ask you a question here. I find this most interesting, this testimony that all of you brought here. But on Vicki and her testimony—I'm looking for what page—it talked about supporting a program here to save 5 billion pounds. Do you agree with that—what she's calling for? Where is that? Which page is it on?

Mr. PEPPERZAK. You mean supporting—

Ms. PATTERSON. Seven.

Mr. SINCLAIR. Limiting amount. It's probably what Mark was saying too.

Mr. PEPPERZAK. I think you have to target a production level. And if that's what accomplishes it, yes. The mechanism to get there, I'm not sure I agree with that.

Senator SYMMS. But, you're talking about a substantially less amount than what we're doing now; is that right, Vicki?

Ms. PATTERSON. Yes, quite a bit less.

Senator SYMMS. Did you hear the testimony this morning from Smith Greig?

Ms. PATTERSON. No, unfortunately I wasn't here.

Senator SYMMS. What he called for was, once you get the supply and demand in balance, then you use some modern technology and computers and so forth when the farmer files an estimate of how much he's going to produce in the next year. If it goes over that, well, then the Government sends back a notice that they'll only buy so much of it, I guess, so then you can go out and kill a few milk cows and put them in the hamburger pile.

Mr. PEPPERZAK. The problem is people might cheat on it a little bit or something.

Mr. SINCLAIR. Overstate their—

Mr. PEPPERZAK. Just like on the census they keep taking. Everybody's constantly fooling around with the numbers that go in that thing.

Mr. SINCLAIR. You'd always want to be on the high end of your estimate—

Mr. PEPPERZAK. Yes.

Mr. SINCLAIR [continuing]. With your estimate.

Mr. PEPPERZAK. But, Vicki and he are both right. If we need so much milk, that's the number and that's what's going to be bought and no more than that. You can't buy everything that we could produce.

Senator SYMMS. Now, I've got only one other question and then I'll quit asking questions and let Jim ask questions.

Can somebody explain to me—in my office about 1 month ago, 2 months ago, we had a visit from some dairymen here. And the fellow is involved in—they're dairymen who are selling to the cheese factory over here at Meridian. If I understood what they were saying correctly, they stated that they couldn't buy enough milk at the cheese factory in Meridian—they couldn't buy enough milk because they couldn't pay a high enough price to compete with the prices being paid by the dairymen's co-op in Caldwell where all that is going in to the warehouses to be stored.

This guy is selling this cheese, to pizza parlors, restaurants, retail at the factory and I think to supply some of the grocery stores in the area. I'm not certain whether I'm correct that he sells to grocery stores. But, can you explain to me how that works?

Ms. PATTERSON. I can't. Can one of you two?

Mr. PEPPERZAK. I can't—I know that there's also a cheese plant in Richfield, Wards Cheese, where they can't buy all the cheese they need. Same problem.

Senator SYMMS. Wards Cheese can't pay the—I've been there and visited—

Mr. PEPPERZAK. Wards is having a problem getting enough milk.

Senator SYMMS. He cannot buy enough milk because he cannot afford to pay a high enough price to get his—

Mr. PEPPERZAK. I think it's a local problem. It has to do with the competition between DCA, the MEDA Co-op, and the cheese plants. It—I don't know how to answer the question other than that.

One of the problems is once you're in a co-op as a producer, you're—maybe there's somebody back there that can answer it.

Senator SYMMS. Well, the other question I had that deals with the—Jim, I'll let you go.

Senator ABDNOR. Go ahead.

Mr. PEPPERZAK. Well, Senator, we can't sell it to him our milk—

Senator SYMMS. You can't sell it to him.

Mr. PEPPERZAK [continuing]. Because of our contract with the co-op that we belong to. I can't even say I don't want to have anything to do with you and sell it to him. That's another problem altogether.

And part of the problem—for example, all of our milk goes out of State. And I'm sure it costs a great deal more to our co-op to handle it the way it does, but they're still excluding him from the market.

Senator SYMMS. Why don't they want to let him buy it?

Mr. PEPPERZAK. They probably want to put him out of business, I suspect.

Senator SYMMS. Now, the next question that you mentioned—is it the 50-cents-hundredweight charge that's causing you to increase production?

Mr. PEPPERZAK. The first 50—when it was announced last year that there was going to be a 50 cent assessment, December 1 last year—last December 1, which was delayed by court action to April. And then there was supposed to be a second assessment put into effect in April, which has now been delayed I guess until August. I'm not sure what the story is.

Based on that planning, we put into our computers and done our work—we had to increase production and that's what we did.

Mr. SINCLAIR. Each producer would not necessarily approach it that way.

Mr. PEPPERZAK. Right.

Mr. SINCLAIR. It depends on their capital availability—

Mr. PEPPERZAK. It depends on your capacity, where you are. There's a number of factors that go into it. I had somebody ask me when I was in Washington, Why didn't you increase your production before if it's so good? Well, I had other things that were better to do with the money at that time. At this time it looks better to do this because other alternatives in agriculture look worse to me.

We run a very profitable farming operation. Our farming production has been more profitable than our dairy production, quite frankly, until this year and last year. And so dairy now looks better. I mean, it's in an overall combined thing.

Senator SYMMS. Jim.

Senator ABDNOR. I forget where I was. Where do you sell your milk?

Mr. PEPPERZAK. Our milk?

Senator ABDNOR. Yes.

Mr. PEPPERZAK. We belong to the Mountain Empire Dairymen's Association, MEDA, out of Denver, and all of our milk in both Colorado and Idaho goes there. They handle it.

Senator ABDNOR. Do you sell any to the Government?

Mr. PEPPERZAK. From time to time, I'm sure MEDA does. I don't know how much and when and if it is, I think it's only in the summertime.

Senator ABDNOR. I had a lady from South Dakota tell us that if we shut out all dairy imports, we wouldn't have a surplus of milk. Is it that bad?

Ms. PATTERSON. I don't agree.

Mr. PEPPERZAK. I don't think that's true. There are some imports, but not that much.

Senator ABDNOR. It sounded like a lot. I guess she called my office while I was there.

Mr. PEPPERZAK. It would reduce the Government expenditure by a substantial amount.

Senator ABDNOR. You represent all the dairy individual people?

Ms. PATTERSON. Yes, in Idaho.

Senator ABDNOR. I'm not trying to be smart or mean, but do these people resent a guy like Mark with his size company coming in here?

Ms. PATTERSON. I'm not really sure how to answer that.

Senator ABDNOR. We've got to sell a program, whatever we have to sell.

Mr. PEPPERZAK. There is a tremendous amount of resentment.

Ms. PATTERSON. I am sure there probably is as there would be in any other business, really.

Senator ABDNOR. My only point is wheat farmers jump all over me when we go back to the acreage thing. We've got some farmers out my way who have been farming the same amount of wheat for 30 years. Some people might come in and buy up five sections of pasture land or grazing land, and plow it up with wheat. And now, they're on the PIK program. They give you allotments on what you farmed last year.

And the guy says, my God, I'm not causing the surplus. I've been holding my line and doing what I've been farming every year. I mean, in the 30 years—I'm not the cause of the surplus.

I imagine the dairy people say there are people in this country who milk 2,500 cows, 3,000 cows and they made the surplus and now you're making us all suffer. Do you people react in that way?

Ms. PATTERSON. I think any dairyman, no matter what size, would like to think that somebody else was causing the surplus. And certainly that sort of feeling with the very large, large dairy farms—they're going to feel that those are the people really responsible. A small dairyman, just as an individual person, is going to feel that way about it.

And the larger dairy farms are kind of a new thing. They're not part of what it was before. So, they're looking at those and saying, that's where the problem is. They caused it.

Senator SYMMS. Well, on the other side of the coin—my neighbor in Sunny Slope is a dairyman. And he's a small dairyman. Grows all of his own feed and milks. His father passed away so he now has a hired hand. But, they've done all their work, 200 acre farm, milking about 100 cows. He always tells me to cut the dairy price support.

I think he sells to co-op in Caldwell. He says, cut the price support. I'm going to be in business no matter what happens. And he says, I don't care—somebody like Mark, that's fine. He would say that you can't be more efficient than he is.

Mr. PEPPERZAK. Which I would disagree with, but—

Senator SYMMS. He's not as efficient—

Mr. PEPPERZAK. Well, the world has come a long way in the day and age of management techniques and computers.

Senator SYMMS. He's got it all.

Mr. PEPPERZAK. He may be one of those, but generally speaking your average 100-cow-dairy operator probably takes 20 to 30 percent more cost than ours.

Senator ABDNOR. I don't know anything about dairy. Can a 100-cow herd get by without all that equipment? Is that the only way to make it?

Mr. PEPPERZAK. He could get by with a lot less capital.

Senator ABDNOR. That's what I'm talking about. Some guy who hasn't got all the capital may get into indebtedness and high interest payments.

Mr. PEPPERZAK. But, Senator, our production herd average for example at our largest dairy is 70 pounds per cow per day. How

many of you members can produce 70 pounds per cow per day, if any?

Senator SYMMS. What's your average cow per day production, do you know, Vicki?

Mr. PEPPERZAK. Something like 42, I believe it is.

Mr. SINCLAIR. U.S. average is—

Mr. PEPPERZAK. No, I have it here somewhere. In Idaho, the average in 1980 was—here we go—the average herd size was 63.8—

Mr. SINCLAIR. Cow.

Mr. PEPPERZAK [continuing]. Producing on location 12,641 divided by 50, which is what? I mean divided by 305, which is roughly 40 pounds a day.

Senator SYMMS. Forty pounds per day and you're producing 70 pounds a day?

Mr. PEPPERZAK. Our labor unit costs are extremely—well, everything is so scientific—it's only natural we can do things that they can't do. And that's why we've become so big. We've become so big because we've been so extremely profitable. It wasn't money that came out of this air.

I mean, we started with a 500-cow dairy in 1976, and we have 6 or 7,000 cows today and 10,000 acres of ground bought mostly out of profits.

Senator SYMMS. Now, is the 10,000 acres of ground corporate owned?

Mr. PEPPERZAK. No, it's not. It's owned by individuals, myself, and partners and partnerships, to take advantage of the tax effects.

Senator SYMMS. Well, have you done any cost studies on the new reclamation law where you'll be able to elect whether to stay with the old law or the new law. There's one section in that bill that I argued against and did everything I could to erase it. It says only 25 people can be stockholders.

There are many family farms in Idaho that are incorporated and that will be using water in excess of 160 acres. There are family farms that would come under the umbrella of the new law, except that they very easily, after the second generation or third generation, could end up with more than 25 stockholders. It just takes the grandparents, the second generation, and then the grandchildren, by then—

Mr. PEPPERZAK. We're there.

Senator SYMMS. You're there. How is that going to affect—

Mr. PEPPERZAK. We have less than 25 people involved. So, I'm not sure how we're going to do it; how to handle it. We may have to break up our groups so—there's another limitation in there. I forget exactly what it is. How many acres, 960?

Senator SYMMS. I think it's 1,200.

Mr. PEPPERZAK. 1,200? Well, we may have to break it up a little.

Senator SYMMS. Then you lease—I think you have unlimited leasing though.

Mr. PEPPERZAK. We may do that. What we may end up doing because of the long-term outlook on agriculture is disposing of our farm ground, to be honest with you, and concentrating more on livestock and dairy. The basic agricultural problem is farm ground. The dairy thing, I think, is symptomatic of it.

There's a guaranteed price for wheat. You see the problems we've created there. And there hasn't been a solution proposed nationally that anybody, I think, is comfortable with that's going to solve our long-term problem. It has to do with the worldwide problem we talked about earlier. We're going to have less farmers. We're going to need less food. We're going to grow less. And how do we permit that to happen and still have people stay in business and make a profit? I don't know. It's a very difficult situation.

Mr. SINCLAIR. Well, the key elements of what both of them have said is that you have to stop somewhere with a limit as to how much you're going to buy. And Vicki had a figure in her testimony and Mark is saying the same thing. You cannot agree to buy everything. You've got to stop somewhere. And when people understand that, that is the limit and will not be changed ever, zip, live with it, that's when your program is effective.

Senator SYMMS. Well, now you're mentioned, Vicki, H.R. 1875.

Ms. PATTERSON. Yes.

Senator SYMMS. Is that the bill that the National Dairymen's—

Ms. PATTERSON. That's the compromised composition.

Mr. PEPPERZAK. It's the compromised composition.

Senator SYMMS. Does it have a cap in it?

Ms. PATTERSON. No.

Mr. PEPPERZAK. No.

Ms. PATTERSON. It would take care of the short-term problem that we're facing right now with the surplus. Basically, that's what it is. It's a short-term solution with the incentive program to cut back on production and with the drops in the price support at the time.

Senator SYMMS. Well, how far does it drop the price support?

Mr. PEPPERZAK. A dollar.

Ms. PATTERSON. Well, a dollar and a half.

Mr. PEPPERZAK. Well, after the third.

Ms. PATTERSON. Yes, if it goes through all three increments. But in answer to the question that—you're dairy friend made the comment about dropping the price support. In every price of—almost everyone who has discussed a solution to the problem, the price support is definitely one of the first things that is mentioned and as far as your people in Idaho, all the dairymen or most of the dairymen definitely feel very strongly about that. And for instance in this composition—

Senator SYMMS. They want it dropped?

Ms. PATTERSON. They feel that that, at this point, is about the only answer that makes any sense. And they agree on that in most cases. I cannot speak for the whole dairy industry of Idaho and say, we all absolutely agree. I wouldn't say that about anything. But, that is the solution that comes out basically in any of these discussions and certainly came out of the meetings that we held in order for me to come here today.

Of course, it is part of the suggestion that we have with the lowering of it and holding the \$5 billion mark.

Senator ABDNOR. Well, we have a dairy plant manager-owner here in our hearing who came from South Dakota. And I don't know what he can be compared to in size. I guess he's smaller. His father started up ahead of him and it's quite sizable, at least for

South Dakota. This guy said all the products he sold for the last 4 months have gone to the Government. And believe me, he's for free enterprise.

If he had his way he'd pull the rug out. He's been like that for a long time. He's not hooked up with any co-op or anything like that.

Mr. PEPPERZAK. My interest in being in this hearing today is, I'm not opposed to a price support drop if it stops that situation. I don't think it will. I'm convinced it won't. There has to be something attached to that, that leads to the final solution of the problem. We're just temporarily putting it off for another year or two or keeping it at its current level.

We have to—and the title of these hearings is the future economic—

Senator ABDNOR. That's right.

Mr. PEPPERZAK [continuing]. And that's what you've got to address. Simply putting that—or even with a temporary incentive program isn't going to do anything. And may do something in six months to nine months, briefly hold it back. We will find a way to produce more milk more profitably, more efficiently to meet the new price.

We'll keep producing as much as we can produce as long as somebody buys it. Just like GM. They're going to produce every car that they can sell as long as there's a profit in it. And that's what has to get addressed. And it has to be addressed in all agricultural commodities. That's the issue.

Mr. SINCLAIR. When you have a cap, obviously if you keep producing above that cap, government's going to buy x pounds, period. Once—it's the same thing as I was stating in terms of grain reserve, that you buy x quantity, not a huge quantity, but enough that you have a comfortable reserve in case of a crop failure or this or that, that you have sitting there. But, you cap it and you stop. And that's the end of your support.

You've done your thing as far as government is concerned, and it's stopped. You go beyond that and if you keep producing—if you keep producing on the outside, your market prices are going to be high. You may get rid of it through exports. You may get rid of it because it's more attractive to feed grain or one reason or another. Or milk sells better at cheaper prices or, you know, whatever happens.

But, it's going to be lower prices once you've passed that point. And then—

Mr. PEPPERZAK. Supply and demand takes over.

Mr. SINCLAIR [continuing]. Supply and demand does take over, the problem does permanently, without any Government interference or involvement, it does get corrected. So, philosophically, I don't see these two very far apart. I think Vicki has gone a step farther than the bill.

Senator ABDNOR. Would this—

Senator SYMMS. I like her suggestion.

Senator ABDNOR. I'm surprised, you don't really go for that stuff—how would a guy ever get in the dairy business? Should he buy somebody out or are you saying, you can't get in here anymore because you were not lucky enough to have some cattle the year before when we put this thing in effect? Somebody might come

along and have 1,000 head of cows—dairy cows just at the time it went in, so he's OK. But some poor kid who was on a farm trying to get started might have had 10 cows or run—

Senator SYMMS. Well, what you could do is just lower it every year for 20 years.

Senator ABDNOR. I've already got that. Do we want another? That's all I'm saying. Remember when we were in Washington with the peanuts. I mean, there are some problems with this.

Senator SYMMS. I was going to say you could lower it every year 5 percent.

Mr. SINCLAIR. In the long run, we would do very well and most—anybody that's efficient would do very well without any Government involvement at all. And as a philosophical point of view, yes, we don't want anything.

Senator ABDNOR. I'm not trying to cause trouble. I'm just saying it might be better, at least the guy's survival—

Mr. PEPPERZAK. But, Senator, the young guy getting in the business has got to pay his price just like we all do.

Senator ABDNOR. But, you paid your price in time to get under it. He hasn't.

Mr. PEPPERZAK. No, no. I got into this thing when it was pretty miserable here in Idaho. I had to buy a market share—

Senator ABDNOR. But, how would the next guy get in it?

Mr. PEPPERZAK. I had to buy a market share through the MEDA—

Senator ABDNOR. You did?

Mr. PEPPERZAK. Absolutely.

Senator ABDNOR. I'm sorry.

Mr. PEPPERZAK. I had to pay \$7 a pound for the right to ship a pound of milk, to ship here in Idaho in 1975. There was no milk market at that point. I had to pay for that right back then. I had to save my money. And why should the Government have helped me then? It didn't. I didn't ask for its help.

Senator SYMMS. Well, it's kind of interesting that in my background in the apple business, they don't have a program there. And I've always said that's the best farm program that I've ever seen. Because it gradually works—in spite of the fact that orchards are long-term investments, you can't turn them on and off, you can turn a dairy on and off faster than you can an orchard.

But, they still seem to go through peaks and lower production. We're coming into a big production in the apple market.

Mr. PEPPERZAK. Because of the Government again, the tax deal on orchards. That's what's encouraged all this Washington thing.

Senator ABDNOR. Well, to get back to the farming business, everyone in farming says if we could start with everything going well, could you go for any kind of a program? Cattle is one of the best examples. You get way too many cattle, and you lose your shirt, and you have to cut back.

Senator SYMMS. Well, thank you very much. Maybe we ought to hear from the cattlemen.

Mr. PEPPERZAK. Thank you.

Mr. SINCLAIR. Thank you.

Senator SYMMS. Thank you all very much. I appreciate your testimony and I appreciate you all giving up your busy schedules to be here with us.

Tom Hovenden and David Bivens. Tom is executive vice president of the Idaho Cattle Feeders and Dave Bivens is executive vice president of the Idaho Cattlemen's Association.

Senator ABDNOR. I know more about the cattle business than the dairy business.

Senator SYMMS. Go right ahead, Tom.

**STATEMENT OF TOM HOVENDEN, EXECUTIVE VICE PRESIDENT,
IDAHO CATTLE FEEDERS ASSOCIATION, INC., BOISE, IDAHO**

Mr. HOVENDEN. Senator Symms, Senator Abdnor, I've got a full load of hay here today, but I'll cut it down to just a few bales.

Senator SYMMS. Your entire statement will be made a part of the record.

Mr. HOVENDEN. I've been associated with agriculture here in Idaho for—since I came here in 1946.

Hindsight is definitely 20/20 vision. Hindsight on 50 years of Federal farm programs, 50 years of political solutions to economic problems reveals that such solutions are pure failures.

Where are we today? We have a two-tier system of agriculture. On one level, we have those producers who receive subsidies, those people with a safety net that never allows them to get the full signal from the marketplace. They have no fear of producing a surplus.

On a different level, we have producers who do not receive subsidies, who even disdain such programs. They rely upon the marketplace for their directions. And this is a special era of opportunity where one can outsmart the market and prosper or misread the market signals and go broke.

The unfortunate thing about this system is that we who do not receive subsidies are forced to compete for labor, land and feed ingredients against those who can sell their surplus production at a guaranteed price, usually at a profit. In the minds of a vast majority of the American public, all of agriculture receives these benefits. And this is not good for agriculture.

I might deviate or add a little bit to my statement. Certainly a lot of our people resent the fact that they're out here buying hay and grain against people who are getting a subsidy of some sort.

Economics and the law of supply and demand. The law of supply and demand functions on the same continuous basis as the law of gravity. The Congress cannot change these laws, but they like to tinker with supply. The marketplace sends signals every day. Economics will solve all of the problems in the market.

The energy market is a good example. Ten years ago no one talked about conservation. Higher energy prices changed all of that. Today we find that conservation is a profitable pursuit. Gee, I even went out and bought a solar home, just to show you. Higher unregulated energy prices made us actually aware of conservation. We reduced demand because of higher prices and then the predictable happened, prices began trending lower.

We hear a lot about market, about the Government and what they're going to do for the farmers and everything.

Let's look at regulations versus private action. Sixty years ago the Congress created the Packers and Stockyards Act to limit market monopolies, encourage competition and to insure prompt payment for livestock. Now, in spite of this P&S, many buyers found it easier to avoid prompt payment through the use of bank drafts.

A prime example, back in Senator Abdnor's territory, when American beef failed in 1975. An Omaha packer was issuing drafts to Midwest cattlemen in banks in Washington State and North Carolina. When it failed, the P&S did their usual fine job of closing the barn door after the horse was stolen. A great clamor for more regulations arose.

Tiring of receiving such drafts in our area, we called a special meeting here in Boise on February 14, 1975, and invited our own feeders plus those from Oregon, Washington, and Montana to attend. We approved a joint resolution calling for payment by check or wire transfer of funds to be effective March 1, 1975.

Through concentrated action and peer pressure, we made it work. We closed two packing houses that were in poor financial condition. And a funny thing happened. We got the auctions and the cattlemen to go down and demand cash too. We'd tried for years to get rid of drafts. But, we stood on our own two feet and did the necessary. We got it done. We didn't need the Government to do it for us.

PRICE CONTROLS

History taught us this principle will not work. Ignoring the lessons of history, Nixon invoked price controls on beef in April of 1973. It created acute market changes. Now, if you've got a given supply with an equilibrium price in a certain market, and you either decrease it or increase it, you get a marked change. We did better. We found these acute changes—Safeway buying slaughter cattle direct from feedlots is the only manner by which they could keep a beef supply within the regulations. That was just plain dumb.

Price controls did interrupt the supply system. Artificial shortages drove the price of cattle up. Greedy packers and feeders expected prices to rise even higher when price controls were lifted. At a tremendous cost they held back on a perishable product and built a huge oversupply. And with the removal of controls, this oversupply hit the market and put prices into a tailspin. And the cruel lessons of history were taught again.

My main point today is the wisdom of saying no. I outlined the price controls and when they were lifted, cattle went down. By March of 1974 many cattle in the feedlot were losing as much as \$200 per head. Cattle producers began to notice that feeders were not willing buyers of cattle at any price. Something was wrong. Help was needed. Could we find a political solution?

From the annual Governor's Conference in June of 1974 came a strong proposal for "long-term, low interest loans for cattle feed-

ers." This would bolster prices and put cattle feeding back on a profitable basis.

But, later in June our officers and directors issued a strong "no" to this proposal. They reasoned that such a program would have put the Federal Government in the beef business, something they didn't want. We received many compliments from other organizations for taking this stand.

Now, I've studied these figures for a long time and if you look at these figures here—if you look at the figures for 1965 through 1968 was a glorious period of equilibrium. The annual slaughter was right at 40 million. The herd was worked at about 36½-percent efficiency. Numbers were same. There were no political interruptions at this time. Grain prices kind of moved along. Cattle prices got a little better.

And on with our studies we notice that from 1950 up until mid-1974 and even through 1978, at any year there were less than 54 cattle per 100 people, feedlots got in trouble. And the next year they passed the word down to the producers. And when there were less than 54 cattle per 100 people, cattle were a great buy. You could buy and do no wrong. Prices would go up. And it happened very shortly.

So, then about 1970 and 1971, we were getting along. The signals were going, but you notice the slaughter was going down, dropped down to 38 million from 40 million. We started to increase the cow-herds. We started 1972 with 56 cattle per 100 people.

These were some bad breaks in the market, but we had too many. And we started 1973 at 58.10. Then look at the slaughter there. We dropped to 35 million, less than 30 percent. That was due to the price controls and what happened there.

Then, when all these cattle hit the market, when this huge supply hit the market, it responded by going down. And that's when they said, let's loan them a lot of money, boys. Well, as you can see in 1974 we had 60 cattle and everybody was saying, well, it's just got to get better. It always does.

Well, by mid-1975 it hadn't got better. And the financial wheel was turning. And we started to liquidate cattle. Now, it took from September 1973 to July 1975 to start that liquidation. And that continued then through January 1978.

Had we loaned those people that money, we wouldn't have killed those cattle. And the Government would have been in the beef business. You'd have been trying to bail us out or buy up the surplus or do something else, but we got rid of those cattle by 1978. We were able to predict that in the fall of 1977 that we would be under 56 and that 1978 would be a good year, and it was.

Jimmy Carter hurt it a little by invoking some import deals. But anyhow, it got to be pretty good. And then in 1979 it got real good when we cut the slaughter back. And we've been struggling along now and I'd say maybe we're at 50 cattle per 100 people.

But, I say that the wisdom of saying no was right there. And I think the Congress has got into all these other businesses—the tobacco business. They got into the dairy business here—you just heard about it—by trying to bail somebody out. So, there's a great wisdom to saying no to these things.

I did survey quite a number of our cattle feeders before I made this report. And to a tee they said, we don't want any of those farm programs. We don't want those subsidies. Get rid of them.

And even when I was in Denver in late May, I had the opportunity to listen to an ASCS chairman from a Midwest State. And he told me that they could write some books and put O'Henry to shame on some of the scams farmers used to show how great their corn and wheat production was so they could get all the PIK money they could.

Help is needed. Get bureaucracy off its duff. Cut out the paperwork. You see all of the new paperwork from the new Migrant and Seasonal Worker Protection Act, the new 1982 Reclamation Act. They just create more paperwork.

The future. The computer's here. The smart guys are going to use it and they'll outthink the Congress and outsmart the Congress every time.

We've seen 50 years of tinkering. These programs have become a popular way to buy boats.

Now, Senator Proxmire is great for his golden fleece. But, if he cut out the dairy supports, he wouldn't get reelected. Jesse Helms would be just as bad off in North Carolina if he turned his back on tobacco.

The commodity program and the PIK program is horrible. You just try to sit down and figure out how to buy these cattle and sell them in 120 days. And then they throw a PIK program, disrupt the whole supply of cattle, how are you going to plan for that?

I'll reemphasize the thing that we need is more foreign markets and lower interest rates and cutting the deficits. Don't try to change the laws of supply and demand. You can't do it.

Thank you. We appreciate this opportunity, Senators.

[The prepared statement of Mr. Hovenden follows:]

PREPARED STATEMENT OF TOM HOVENDEN

INTRODUCTION

Senator Steve Symms,
Joint Economic Committee,
Congress of the United States.

My name is Tom Hovenden, a resident of Boise. For the past 18 years the cattle feeders of this state have retained my services as the manager of their trade association representing over 90% of the cattle finished for market in Idaho feedlots.

I am a native of eastern Nevada where I worked on ranches as a teen ager. Following nearly 5 years of service in the U. S. Army in World War II, I moved to Idaho in 1946. Since that time I have been closely involved with Idaho agriculture as a businessman, farm owner, purebred livestock producer and in my present position.

Hind sight is definitely 20/20 vision. Hind sight on 50 years of Federal farm programs, 50 years of political solutions to economic problems reveals that such solutions are pure failures.

Where are we today? We have a two tier system of agriculture. On one level we have those producers who receive subsidies, those people with a safety net that never allows them to get the full signal from the market place. They have no fear of producing a surplus.

On a different level we have producers who do not receive subsidies, who even disdain such programs. They rely upon the market place for their directions. This is a special area of opportunity where one can outsmart the market and prosper or misread the market signals and go broke.

The unfortunate thing about this system is that we who do not receive subsidies are forced to compete for labor, land and feed ingredients who can sell their surplus production at a guaranteed price, usually at a profit. In the minds of a vast majority of the American public, all of agriculture receives these benefits. This is not good for agriculture.

ECONOMICS AND THE LAW OF SUPPLY AND DEMAND

The Law of Supply and Demand functions on the same continuous basis as the Law of Gravity. The Congress can not change these laws, but they like to tinker with supply. The market place sends signals every day. Economics will solve all of the problems in the market.

The energy market is a good example. Ten years ago no one talked about CONSERVATION. Higher energy prices changed all of this. Today we find that conservation is a profitable pursuit. Higher, unregulated energy prices made us acutely aware of conservation. We reduced demand because of higher prices and then the predictable happened, prices began trending lower.

REGULATIONS VERSUS PRIVATE ACTION

Sixty years ago the Congress created the Packers and Stockyards Act to limit market monopolies, encourage competition and to insure prompt payment for livestock. In spite of the P & S, many buyers found it easy to avoid prompt payment through the use of bank drafts.

The prime example of this was the American Beef failure in early 1975. This Omaha packer issued drafts to midwest cattlemen on banks in the states of Washington and North Carolina. The P & S did their usual fine job of closing the barn door after the horse was stolen. A great clamor for more regulations arose.

Tiring of receiving such drafts in our area, we called a special meeting here in Boise on February 14, 1975 and invited our own feeders plus those from Oregon, Washington and Montana. We approved a joint resolution calling for payment by check or wire transfer of funds to be effective March 1, 1975.

Through concentrated action and peer pressure we made it work. We closed two packing houses that were in sorry financial condition. And a funny thing happened on the heels of our success. The livestock auction markets and ranchers adopted the same posture on payment. We didn't need the government to do this for us. All we had to do was stand on our own feet and do the necessary.

PRICE CONTROLS

History has taught us that this principle will not work. Ignoring the lessons of history, the Nixon Administration invoked price controls on beef in April of 1973. This created acute market changes, like Safeway buying slaughter cattle direct from feedlots as the only manner by which they could keep a beef supply within the regulations. That was just plain dumb!

Price controls did interrupt the supply system. Artificial shortages drove the price of live cattle UP. Greedy packers and feeders expected prices to rise ever higher when price controls were lifted. At a tremendous cost they held back on a perishable product and built a huge over supply. With the removal of controls, this over supply hit the market and put prices into a tail spin. The cruel lessons of history were taught again.

THE WISDOM OF SAYING "NO"

With the lifting of price controls on September 1, 1973, cattle feeders started down the road to financial ruin. By March of 1974 many cattle were losing as much as \$200 per head. Cattle producers began to notice that feeders were no longer willing buyers at any price. Something was wrong. Help was needed. Could a political solution be devised?

From the annual Governor's Conference of June, 1974 came a strong proposal for "Long term, low interest loans for cattle feeders". This would bolster prices being paid to producers and put cattle feeding back on a profitable basis.

Later in June our officers and directors issued a strong "No" to this proposal. They reasoned that such a program would have put the Federal government in the beef business, something they didn't want. We received many compliments from other organizations for taking this bold and open stand.

Let us look at the wisdom of this decision as illustrated by the figures below:

YEAR	JAN 1 MILLNS PEOPLE	JAN 1 CATTLE (-000)	JAN 1 ALL COWS (-000)	ALL CATTLE PER 100 PEOPLE	ALL COWS PER 100 PEOPLE	TOTAL COMMERCL SLGHTR (-000)	PERCENT JAN 1 INVENTORY SLAUGHTERED
1965	193.5	109,000	48,780	56.33	25.21	39,917	36.62%
1966	195.6	108,862	47,990	55.66	24.53	40,004	36.75%
1967	197.5	108,783	47,495	55.08	24.05	39,731	36.52%
1968	199.4	109,371	47,685	54.85	23.91	40,061	36.63%
1969	201.4	110,015	48,040	54.63	23.85	39,611	36.01%
1970	203.8	112,369	48,780	55.14	23.94	38,510	34.27%
1971	206.2	114,578	49,786	55.57	24.14	38,845	33.90%
1972	208.2	117,862	50,585	56.61	24.30	38,217	32.43%
1973	209.2	121,539	52,553	58.10	25.12	35,740	29.41%
1974	211.5	127,788	54,478	60.42	25.76	40,164	31.43%
1975	213.8	132,028	56,931	61.75	26.63	46,677	35.35%
1976	216.0	127,980	54,971	59.25	25.50	47,947	37.46%
1977	218.1	122,810	52,441	56.31	24.04	47,047	38.31%
1978	220.5	116,375	49,677	52.78	22.53	43,141	37.07%
1979	223.0	110,864	47,852	49.71	21.46	36,266	32.71%
1980	225.6	111,192	47,865	42.29	21.22	36,180	32.54%
1981	227.8	114,321	49,586	50.18	21.77	37,542	32.84%
1982	229.9	115,691	50,362	50.34	21.91	38,145	32.97%
1983	232.0	115,201	49,146	49.66	21.18		

Population figures: U.S. Department of Commerce

Cattle figures: U. S. Department of Agriculture

Slaughter figures includes both cattle and calf slaughter numbers combined.

In late 1974 and early 1975 we began to study USDA cattle inventory and slaughter figures in detail. We found their figures to be quite reliable by working backwards from the slaughter figures. Everyone agrees that slaughter numbers are accurate because this process is counted day by day.

We found that we had to slaughter a given percentage of the January first inventory each year to keep number even. Rather than express cattle and cow numbers in millions, we tried to relate them in relation to a village of 100 people. When are you short of cattle and when do you have too many on the market for a profit?

We found that from 1950 forward that 56 was the magic number. When the number exceeded 56 cattle per 100 people, it was a bad year for cattle feeders. The producer would find out the following year from the feeder. The prices paid are great signals from the market.

The period of 1965 through 1968 was a period of great stability in the market. We did not have too many or too few cattle. There were no political disruptions! Prices increased very gradually over this period. We had less than 56 cattle per 100 people.

Signals were being sent to increase production and we started this in 1969. Slaughter percentages went down as more heifers were held for breeding stock. By January 1, 1972 we were over 56 cattle per 100 people.

We certainly had too many cattle by January 1, 1973 when we had 58.10 cattle per 100 people. There was pressure on the supply side because of the number of heifers being held back for the breeding herd. The cattle industry was in trouble, but didn't know it. We didn't need political games to further restrict slaughter. The over supply was about to take care of itself.

In 1974 the popular saying amount producers and feeders was, "Things will get better." As you can see, slaughter increased in 1974, but the herd continued to increase. Look at the increase in cows between 1967 and 1975. The market and economic conditions took hold and in July of 1975 the slaughter rate went above 3% of the beginning inventory figure, the amount needed at an annual amount to reduce numbers. The liquidation was underway and would last through January of 1979.

THE WISDOM OF SAYING "NO"

I have pointed out that a need for a reduction in the herd existed on January 1, 1973. It was certainly need by 1974. Now, had we adopted a system of "long term, low interest loans", the herd liquidation would have been deferred. Cattle Feeders financial troubles would have only worsened.

Had feeders accepted these loans, the Federal government would be in the beef business today just as surely as it is in the cotton, tobacco, rice, wheat and dairy products business today.

A SURVEY

In preparing this report I called a number of our cattle feeders, men who have been in both the feeding and crop production business for many years. They were unanimous in their opposition to government crop programs. As one successful farmer and feeder put it, "These programs really help the big operators and don't do much for the little guy." This man is proud of the fact that he has prospered without such programs. He is well known in the Hansen area for paying top of the market prices for hay and grain.

Paying cash for cattle that will be sold from 4 to 8 months in the future is risky business. It requires careful planning as well as good management. Our feeders were unanimous in their criticism of the P.I.K. program! How could they have possibly planned for the disruptions this program made in the flow of feeder cattle, in the changes in prices for feeder cattle that it first created when the price of finished cattle did not warrant such increases? This is typical of all government programs. For every action, there is a reaction somewhere else.

I must relate this story to you. In late May I had the opportunity to attend a meeting in Denver. One of the participants is the state A.S.C.S. Chairman for a midwestern state. He said that someone should write a book listing all of original ideas submitted by farmers in his state to prove a fabulous production record for their farms. He said their scheme would put the late and great humorist, O. Henry, to shame.

WHERE HELP IS NEEDED

Get the bureaucracy off its duff. Impatient farmers find the slow movement of government to be annoying. Cut out the paper work. We have seen two new pieces of legislation that have created new mountains of detail. I speak of the Migrant and Seasonal Worker Protection Act and the 1982 Reclamation Act. The new paper work being added by these acts is most discouraging.

We have problems with the Food and Drug Administration. They are extremely slow to approve any new pharmaceuticals. This makes them horribly expensive when they do become available. It is painful to know that there are excellent products on the shelf awaiting approval while one suffers through heavy financial losses for the lack of their use.

THE FUTURE

Change is constant and the computer is the new agent of change. Those who adapt to them will be successful. Those who do not will be left behind. The computer will out maneuver and outsmart Congress every time. Farming operations will become more integrated and larger in order to capture every profit point from germination to consumer. Look at the changes in the poultry and swine industries. We can expect them everywhere.

SUMMARY

We have 50 years of tinkering with supplies. You have taught farmers how to produce surplus commodities.

These programs have become a popular way to buy votes, to buy control of the White House and Capitol Hill.

Through various commodity embargoes and the P.I.K. program we have sent a message to the world that we are not a reliable source of supply. P.I.K. has told Canada, Australia, South America and the European Community to increase their production because we are backing out of the supply picture by reducing our production. We have encouraged these other suppliers to seek out our foreign markets.

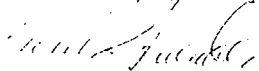
Our defecits and high interest rates have so strengthened the dollar abroad that many buyers can not afford our farm products.

I read the other day that the cheese give away program is in trouble. It seems that with all of the free cheese available, retail sales of cheese are slumping and creating more surplus for government warehouses. Does this surprise anyone?

If you are serious about farm and food policy, then you should direct all of your efforts in the Congress towards developing programs using America's great food production potential as a potent instrument of foreign trade and diplomacy.

Dont't try to change the laws of Supply and Demand and of Gravity.

The Idaho Cattle Feeders appreciate this rare opportunity to express their thoughts to the Congress. We also appreciate your consideration, Senator Symms, in bringing this hearing to Idaho.



TOM HOVENDEN
Executive Vice President

Senator SYMMS. That's a great statement, Tom. I always enjoy your statements, but that's one of the best I've heard you give, and you've given a lot of good ones at different times. I really appreciate that. I wish we had the whole Joint Economic Committee, Mr. Proxmire included, to hear that. I will point that out to him. He's on our committee.

Now, just by way of introduction to you, Senator Abdnor, Dave Bivens was a State senator in the Idaho Legislature. He's from Jim McClure's hometown. He has been in the cattle business for a long time and is still feeding cattle. He has had his ups and downs and gone through a lot, but he was in the State senate when I first ran for office. We have been friends for many years. Dave, we look forward to your testimony.

Senator ABDNOR. Do you raise cows or feed them?

Mr. BIVENS. We were in both. We've gotten out and I've taken an executive job, now.

Senator ABDNOR. Oh?

Mr. BIVENS. OK. Do you want me to go ahead?

Senator SYMMS. Go ahead.

**STATEMENT OF DAVID BIVENS, EXECUTIVE VICE PRESIDENT,
IDAHO CATTLEMEN'S ASSOCIATION, BOISE, IDAHO**

Mr. BIVENS. Senator Symms, Senator Abdnor, I'm Dave Bivens, executive vice president of the Idaho Cattlemen's Association. On behalf of the Idaho Cattlemen's Association, I am pleased to have this opportunity to present some brief general comments regarding the future of Federal farm programs.

I would like to reserve the right to submit some technical information later, if you feel it's necessary.

Senator ABDNOR. We'll keep the record open.

Senator SYMMS. We'll keep the record open for 1 month, I believe it is; is that right?

Senator ABDNOR. Yes.

Mr. BIVENS. OK, fine.

Over the past 45 to 50 years, the U.S. Congress has spent an unbelievable amount of time and money on farm programs of all kinds. Several, of course, were supposed to be very temporary, but many still remain in effect in one form or another.

The degree of success of each of these programs has varied from near zero to fair, very few even got to a good rating, at least in our estimation. One common characteristic, however, of each program was that it did cost money and created additional jobs and redtape. The benefits continue to go on to a relative few, at the expense of others that are affected directly by the spinoff of the program. As an example, a support or diversion program on wheat and feed grain will indirectly affect our cattle producer and feedlot operator in a number of ways.

Supports, quotas, and embargoes seem to be a rather common pattern with many foreign countries, some of which we sell agricultural commodities, both raw and processed. These various agricultural protective programs that exist in foreign countries further magnify the economic pressure on our domestic agricultural pro-

ducers by enticing them to ask for similar-type programs in the United States.

Over these years, the cattle industry has remained quite negative toward any type of subsidy or control of production programs directly on cattle. There have been some strong efforts made in the past to establish a number of types of subsidies or support systems, but the National Cattlemen's Association and many other organizations and individuals representing the cattle industry, including our own Idaho Cattlemen's Association have been successful in resisting these efforts.

Since we were informed that this meeting was being held to receive testimony regarding farm policy for the next generation, I started polling individual producer and feeder members of our organization. During each contact I posed one question, what do you recommend as a guideline for future farm programs and policy?

Without exception the response to the question was emphatic: "Get the federal government out of our business and keep them out. We have already had more farm programs than we can afford." They explained that the entire cattle industry remains clouded with uncertainty. They cannot depend upon normal, seasonal, market fluctuation or normal feed and cattle supplies as long as there are diversion programs on some commodities, subsidies, and supports on others, with compliance and regulations being changed sometimes weekly or surely every year.

However, a few agricultural programs generally remain quite popular and essential with the people that I represent. They are:

One. Agriculture research and extension and education, recognizing that effective research could lead to the possibility of overproduction of some crops. However, hopefully, increased consumption and export trade could help to offset the possibility of increased production.

Two. Market development—both foreign and domestic. The National Cattlemen's Association has active, hard-working committees on marketing and foreign trade which include representatives in each State that work to increase foreign trade into countries, some of which could absorb nearly all the beef that we produce here in the United States by increasing the per capita consumption up to 1 pound.

However, we continue to receive information from the NCA representatives we have in Washington, D.C., that many factors, mainly political barriers including balance of trade and so on stand in their way as far as increasing our export trade.

In conclusion, I would like to reemphasize our objection to subsidies and diversion farm programs. The problems that have been created by the existence of these farm programs, subsidies and quotas, and diversion programs have certainly been greater, much greater than the benefits.

In the future, appropriations which will adequately fund agricultural research, extension and education, along with increasing our efforts to expand agricultural marketing systems and marketing outlets—foreign as well as domestic, should be the thrust of our Nation's farm programs and focus toward the next generation of farm policy. Thank you.

Senator SYMMS. Thank you very much, Dave, for an excellent statement. Last night we were out at the ranch with my brother Dick. I invited him to come over and testify. But, he said he wouldn't bother. He was just going to tell us last night and I think, Jim, that you heard about the same thing, didn't you, from him and what these two gentlemen pointed out; he says, get the Government out of it and keep it out. Because it's going to destroy us and it discombobulates everything.

He's very upset about the fact—as I mentioned earlier—that there's wheat land in Washington State that's beginning the PIK program and planting grapes on it. And he said that would be a nice way to get a grape vineyard going; to be able to get fallow for your plants for the first few years, while they're not producing.

So, I thought that was kind of interesting. Do you have any questions?

Senator ABDNOR. No, I enjoyed the testimony.

Senator SYMMS. I sure did enjoy it and I thank you very much. And I hear you loud and clear. I hope that something can be done someday to get the Government out of the way and have the Government help producers. I think that's the big frustration I see. You go to Japan and their Government has been a big asset or a partner in production or whatever. And we have, I think, less of an adversarial relationship now than maybe we have had at times and a general consensus that our Government has to stop being an adversary to everybody who's trying to do anything.

But, you mentioned paperwork, Tom. Is the new reclamation law causing a great deal of paperwork?

Mr. HOVENDEN. The Bureau in their first suggestion on the deal, it's 960 acres, you were talking about it here earlier, 960 acres, but they want these canal companies to report anybody who farms 5 or more acres or leases 5 or more acres. In other words, every lease, everybody that's got a little bit and all these different leases have got to be recorded with the canal company and reported to them.

The Northside Canal Co. estimated that it would cost them \$50,000 the first year and then \$20,000 a year just to maintain all this filed stuff. Now, who's going to run around even renting 40 acre plots and rent 924 of them. If you're going to start and rent those little plots, you're not going to rent very many. But, the tremendous—they had three options and I talked to them in Denver and I said, "Well, I got one where they took hardly any action." I said, "Why don't you take that?" "Oh, we couldn't do that."

But, the paperwork—and the attorneys told me, they said:

Boy, I got it made. Every lease of land—and there's a lot of these small plots say here in this valley where the land's been subdivided, they lease it. They've got to have a lease. It's got to be recorded with the canal company. And it's got to be reported to the bureau. There's such an amount of paperwork you can't believe it.

Senator SYMMS. It makes me sick to hear that. I'm glad that you brought it up. I hope we can head it off. It's just ridiculous.

Mr. HOVENDEN. They've opened the comment period on that. In this NASAWPA, the records they have to keep for that are for the hiring of some guy. And that's phenomenal.

Mr. BIVENS. You really don't know what it's going to be yet, I don't think, at this point.

Mr. HOVENDEN. No.

Senator SYMMS. Thank you very much. If there are no further questions—Bob, do you have any questions?

Mr. TOSTERUD. No, I don't have any.

Senator SYMMS. Thank you. I appreciate your patience in waiting all day.

Next, we have Dennis Frazier, president of Idaho Poultry Industry Federation, Pocatello. Dennis is not here. Stan Boyd, executive director of the Idaho Wool Growers Association. I don't see Stan either.

Hank Schoening, commissioner to the Idaho Bean Commission from Nampa. Is Hank here? And Ron Foster, president of the Idaho Sugar Beet Growers Association. Are you Ron?

Go ahead, Hank.

**STATEMENT OF HANK SCHOENING, COMMISSIONER, IDAHO
BEAN COMMISSION, NAMPA, IDAHO**

Mr. SCHOENING. I'd like to thank you, Senators, for inviting me to participate in this hearing. I do not have a prepared statement, but I will get you one.

Senators SYMMS. You're Hank Schoening; right?

Mr. SCHOENING. Hank Schoening, right

Senator SYMMS. I just wanted to make that clear for our record.

Mr. SCHOENING. I'm a member of the Idaho Bean Commission. It seems you're asking for recommendations for future farm programs and policy. I assume that this means farm programs administered by the Federal Government. To begin with, this flies in the face of people representing commercial dry bean production and snaps bean seed production, since it has been the strong feeling of the industry that the Federal Government should stay out of the bean business. And I assume that feeling is still very prevalent within the industry.

It is very evident that the industry is capable of producing far more than we're capable of marketing. Marketing is our No. 1 problem and it would help the industry tremendously if we had a few dependable export customers for beans. However, once more I wonder how much good the Federal Government can do in the area of marketing. And I certainly wonder if the industry as a whole wants the Federal Government to get involved in marketing. We have said many times in the past that we do think the agricultural representatives, attachés, and assistants, could be of greater assistance to the industry if they were not dominated by the Department of State and the policies of that Department and the offices in foreign countries.

Market-oriented personnel could be of great help to the industry by supplying market information directly to the industry.

We have been hearing for the past 30 years that world demand for food items is going to exceed our capabilities to produce. This has not happened, does not look like it's going to happen and it seems that the major reason for the inability to supply food items to the needy of the world is the lack of their ability to pay for our production capabilities. For this reason and economic reasons within the United States, it is quite apparent that one of the great-

est needs of the American farmer is to be able to produce at a reduced cost.

This leaves the conclusion that most certainly we need a continued expanded research program. A good share of research funding should come from the Federal level because of the beneficial economic impact to the entire nation.

Example: Greater export of agricultural products results in a reduction in the balance of trade. Agricultural research is on the brink of one of the most exciting breakthroughs in genetics of plants and animals. Which will have the ultimate effect of reducing the per unit cost of production. This research, commonly referred to as genetic engineering, has the potential of taking all of the good features from one plant or animal and transferring them to another in a very short time.

In Idaho, we produce more than 50 major crops and are renowned for our seed production in many of those crops. This research technique could be of major importance to the State of Idaho. If we are to continue as a dominant force in the production of seed, therefore, it is very important that research moneys and facilities be provided to the State of Idaho if we are going to remain one of the leaders in seed production.

Trends in the past few years have been to close some of the USDA facilities and transfer personnel out of the State of Idaho to locations elsewhere in the United States. Oftentimes, without the capability of seed production but with a strong political influence on the Congress and are successful in getting those facilities and personnel located in areas with strong political influence.

Example: Cutting of USDA research moneys from the entomology research at Kimberly and transferring money and personnel to North Dakota and Michigan. There are probably many other things that could be said.

The two important things that come to my mind are marketing and maintaining a strong research program which will lead to a reduction in cost of production, making our product more available to those who presently cannot purchase our products. Thank you.

Senator SYMMS. Thank you very much, Hank, for an excellent statement. Ron Foster with the Idaho Sugar Beet Growers Association.

STATEMENT OF RONALD B. FOSTER, PRESIDENT, UPPER SNAKE RIVER VALLEY SUGAR BEET GROWERS ASSOCIATION, ABERDEEN, IDAHO

Mr. FOSTER. Senator Symms and Senator Abdnor, it's a pleasure for me to be here. The record should show that I'm president of the Upper Snake River Valley Sugar Beet Growers Association.

Senator SYMMS. Upper Snake River Valley.

Mr. FOSTER. Yes, not the Idaho.

Senator SYMMS. Oh, excuse me. I guess I have the Idaho Sugar Beet Growers down. Are you growing any beets in the Upper Snake River Valley anymore?

Mr. FOSTER. As many as we can.

Senator SYMMS. Where do you ship them? To Twin Falls?

Mr. FOSTER. They ship them to Paul and Twin Falls.

Senator SYMMS. Oh, Paul.

Mr. FOSTER. Yes.

Senator SYMMS. Mostly by truck?

Mr. FOSTER. All of them—well, part by rail, part by truck. The ones they rail come clear to Nampa.

Senator SYMMS. I see.

Mr. FOSTER. But, I address you today not only as a representative of the sugar beet industry, but also as a third-generation farm family in Idaho. My grandfather came and helped build the first canals and took the sagebrush out over in eastern Idaho. And my sons are fourth-generation Idaho irrigation farmers.

And I have been involved professionally in ag research and have been farming full time since 1966. And when I began farming in 1966, I believed that by 1980 our marketing problems would be minimal, we would have contracts for most commodities and it would be a pleasant as well as a challenging experience to be a farmer. The high dollar inputs for production costs, the anxieties of raising the crops and the frustrations of marketing into a surplus market where prices are often below the actual cost of production has become a dilemma to me and my family.

All of our people are dedicated and loyal and work 12 to 14 hours a day for 7 or 8 months a year planting, moving pipe, and harvesting. Eight hour days are attainable only in the winter when we are feeding cattle.

Every commodity we sell is in a surplus or potential surplus condition today except sugar beets. Production limitations administered by the sugar beet processing company is effective in relating supplies to the market. If sugar had not been included in the present farm bill with its protective clauses, we would not have a sugar beet industry in the United States today. If it is not included in the next generation farm bill, it will be a fatal blow to a long-time profitable segment of the U.S. agricultural industry.

And I would hope that you might make a special point to recognize how vital that is. And at the moment there is some effort in the Congress, a bill which has been drafted and could be introduced that would lower those supports from 17 to 13 cents.

Senator SYMMS. I'm aware of that. The fact is, I was in the closed meeting when Senator Helms brought up sugar to a group of Senators that we call the Steering Committee in the Senate. A group of conservative Senators. He brought up the question of sugar, which he wanted to include in the bill. I can assure you that with our senior Senator McClure there wasn't time for anybody else in the room to open their mouths until he had made it very clear as to why and all the reasons. There was never any more discussion about it, and Jessie said, "well, if that's what you want, that's what it will be" and put it in the bill.

I think that your delegation is very well aware of it. I'm very concerned, frankly, as to how you can adjust this one without affecting the corn production and the fruit growers in the Midwest. I know that Pepsi-Cola has now gone to those—and I think we do have rocks on the road ahead of us for the long haul.

Mr. FOSTER. Well, there are some critical problems. We would like to—

Senator SYMMS. P. T. Rathbone lives just across the river from me. He's a sugar beet grower in this portion of the State and I'm sure you are aware of this. His wife is employed at Symms Brewery Ranch, so he keeps us very well informed.

Mr. FOSTER. Right.

Senator SYMMS. Excuse me for interrupting you.

Mr. FOSTER. That's fine.

Our Government and its people have been the good guys to everybody. We've exported germ plasma, technological know-how, modern equipment, and all that goes with those commodities until we now have countries all over the world with developed agricultural industries that compete with us in every world market. These countries could care less now that they have their resources developed whether or not a U.S. farmer who pioneered these great production breakthroughs even exists.

It has become obvious to we who have been in agriculture on a family basis for a number of years that the existing conditions cannot continue. The agricultural factory is too big, the markets are too limited and someone must be responsible for limiting production. Economic forces have not done it because the farm remains after the farmer has gone broke and is acquired by someone with capital and other resources and it comes back on stream at a higher level of production than before the failure.

After agonizing through the dilemma we're in and in consultation with neighbors in our area, it is our studied opinion that Government is the only entity that has the necessary tools to limit production. With our modern computer technology, historical and projected models and other historical data, it should be possible to project needs for domestic and export markets with an adequate reserve maintained at all times.

This needs to be done for all major commodities including the meat complex. The system will need to be absolute with no substitute crops and idle land treated for protection and improvement through the use of soil building, green manure, or dry residue crops. Production history should stay with the land or ranch and be transferred when ownership changes. Changed land use such as dry land to irrigated should be controlled by using only the historical yields for the crops grown in the past. No new land needs to be developed.

A basic raw product producer such as agriculture has to be maintained in a profitable position so it can generate jobs and income through all the levels of processing to the ultimate consumer. This great renewable natural resource could at some future date be called upon to produce energy when the fossil fuels are gone.

The current PIK program is well meaning and should be effective but the substitute uses have spilled over into other crop domains and livestock in a very negative way. Its cost effectiveness is going to be horrendously poor when the facts are all in. The dairy program is a fiasco and will continue to be so until it is severed from politics. Agriculture and politics have a very poor track record as emphasized by the trade embargoes of the past few years.

It is our hope that this committee will be objective in their evaluation of all testimony and develop a next generation policy that

will remove for our children the heavy financial anxieties that we are faced with at the moment in this system as it presently exists.

And I know what I'm saying is opposed to some of the other testimony, but it seems to me that we do have to have some limitations on the production that we have, the capabilities of producing in this country. That Government does have the potential of providing those limitations without an excessive cost to the Government. Just by saying, "Hey, guys, lay 20 percent of your land aside, you know. That's—that isn't unreasonable. We can still make a living."

Senator SYMMS. Well, Ron, I appreciate your testimony. I jotted down a little note here to myself. You were talking about how our Government is being the good guy to everyone by exporting all our capabilities.

The American farmers as a group are probably one of the most conservative groups in the country in terms of a strong spirit of nationalism and anticommunism. Probably the best friend the American farmers have are the Communists, because they can't produce anything. And eventually we have a market. I've often thought that if the Russians ever had brains enough to go to a private property farming system, we wouldn't be able to sell anything because they've got twice as much irrigable farm land and very similar climate to our Midwest—more so than Minnesota and that part of the United States, and Canada. They just don't get much grown on their land.

I've been to Central America recently and have seen what the Communists are doing there. They're destroying El Salvador's ability to produce any agriculture. And there are 5 million people there that have to eat. I don't know how they're going to afford to pay for it. They're going to have real problems. Thanks to the Communists, they're not producing anything right now.

But it is interesting that the American farmers are probably one of the most independent-minded of all people and resist those forms of tyrannical Government the most. Yet if it weren't for that right now, a lot of what Mark Peperzak said about world food production is true. The world can produce. You take countries like Indonesia, all they have to do is clear off some of that forest and some of that land and they can just produce incredible amounts of agricultural products. They're just not doing it because of their economic system and other things.

Jim.

Senator ABDNOR. No.

Senator SYMMS. Bob, do you have any question?

Mr. TOSTERUD. No.

Senator SYMMS. Thank you very much. I appreciate both your statements.

And the next panel is Clair Hillman, president of the Idaho Crop Improvement Association and Bill Alberts. I understand they're not here.

Is Barbara Hartell here?

Ms. HARTELL. Yes.

Senator SYMMS. She is the president of the 4-H Leaders Association; and Jessie Griffith from Blackfoot. That's Jessie right here? If you two would come to the panel.

I might just make an inquiry. Are there any other people here that wish to testify?

[No response.]

Senator SYMMS. Barbara, we appreciate your being patient enough to stay through the day.

Senator ABDNOR. How is it that the ladies had to wait till the end of the day? I don't know.

Senator SYMMS. It's not very thoughtful of us to do that. I meant to ask Hank a question about the bean crop in Idaho but I guess he got out of the room. So, I'll have to address that on the record. How many beans do we have in the bins in Idaho? I think we have about a 2-year supply. I just wanted to verify that. Do either of you happen to know?

Ms. HARTELL. I might have the figures. I'm not sure.

Senator SYMMS. I was just looking through our agriculture books and it doesn't say in there. But earlier this morning some comments were made about the IMF funding. Senator Abdnor and I both voted against extending and expanding the IMF funding. One of the reasons I came to that conclusion was the limitations the IMF is putting on countries like Mexico to buy beans that we grow in Idaho; if the farmer in Idaho has to pay taxes or subsidize a foreign aid program, if we could get back a market for our agriculture, that's one thing. But, when we can't, there's not to much in it for us.

Go right ahead, Barbara.

STATEMENT OF BARBARA HARTELL, PRESIDENT, 4-H LEADERS ASSOCIATION, BOISE, IDAHO

Ms. HARTELL. I'm Barbara Hartell and I'm a resident of Boise. And I have been a volunteer 4-H leader—I am a volunteer 4-H leader—for the past 15 years.

Senator SYMMS. I want to congratulate you for that. I was in 4-H myself when I was a kid and I think it's one of the finest education programs that we have in this State or in the country. And I'm sure Jim feels that way in South Dakota. And you volunteers really—probably some of the very best education takes place in the world in American 4-H programs. I appreciate that you are a volunteer.

Ms. HARTELL. Well, thank you.

And I also am working on establishing a State 4-H leaders association and am serving as interim president of that this year. So, I'm new at this and talking to people, so you'll have to bear with me.

I have lived in town for a long time, but I grew up on a ranch in eastern Oregon. And I have to contribute a lot of my success and goals in life and achievements have been due to my 4-H training. And as you said, 4-H is the largest organization—youth organization in the country. And the goals of 4-H are the same now as they were 73 years ago when it was founded. And that's to assist the youth in acquiring knowledge, developing the life skills and forming attitudes which will help them become directing, productive and contributing citizens to our society.

So, I think I'm talking about our next generation. And to assist—we want to help assist these youths in developing their leadership skills and in forming positive citizenship attitudes. And if 4-H is to continue, I think as volunteer leaders, we need the support of our National Government. We need this through the help of the universities, land grant colleges and research and the cooperative extension program.

The 4-H youth development is really the byproduct of adult education provided by the county extension staff. This continuing education provides 4-H leaders and parents with accurate and up-to-date and unbiased information and a plan to achieve the objectives of 4-H. There's no other organization that provides the continued quality of education that 4-H does for the dollar.

Idaho has approximately 4,000 volunteer leaders who donate approximately 95 hours of their time or more to 4-H activities a year.

Senator ABDNOR. How many do you have?

Ms. HARTELL. We have 4,000 here in Idaho. And if you take—

Senator SYMMS. How many students involved?

Ms. HARTELL. I didn't look at how many students. I forget how many we have. I have a figure here that I could give you though. Just a second. There is—

Senator SYMMS. 4,000 teachers?

Ms. HARTELL. We have 4,000 leaders.

Senator SYMMS. Leaders. So, there must be—

Ms. HARTELL. And there's at least an average of about five per leader.

Senator SYMMS. At least 20,000 students.

Ms. HARTELL. Yes, we have close to 20,000—19 something.

Senator SYMMS. That's excellent.

Senator ABDNOR. I would like to know the age they can get in. What age can they get in at?

Ms. HARTELL. Nine.

Senator ABDNOR. Nine?

Ms. HARTELL. At 9 years. And this is why I think 4-H is so good because just a small achievement—I think our leaders do so much for the small amount of time they have, and then it's continued. If the child completes one project and feels good about themselves, this is great. Because in our society today, there are so many people who need so much help.

Senator ABDNOR. Well, 4-H hasn't always been in cities like it is now, has it?

Ms. HARTELL. No, 4-H originated as corn crops in Kansas. And one of the reasons that 4-H originated, as I understand it, is because the universities couldn't get across the knowledge that they had to the farmers to produce more. So, they started—if they had their youngsters grow the corn, the parents and the adults would learn the knowledge that they wanted. And this is really true today. All this knowledge that the extension staff and the universities are giving us, the parents have to learn it or the leaders before it's given to the children.

And so, it's really quite—and it's true today as much as it was then. You can see it through our extension program. And the girls got into it, but they began more in the baking area and personal and self skills—or personal development was one place they em-

phasized. And we're still promoting the self development in all 4-H projects now.

Even though we don't have all agricultural projects, they're all really agricultural related. They're building skills that a lot of our schools aren't providing for us and bookkeeping—or recordkeeping which we all do in our 4-H, budgeting and evaluation, public speaking. And to be a productive country, I think we have to remember our people as well as our crops.

I appreciate you letting me come and speak to you today. And if I could answer any more questions—but we as volunteers, we do need your support. We have all the volunteers and we do have a large sector of private support, which really multiplies many times again what our tax dollars provide for us. So, thank you.

Senator ABDNOR. I serve on the appropriations committee, and one of the easier budget items to come up with and agree with is 4-H. I have to tell you that. I mean, it has a lot of support from Members of the Congress. Lord only knows a lot of the areas are being reviewed very carefully, but I've never had any complaints from the 4-H leaders as to the budget. I guess they can always use more, but at least we're satisfied.

Ms. HARTELL. Well, our State has dropped a lot of our county leaders in this past year. And we really need the support. We've lost a lot of our 4-H county staff.

Senator ABDNOR. Is that for any reason—funds or something? Is that it?

Ms. HARTELL. This is what they're telling us, that all the funds are low. And so, they're just when a staff person resigns, we have not been able to replace them. And so, we do need to remember that—this information needs to filter down to the people as well. And I think—

Senator ABDNOR. Are most of those leaders—through the college; is that right?

Ms. HARTELL. Yes; they're off-campus staff from the college.

Senator SYMMS. Thank you very much for your testimony. Our last witness today is Mr. Jesse Griffith from Blackfoot, Idaho. Jesse, your entire statement will be included in our record. We appreciate all the work that you've gone to to put this together. And we will—

Mr. GRIFFITH. There are two parts to it.

Senator SYMMS. Oh, I see. I have two sheets here. Yes; I'm sorry. Well, your entire statement will be part of our record. I hope that we can—

Mr. GRIFFITH. Both of them together,

Senator SYMMS. Yes, both of them together. Your entire statement will be part of the record.

Mr. GRIFFITH. I apologize because I wasn't able to conclude it as much as I wanted to on particularly the last part, the solution.

Senator SYMMS. There's an old saying that the mind can only absorb as much as the seat. I hope you don't feel that we don't want to hear the entire statement, but maybe you can highlight it for us.

Mr. GRIFFITH. I'll relieve you with this opening paragraph here.

STATEMENT OF JESSE GRIFFITH, BLACKFOOT, IDAHO

Mr. GRIFFITH. From observation study over many years, I've evolved an economic plan that I believe would permanently solve the main part of the so-called farm problem. But, it being impossible to present it in a short-time format, I will briefly outline the problem and the intended goals of my solution, hoping that somewhere else I'll be able to have an appearance to adequately explain it.

I'm not even going to try to tell you what's here anymore than just to outline the goals—

Senator SYMMS. I'll read it on the way back.

Mr. GRIFFITH. [continuing]. What I claim for it to do.

Maybe I better start out by introducing myself just a little bit more and why I came to these conclusions. I've sort of made this a personal hobby, as my brother-in-law here can testify, over the years of farm plan. I started this in 1957 and substantially generated it then. But, it has had many refinements since that particular time. Now, it is strongly influenced by the fact that I am not trained in any college in the school of agriculture, but in the school of industry or engineering. I'm an engineer by profession.

I've worked for General Electric Co., for the Westinghouse Co., and for the Lockheed Co. And the training in economics that I got in my first postgrad job with General Electric was the one thing that set my feet on the ground with the good old free enterprise system. And that associated with watching the history unfold, I was—happened to be old enough to know about the depression. I was in the war and saw the war economy unfold and different things happening including the 1972 once-in-a-century drop over in Europe and Asia that caused that economic drop and saw how those things happen.

They all had an influence on my final script of what I have here or what I have to present to you. I'll go on here with this brief statement here.

Of the Nation's \$3 trillion of GNP, less than 1 percent goes to the farmers as net income. In other words, we get about \$20 billion in this last year. We've been in this range—we're less than—as far as the farmers themselves and what they get, we're less than 1 percent. We get more than that for our crops, but we pay that out as part of this \$3 trillion GNP.

Now, I bring out this difference because, as a general rule, this other 99 percent studies, determines cost of production or services and prices them and hangs price tags on them and we go buy them. It's consumers—farmers are as everyone else is. The farmers are in this thing backward. The opposite is true with us. We produce ahead of time and in an unpredictable amount of what is there. And after it is there, if it is surplus and it usually is, we are set at auction and so that the buyer, not the seller, sets the price. Now, this is familiar to you, gentlemen. I'm sure I don't have to tell you about that.

But, the thing that doesn't seem to be recognized is the reason why this happens. The symptoms—the things that's been going on in agriculture during all these many decades and these Government programs have been to attack the symptoms of the problem and never attack the problem. Putting Band-Aids or first aid treat-

ments onto the particular problem. But, the problem is deeper than that. And the problem is this deep and it's been alluded to you several times today that somehow we've got to only offer for sale the amount that will sell profitably. And we can't do that as farmers.

Now, I'm a dyed-in-the-wool free market type of a fellow. And I believe in it absolutely. But, for agriculture, it does not work for this 1 percent or less than 1 percent like it does for the rest of them. We use it backward.

We create the supply first and end up, instead of being able to have the buyers or the sellers usual freedom of pricing our goods—and the buyer has freedom of saying whether he's going to buy it or not. We end up doing it the other way. We take the freedom of telling him how much he's got to buy.

So, we end up losing the freedom of pricing. Now, the law of supply and demand will not let anybody in a free economy and a free nation like we have and hope to have to be able to have both things, to have the freedom of production to produce whatever volume he wants and then turn around and have the freedom of setting a price, even if it's a fair price, even if it's done through group marketing, it just will not hold. It's a double freedom that just is not there and is just not available.

Now, we've got to accept that fact and figure out some way to solve it. Now, the fact that we have that gives many paradoxes that are peculiar to agriculture that are not common to the rest of the economy in general. And these are the questions I asked myself many years ago sitting on a tractor. Why the farming economy was so different than it was—what I was taught by GE and so on. Now, think about it. A recession to a farmer is when a unit price goes way down. But he's still providing about the same amount of volume of goods—useful goods, valuable goods, and vital goods, quantity and quality and everything.

He does not have a lack of demand. He just has a surplus of supply and the price goes down. Now, that's a recession of the farmer. Now, what is it to a nonfarmer? The price remains about the same. But, the volume of activity goes down, so they produce a lot less power so they produce a lot less of these other things. An they do this to go down because they'll only produce it in response to demand or a proper price because that's the way—they have the amount of management to do that. And the farmers don't.

Well, as a result of this peculiarity in the recent recession that we're coming out of, it has been said that industrial production got down to somewhere just about say 65 percent of capacity. Now, this is what they did in order to hold the most profitable price-volume ratio to make their money. Farmers under the same circumstances would have stayed at virtually 100 percent of capacity production except for that the Government interfered with it to cause some land to be idle.

Now, why does this all come about? Now, this earlier gentleman here about the dairy situation—he alluded to it somewhat. He said if the price goes down, I'm going to increase my production. Well, that's exactly the first response that you'll get from the farmers that can do it. The lower the price goes, the more competitive it gets, the worse your margin is; the higher you've got to get your

yield, the higher your volume. So, there's—farmers have an incentive to switch from one crop to another and that is all.

I've got a problem with a dry mouth here. It makes it a little hard to talk. The doctor's got me on some pills. My wife told me not to do this, to chew gum. But I'm going to chew it anyway.

Senator SYMMS. We're getting you some water.

Mr. GRIFFITH. Well, I'll try to go on anyway.

The farmer will keep producing as much as he possibly can because no matter what happens to the price, he will expect to make more or lose less by full production. This is the incentive that comes to him. Now, what is the free market system? It is a system that's based on incentive. It's not one by regulation or force. It's one by incentive. People just do the right things because they have the incentives to do the right things. This is the good of it.

But, the farmer does not have the incentive to do the right thing like the other 99 percent does. He has an incentive to switch from this crop to that, increase his soybeans or decrease his corn or go from wheat to barley and back and forth or potatoes to wheat or whatever. But, to leave land idle, to cut down overall production, he doesn't have that incentive.

Not having that incentive, then the free market cannot work for him the way it's now structured as it does for the other 99 percent factor. In order for us to not be second-class citizens and step into that, we've got to come up with some way to do that and still be compatible with the free market, because the free market does very many things that are important to agriculture. And it seems like we have within the farming group two extremes of people; the ones on the extreme right that say, hey, the free market will do everything if we just get the Government out of it. And the natural free market incentives or natural operation of free market will solve all these problems. Well, that's a bunch of baloney.

It will not happen. It might happen in some cases, but because of this backward way that we use this system, it won't work. We can't have the double freedom. Nobody else can, we can't have them. Then we've got on the other side the farmers who want the Government to come in and put down quotas and set prices like minimum wages and all these sort of things. And that is a ridiculous thing. I covered that quite extensively in the big paper, but I won't take the time here.

Well, so you'll know where I'm coming from and what I expect or what I hope to come out of this is we have a free market problem here. And the only solution to a free market problem is a free market solution. And the ones that have come out of Washington over the many decades have been largely socialistic and regulatory and this sort of thing. In other words, they're not—they're based on incentives, some of them, but the wrong incentives. They give you goofy incentives.

Like take the one that we've had most recently. Now, I'm not talking about PIK. That's like a trip to the hospital after you've been damaged. Something that's well worthwhile, but we don't want to keep on with that kind of stuff. But it's what caused PIK that I'm talking about. We go on and we say, all right. You're guaranteed. If you will leave your ground out to a certain point for

that particular crop, we'll pay you the difference between the free market and the target price. OK?

Now, for this to be tolerable to the Government, they hope that this will entice enough farmers to leave enough ground out so that there will be little or no deficiency payments so the Government can afford it. Now, think what happens. If that works for the Government, the guys that caused it to happen left their land out, lose their production, get virtually the same price as the one that didn't participate, and you end up what? Some incentive. Kicking the hero in the teeth and taking the villain and rewarding him with this extra production.

That thing was built to fail before it started. Because now, let's say it did work for the Government. And the farmers did this and he got kicked in the teeth. How many times is he going to get kicked in the teeth? Maybe it would have worked for 1 year. Maybe it would have worked for 2 years. But, he's soon enough going to recognize he's a sucker, quit the program, and make it not work for you.

Now, that's a backward incentive. And these are the kinds of things that we get out of Washington. Every program that's been has had in some way an incentive for some part or some way that either the farmers can defeat it or the Government will defeat it or some other. It hasn't been based on sound economic free market principles. It's based on proper incentives to do the proper thing.

Now, I'll go through here now, I've outlined just about six or seven things here that I expect—that I claim that this will do. That a proper free solution must include at least all of the following:

One. A securely stored food reserve of equal—a storage equal to any foreseeable uncertainty in the volume of the next harvest to meet the Nation's needs and commitments, whether such uncertainties be from weather, crop disease, farm policy, embargoes, or whatever else might be considered credible.

Two. Reasonably fair and stable and competitive cost of production, farm crop prices for the average farmer with some still failing and excelling according to the relative performance. And that's no more than can be expected in a free market system.

Three. Reasonably fair and stable food costs to the consumer.

Four. And listen to this—all farm income for crop production to come from the marketplace. This means no Government payments for acreage reduction, price deficiencies, RAP, PIK, or et cetera, such as has been commented in the past.

And believe me, gentlemen, I have a way that this can be done within the free-market type of situation, that I'm convinced will work. I've thought about it over the years and I have taken it to Ph.D.'s like the ones that were sitting here this morning. And I give them a piece of paper like that and say, read it. And one of them that was here this morning that talked to you, I gave it to him a year ago and he hasn't read it yet. So, he couldn't respond. But the ones that I give it to say, yes. They read it quickly and don't pay any attention to it, but after I tie them down and I've done this to a number of them, the easiest guys to explain this to are profound economists, agricultural economists. And I've never had one disagree with me. And I've never had one take that thing,

and read it, and agree with it because they've always had some major misunderstanding of what I was actually saying.

He was trying to tie it to something—historyism instead of what I actually said if you look through it in its completeness. And I don't claim that thing to be complete. There's a lot more up here than there is there. Because this particular writing—I didn't get the time to make an even—

Senator SYMMS. Could you just give us a one-sentence statement of how the program works or is it possible?

Mr. GRIFFITH. Can I read these two or three here just quickly?

Senator SYMMS. What page are you on?

Mr. GRIFFITH. And then I'll go to as long as you want to stay and ask questions.

Senator SYMMS. What page are you on?

Mr. GRIFFITH. And all farm income to come from crop production—

Senator SYMMS. What page are you on?

Mr. GRIFFITH. I'm not on that book. I'm just on my synopsis. They told me over there that I had to cover something in 5 or 6 minutes.

Senator SYMMS. Go ahead.

Mr. GRIFFITH. I had to cover something in 5 or 6 minutes. But, it does have a similar sort of thing in there. I'm sorry I led you astray there.

Freedom for every farmer to make his own individual management decisions allowing him to raise whatever portion of any crop he deems best in any year he chooses, a signal to him by the free-market price and from his own individual circumstances without regard to protecting an acreage allotment or responding to an artificial-price signal from a price-support program.

This is an absolute necessity if we are to have a minimum production cost for the farmers need this in order to: (a) provide the lowest possible domestic food costs; and (b) to compete more successfully in export markets. And those are important things, very important.

The last thing here and I believe this to be a program so structured on perpetually sound economic principles, that it will be unneeded of modification from year to year for it must have built into it proper incentive responses to any economic disturbance that may occur from any cause, be it natural, political, or otherwise, even the embargoes. We respond to them and take care of this. To do this, it must successfully cure the basic problem instead of just having these Band-Aids and first-aid treatments on the most intolerable things that we're faced with today, like the PIK thing. Or do these things that have some delayed side effects that USDA has done to try to remedy the situation.

All right. Now, to get back to your question, Senator Symms, you said—what is the basis for it?

Senator SYMMS. What's the program, right.

Mr. GRIFFITH. What is the program?

Senator SYMMS. The bottom line.

Mr. GRIFFITH. The bottom line for the program?

Senator SYMMS. Yes.

Mr. GRIFFITH. Well, I sure hate to answer that in a short question, but the bottom line is the Government then instead of doing what they have been doing and since the free market by itself will not be the right thing for farmers and let them be like the 99 percent, if we can write a law in such a way that the USDA cannot manipulate the farm economy, but respond to it in the proper way—probably the closest analogy to the Government of what I would ask them to do and it would come out of computers, the results.

The thing that I would ask them to do would probably be most similar to what happens on election day. The Government does not decide who wins an election. They decide who did and they guarantee that such—and that that person gets to serve. Well, that's all this is. Have this so structured on sound business principles that this information that the farmers, on his own volition, decides what he wants to raise and tells the computer at each of the ASCS offices.

And we have this PIK thing go back to Kansas City and if this thing were set up with computers properly, it can go back to Washington or wherever the Senator is. This stuff can be analyzed like that and come back say, hey, this thing is a little bit wrong. Let's have a new bid and we can rebid this thing. Now, when I say bid, I'm talking about both set-aside and price. In order to start this thing out, why we would have to—we'd start out with assumptions. But, after the thing got rolling, why then we wouldn't start out with assumptions. It doesn't have to be right.

What it amounts to is this: If the set-aside is—instead of setting a price—now, here's the trouble you'll get into. Now, cost of productions are very important. Everybody else determines what they get on cost of production. Farmers don't. Now, if you try to do that with the farmers, you'll be in big trouble. There's no CPA or economist that could possibly do that because there's too many intangibles that are esthetic things. And they vary from farmer to farmer, not just from farm to farm.

And the only way you'll ever find out is by the farmers themselves saying, hey, how much I intend to raise this, then I'd raise this. So, look at what we've got now. We've got \$20 billion as a net income to the farmers. And let's just say for instance like I did in my thing there—say that what we figured was proper for agriculture as a whole was say \$28 billion. All right. Let's let the farmers bid for that.

That computer can analyze that and see if this blend of what goes back will add to \$28 billion. And they get back there and they find out, hey, at that price the farmers want to raise too much of this and too many of that and it will result in too much set-aside and too little. So, then you go through the second round and you lower the price on this and raise it on this one end. Instead of trying to fix the price of any one commodity, fix the price of the overall prosperity of agriculture on norm with other people. And let the farmers themselves bid into it like a contractor would bid into it. And weigh that against the set-aside and when this goes back and forth enough times, and it can go quickly, this thing being mechanized and computerized, to where the set-aside is uniform enough between the many, all is fine.

You see, the big problems we've had in the past I don't like. We've gone into these programs to put these things—well, what's the first crops that we put in set-aside? The one that gets picked on first is wheat. And then if things were worse, why you could go into corn and feed crops. The ones we pick on first are the very ones that we need to produce the cheapest and export the worst for overseas competition. Anytime that we take and set wheat idle and have it carry the whole burden—because anytime you set land idle, it doesn't just help wheat because there's this feed-through with the free market system sort of a thing that people switch into the more favorable or this sort of thing.

But, put the whole burden umbrella on the wheat, you put wheat at a disadvantage. The best thing to do is leave the wheat farmers as efficient as possible and come out with a scheme—and this tells about the scheme. It would work if you used only corn and wheat and soybeans, the three biggest crops that we've got. But it would work a lot better—a lot more ideally the more crops it works into it.

And as you read this thing through, why I grouped these crops according to three categories: Group A, those that can be stored for the long-range reserve that are storable; those that aren't storable but have to be used to produce; and the third ones that I don't address only represent about 5 percent of the calories production of agriculture, is those things like Senator Symms' apples or vineyards or wheat ground that's in fallow. Normally these sort of things.

So I address these other two principles. And I don't get into livestock.

Senator ABDNOR. You leave livestock—

Mr. GRIFFITH. I beg your pardon?

Senator ABDNOR. You leave livestock out of it? Is that it?

Mr. GRIFFITH. I don't get into it from this standpoint. This is a problem that's got to be solved here. Now, if this problem is solved with our acres and our crops, it will indirectly affect agriculture—affect all of agriculture. Do you remember what happened to livestock when Russia got short on wheat back in 1972 and 1973? You couldn't hold the price of anything down. Because the corn and the wheat had such an inertia to carry the price up that the year after that, people were switching into those crops and gosh, potatoes went up, and things that never left the United States.

See, agriculture cannot—because of the switchability, you can't succeed in raising the price of making it favorable to one unless it's favorable to all. Because, the others will shift in and drag it back down. I'm not talking about perennials like your orchards and things. But the kind of crops I'm talking about—

Senator ABDNOR. Well, you happen to see—

Senator SYMMS. I thank you very much.

Senator ABDNOR. What does the farmer do? Make his own bid? Is that what you're suggesting?

Mr. GRIFFITH. I didn't quite hear that.

Senator ABDNOR. These producers puts his own bid in for—

Mr. GRIFFITH. From a producer's standpoint all he does is decide what ratio of what he wants. He says, I'm going to raise this many acres of that, this many acres of that, and this many acres of that.

This is after the Government has come out with the first bid and said, hey, we're—wheat's going to be at \$4, barley is going to be at 5½ a hundred, potatoes—potatoes aren't storable, so they wouldn't be part of it.

And he'd look at that and say, well, with that kind of mix, I'm going to raise this much wheat and this much barley and this much—these crops, soybeans or so on through like this. And he sends it back and when the Government—when the computer gets that information he says, hey, the amount they want to raise isn't actually on the free market from an elasticity formula result in those prices. So, we'll have to say, make a change and lower this one and upper that one.

And it's on sound economic principles that any professor of economy or economics—I'm sure you guys must understand that well enough to know what elasticity means in the economy factor of things.

Senator SYMMS. Right.

Mr. GRIFFITH. I had a good discussion about this once with Bill Fay back in your office and I met you that time. I don't know if you ever remember.

Senator SYMMS. Right, I do remember. Well, thank you very much, Jesse.

Mr. GRIFFITH. And he was really understanding of that.

Senator SYMMS. We'll take a careful look at that and I think I get the gist of what your approach is and it is very interesting.

I'd like to say in closing that I think we've gained a lot of insight today with some of the problems here in Idaho. We'd like to especially thank Senator Abdnor for his patience and for taking the time to come and visit us in our State. We have a tour set up for you at 4:30, so we're going to have to move pretty soon. We're going to have to bring this hearing to a close. I'd also like to thank our court reporters, Debbie this afternoon and Pam this morning, for their patience and willingness to sit here and help us gather this record to take back to the Joint Economic Committee, and our committee staffer Bob Tosterud. We appreciate his efforts to make this a success. Also Marcia Hall and Georgia Lemley from my staff who helped set this up.

I'd like to say thanks to all of them. And if there are no further questions—

Senator ABDNOR. I just want to tell Jesse that I've got a legislative assistant who used to be my ag man. I believe the program he's been trying to sell me might be somewhat like yours. I'm going to be sure he looks this over.

Mr. GRIFFITH. That's interesting.

Senator ABDNOR. It seems like what he's talking about. It seemed to me like at the time that it was a real bureaucracy problem. You made it sound simple. But, I'm going to give it to him.

Mr. GRIFFITH. I think that this will simplify what happens in the AFC offices.

Senator, could I make one request of you? I don't expect whoever reads this along with you or this sort of thing to actually get the right gist of what's there. Will I be given an opportunity to get the criticism of it to make sure they understood it right? Because I've never succeeded in writing and sending it to people without—

Senator SYMMS. Certainly.

Mr. GRIFFITH [continuing]. Without getting comments that I don't recognize applying to my document. I didn't—I don't write well enough, I guess.

Senator SYMMS. Well, I'll tell you one thing, Jesse, don't feel bad. You have had the undivided attention of one-fiftieth of the U.S. Senate this afternoon. That's more of an opportunity than most citizens ever get.

You have had our attention here, so don't feel like you haven't. If you appeared in front of the Joint Economic Committee in Washington, you'd be gavelled down and told to submit it in writing, and then the next witness would be heard.

So, we're glad to study this. I think you have made it clear to me. I understand what you're talking about. I understand what you're trying to say. Jim and I will discuss this and get his staff working on it, and Bill Fay to look at it, and we'll get back in touch with you if we have some more questions.

I also want to thank Anne Canfield of my staff who was not able to be here today for sending out invitations.

Mr. GRIFFITH. I'd like to make one more comment.

Senator SYMMS. Yes.

Mr. GRIFFITH. If this had been in place over the last few years, most of the problems that have been discussed today would never have been.

Senator SYMMS. Well, that's good representation. If there are no further comments, the committee will stand in recess.

[Whereupon, at 4:10 p.m., the committee recessed, to reconvene at 9 a.m., Monday, August 8, 1983.]

TOWARD THE NEXT GENERATION OF FARM POLICY

MONDAY, AUGUST 8, 1983

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 9 a.m., at the Marriott Inn, Clarksville, Ind., Hon. Lee H. Hamilton (vice chairman of the committee) presiding.

Present: Representative Hamilton.

Also present: Robert J. Tosterud and Kenneth V. Nelson, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, VICE CHAIRMAN

Representative HAMILTON. The Joint Economic Committee will come to order. The Joint Economic Committee of the U.S. Congress has recently completed a series of eight Washington hearings on the theme "Toward the Next Generation of Farm Policy."

During those hearings, we heard from 28 national experts addressing a variety of subjects ranging from price support programs in the post-PIK era to the consumer's interest in farm policy; from agricultural trade policy to the economic condition of rural and agricultural businesses; and from soil conservation to financing agriculture in the 1980's. The testimony was comprehensive, sometimes controversial, and always thought provoking.

The Washington hearings are being followed by five regional hearings like the one here today. The reason for the hearings is simple. Our traditional farm programs have simply not done the job in improving the outlook for the farm sector during the last few difficult years.

During the last 3 years, years in which supply programs were in operation, the public cost of farm price support activities exceeded \$30 billion. During this same period, grain, cotton, and dairy stocks have soared, grain prices have declined, farm exports have dropped, and farm bankruptcies have skyrocketed.

In addition, 1983 will likely mark the fourth consecutive year of depression-level real net farm income. Farm programs this year will cost the taxpayers \$21.8 billion, nearly twice as much as last year and eight times the cost in 1980.

The problems in the farm sector have many causes, including a worldwide recession, unfair trade practices, Soviet grain embargo, the strengthened U.S. dollar, high interest rates, inflation, misjudg-

ments in program administration, and two consecutive bumper world harvests.

Moreover, few forecasters say that relief is on the way. Several experts testifying before the committee in Washington said that the next several years will see a continued world situation of supply exceeding demand.

Yet, when we look to our traditional farm programs for help, little is forthcoming. A recent Congressional Budget Office report prepared for the Joint Economic Committee found that there are basic structural reasons for the failure of the traditional farm programs.

The report concluded first that today's farm programs are fundamentally the same as those 50 years ago, despite the dramatic changes in U.S. agriculture from a fairly insulated sector to an integral part of the world economy.

Second, even with program improvements and the growing market dependence of farmers, Government price supports expose taxpayers to very large outlays when supplies exceed demand.

Third, even with those large taxpayer costs, farm programs have limited capacity to improve farm income or to reduce farmers' risks because of today's farmer's dependence on uncertain international markets.

Finally, by raising domestic prices, farm programs can work to the long-term disadvantage of U.S. farmers by discouraging consumption in importing nations and by encouraging production in producing nations.

So where do we go from here? What steps can we take to help the farm and the food sectors? What long-range planning is needed in all aspects of farm policy?

We all know that change comes hard in agricultural policy. The situation we're in today could produce, and we think will produce, constructive changes.

During the Washington hearings, numerous suggestions were made, including allowing flexibility to reduce high support prices that make our products uncompetitive, designing supply controls around production levels instead of acreage levels, placing limits on the amount of grain that a farmer can put into the reserve, cutting back Federal farm price programs while expanding export credit programs, providing special assistance to small farmers, targeting soil conservation programs in areas with the greatest erosion problems.

I might say this weekend I've had a good many suggestions from my farmers in county fairs that Congress pass legislation to produce rain in southern Indiana, and some even suggested that I and some of my colleagues do a few rain dances, which I would be willing to do if I thought it would produce results.

But that brings us all to today's hearings. We appreciate very much all of your interest in agricultural policies, we are especially appreciative of those who are willing to step forward today and testify on what really is a very difficult public policy question. We're eager to hear their comments, and those comments will be noted in the records of the Joint Economic Committee which will be perused by my colleagues in the Congress and by the staff of the Congress.

We have four panels of invited guests today, after which we will have a brief opportunity for people in the audience to speak later this afternoon.

The first panel is made up of persons representing State government. We have with us in that panel Lt. Gov. John Mutz of Indiana, Bill Burnette from the State Council on Agriculture for the Commonwealth of Kentucky, and Dale Locker, who is the director of the Ohio Department of Agriculture. Each of these gentlemen have had to come a good piece today to be with us, and we look forward to their constructive comments in this morning's hearing.

Lieutenant Governor Mutz, we're delighted to have you, we look forward to your testimony.

Mr. MUTZ. Is there a time constraint in this situation?

Representative HAMILTON. I want you to feel free to take the amount of time you think necessary. We have you and your two colleagues on the panel scheduled until 10:30, which should give you ample time.

I will not spend a lot of time on questions to panels, but I may direct a few questions at the end of your testimonies, but please feel free to take time.

Mr. MUTZ. The reason I mentioned that is that we have a prepared statement, and I had intended to summarize that statement and ask that the contents of the statement be included in the record.

Representative HAMILTON. I would really prefer that you do it that way, Governor, your statement as well as the statement of all who follow will be included in the record in full. Thank you; please proceed.

STATEMENT OF HON. JOHN M. MUTZ, LIEUTENANT GOVERNOR AND COMMISSIONER OF AGRICULTURE, STATE OF INDIANA

Mr. MUTZ. Thank you, Congressman. With those comments, I appear here today as the commissioner of agriculture for the State of Indiana and on behalf of the farmers in our State.

Obviously, it is a great pleasure for me to speak on behalf of the No. 1 industry in Indiana, and still the industry that provides the greatest number of jobs for people, and you add those and the industries related to food and fiber, and, of course, Indiana has consistently, over that last several years, ranked in the top 5 of our 50 States in terms of production of corn, soybeans, hogs, eggs, popcorn, and ducks, I might add, which isn't on the list in my statement—this, and despite the fact that we are the 38th largest State in terms of land area, so obviously agriculture continues to be an important part of our Indiana economy. In my role as commissioner of agriculture, I share that responsibility, unlike most other States, with Purdue University, a land-grant college, and we often work together not only with the university and its fine faculty, but also with the private sector of farm organizations in creating policy in Indiana.

I could summarize my particular viewpoint today on behalf of Indiana farmers by saying there are three elements which we think are necessary, if we are to plan for the future of farming, to step beyond this period in our history in which we have the surpluses

which you noted in your opening statement, to step beyond this period of time when weather apparently is adversely influencing our farm products, particularly the corn crop at the present time.

At this very moment, I guess a survey is being conducted to see whether or not Indiana should, in fact, be eligible for some type of special consideration due to the crisis involving the weather conditions.

But all these points aside, and I think aside from the question of the need for intermediate or short-term programs, such as PIK and the like, the three elements we think in the long run are important for the farming economy and for economic development in general in the State are these three things—first, diversification; second, aggressive marketing; and third, effective research programs.

In the area of diversification, I suppose the era of the 1960's and 1970's will be recorded in history in terms of farm policy as being those in which specialization was advocated, not only on our college campuses, but among a number of pieces of literature that appeared during that period of time.

It seems clear to many of us in Indiana that while Federal and State policy may not necessarily make this come about, it is important that an element to be considered is one which encourages diversification of the farm operation itself.

I speak in this regard to the fact that in a year such as a year and a half ago, when hog prices were at record levels, if you were a corn farmer and you also were in the hog business, it is likely things didn't go too badly for you, but if you were in a situation where corn alone was your major staple in terms of income, it was a very difficult year.

This kind of diversification is elementary, but nevertheless, it seems to me as farms become larger and the total investment required becomes larger, that the diversification of what we do on farms will help those farmers through the peaks and valleys of an economy in which international events affect the prices we get, and in this regard, the efforts we're making in Indiana to provide so-called specialty crops as a way to divert—to diversify the average farming operation is one which should be looked upon in terms of Federal and State policy formulation.

The second element which I discussed, of course, is that of an aggressive marketing program. It is pretty clear to me that marketing is a big subject, it involves finance, it involves the issue of value added to agricultural products.

A good many of our Federal programs in terms of marketing, in the past, have emphasized the crops that come directly from the farm rather than those which might be considered to be those that have had value added to them by something else we have done during the time period that followed.

It is very clear, of course, in terms of Indiana's economy and the U.S. economy that, for example, if we sell soybean oil rather than soybeans themselves, that according to a recent survey done by the USDA and the National Science Foundation, for example, value added on soybean oil is a 53-percent increment, employment could be increased as much as 35 percent, and personal income is affected by 29 percent.

Wet corn milling is another example where value added adds 167 percent, employment increases 129 percent, personal income increases 140 percent.

In the case of Indiana, the production of corn sweeteners is a good example in this area where the amount of corn consumed by this industry is some \$250 billion worth of corn a year, the actual value of that crop or that product when it is sold as a corn sweetener is over \$1 billion a year.

Indiana has about 20 percent of the wet corn milling business in the United States, and so, obviously, this is a classic example of what an emphasis on adding value to agricultural products can mean to our economy.

There are ways in which Federal policy can encourage this sort of activity. Examples of these might be a proposal concerning enterprise zones. As has been indicated, the Congress is currently struggling with enterprise zone legislation, the current legislation calls for 75 enterprise zones to be created over a 3-year period of time.

I would propose 25 of these or one-third, be set aside as rural enterprise zones rather than the original concept which I think emphasized urban areas.

The advantages of the changes in the capital gains tax as well as the other sections of enterprise zone legislation, would make it easier for us to find ways not only to diversify the base of agricultural products on farms, but also to create those process industries in certain areas of our rural communities that would add value to the products, create jobs for people and increase the economic impact of those products on the economy that is involved.

We also find, of course, in the marketing area that we need to take a careful look at credit. It is our opinion that the use of credit as a sales tool is one of the most important aspects of our Federal farm policy.

I recently returned from a trade mission to the Far East in which I had a chance firsthand to observe our FAS representatives in negotiations with the Korean Government concerning the use of blended credit.

The blended credit system is a very clever approach, I was extremely pleased with the degree of expertise employed by the FAS in this situation and by the direct impact it had on buying decisions by Koreans under this set of circumstances.

That sort of program needs to be enhanced and enlarged. And it seems to me that, for example, the GMS 201 and 301 programs stand currently relatively unfunded, they relate in part to the ability to export livestock, particularly breeder livestock of one kind or another.

That is an element of our export policy in Indiana that we have concentrated on in the last few years and one I believe deserves the attention of Congress as far as funding is concerned.

We also see at this particular time in our history a very strong U.S. dollar, a dollar so strong as a matter of fact, that virtually everyone you talk to in foreign countries say that the dollar is so strong we have difficulty buying from you.

It is nice to have a strong dollar from the standpoint that is a recognition that we have a stable economic climate and stable po-

litical climate in the United States; on the other hand, it is discouraging to have to fight that problem when competing with other parts of the world.

I would suggest that we take a look at financing techniques that relate to the strength of the U.S. dollar. Possibly there is a way to tie loan rates to the strength of the U.S. dollars.

I recognize there are complicating factors on how this could be accomplished, but it seems to me the creative use of financing at a time when exports are dropping in terms of the total percentage of the U.S. activity in this field, is extremely important.

I would also recommend to the committee the Export-Import Bank legislation sponsored by Senator Lugar dealing with small business.

Unfortunately, the Export-Import Bank has largely limited its activities to very large business transactions in the past, and we believe there is an opportunity here for the small and medium sized business. And that particular piece of set-aside legislation I recommend for your consideration.

We in Indiana have been involved in a variety of activity designed to improve our ability to communicate directly with foreign governments in terms of increasing demand for our products and in selling our products, and we will continue to do that.

It seems to me a great shame that the so-called Export Trading Act of 1982, while touted with a good deal of enthusiasm when passed by Congress, has not added a great deal to the ability of the Midwest to enter into international trade transactions, and we think the use of export guarantees and other kinds of financing incentives through this particular section of our Federal law would add to our ability to merchandise our products and sell them abroad.

Now, all of these things, of course, are part of an aggressive marketing program and I believe that's the second part of this program. The third deals with the importance of research.

For many years research programs largely conducted at our land-grant colleges have been a foundation of the remarkable story of U.S. agriculture. We continue, I think, to be the envy of the civilized world in terms of our production capacity, and that is largely due to this unique arrangement in which the land-grant colleges have taken the expertise of the laboratory of the scientists directly to the farmer.

And that continues to be one of the strengths of our system, the one that needs to be enhanced, investment in it increased in spite of decreases in other areas of investment on the part of our Government.

Of course, I believe in the long-run expertise in the area of agri-genetics is probably the area that has the greatest potential for the future in terms of agriculture. It is from this area that the new hybrids for the future will come, greater productivity in the longer run will come as well, a whole variety of unusual opportunities lie ahead in this realm.

This discovery of the common DNA and the impact on our society is probably as profound as the discovery of the computer or the discovery of atomic energy in the past. It was one of those tremen-

dous breakthroughs that needs to be included in any major program.

While we are talking about research, I would point out that private research as well will play a bigger role in the future as we look upon research that affects the utilization of farm products rather than only productivity on the farm.

In 1985 the R&E tax credit, which was included in tax legislation a year or two ago expires, it is sunsetted under existing law. That is a 25-percent credit against a base for research activity designed to give incentive to conduct research activities.

I would point out in Indiana we have our own 5-percent version of the same tax credit in the Indiana Tax Code as a way to further enhance the desirability of doing private sector research in Indiana, and I would strongly recommend to the Congress an extension, either a limited or a perpetual extension, of the R&E tax credit as being an important contributor to the efforts of research in the private sector and in agriculture.

In conclusion, what I have basically said today is that at a time when the emphasis of most farm debate is on those programs that tend to set aside or limit production one way or another, that we need to raise our eyes a little bit, raise our vision toward the long-term future.

I believe in Indiana most farmers want to produce. I believe they want to do the maximum and the best job they possibly can with the God-given resources they have available. And I think they recognize that in the long run, artificial involvement in the marketplace is unlikely to solve their problems—diversification of individual farming operations and aggressive, effective marketing programs at all levels, Federal, State, and in the private sector, and continued and substantial research are the things that ultimately will make a difference as far as U.S. farm policy is concerned. And we recommend those approaches as far as the future is concerned. Thank you very much, Congressman Hamilton.

[The prepared statement of Mr. Mutz follows:]

PREPARED STATEMENT OF HON. JOHN M. MUTZ

Mr. Chairman and Members of the Committee, on behalf of the people of the State of Indiana, I appreciate the opportunity to discuss the future direction of farm policy with you today. Indiana has a special stake in farm policy as one of the major agricultural states in the country. Agriculture is Indiana's number one industry as Indiana consistently ranks in the top five in the production of corn, soybeans, hogs, eggs, and popcorn. Indiana also ranks eighth in the exportation of farm products. Indiana maintains these high rankings despite the fact that it ranks thirty-eighth in land area, the smallest state west of the Alleghenies. Because we are extremely proud of our rich agricultural heritage, we come here today not to complain about the great challenges that face the agricultural sector of our economy, but to offer substantive suggestions. Many of the problems that face agriculture are extremely complex and we do not presume to have the answers, but we are extremely pleased at the timeliness of these hearings sponsored by the Joint Economic Committee.

Thoughts and Recommendations
From the Indiana Agricultural Perspective

At the state level in Indiana, a program for Indiana has been developed that emphasizes diversification, effective and aggressive marketing, and research.

While specification was a "buzzword" of the seventies in agriculture, diversification will be the key to farm survival in the eighties. Diversification spreads the risk over several commodities. For example, while corn prices have been low during the past several years, hog operations have been relatively profitable. In Indiana, we encourage farmers to take a hard look at diversifying their operations, perhaps into specialty crops or by adding a poultry operation to their grain operation for example.

Another area I emphasize as Commissioner of Agriculture, is effective, aggressive marketing. Obviously, many of the current marketing/export problems are precipitated by influences beyond the direct control of agricultural policy at the national level (the value of the dollar overseas, domestic monetary policy, trade barriers by foreign buyers, depressed economic conditions worldwide, etc.). However, we propose that, to minimize these traditional influences, the future prosperity of agriculture should be closely associated with the targeted development of the value added industry in rural communities throughout America. Traditionally, American Agriculture has not benefited fully from value added opportunities in processing and distribution. Historically, national agricultural policy has emphasized production expansion and the export trade expansion of raw agricultural products. Consequently, foreign buyers of our agricultural production have benefitted disproportionately from the development of value added industry. This is the case throughout Europe and Japan. . .our largest customers for agricultural commodities.

Substantial economic potential exists from generating a larger proportion of processed and semi-processed products in the spectrum of agricultural com-

modity trade. Exporting processed products provides an export marketing opportunity for those domestic goods and services required to assemble, process, and distribute basic agricultural commodities, thus increasing the value of the commodities and adding to the economic multiplier effect in the rural sector. A U.S.D.A/National Science Foundation study demonstrates the economic impact of value added industry:

Examples:

<u>Commodity</u>		
Soybean oil products instead of soybeans	Value added	+53%
	Employment increase	+35%
	Personal income	+29%
Wet corn milling instead of corn	Value added	+167%
	Employment increase	+129%
	Personal income	+140%
Dressed Poultry instead of corn	Value added	+843%
	Employment increase	+784%
	Personal income	+663%

In Indiana, the corn sweetener refining industry is an excellent example of what can be achieved through emphasis on value added processing. Indiana currently processes about one-fifth of all corn sweeteners produced nationally. The farm value of the corn consumed by this industry is about \$250 million annually. The value of the finished corn sweetener products manufactured, however, is nearly \$1 billion annually! (See Appendix 1)

Not only should we be looking to export more value added commodities to selected markets, but we should also take a hard look at the extension of credit to targeted markets. I recently led a trade mission to Korea (as well as a number of other countries in the far east) to negotiate a revision of Korean trade barriers to the importation of cattle. While we cannot displace or disrupt local economies of developing nations, there is room for negotiation so

long as we are willing to work closely with agricultural officials of other countries. We must be flexible, sensitive and willing to work with the cultural framework of potential trading partners. We must be creative in our attempts to open the doors of trade and must work on an almost case by case method to deal effectively with other countries.

While in Korea, I also had a rare opportunity to see a magnificent tool of the export trade at work--the tool of credit extension. In my case, I witnessed a negotiation session between a representative of the Foreign Agricultural Service and Korean Officials. I am convinced that while not every country warrants the risk of credit extension, we should certainly do more. We applaud the development of the so-called Blended Credit Program, but other federal programs remain unfunded that could help finance exports. In Indiana my own Agriculture Division informed me of the need to reinstitute funding for several C.C.C. programs in the export area. These programs include the GSM-201 and 301 programs that resulted from the 1978 Agriculture Export Act. The GSM-201 program would finance export sales of breeding animals. Indiana breeding animal exporters are continually faced with overly competitive financing schemes from the EEC and Canada. While the U.S. is still recognized for the genetic superiority of its stock, we are unable to export these animals in many cases because we are not competitive in the extension of credit.

Other countries are also becoming increasingly competitive in the area of the terms of credit (i.e. loan rate, repayment schedule, delay of first installment, etc.). We too must package our credit terms in a way that makes us attractive. We must become imaginative in our packaging schemes. For instance, we may want to consider or research the idea of tying loan rates to the strength of the dollar. Currently, the strength of the dollar is impairing our ability to export. When the dollar is strong, our policy might be to compensate with a lower loan rate. This "sliding scale" approach could get overly complex, but as a general policy warrants some research. A related strategy might be to lock into a fixed

exchange rate to allow the borrower the security and certainty needed in a turbulent world market. The more basic point I am attempting to make here is the need for creativity and imagination in the area of financing exports.

The lesson we have learned from our competitors is clear--we cannot overlook the need to properly fund the extension of credit even in times of recession and funding cutbacks. Cutbacks in the area of export credit extensions are not advisable at a time of overproductive agricultural capacity and when farm support programs on the domestic level are so expensive. That I am not alone in my concern for the financing of exports can be demonstrated by a number of resolutions recently passed by the National Agricultural Marketing Officials (NAMO) for consideration by the National Association of State Departments of Agriculture (NASDA). I reference you to a number of such resolutions on this subject (and a number of other important subjects) in the appendix of this statement.

Related to the area of export financing is the subject of cargo preference. Cargo preference legislation is especially harmful in such a highly competitive area as the export of agricultural commodities. Protectionism in general, has no place in the agenda to become more competitive in trading and selling our agricultural commodities as witnessed recently by the problems associated with the People's Republic of China in legislation that gave protection to the U.S. textile industry. Again, I reference you to a resolution on this matter in the appendix.

Important legislation passed last week in the United States House of Representatives concerning the Ex Im Bank is to be applauded as one of the most important jobs bills of this session. If Amendment 1299 to S-869 sponsored by Senator Lugar passes, regarding the Ex Im Bank Charter Renewal legislation, small and medium sized businesses will ultimately be able to compete favorably vis a vis foreign competitors. This legislation will revolutionize exporting for small businesses.

A final word on the need to export and market our products abroad. . . Hoosier farmers, I believe, would be more receptive to federal programs aimed at reducing the number of acres in production if agricultural policy included programs that maximize our ability to market our products abroad. The Hoosier farmer has difficulty understanding the need to cutback production while we lose markets abroad. Hoosier farmers want to farm and produce! The recent tentative long term agreement with Russia is a start, but we have a long road back to re-establishing ourselves in the role we are destined to fill--the role of the world's preferred supplier of food instead of a supplier of last resort.

The third area I mentioned at the beginning of this statement is that of research. Research will require continued direction and funding at the federal level as well as at the state level. Continued emphasis should remain in the funding of agri-genetic research. Agri-genetic research is the hope of the future in terms of the need for new breakthroughs in hybrids. While classical methods will continue to have an important role in research, such methods are not timely and responsive to a rapidly changing world. Agri-genetic research, especially in the plant biology area, will usher in the next revolution of increasing crop yields. But agri-genetic research promises much more--we may look forward to major crops that can be planted at a lower cost of production to the farmer and which will make more efficient use of and care for the soil. Funding ag-research, especially in the area of plant biology, would be dollars well spent and should receive a funding priority even in an era of funding cutbacks. Relative to research funding, our competitors are using tax incentives that are especially tailored to research. Japan, for example uses an accelerated depreciation schedule geared to the rapidly changing quality, cost and quantity of sophisticated equipment used in research and production. Therefore, I encourage the Members of this Committee to give the strongest consideration to the research and experimental tax credit program of the Economic Recovery Tax Act of 1981. This 25% tax credit is due to sunset in December of 1985. I respectfully urge

the extension of this tax credit as it is especially relevant to the area of high technology research. (Again, see the appendix to this text for a resolution that will be presented to the National Conference of Lieutenant Governors later this month concerning the Research and Experimentation Tax Credit of the Economic Recovery Tax Act of 1981). So, not only must the funding be made available, but tax incentives must be specially geared to those concerns working in the area of agri-genetic research. I would also emphasize the need to give priority to that research that finds new uses for agricultural products and which modifies basic agricultural products to the cultural tastes and preferences of our consumers as well as consumers of other countries. The aroma of popcorn popping in our local movie theatres may excite the taste buds of most Americans, but would a similar excitement be encountered in a Korean or Japanese market?

As Commissioner of Agriculture for Indiana, I recognize that many difficult policy choices confront this committee and agricultural leaders nationwide. Solutions will not easily be reached--at most accommodations may be forged from competing policy alternatives. One thing is clear, however, if Congress and the USDA lower support prices, target prices and loan prices in an effort to decrease incentive to overproduce both domestically and abroad, there must be a concomitant increase in funding in other areas such as export finance and for research. Decreasing the incentive to produce is not the sole solution: we face an increasingly sophisticated and competitive world in terms of the production of agricultural commodities and the ability to export and sell those products.

Thank you very much for your time and consideration and I wish you God's speed in your attempts to wrestle with these very complex problems.

APPENDIX 1

Two preliminary actions at the national level could significantly assist the development of value added industry in agriculture, if given the proper emphasis by Congress.

FIRST, in accordance with the Rural Development Policy Act of 1980, Agriculture Secretary Block has submitted to Congress a rural development strategy as recommended by the National Advisory Council on Rural Development. In this recommendation, special incentives were proposed for the development of Rural Enterprise Zones. More specifically, it was recommended that one-third of the seventy-five enterprise zones to be established at the national level be allocated as Rural Enterprise Zones. In addition to the normal federal incentives for job producers to locate in these enterprise zones, it was proposed that the Rural Enterprise Zones have exemption from capital gains taxes on the zone property and have federal government guarantees on industrial development bonds for small businesses locating in these zones.

We strongly support this recommendation and urge Congress to give serious consideration to the proposed special incentives for rural economic development. We believe that such incentives will greatly assist in the development of value added industry in the rural sector, and provide for the long-term economic viability of agriculture in America. Further, such incentives would strengthen and enhance state level economic development initiatives.

SECOND, The Secretary of Agriculture recommended further expansion of international trade in Rural American products through the Export Trading Company Act of 1982. This Act enables American firms to band together for

APPENDIX 1--Continued

export purposes without violating antitrust statutes. The Act also permits banking institutions to participate in export ventures through financing ventures and other means.

We suggest that Congress should consider further expansion of the aforementioned Act by providing tax incentives and export guarantees. Thousands of small and medium-sized firms throughout Rural America produce goods and services that are competitive in overseas markets, but lack the expertise and risk capital to develop such markets. With incentive, assistance and financial guarantees from the federal level, such firms could well be the standard-bearers of value added development in the rural sector.

A RESOLUTION MEMORIALIZING THE CONGRESS OF THE UNITED STATES TO EXTEND THE RESEARCH AND EXPERIMENTATION TAX CREDIT OF THE ECONOMIC RECOVERY TAX ACT OF 1981 BEYOND ITS SCHEDULED EXPIRATION DATE OF DECEMBER 31, 1985.

WHEREAS, the Congress of the United States, through the Economic Recovery Tax Act of 1981, established a Research and Experimentation Tax Credit for certain qualified research expenses incurred in carrying on a trade or business; and,

WHEREAS, the Research and Experimentation Tax Credit, found in Section 44F of the Internal Revenue Code, is equal to 25% of a taxpayer's incremental research amount, which is the amount by which a taxpayer's qualified research expenditures for the taxable year exceed the taxpayer's average qualified base year research expenditures; and,

WHEREAS, the Research and Experimentation Tax Credit applies to research performed in the fields of laboratory science, engineering and technology and applies to basic research expenses such as wages, supplies, property rights and research contracts; and,

WHEREAS, the Research and Experimentation Tax Credit also applies to corporate expenditures for basic research conducted by a college, university or other qualified research organization; and,

WHEREAS, the Research and Experimentation Tax Credit applies to research expenses paid or incurred through December 31, 1985 only and thereafter expires; and,

WHEREAS, the Research and Experimentation Tax Credit was enacted to provide an incentive for increased research activities in the United States leading to the development of new technologies and the creation of new jobs; and,

WHEREAS, there continues to exist a great need for a continued and sustained research incentive program to spur the development of new technologies in the United States.

THEREFORE,

BE IT RESOLVED BY THE NATIONAL CONFERENCE OF LIEUTENANT GOVERNORS OF THE UNITED STATES OF AMERICA THAT:

The Congress of the United States extend the Research and Experimentation Tax Credit of the Economic Recovery Tax Act of 1981 beyond its scheduled expiration date of December 31, 1985.

The Lieutenant Governors of the United States of America do hereby transmit a copy of this resolution to each Senator and Representative of the Congress of the United States.

August, 1983

RESOLUTION NO. NAMO # 1
(FOR NASDA USE ONLY)

SUBJECT OF RESOLUTION Agricultural Cargo Preference
ORIGIN OF RESOLUTION NAMO (Organization)
DATE OF ORIGIN July 21, 1983
NASDA STANDING COMMITTEE, RESOLUTION ASSIGNED _____

It is vital to the health of our states' and nation's economy to increase our agricultural exports. The budget of the U.S.D.A. and the Agency for International Development is designed for the promotion of the agricultural sector. These two agencies underwrite 90 percent of the differential pricing that is necessary because of the "cargo preference" laws (Jones Act).

Resolve that NAMO urges NASDA's supports of the concept of a strong merchant marine fleet that should continue to receive rate differentials for "cargo preference" shipments, not from the agricultural sector, but from another agency of the federal government, which would result in increased volumes of agricultural commodities shipped overseas under the P.L. 480 program.

ACTION TAKEN BY NASDA STANDING COMMITTEE _____
ACTION TAKEN BY NASDA RESOLUTIONS COMMITTEE _____
ACTION TAKEN BY NASDA _____

RESOLUTION NO. NAMO # 2
(FOR NASDA USE ONLY)

SUBJECT OF RESOLUTION Funding GSM 201 and GSM 301
 ORIGIN OF RESOLUTION NAMO
 (Organization)
 DATE OF ORIGIN July 21, 1983
 NASDA STANDING COMMITTEE, RESOLUTION ASSIGNED _____

Whereas, one of the most limiting factors in expanding U.S. livestock exports is the inavailability of competitive financing, and

Whereas, through the USDA Commodity Credit Corporation, the GSM 201 and GSM 301 programs provide the mechanism to make available competitive financing to assist the expansion of U.S. livestock exports.

Be it resolved that NAMO requests NASDA to call upon USDA, the CCC and the Office of Management and Budget to assign adequate monies to the GSM 201 and GSM 301 programs.

ACTION TAKEN BY NASDA STANDING COMMITTEE _____
 ACTION TAKEN BY NASDA RESOLUTIONS COMMITTEE _____
 ACTION TAKEN BY NASDA _____

RESOLUTION NO. NAMO # 7
(FOR NASDA USE ONLY)

SUBJECT OF RESOLUTION Quarantine & Health Requirements for Cattle
Exported from the U.S. to the People's Republic
of China

ORIGIN OF RESOLUTION NAMO (Organization)

DATE OF ORIGIN July 21, 1983

NASDA STANDING COMMITTEE, RESOLUTION ASSIGNED _____

Whereas, the U.S. and the People's Republic of China (PRC) have signed agreements concerning the quarantine and health requirements for cattle swine and poultry exported from the United States to the PRC dated June 1, 1983.

Whereas, the agreement contains requirements that are unacceptable and present significant impediments to the export of livestock to the PRC.

Be it resolved that NAMO urge NASDA to call upon USDA/APHIS to immediately reopen negotiations with the PRC and to institute those recommended amendments by an appointed taskforce of U.S. livestock exporters.

Be it further resolved, that representatives of the affected industry be directly included as technical consultants to any future negotiations involving animal health and quarantine requirements for export.

ACTION TAKEN BY NASDA STANDING COMMITTEE _____

ACTION TAKEN BY NASDA RESOLUTIONS COMMITTEE _____

ACTION TAKEN BY NASDA _____

RESOLUTION NO. NAMO #13
(FOR NASDA USE ONLY)

SUBJECT OF RESOLUTION The Marketing of "Added Value" Agricultural Commodities

ORIGIN OF RESOLUTION NAMO _____
(Organization)

DATE OF ORIGIN July 21, 1983 _____

NASDA STANDING COMMITTEE, RESOLUTION ASSIGNED _____

The U.S. economy historically has been supported by tremendous agricultural production that not only supplies domestic needs for food and fiber, but also provides vast volumes for export throughout the world.

Public moneys spent on research, development and education for the production of raw agricultural commodities have yielded the American citizens an abundance of food commodities at prices much lower than in other nations.

We have arrived at a time in history that competition for the production and marketing of agricultural commodities dictates that the laws and the policies of this nation should be reviewed for the purpose of gearing the U.S. agricultural industry to meet the projected competition from the developed countries and the developing countries participating in world trade.

In order to meet this competition, provide additional jobs and improve the economy of this nation, more emphasis should be placed on the "added value" concept applied to the processing, packaging and distribution of raw agricultural commodities in both consumer and institutional domestic markets as well as foreign markets;

Be It Resolved that the NAMO hereby requests that a committee be appointed by the Secretary of Agriculture to study ways and means for increasing the economic value of the agricultural commodities through research, development and marketing of "added value" agricultural products both domestically and internationally, and to consider placing more emphasis on the use of public moneys in the field of research in developing "added value" products through the land grant universities and other organizations with demonstrated linkages to agri-businesses for commercialization of new "added value" products.

ACTION TAKEN BY NASDA STANDING COMMITTEE _____

ACTION TAKEN BY NASDA RESOLUTIONS COMMITTEE _____

ACTION TAKEN BY NASDA _____

RESOLUTION NO. NAMA #14
(FOR NASDA USE ONLY)

SUBJECT OF RESOLUTION Farm gate to consumer, transportation, warehousing and packaging improvement

ORIGIN OF RESOLUTION NAMA Transportation & Packaging Committee
(Organization)

DATE OF ORIGIN July 21, 1983

NASDA STANDING COMMITTEE, RESOLUTION ASSIGNED _____

Sixty-five percent of the consumer food dollar is spent on moving product from the farm to the consumer. Lower costs through efficient handling in this segment of the marketing chain would be most easily passed through to the consumer and would contribute to decreased pressure to lower the price to the farmer. Additional research funds are needed as documented in the study of the office of technological assessments on post harvest technology and marketing economic research which was released in the Spring of 1983.

ACTION TAKEN BY NASDA STANDING COMMITTEE _____

ACTION TAKEN BY NASDA RESOLUTIONS COMMITTEE _____

ACTION TAKEN BY NASDA _____

RESOLUTION NO. NAMO # 15
 (FOR NASDA USE ONLY)

SUBJECT OF RESOLUTION Rural Roads and Bridges

ORIGIN OF RESOLUTION NAMO

(Organization)

DATE OF ORIGIN July 21, 1983

NASDA STANDING COMMITTEE, RESOLUTION ASSIGNED _____

The nationwide problem of deteriorating rural roads and bridges has not been solved or alleviated.

NAMO requests that NASDA seek to determine how much of the 1983 five cent Federal highway fuel tax is to be devoted to rural roads and bridges and if a break down is not available or if the amount is not equitable, that NASDA request from the Federal Department of Transportation greater equality for the repair of rural roads and bridges.

ACTION TAKEN BY NASDA STANDING COMMITTEE _____

ACTION TAKEN BY NASDA RESOLUTIONS COMMITTEE _____

ACTION TAKEN BY NASDA _____

Representative HAMILTON. Thank you very much, Governor Mutz, we will hear next from Mr. Bill Burnette who is the deputy director of the State Council of Agriculture for Kentucky.

**STATEMENT OF BILL BURNETTE, DEPUTY DIRECTOR, COUNCIL
ON AGRICULTURE, STATE OF KENTUCKY**

Mr. BURNETTE. Thank you, Congressman Hamilton. Ladies and gentlemen, good morning. My name is Bill Burnette. I'm with the Kentucky Council on Agriculture, an agency of State government, and I'm here as a result of your invitation to Governor Brown. As you know, the Governor had open-heart surgery in June and is still recovering from complications that set in following the surgery.

In my remarks, I will address matters relating to a general farm policy for the future and offer some specific suggestions for improving current Federal programs. First, however, I would like to briefly familiarize you with the agricultural industry in my State.

Representing a total investment of over \$20 billion, agriculture is the largest industry in Kentucky. It employs more people than any other single industry, and it generates almost \$3 billion a year in farm marketing receipts. Corn, wheat, tobacco, and milk products for which the Federal Government maintains some type of price-support system, account for about one-half of all cash receipts and almost two-thirds of the value of all exports. With the addition of soybeans, these shares increase to about 60 and 90 percent, respectively. The bulk of the remainder of cash receipts are derived from the marketing of cattle and hogs, products which are particularly vulnerable to price competition from red-meat imports.

So, as you can see, Kentucky agriculture has a great deal at stake not only in the farm policy of the Federal Government, but in its economic and trade policies as well.

In theory, at least, I believe a majority of Kentuckians support the principles of a market-oriented, free-trade economy. However, we recognize that we live in an imperfect world and that not everyone plays by the same set of rules. This reality and the dynamics of a rapidly changing world marketplace dictate the necessity for an agricultural policy that is flexible enough both to meet existing challenges and to take advantage of new opportunities.

Success or failure of a farm policy must be measured against its ability to achieve each of the following: First, maintenance of an economically viable farm economy; second, preservation of the family farm as an important American institution; and third, protection of our natural resource base.

Critical to the first of these, I think, is an aggressive export promotion and market development program. Due to the incredible capacity of the American farmer to produce, it is absolutely essential that a major portion of U.S. production find a market abroad. Since agricultural exports began their sharp decline in 1981, net farm income has plummeted—from an all-time high of \$32 billion in 1979 to \$18 billion in 1982. And the projections are for a further decline in exports in 1983 and with little improvement in 1984.

The reasons for the decline in U.S. exports, of course, are a worldwide recession, an overvalued dollar, propped up by artificially high interest rates, self-imposed trade restrictions, and heavily

subsidized competition, particularly from the European Economic Community. The resulting drop in demand and prices has brought about a corresponding increase in costs to the U.S. Treasury.

One of the most sweeping changes in domestic policy brought about by the decreased demand for U.S. exports is the payment-in-kind program, otherwise known as PIK. As you know, the PIK program has evoked a great deal of criticism from its detractors based on the program's unexpectedly high costs. But I, for one, cannot be critical of Secretary Block or USDA for their handling of the PIK program. The high costs of PIK are primarily due to the unanticipated high rate of participation, which reflects the economic predicament of farmers at the time.

Since the implementation of PIK, weather conditions have gone from bad to worse. Excessive rainfall at planting time has turned into extremely high temperatures and drought over much of the Nation during the summer months. Can you imagine the number of bankruptcies and defaults that would have occurred without PIK?

This short-run program was necessary to help bring supply more in line with demand. The primary concern now, however, is whether PIK's critics will force a much less effective program for 1984. Preliminary indications from USDA are that this will be the case.

To be sure, sustained economic prosperity depends on steady growth in both foreign and domestic demand rather than restricted production. Thus we offer the following policy and program suggestions for enhancing demand from both quarters:

FOREIGN

First, USDA should play the lead role in all decisions relating to the export of food and fiber on either a commercial or concessional basis.

Second, immediate capitalization of the export revolving fund [ERF] authorized by the 1981 farm bill.

Third, the United States should move aggressively to negotiate additional bilateral agreements with importing nations. We applaud the new expanded grain agreement with the Soviet Union and encourage similar long-term agreements with other countries. These kinds of agreements will help restore our image as a reliable supplier.

Fourth, the United States should explore a common North American export strategy with Canada.

Fifth, the United States should attempt to develop a cooperative food-aid strategy with the European Economic Community. A cooperative effort should foster world food security and help reduce tensions between the two trading partners.

Sixth, the United States should aggressively pursue the reduction or elimination of tariffs and other more subtle trade barriers with its present and potential trading partners, through a thorough review of the adequacy of the General Agreement on Trade and Tariffs [GATT] or by any other means at its disposal.

Seventh, the Public Law 480 "food for peace" program should be reviewed to determine its capacity to meet the needs of the world's hungry.

DOMESTIC

First, the Federal Government should renew its commitment to a domestic alcohol fuels industry—by encouraging the use of fuel alcohol by gasoline refiners and distributors, and of alcohol and gasoline blends by the Nation's motorists; by making additional venture capital available through direct loans and loan guarantees, investment tax credits and/or larger exemptions from the motor fuels tax; and by authorizing and providing funding for a strategic alcohol fuels reserve.

Second, dairy processors should be encouraged to develop new products from milk and to manufacture traditional products with more market potential than American cheese. At the same time, producers must be encouraged to cull their marginal cows.

Third, proposed changes in USDA's beef grades should be adopted. This should help satisfy the U.S. consumers' changing preference for leaner beef and, also, make American-produced beef more competitive with grass-fed beef from Australia and Argentina.

Fourth, USDA's food stamp program should be reviewed to determine its adequacy in meeting the needs of the Nation's poor.

Survival of the family farm as an economically viable institution may rest, in large part, on the Federal Government's resolve to strengthen its commitments in the areas of agricultural research and extension, and rural development. For decades, the Federal Government has maintained a high profile in those important areas. In recent years, however, funding—especially funding for research—has not kept pace with nearly every other nonmilitary sector of the economy. Nor has the funding been commensurate with the economic and social importance of agriculture and rural communities in our society.

As our population and that of the world continues to grow, as the technological pace quickens, and as economic, social and health problems and pressures proliferate, it will be more important than ever that government at all levels be prepared to meet the challenges—of producing an adequate food supply, maintaining adequate infrastructure—roads, water lines, sewer systems, et cetera—creating employment opportunities, and so forth.

Along these lines, the following incomplete list of recommendations are made:

First, the role of the Farmers Home Administration [FmHA] should be reexamined with a view toward making it a more positive force in agricultural lending and in rural development.

Second, the Federal Government should act to maintain the integrity of the agricultural lending system. Particular emphasis must be given to young and beginning farmers and to those who suffer from emergencies beyond their control. In this regard, the Congress should act to force the administration to fully implement the economic emergency loan program, FmHA's limited resource program, and to counteract the administration's imposition of the so-called 30 percent rule as regards emergency disaster designations. The latter is inherently unfair. If it is necessary to tighten qualifications under the emergency disaster loan program, the qualifications should be tightened on the individual applicant rather than the designation procedure.

Third, necessary steps should be taken to maintain adequate financial resources for rural businesses. The administration should not be allowed to scrap or downgrade FmHA's business and industrial loan program.

Fourth, Congress should act to assure farmers with stored grain equal protection under the Federal bankruptcy law.

Fifth, in its search for additional revenue to reduce the size of Federal budget deficits, Congress should not act to repeal any portion of the estate tax reforms granted in the 1981 tax law. These provisions are critical to the survival of the family farm as we know it today.

Sixth, research related to producer profitability and mechanisms designed to disseminate the results of that research should be emphasized.

And finally, protection of the Nation's natural resource base should require little explanation. Our soil and water resources are the foundation of the Nation's economy; the wise use and conservation of these basic resources are essential to our wealth and enduring strength as a nation. And as responsible officials and compassionate human beings, we should certainly want to leave with our children the means to feed themselves.

In Kentucky, however, as I am sure is the case of many other States, soil losses to erosion are a serious problem. The average annual loss on an acre of cropland is 9.4 tons, almost twice the rate of regeneration. Indeed, losses on some marginal cropland exceed 100 tons per acre. As a result, many areas of Kentucky are experiencing major problems with water quality due to excessive sedimentation and chemical pollution from agricultural activities. This is true of both surface and ground water supplies. Thus the Federal Government, whose programs and policies have often been erratic and contradictory, must change its policies and programs to assure sound conservation practices by producers. For example:

First, the Federal Government should make soil and water conservation a high national priority. Steps that should be taken include: Maintaining the viability of cost-sharing and technical assistance programs, encouraging conservation tillage research, assuring the consistency of the farm program with sound conservation practices, and targeting programs to problem areas.

Second, the Federal Government should emphasize program incentives rather than regulatory devices.

Third, land retirement policies and programs, such as the payment-in-kind [PIK] program, should benefit conservation.

Fourth, tax incentives for conservation practices and equipment should be utilized where possible.

Thank you, Congressman, that concludes my remarks.

Representative HAMILTON. Thank you very much, Mr. Burnette. We will hear now from Dale Locker, who is the director of the Ohio Department of Agriculture.

STATEMENT OF DALE L. LOCKER, DIRECTOR, DEPARTMENT OF AGRICULTURE, STATE OF OHIO

Mr. LOCKER. Thank you, Congressman, it is a pleasure to be with you this morning, I think. For some 12 years I was chairman of the

House Agriculture Committee, and I never realized what it was like to sit on the other side of this microphone and make people nervous. So I am one of the nervous ones this morning.

I having come at the end of the three, and I would compliment the other two on their concerns, and they voice a great deal of the same concerns we have in Ohio.

I'm like the fellow that has the wheelbarrow and the shovel, after the horses have gone by, all the beauty is passed, and I have got a cleanup operation to perform.

Representative HAMILTON. Think about the witnesses that appear at 4 o'clock this afternoon.

Mr. LOCKER. They will have indeed a great cleanup job.

I will, since you have a copy of my prepared statement, just hit some highlights here and perhaps make some general comments.

I have taken the approach of saying more general comments as to what we're concerned about. We recognize that you in the Congress, every day, are receiving tons of mail telling you specifically what you should do, and I have received some of those letters likewise—what to do and where to go.

So therefore, we did take kind of a general view, and I would like to point out some of the things we see in Ohio's farming history, recent history, last 10 years or so, that have given us some problems—the capital-intensive farming, the change in the heavy outlay of capital, which, of course, is a heavy burden on farmers.

There has been a change in attitude by the lending institutions toward the farming community. The last 10 years of farming in Ohio have been also a great deal of crop specialization, and that has come about because again of trying to meet the capital requirements, trying to cut back and specialize, hoping indeed that will be of assistance. What has happened, as was mentioned by the first speaker, is that we have gotten into a real bind.

Also, in the last 10 years competition for the land itself, the heavy increases in the cost of land has made it less and less feasible in the farming operation.

We have the land development, and our government, both Federal and State, are real abusers of land use when you come to the highways and other entities, which has caused some problems for farming also.

Indeed the last 10 years has seen a radical change in the demographics of farming in Ohio. Specifically, in that period of time there has been a 10-percent decline in the number of farms overall in the State of Ohio. At the same time there has been a 8-percent increase in the large farms, and a 10-percent increase—I'm going to use the term "sports farm" because that seems to be one that is acceptable, although it kind of rubs me the wrong direction—sports farm being that type of farm where the individual has to work to make the money to make sure that he can go ahead and farm and do what he likes to, which is farming, so we say part-time farming.

This, of course, indicates where the problem is at. The large farm operation has been able perhaps to survive with the capital needs. A lot of our farmers who were small farmers have had to get jobs off the farm to support that right, that inclination to farm, and this, of course, causes problems with labor as well with the job economy like it is now.

We have a number of people who would literally be very happy to be full-time farmers if that were possible and can't be.

We find that I think the major problem we have that has been touched on is markets for the products. The embargoes, of course, was a problem, de facto embargoes of not having long-term agreements, which I was glad to see the President was able to come to terms and enter into a long-term agreement.

I think another indication of our traumatic times that we are in that I never thought I would live to see a day where we would have to pass legislation to pass legislation to say that we as a country would stay with our word when we signed a contract or an agreement.

I think this indicates the change that we are in. As well as the developing of the market the agricultural community suffers from, I think, and we have done a lot of surveying in our State, our State fair is going on, of course, one of the largest and best State fairs in the entire Nation—that wasn't in my speech, I just wanted to add that.

We have had a lot of people come up, we've got a lot of farm equipment—I'd like to share one story with you because it is important, it illustrates what we think is part of the problem, too.

A couple of families have come up to the display and looked at one of the large pieces of farm equipment and we had the price on there \$81,000, and I heard the gentleman say to his wife, I just happened to be standing there: "I think that must be \$8,000, it must have been a mistake." And I chimed in, as I'd want to do, and let him know that, indeed, that was not a mistake. And the wife's statement was: "Well, how in the world can a farmer make it with that kind of expense." And I said: "Ma'am, that is indeed the problem."

I say this because this illustrates one of the other problems and I have no recommendations or solutions, one of the other problems is to get our urban brothers and sisters to recognize the problems we are talking about when we are concerned in the agricultural community.

I indeed have a major concern with the PIK program and the cost that is involved—not with whether it was helpful or not, I think everyone will agree that it is—but the problem being when the bottom dollar line comes into play along with the cost of the milk program, that we're going to cause such a backlash among the urban area people and the taxpayers that they may, indeed, be going to want to say: let's eliminate all programs and make it extremely difficult for Congress to address the problems they know exist in the agricultural community.

This is one of our major concerns.

I think the other problem, we would say, whether it is the PIK program or whatever program it was, that we really see needs to be addressed is a long-term—and if there is a central point of what we have to say here today—it is that we need to look for long-term policies, a long-term approach in this area.

We in Ohio, in the State of Ohio, are presently involved with Governor Celeste in putting together a strategic plan to guide our State through the next 5 years and the next 20 years.

Now, I hasten to add our Governor will not be Governor for the next 20 years, we have a prohibition against that in the State, but the point that it illustrates is that we feel there is a need to look far in advance to where we are at.

PIK program is a good example of that. There is an emergency, and Congress tries to address it to the best of their ability, but addresses it as an emergency and in turn, we're hearing said now, and I'm sure, Congressman, you heard this also, what do we do next?

PIK is not even hardly cold, and we are saying where do we go from here.

This does a couple of things—one, it makes the agricultural community extremely uncomfortable because of trying to calculate what direction they need to go for the next year or two.

Two, it also makes it very difficult, and again I go back to the general taxpayer, our urban brothers and sisters, to understand well, gee, I thought you took care of that farm problem, you had the PIK program 10 years ago, didn't that do it, et cetera, et cetera.

I probably overemphasized this, and I think it is an important point.

The farming community it has been said here, and I repeat that very strongly, the farmers are not looking for a handout type of program, they are looking for a program that will allow them to get a price for their product, and as all of them told me, Dale, get the price, and we'll take care of ourselves.

I think that is a valid statement and I think we always need to focus in on that. We have a tendency to many times look at programs as being a dole, a handout, something to get them over the hard times, a welfare program, if you will, and this is bad again for the taxpayers to look at it in that vein and for the farmers to feel that they have been put into that situation.

I would strongly address the other problem, one I said is the long-term planning. The other problem we see is the national farm credit policy that has easy access that indeed has some semblance of speed to the decisions therein. We have the horror stories in Ohio, and I hope we are the only State in the Nation that has these problems with the lending programs, where indeed the farmer is practically dead and buried before he finally gets a final determination of a yes or no—and I say that with some sense of levity and a little sarcasm, but it is a concern.

The farmer makes an application and the whole paper procedure many times creates an additional problem.

I have a story to share with you as quickly as I can because it illustrates my concern.

I had a farmer and the farmer had a problem with the application, and he came to me, went to the Farm Home Administration at the local level, it's in the process, it went on in the process, the farmer or the individual selling the farm needed to sell it right away, and was long gone to Florida. He was indeed one of the farmers that was going to make it, he was going to sell out—and because of the delay, and finally the bottom line came, you will not believe this, the bottom line came, everything was approved, but they had used their gas allotment for the month, so they couldn't go out and, onsite, look at the farm.

I said: "That's no problem, the farmer will take you out, we can get the tractor out if you want." He said: "We can't do that, we're not allowed to do that, that is undue influence." I said: "Well, I'm in government and you're in government, come on, get in the car and I'll take you out." We cannot do that, we are a Federal program, and we are not permitted to do that.

The bottom line was, which made this little fellow just irritated no end, the farmer lost the farm, the fellow sold out to a developer, and he went to Florida, and he was happy, and the developer was happy, except the young man who wanted to go into farming didn't have the chance.

Now, that is I'm sure, I hope, I pray, a very isolated incidence. But the general problem of the paper and the approach is not isolated, it is a problem as we see it.

Last, let me kind of wind up quickly here, again we say a long-term, consistent farm policy, in that approach it will be extremely important, as we see it, to have a great deal of consideration for that beginning farmer. I'm going to say young farmer because we have people who are not necessarily young of age but are beginning farmers who want to get into farming because that's where they have come from.

My problem, as we have heard nationally on the farm foreclosure sales, about 1 percent or 2 percent, I went over the State asking, I asked lending institutions, four segments, four corners of our State, what is the foreclosure rate as you perceive it, what will it be, and they said about 1 percent.

Now, it is intriguing to me that it is 1 percent in California, and 1 percent in Ohio, and 1 percent in Texas. I find that not necessarily workable. There has to be pockets indeed where it is far greater than 1 percent.

And if there is, my concern is, are we looking at the foreclosure, are we looking at the credit problems in that kind of isolated specific concern.

I know at a national level you have to have policies that cover the entire Nation. My concern is we need to also make sure that they cover those individual entities as best we can, especially that beginning farmer.

Last on that point, we talk about, and there is that general attitude of saying well, let them sink or swim, hands-off policy, and indeed we'll weed out the incompetent and we will have a good farm program.

I have got to say as bluntly as I know how when we do that kind of weeding, that we are going to weed out is that beginning farmer who it is much more difficult to get into, and then we can tomorrow wake up perhaps with our tummies not quite as full as today and say: oh, why didn't we go the other direction.

I would only add as a point of concern, and while it may sound like levity, it is not intended, as I see the crops in a variety of areas, I think perhaps the good Lord has his own PIK program or set-aside program, and it looks like we are not going to have to worry about a great deal of surpluses this year. That may help us, but I see down the road in a year or two it is again back to fence row to fence row, and we fall back into the same problem, ergo, I say we need a national farm policy of long-going consequence.

Thank you, Congressman Hamilton, we appreciate your concern.
[The prepared statement of Mr. Locker follows:]

PREPARED STATEMENT OF DALE L. LOCKER

Mr. CHAIRMAN, MEMBERS OF THE JOINT ECONOMIC COMMITTEE OF CONGRESS, MY NAME IS DALE L. LOCKER. I AM THE DIRECTOR OF AGRICULTURE FOR THE STATE OF OHIO.

IN OHIO, THE DEPARTMENT OF AGRICULTURE IS A CABINET LEVEL POSITION WHICH ATTEMPTS TO REPRESENT AGRICULTURE AND AGRI-BUSINESS IN THE STATE. I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOUR COMMITTEE AND SPEAK TO YOU ABOUT SOME OF THE CONCERNS THAT WE IN OHIO HAVE AS THEY RELATE TO YOUR TOPIC "TOWARD THE NEXT GENERATION OF FARM POLICY."

MY REMARKS TODAY WILL TOUCH ON THREE SPECIFIC AREAS OF CONCERN. FIRST, I WILL TRY TO DEAL WITH THE RECENT HISTORY OF FARMING IN OHIO. SECONDLY, I WILL ATTEMPT TO DEAL WITH CAUSES FOR THE DECLINE IN FARM INCOME IN OHIO AND THIRDLY THE NEED FOR CHANGES IN FARM POLICY.

1. RECENT HISTORY OF FARMING IN OHIO

IN THE LAST 10 YEARS IN OHIO, 5 CONDITIONS SEEMED TO HAVE GOVERNED OUR ARRIVAL AT WHERE WE PRESENTLY ARE IN AGRICULTURAL ECONOMICS.

1. DURING THAT PERIOD OF TIME, WE HAVE GONE TO A LOT OF CAPITAL INTENSIVE FARMING. THIS HEAVY CAPITAL OUTLAY MAKES IT VERY DANGEROUS FOR PERSONS TO GAMBLE ON FARMING INVESTMENT.

2. THE LAST 10 YEARS IN FARMING IN OHIO HAVE SEEN A GREAT DEAL OF CROP SPECIALIZATION. THE RED MEAT INDUSTRY AND OTHER SEGMENTS OF FARMING HAVE TAKEN A BACKSEAT TO OHIO'S BECOMING ALMOST EXCLUSIVELY A CORN AND SOYBEAN STATE.

3. IN THE LAST 10 YEARS WE HAVE SEEN A GREAT AMOUNT OF COMPETITION FOR CROP LAND. AS WE HAVE MOVED TO THIS CROP SPECIALIZATION, WE SEE MORE AND MORE FARMERS TOTALLY FILLING THE AVAILABLE CROP LAND FROM FENCE POST TO FENCE POST.

4. ALL THIS HAS LEAD TO MASSIVE INCREASES IN DEBT FOR FARMERS.

5. OVER THE LAST 10 YEARS WE HAVE SEEN RADICALLY CHANGING DEMOGRAPHICS IN FARMING IN OHIO. SPECIFICALLY IN THAT PERIOD OF TIME, THERE HAS BEEN A 10% DECLINE IN THE NUMBER OF FARMS OVERALL IN THE STATE OF OHIO. AT THE SAME TIME, THERE HAS BEEN AN 8% INCREASE IN LARGE FARMS AND A 10% INCREASE IN SPORTS FARMS. (I DEFINE A SPORTS FARM TO BE ONE ON WHICH THE MAIN INCOME OF THE FAMILY IS GAINED FROM NON-FARM SOURCES.)

THE CONCLUSION HERE IS OBVIOUS, OF COURSE, AND THAT IS THE FARMS THAT ARE GOING DOWN THE TUBES ARE THE MIDDLE SIZED FARM OPERATIONS.

II. THESE 5 FACTORS HAVE LEAD TO DRAMATIC DECLINES IN NET FARM INCOME. IN 1982, WE SAW IN THE STATE OF OHIO EXPORTS DECLINE FOR THE FIRST TIME IN RECENT HISTORY. THE CAUSES FOR DECLINE IN FARM INCOME IN EXPORTING ARE OBVIOUS.

WE SEE THREE OF THEM.

FIRST OF ALL, EXCESSIVELY HIGH INTEREST RATES. SECOND, EMBARGOS AND A GENERALLY UNFRIENDLY AND INCONSISTENT FEDERAL POLICY TOWARD EXPORTING FARM PRODUCTS. THIRDLY, RECORD HARVESTS WHICH HAVE LEAD TO SOME DECLINE IN PRICES. CERTAINLY THE IMPACT ON THE GENERAL STATE OF THE U.S. AND WORLD ECONOMY EFFECTS FARMERS IN THE OHIO AS WELL AS EVERY PLACE ELSE, AS DOES THE CONDITION OF WORLD TRADE.

HOWEVER, THE CIRCUMSTANCES OVER THE LAST 10 YEARS HAVE LEAD OHIO FARMERS TO BE ON THE BRINK OF FINANCIAL EXTINCTION IN TOO MANY INSTANCES. THE AGRICULTURAL ECONOMIST THAT WE TALK TO MAKE SEVERAL ASSUMPTIONS ABOUT THE FUTURE OF FARM ECONOMY IN OHIO AND IN OUR NATION.

1. MOST TELL US THAT ANY ECONOMIC GROWTH TO BE EXPECTED OVER THE NEXT FEW YEARS WILL BE VERY MODEST ECONOMIC GROWTH, NO DOUBT IN THE 2-3% RANGE.

2. AGRICULTURAL ECONOMISTS TELL US THAT THERE WILL BE A RETURN OF A HIGHER RATE OF INFLATION, PERHAPS TO THE 8 - 10% RANGE.

3. THAT THERE WILL BE A CONTINUAL NEED FOR GOVERNMENTAL PROTECTION PROGRAMS SUCH AS PIK AND OTHERS.

THE PREDICTIONS THAT WE SEE ON THE HORIZONS FOR FARMING IN OHIO ARE NOT BRIGHT UNDER THE BEST CIRCUMSTANCES. EVEN

OPTIMISTICALLY. WE CAN ONLY HOPE THAT FARMS WILL HAVE A MODEST GROWTH RATE IN THE YEARS TO COME, BUT NO DOUBT IT WILL BE SLOWER BUT ALSO LIKELY A MORE STEADY GROWTH RATE THAN WE HAVE SEEN IN THE PAST 10 YEARS.

WE ALSO PREDICT THAT GOVERNMENT PROGRAMS WILL HAVE TO CONTINUE BUT NO DOUBT WITH LESS ENTHUSIASM AND AMOUNTS THAN THE PIK PROGRAM. ALSO WE RECOGNIZE THE FACT THAT UNDER THE BEST OF CIRCUMSTANCES, FARM INCOMES WILL LIKELY CONTINUE TO LAG BEHIND OTHER PRIVATE SECTOR INCOMES BY AS MUCH AS 9 - 10 %.

THIS SOMEWHAT DIRE PICTURE SHOULD NOT LEAVE ANYONE TO CONCLUDE THAT THERE ARE NOT ACTIONS THAT CAN BE TAKEN TO IMPROVE SIGNIFICANTLY FARM POLICY AND CONSEQUENTLY THE POSITION OF FARMERS AND AGRI-BUSINESS PEOPLE IN THE YEARS TO COME.

III. LET ME POINT TO SEVERAL RECOMMENDATIONS AND AREAS OF CONCERN THAT WE WOULD LIFT UP TO THIS COMMITTEE FOR THEIR CONSIDERATION AS THEY LOOK AT THE FUTURE OF FARM POLICY.

1. THERE IS A NEED FOR STRATEGIC PLANNING TO TAKE PLACE REGARDING FARMERS AND AGRI-BUSINESS AT BOTH STATE AND FEDERAL LEVELS. IN THE STATE OF OHIO, WE ARE PRESENTLY INVOLVED WITH GOVERNOR CELESTE IN PUTTING TOGETHER MEANINGFUL STRATEGIC PLANS TO GUIDE OUR STATE OVER THE NEXT 5 YEARS, AND THE NEXT 20 YEARS, AND BEYOND. THESE PLANS LIFT UP AND CAUSE PEOPLE TO GRAPPLE WITH THE HARD ISSUES SUCH AS WATER USE, LAND USE, ECONOMIC DEVELOPMENT INCENTIVES, JOB PRODUCTION AND ALL THE MYRIAD OF PROBLEMS THAT SURROUND AGRICULTURAL DEVELOPMENT.

EVERY DECISION OF FARM POLICY CHANGE NEEDS TO INCORPORATE A TIMELY DISCUSSION OF THE MATTER BY INTERESTED PARTIES. FOR EXAMPLE, THE PIK PROGRAM HAS BEEN RECEIVED WITH VARIOUS DEGREES

OF ENTHUSIASM, BUT FOR THE MOST PART SOMEWHAT POSITIVELY. WE ARE NOW READING ABOUT THE FACT THAT WHILE THE PIK PROGRAM MAY BE OF ASSISTANCE TO FARMERS IT IS CAUSING DIRE CONSEQUENCES FOR IMPLEMENT DEALERS, FERTILIZER DEALERS, AND OTHER AGRI-RELATED MANUFACTURERS WHO ARE NOT SELLING EQUIPMENT TO PERSONS WHERE THEY MIGHT OTHERWISE SELL IT.

A STRATEGIC PLAN NEEDS TO CONSIDER THOSE TYPES OF CONCERNS.

2. FARM FINANCING. CERTAINLY ONE OF THE MAJOR CONCERNS IS THE LEVEL OF INTEREST RATES, BUT THAT NOT ONLY AFFECTS THE FARM ECONOMY, IT AFFECTS ALL AREAS OF ECONOMIC RECOVERY.

THERE ARE SOME SPECIALIZED PROBLEMS FOR FARMERS HOWEVER. SOME OF THESE TIE TO THE UNPREDICTABILITY OF ADEQUATE CAPITAL FUNDING THAT SURROUNDS THE PCA'S AND THE FMHA. FARMERS TELL US IN OHIO OF HORROR STORIES WHERE THEY SUBMIT APPLICATIONS ONLY TO WAIT MONTHS AND MONTHS TO GET SOME TYPE OF DECISION AS TO WHETHER OR NOT THEIR REQUEST FOR FUNDING HAVE BEEN APPROVED.

ADD TO THOSE HORROR STORIES THE FACT THAT THE FUNDING WILL ONLY BE AVAILABLE FOR A YEAR AND THEN THE PROCESS MUST BE REPEATED.

IT WOULD SEEM TO ME THAT ONE OF THE THINGS THAT SHOULD BE CONSIDERED IN A FUTURISTIC FARM POLICY IS A REVIEW OF ALL PROCEDURES REGARDING FUNDING FOR FARMERS TO PROVIDE FOR A STREAMLINING AND EFFICIENCY OF OPERATION. SUCH FUNDING PROPOSALS MIGHT INCLUDE AN INCENTIVE PROGRAM TO ENCOURAGE FARMERS TO MOVE TO COMPUTERIZATION OF THEIR RECORDS AND RECORD KEEPING. IT ALSO SHOULD INCLUDE COMMITMENTS FOR OPERATIONAL FUNDING PERIODS LONGER THAN ONE YEAR AT A TIME.

3. THE FEDERAL GOVERNMENT NEEDS TO SERIOUSLY ADDRESS THE QUESTION OF A CONSISTENT FEDERAL POLICY TOWARD EXPORTING. IT IS IMPORTANT THAT EXPORTING OF AMERICAN FARM PRODUCTS BE MADE EASY AND THAT FOREIGN BUYERS KNOW WITH SOME CERTAINTY OF THEIR ABILITY TO OBTAIN THOSE COMMODITIES THAT THEY SEEK.

SERIOUS CONSIDERATION SHOULD BE GIVEN TO THE EXPORTING OF MORE VALUE ADDED PRODUCTS AS OPPOSED TO RAW GRAIN.

IN SUMMARY, THE 2 THINGS MOST NEEDED TO IMPROVE THE FARMERS' POSITION IS:

1. A CONSISTENT LONG-TERM NATIONAL FARM POLICY,
2. AN EQUITABLE EASILY ACCESSIBLE NATIONAL FARM CREDIT PROGRAM.

LET ME SAY THAT THE PROBLEMS FACING AGRICULTURE IN OHIO AND ACROSS THE NATION ARE DIFFICULT BUT THE RESOLVE OF FARMERS TO SOLVE THEM REMAINS AS STRONG TODAY AS IT HAS HISTORICALLY BEEN IN OUR NATION.

WE AT THE OHIO DEPARTMENT OF AGRICULTURE WISH YOU WELL IN YOUR QUEST TO DO SOME POSITIVE FUTURISTIC THINKING AND PLANNING ON BEHALF OF AGRICULTURE AND AGRI-BUSINESS.

Representative HAMILTON. Thank you very much, gentlemen. Several things have impressed me about your comments this morning—first your grasp of the problem.

Each of you has obviously fulfilled your roles very well in agriculture in your State. You reflect a great deal of concern about the problems the farmers confront today in your respective States, and recognize the seriousness of the problem.

There are certain themes, of course, that run through your testimony that run through a lot of the testimony that we have had—the importance of exports, the importance of research, protection of the family farmer, and the importance of conservation.

And all of these things which those of us who are close to the agriculture community take as kind of given, I guess, in agriculture policy, are really not when you look at budget decisions, for example, that are made in the Congress and the executive branch rather frequently.

Your comments today have been constructive, and specific, and helpful, and your analyses of your State problems have been very good.

Now, let me just ask a couple of questions if I may about some of the comments you have made.

One of the things I want to know is how you look at the agricultural research program of the Federal Government—Governor Mutz, you mentioned this. Do you sense we really have a coherent national agricultural research program—what are its strengths, what are its weaknesses.

I'd like any of you to comment on that, I don't want to put anyone on the spot. If you have some thoughts about that, I would appreciate receiving them because it is one of the things we are reviewing in this long-term effort.

Mr. MUTZ. There are two issues as far as research. The first one is that the emphasis on research be moved not necessarily away from productivity, but at least a new emphasis be placed on research so that it deals with what I refer to as the utilization of agricultural products.

I'm talking here about this whole arena of the potential for value added to the products we produce on farms.

In that respect, I think for years we have always prided ourselves on this concept that we produce more corn per acre and more pigs per litter, all that sort of thing. And I am not necessarily suggesting that that as a long-run policy be abandoned, but I am suggesting the vast amounts of money now being spent mainly should be converted to those areas that deal with utilization research. That is the first point.

The second one is that whether we like it or not, Government is not going to have enough money to fund the research activities that are required, particularly when we begin to talk about the DNA technology and the enormous amounts of potential in that area.

For that reason, I think we have to take a second look at this business of public-private cooperative research activities.

We have tried very hard in Indiana, as has our sister States in the region, to begin to foster that kind of approach. At Purdue University we have the beginning of some very exciting kinds of activi-

ties in which a combination of public funds and private funds are being utilized together for research activities.

That is one of the reasons I suggested in my testimony that the R&E research credit—

Representative HAMILTON. I noted that.

Mr. MUTZ [continuing]. Be extended. I would also suggest to you that one of the other sources of funding for research is what we call the R&D tax shelter.

The R&D tax shelter is a funding approach which currently in most cases is not eligible for the R&E tax credit—the reason being, of course, is that there is no base because it is a new venture in essence.

I had suggested some time ago in testimony elsewhere that there might be a creative way to draft the statute that would encourage the use of ongoing R&D tax credits in that form as well.

I recognize that we don't want to create a tax shelter that goes for beyond our intention here. And it may be that some allocation of the amount of research done, so that at least 50 percent of the partnership has to be owned by a venture that has a base, for example, might be a way to structure such a program.

We fiddled with several ideas which I think deserve some attention.

But in summary, what I am suggesting to you here is that I do not perceive at the Federal level an organized effort that says we want to move research into this arena versus where we have been in the past.

It has been my experience in research activities, without being critical now necessarily of anyone, that researchers tend to follow money. Wherever money is available, they will do whatever is suggested.

We have some examples in the Middle West where we have some of the worlds foremost experts on crops that aren't necessarily major components of our economy. It happens that the bright mind said well, there is a research grant available, I'll go get it.

It seems to me that a perceived policy that aims in the direction I suggested here is extremely important.

Representative HAMILTON. Mr. Locker wanted to comment, I think.

Mr. LOCKER. Yes, just following up and giving support to that statement. The other problem besides—again, I'm on this long-term kick, we don't feel it is a consistent approach.

The other thing we would like to see is a little more ability to draw and bring those programs of money that is available in to supplement, augment, and be a part of whatever might be going on at that time.

There seems to be a tendency, the State—we have a research program at the stage—and it seems like the tendency is if somebody is already doing it, then fine, put those dollars someplace else, so we have a tendency of a shotgun approach, doing a little everywhere and a jack-of-all-trades and perhaps the master of none. That is a concern we have.

To give you a quick example, we have a program the grape industry is sponsoring in the State of Ohio, or putting moneys into,

using the computer in the vineyards. The little computer goes everywhere.

But the beauty of this is it indicates and tells you when you should or should not spray, ergo, we're saving chemicals plus we are saving, as the gentleman from Kentucky mentioned, the runoff of those chemicals that are not needed supposedly.

If we can cut down by three sprayings that we did last year, that's three more and it is a help in the dollar.

But again, to get moneys to come into that, well, we're doing it, so you don't need our assistance. So that is just as an extra point.

Representative HAMILTON. Mr. Burnette, I would like to get your view on the tobacco program, if I may. Could you give us the reaction of tobacco growers in Kentucky to the current program?

Mr. BURNETTE. I think, Congressman, that most tobacco growers in Kentucky support the no net cost program.

Representative HAMILTON. They do?

Mr. BURNETTE. Yes, we're right now a little bit concerned about the authorization given to the people to provide incentive payments to companies that purchase more than they did last year. We don't think—it may not even become effective this year, probably not.

Representative HAMILTON. Governor Mutz, you made a statement that interested me about tying loan rates to the strength of the dollar. Now, I presume you're talking there about an inverse relationship, the value of the dollar increases, the loan rate would go down.

That really does tie agricultural lending to international development in a very very direct way.

I would appreciate your comment further on that if you would care to do so.

Mr. MUTZ. I'm not sure that I am qualified to try to outline for you the specific mechanism that might be used to do this sort of thing. It's pretty clear to me, however, that such an approach is necessary if we are to be competitive.

Representative HAMILTON. There isn't any doubt about your basic point, and that is, the strength of the dollar, which, as you suggested in your testimony, has a lot of good points to it, has really socked us on agricultural exports. It is a very serious matter not just on agricultural exports, but all kinds of exports.

Mr. MUTZ. One of the things we might do is to lock into a fixed exchange rate to allow the borrower the security he needs in the kind of market that we're dealing with.

I guess the reason I came across this idea is that actual experience during my visit in Korea about a month and a half ago I saw the competitive nature of what our competitors are able to do in this respect.

That this kind of an approach would require some experimentation, I'm sure, but I think it is possible.

Representative HAMILTON. Let me ask you, all of you generally, about the commodity programs. We've had a lot of indications that the present support programs really benefit primarily the big farmer, the larger farmer, and if you look at where the money goes under the commodity programs, it goes principally to the big operator.

Several of you in your comments this morning talked about the family farmer and the importance of the family farmer in not only the economy, but for social reasons as well, in the country.

Are you sensitive to this problem—is it a problem from your standpoint, and if it is a problem from your standpoint, would you be receptive to changes in the commodity programs that would be directed more to the smaller farmer?

A simple little question you might want to flip around a little bit. Let me tell you, it is a lot easier to ask these questions than it is to answer them, I recognize that.

Mr. LOCKER. Yes; and I will straddle the fence as I'm wont to do from time to time. If we can—depending on what we are talking about when we talk about the small farm.

One of the problems we grapple with is what is a small family farm. And if you say a family farm that can indeed own the whole State of Ohio, depending on the family. You say small family farm, what is small?

I testified and served on a group that was trying to devise that a few years ago at the Federal level, and they are talking about 2,000 or 3,000 acres run by a single family as being a small family farm. Hey, we wouldn't find many of those in Ohio.

I think that's where the problem is, and yes, Congressman, we are concerned that it does seem like the dollars are going to those large farms.

How you approach it now I am not at liberty to give you a great deal of guidance, but I think we need to approach it because again, that's where we are falling into this problem, as the general taxpayer looks at it and sees—they say wait a minute, you put out millions of dollars for programs and so on—but I look at my farmers in Ohio and find that they received a very little support payment.

Let me throw in one other point which is going along with the subsidy program, and back to my theme of a long-term policy.

I was talking with some of our dairy farmers about the 50 cents and one of the fellows, an older gentleman, said I'm doing something I never thought I would have to do, and I said what is that, and he said I have gone to milking three times a day so I can make up the loss of the 50 cents.

That's one of our problems when we're talking about it's not the approach or the program—it's the approach and being able to kind of calculate what the results are going to be, what the outcome is going to be.

That is the same way with the large farms, I'm sure they need it, but not at the capacity of the small family farms.

Mr. BURNETTE. I would agree with you that most of the money is going to the large farmer, and yes, we would be receptive to changes; however, I don't have any suggestions. I wish I did.

Representative HAMILTON. Your observation in itself is of use to me and of value.

Mr. MUTZ. Congressman, I might comment that I think it is not a fair comment, however, to say that only large farmers have benefited from the existing short-term programs, because I think that a number of the small farmers who continue to express concern about their financial future probably, from a cash flow standpoint,

have been saved at least during the short-term period because of some of these programs.

What I am really suggesting is that drawing an arbitrary line is probably a very difficult thing to do in this situation, and if I sat in your seat, I think I would ultimately conclude that it was impossible. I can't say for sure that that is the case, but it is very, very tough to do.

Representative HAMILTON. One of the things that really strikes you about agriculture today is the extent to which a relatively few farms are producing. The great bulk of net farm income, the figures that I have from the Congressional Budget Office, say that approximately 300,000 farms now receive 90 percent of total net farm income.

That really is an astounding figure to me. What it means is that relatively few farms in this country are producing almost all of the net income of the country.

And this trend which we have seen for many years going on has not stopped toward the concentration of agriculture.

You talked, Mr. Locker, in your statement, about the farmers losing control of the agricultural policy agenda, and I think you're on target with that.

These hearings, I might say to you, are hearings that are well in advance of any legislative considerations of the Congress. Our bill doesn't expire until 1985. And so we're moving ahead.

But one of the reasons we are doing it is to try to have opportunities for the regional input, and that means the farmers in the States around the country.

Agricultural policy has to shoot at a number of objectives. Certainly one of them is a reasonable return on farm assets; another one is just adequate supply of food and fiber in the country; a third objective would be a reasonable degree of stability in farm prices—you mentioned that in your testimony several times—and now we are confronted with a fourth one which is we have got to be competitive in the international market.

The problem is not to hit any of those targets, but is to hit all four of them, to do it simultaneously, and it is a very, very formidable task.

I want to express my appreciation to you and give you an opportunity to make any concluding comment if you have any such comments at this point.

Mr. LOCKER. You can tell I am a former elected official and politician, I always have a comment to make. I'm sorry about that.

I just personally want to say thank you, and I mean this very sincerely. I think the greatest thing that can happen as far as the farm policy is concerned is what is being done here today.

I wish it were possible to be in each State where the farmers in that area that have that personal feeling that there is a concern. One of the problems I know that you are facing and you are well aware of that we in the state legislature face is the pulling away of the general populus to the support for government and governmental entities.

So, I think what you are doing is probably more important, perhaps, than anything we have said which says there is a concern,

there is a desire to address the problem sensibly and an overall approach to it.

We compliment you from Ohio and pledge you our support any time we can be of assistance, any of our farmers, give a yell. Thank you.

Representative HAMILTON. I hope you will convey to your Governors my personal respects for permitting you to testify here today and for doing it in a very able way.

Mr. Burnette, I hope you will convey to Governor Brown our concern for his health and our wishes that he be fully restored to an active life. Thank you very much, gentlemen.

Did you want to make an additional comment?

Mr. MUTZ. The only comment I would add to this is the fact that one of the other elements in this whole economic scenario that you are analyzing here deals with the issue of the public's perception is to what goes on on the farm.

The comments were made about the fact that if you have a farm program that costs so much you lose a good deal of the general constituency because of that cost.

The biggest determining factor, however, is what people perceive to be the cost of what they eat, I think even more so the cost of Federal farm policies, is ultimately what the grocery store shows the housewife.

In that respect, one of the biggest cost factors is what takes place after products leave the farm and that, of course, includes transportation and other issues involved in this policy.

We didn't comment very much on that today. I had one section in my prepared statement that I left out in an effort to be brief, which deals with cargo preference legislation, for example, and it's impact on our ability to be competitive in the international marketplace and I would recommend that issue for further consideration.

Representative HAMILTON. I had noted that in your testimony, it is a good point.

Mr. MUTZ. I join with my colleagues here and thank you for the opportunity to speak.

Representative HAMILTON. Nice to have you. OK, we will ask that the next panel of witnesses come forward. They are witnesses who represent the State land grant universities.

We want to welcome before the committee now the representatives of the State land grant universities: D. Ray Humberd, who is the professor of agricultural economics and resource development, University of Tennessee, Knoxville; Bob F. Jones, professor of agricultural economics, Purdue University, West Lafayette, Ind.; Mr. Kenneth McIntosh, professor of agricultural economics, University of West Virginia, Morgantown, W. Va.

Gentlemen, we are very pleased to have you, and I might say that we had one cancellation this morning, we had expected Paul Kindinger from the Michigan State University to be with us, but he was not able to be with us.

Your statements, of course, will be entered into the record in full, and we would appreciate your summarizing those statements for us now. Mr. Humberd, I will begin with you.

**STATEMENT OF D. RAY HUMBERD, PROFESSOR AND LEADER,
AGRICULTURAL ECONOMICS AND RESOURCE DEVELOPMENT,
AGRICULTURAL EXTENSION SERVICE, UNIVERSITY OF TEN-
NESSEE, KNOXVILLE**

Mr. HUMBERD. Thank you, Congressman Hamilton. I want to thank you for inviting me to appear before you to discuss future farm policy. I want to make it clear that I am not advocating any specific policy alternative. Also, I do not devote all my time to the policy area; thus, I am not an expert on program details. However, I hope that my comments will be of some value.

I view this process of assembling ideas, opinions and suggestions for future policy to be extremely important. Agricultural legislation should provide clear signals to those farmers who are making decisions concerning whether or not to invest hundreds of thousands of dollars in farming operations. The situation that many farmers find themselves in today is precarious. As has always been the case, resource immobility retards the ability of the farm industry to adjust rapidly.

I know that you've had presentations before this committee that outlined the recent history of agricultural legislation and the response from the farming sector. I see no need to repeat those except to recognize that a combination of several domestic and foreign circumstances has contributed to the present situation of reduced U.S. agricultural exports, increasing commodity stocks, depressed farm income, increasing government expenditures, and serious cash flow problems on many farms.

The current discussion concerning the agricultural situation and its related components assumes some set of goals for farm policy. Perhaps the forum that you provide should devote some time to a discussion of what the goals of American agricultural policy are or should be.

Surveying past milestones of agricultural policy, the following underlying goals seem apparent.¹

First, abundant and stable food supply for domestic consumers at reasonable cost.

Second, returns from resources applied to farming equal to those earned in other sectors.

Third, maintenance of a dispersed, family farm dominated agriculture.

Fourth, conservation of resources for future generations and preservation of the environment.

Are these the appropriate goals for the 1980's and 1990's? If so, how are conflicts between them resolved? Our experience reminds us that a sharp conflict develops quickly between domestic food supplies and prices and international markets during shortages.

POLICY OPTIONS

I'd like to briefly discuss four major policy options, first, free market, second, mandatory production controls, third, fine tuning present programs, and fourth, a stabilization and cost sharing part-

¹Harris, Harold M., Jr., "Milestones of U.S. Agricultural Policy, Lessons for the Future", Speech at Agriculture in the 21st Century Conference, Richmond, Va., April 11-12, 1983.

nership between producers and Government.² Certainly, others could be listed. Time doesn't permit a complete discussion of all the likely ramifications of each alternative.

Farmers differ among themselves in their preference for Federal Government involvement in agriculture.³ Even within a county or a community, opinions differ, sometimes widely.

FREE MARKET

The free market alternative implies minimal Government involvement but the adjustment for producers to highly variable farm prices is often harsh. Many farmers would be forced out of business in the worst of times. Inefficient producers and marginal production areas will be the casualties. The industry is likely to become more concentrated with fewer and much larger farms. The free market approach is likely to lead to a great deal of instability relative to farm commodity prices, farm income, farm survival and the viability of local, rural economies.

MANDATORY PRODUCTION CONTROLS

The objective of mandatory production controls is one of raising market prices by restricting production. Based on experience, marketing quotas have been a much more effective means of controlling production than attempts to control level of input use. Controls on one major commodity requires controls on closely competing commodities or the surplus problem simply shifts. If production controls take the form of acreage restrictions, land owners at the time production controls are established receive a windfall gain and new farmers or tenants are forced to pay higher rental rates or higher prices for land. Acreage restrictions often become capitalized into the land to which they are attached. Production controls, if effective, lead to more stable market prices. Normally, production controls, as applied, will reduce exports.

FINE TUNING PRESENT PROGRAM

The performance of present policy suggests several modifications are needed. More flexibility could be provided for the production adjustment tools. Voluntary controls need to be strengthened to make them more effective. The expected positive effects of a policy for farmers is often blunted if agricultural exports are used as a diplomatic weapon. The farmer-owned grain reserve was intended as a supply assurance device and should not be used as a price enhancement tool. Loan rates could be set on a formula basis relative to the world market. Target prices could be flexible to provide incentives for production adjustment. They could be tied to carryover stocks or national average costs of production with the stipulation of no increase when stocks exceed a specified level.

² Knutson, Ronald D., "Prospects And Perspectives for Farm Policy," Speech at the Farm and Food Policy Symposium, Clemson University, June 2-3, 1983.

³ Breimyer, Harold E. and Meredith M. Burks, "Opinions of Leading Missouri Farmers About Farm Policy, 1983," "Economic and Marketing Information for Missouri Agriculture," Vol. XXVI, No. 7, July 1983.

SELF-HELP PARTNERSHIP

The basis idea of the self-help option is that producers assume a portion of the program costs. The effect is an implicit downward adjustment in the level of price and income support for the commodity. If the desire is that producers assume a larger share of the industry stabilization function, farmers' tools to accomplish this objective must be improved and perhaps legislated. This implies greater emphasis on cooperatives, marketing orders and agreements, market development, integration, and pooling. This option holds the potential for increased adjustment to changing industry conditions and more producer responsibility in industry stabilization activities.

OTHER CONSIDERATIONS

Regardless of which alternatives we discuss, it's essential that we recognize that Government actions outside the narrowly defined farm policy area will continue to have a tremendous impact on the economic well-being of farmers. National economic policies designed to affect inflation, interest rates, budget deficits, monetary and fiscal policy, trade restrictions, embargoes, and trade subsidies, also affect farmers. Agriculture does not operate in a vacuum and thus, future policy that does not recognize and try to account for these external factors will be shortsighted and ineffective or perhaps even counterproductive.

It's obvious that if the productive capacity of U.S. agriculture is to be fully utilized, foreign trade is essential. With about two-thirds of the wheat, one-half of the soybeans and cotton, and one-fourth of the corn exported annually, policy must recognize the need for trade to continue and expand. It is important to note that the increased dependence on trade in the 1970's was not unique to agriculture. The economy as a whole became increasingly dependent on international trade. This increased dependence on world trade makes it more difficult to influence the farm economy with strictly domestic agricultural policies. We need to strengthen our international market development efforts consistent with other farm and trade policies. USDA market development programs with industry cooperator groups such as the American Soybean Association and the Feed Grains Council are examples that can be expanded.

At the time the 1981 farm bill was written, inflation was a serious problem and agricultural exports were booming. Target and loan levels were structured to index upward to account for what was expected to be continued inflation of commodity prices and soaring unit production costs. However, the recent U.S. and world recession brought commodity price deflation and substantial easing of input price inflation. The result of target price and loan rate escalation in the face of surpluses has been costly. Escalating target prices encouraged expanded domestic production while higher loan rates encouraged our export competitors to expand. In a year of the greatest U.S. acreage reduction ever, 82 million acres, foreign acreage devoted to crop production has increased.

One solution would be to allow target prices and loan rates to fluctuate with economic conditions. We are likely too shortsighted to draft a 4- or 5-year farm bill using fixed loan rates and target

prices. The next 5 years will probably feature an unstable monetary and fiscal environment—though, hopefully, not as unstable as during the past 5 years. A farm bill should be designed to adjust with changing economic conditions. Target prices should not be permitted to encourage production for which there is insufficient demand. Our loan program should not raise an umbrella under which our export competitors expand production and undercut us to gain a greater market share.

Loan rates should be flexible enough to adjust up and down as market signals dictate. This can be accomplished by tying loan rates to the average market price during the first 4 to 6 months—when prices are generally lowest—of the previous three marketing years or some other appropriate combination. The loan program should be viewed not as an income transfer device but as a source of financing to farmers and a means to help smooth out marketings and prices.

It has been projected that in the not-too-distant future, commercial farms will produce about 90 percent of total output and account for about 10 percent of all farms while the remaining 90 percent of all farms will produce about 10 percent of all production. The problem of these two are quite different and if policies are deemed necessary, they should address each group of farmers with different policy tools and techniques.

CONCLUDING REMARKS

In summary, I think it's realistic to assume that Government programs in agriculture will continue in some form. It's important that those programs be structured to insure a healthy, viable farm sector. Historically, agricultural policy has a tendency to evolve gradually—major changes in policy direction seldom occur. The impact that agriculture has on the economy is tremendous, accounting for about 20 percent of the gross national product. It's important for many rural communities throughout the country that a healthy agriculture exists even as needed resource adjustments occur.

I had the opportunity to visit four farms in Tennessee last week. All four are family farms operated by farmers under 35 years of age and three for the four farm operators are college graduates. It is by pure chance that the enterprise mix was one dairy, one swine and tobacco, one beef cattle, and one fresh-market vegetable farm. These farms are small by some standards but all of these young farmers have significant investments. The farm visits were related to farm management program activities, not policy. Yet, the thought that I would be here today kept reminding me that perhaps we discuss policy too often in the abstract sense. Those farms are operated by people who have chosen farming as their profession. They and others like them will be the source of our food and fiber products in the next century. The programs and policies that we adopt affect the decisionmaking on those farms not in any abstract form but in real terms.

Policy considerations deserve our best thoughts, experiences, and wisdom to assure that Government aids and facilitates rather than hinders. Thank you for the opportunity to be here today.

Representative HAMILTON. Thank you, Mr. Humberd, for a good statement. Mr. Jones, glad to have you from Purdue and look forward to your comments.

STATEMENT OF BOB F. JONES, PROFESSOR, DEPARTMENT OF AGRICULTURAL ECONOMICS, PURDUE UNIVERSITY, WEST LAFAYETTE, IND.

Mr. JONES. Thank you, Congressman Hamilton.

This committee has picked an appropriate title for its discussion of future farm policy. The large-scale acreage reduction programs for 1982 and their high costs clearly indicate a need for review of present farm programs. Current programs have roots which go back 50 years. However, there have been significant changes over that period in agriculture and the economic and political environment in which it operates. One thing has not changed. The current weather stress on corn and soybeans in the Midwest reminds us that the size of the crop cannot be predicted with a high degree of certainty.

I am going to hit just the highlights of what I have written here because you have a copy of it. Also, I would say that I really appreciate this opportunity to discuss this topic today in what I consider a rational and studious way, because I think that is the way we make progress in this very controversial area where we don't all agree on what the solutions are.

We might look briefly now—before I start that, I might say that most of my comments are going to be related to grains policy, and that is for two reasons—that includes soybeans, they are so important to the Indiana economy, and also grains policy is so much a part of the total farm policy that affects farming.

I am not going to be making statements that are comprehensive or the total of all farm policy. I think I can make my points stronger if I limit myself just to those two. I fully recognize I'm going to be leaving out many parts of what I consider a comprehensive farm policy.

We might look now at the question of how large stocks accumulated, how we got to where we are now. Well, as you noted earlier, we had above normal yields for the major grains in 1981 and 1982, and this factor alone accounts for about half of the buildup in stock that we are expecting to be in existence here at the beginning of the new marketing year October 1—so above yields as a result of weather.

Farmers also had expanded production in response to a guaranteed price, and that price was guaranteed to them or at least to some extent to the loan rates and the target prices, and as a result of that guaranteed price, there were many farmers who did not choose to participate in those programs. Part of it may be that they misread the outlook, and part of it may be that they simply felt that well, Government will step in if things really get worse than what we anticipated they would be.

On the other side of the equation, we had very weak foreign demand, as you and others have alluded, and that has come about because of slow economic growth, it has come about because of the strong dollar, which makes our product much more expensive to

other countries, particularly the Western Europeans and many of the less developed countries.

Then we had an awful lot of competition from other suppliers. We have had great growth in production in the United States in the last two decades. I have a figure in my prepared statement that there has been about a 41-percent growth in production in the United States over the last two decades up into 1983, and if you look at it, it has been identical outside of the United States, which I thought was rather strange—41 percent inside of the United States and 41 percent outside of the United States.

We have a loss of share of our market particularly since 1980. Now, part of that is due to the 1980 embargo, and part of it is due to the other factors there, the strong dollar in particular.

As I noted earlier, the roots of the current farm program go back 50 years, but the environment in which farmers operate today is not the same as it was when the program was put into existence.

Of course, as has been noted, the big change is in the importance of the foreign market. Two decades ago we could really design farm programs without paying much attention to what the export market was, because at that time we exported about 25 percent of our grain and about a third of our soybeans.

Today we export over a third of our grains and over half of our soybeans, when we consider raw soybeans and products.

Now, we are the major exporter of grains in the world, and some people feel that because we are the major exporter, we can really set the price and export whatever we want to.

I would say that we can have a big influence on setting that price, but if we get that price set too high, then others take advantage of that and we're not able to maintain market share. So we have to look at what our price level does to our share.

Now, three things have not changed over these last 50 years, and it seems to me like we are still able to produce much more than we can consume domestically.

Now, interestingly enough, less than—well, only about 2 years ago we had a big debate in this country about our possibility that we couldn't produce enough, and now we are going to allocate the short supply.

Well, it is interesting that in just 2 years' time, this has turned around so dramatically and I think most agricultural economists believe that we have the potential to produce much more year to year on a long-term basis than what we can sell at what we consider acceptable prices.

Another thing that has not changed, and I am reminded of this every day for the last month, that production is highly variable from one year to the next, and you can't predict with a great deal of certainty with any one particular year.

Another thing that has not changed is that the public seems to demand intervention into the market. Farmers seem to want protection from low prices, consumers want protection from high prices, and Government seems to want to get involved, particularly when it is concerned with foreign policy, and to use agricultural exports to try to obtain other objectives, and it seems like they often do that without really considering what the consequences of those actions are in the long run.

It may have some benefit for foreign policy in the short run, but for a very long run, serious consequences for agriculture.

Now, how we dealt with these problems in the past, well, I think we all know there were essentially two alternatives that we followed, and that is to restrict production or try to expand demand, whether it is domestic or export, and we put a lot of emphasis on trying to expand the demand in foreign markets.

Now, growth of the foreign demand, under current circumstances, is a very costly process, and that is for several reasons.

This is true when we try to restrict production when we are selling such a large part of what we produce into that foreign market.

As I noted earlier, when we try to restrict production and raise prices, others step in under our umbrella, and they really, you might say, egg us on to raise our prices because they can step in and sell just a few cents under. Just look at the data as to what happened in Argentina and other places in the last year, they expand production and take away a share of our market.

And we really can't avoid the residual supplier role. Now, there's some belief that we can, but I don't see how we can avoid that, we are such a dominant supplier, and we have such a large effect on the price and, as I say, others can step in and sell just a little bit under that and we sell what is left—that is a large quantity, but we still have that residual supplier role.

And then, of course, we seem to be unable or unwilling to restrict production without spending a large amount of money when we use the voluntary approach, and I know many of the farmers that I talk with, that there is not great enthusiasm for mandatory controls.

I know there is in certain parts of the State and that enthusiasm seems to be growing, but I think the majority of the people do not want the mandatory controls approach.

Looking now at the export question alternative, we are confronted by restrictionist policies by many importers, particularly the European Community, and Japan.

And, of course, the European Community restricts our exports to them, particularly for the feed grains, and then they generate surpluses which compete with ours, and they use large subsidies to export those surpluses into some of our traditional markets.

As I mentioned earlier, slow economic growth is a factor, and credit limits are a factor. And one has to recognize here that many of our buyers would like to buy more, but they have inadequate ability to earn foreign exchange and they have just about borrowed to the extent that we and others are willing to lend to them.

We have to ask ourselves whether it is in our interest to make more loans to certain parts of the world.

And some people propose export subsidies. Well, there may be a place for export subsidies, but they are a very expensive choice to expand exports, and some of the research we have done shows that it may take about \$2.50 in export subsidies to increase income by \$1 and that is because most of it in a sense leaks out, it goes out in the form of a lower price to the buyer and most of the benefits that are exported.

Now, as we try to design new policies, we are faced with these two crucial issues, and they have been touched on here to some extent.

One of them is the level of support and the other is the role of the Government in stocks policies, and I haven't heard much comment yet this morning on that role of the Government in stocks policies.

Looking at the question of the level of support, high price supports give the wrong signal when these supports are above the long-run price for grain—they encourage more production, they discourage consumption, and that's exactly the opposite of what is needed when market prices are considered too low.

Now, in my prepared statement I have a table which compares high supports versus low supports, and I have got quite a little bit of detail there which I won't go into at this point.

But one point I would make is that the principal benefit of price supports is what they do to land prices.

The benefit gets bid into the price of land, and it doesn't really benefit future landowners, only the present landowners.

With lower price supports, future landowners and tenants will still be able to earn a competitive return on their investment, and I think there is a fair amount of evidence that that is the case.

Now, an alternative to high or low supports is a proposal that I would make here, and that is, by using a moving average price, as a means of supporting prices, and here one might consider a 5-year moving average like the current system for soybeans, now in that system the price is the average over 5 years with the high and the low not included in the average, but it seems to me that that is not really necessary because if you average it over 5 years, that still decreases the effect of any one year.

What this would do, it would provide some support to prices, and it would give producers the right signals to induce them to adjust their production.

Looking now at the role of Government in stock policy, it is pretty obvious to me as an economist and as I look at how people behave in the private sector, will hold stocks to even out the variations in production that happen from one year to the next.

There is also evidence that farmers hold most of those stocks that they do see an advantage of the possibility of having stocks when they think prices will be higher, so they do hold stocks.

But it is also obvious, pretty obvious to me, as I look at this, that the stocks may not be quite large enough, and there are several arguments as to why this is the case, this implies that the Government does have a role in encouraging larger stock.

So, this could be remedied by a relatively simple system of subsidies rather than the rigid system we currently have.

If we wanted to get more grain in storage, we could do one of two things, we could simply pay all farmers a part of the cost of carrying stocks into the next year and say the last day of the marketing year we'll pay all farmers so many cents per bushel for everything they carry over, and maybe it is unimportant where those stocks are held, whether in commercial or whether in farmer hands.

That would be one way. Another way would be to continue to subsidize the cost of storage facilities, and we had a program like

that for a long time and we could continue to subsidize that through low interest rates, that is, lower than the market rate.

Some people would say yes, but this doesn't give the Government any control over stocks. Well, some economists would say that's right, and that would make it work better because there is always the tendency of Government to want to use the stocks to obtain other objectives, and if it will run with this kind of a system, you would have more market orientation, and farmers would be free to either choose the subsidy or choose the other alternative.

So, let me sum up then by saying that in this short time I obviously can't cover all bases as I noted here.

I noted that grains policy as a key role in the overall farm economy, and I think in formulating future farm policies, it will be necessary to recognize the importance of exports as a part of total demand.

Domestic policies cannot be designed without considering their implications for trade. The level of support is a key element in maintaining access to markets and in maintaining the U.S. competitive position in the long run.

Giving the right price signals to producers is necessary if they are going to be able to adjust to changing world market conditions, and we can be sure they are going to change over time.

I think the stocks policies do have an important role to play in maintaining the U.S. share of world markets and in price stability, both internally and externally. I thank you.

[The prepared statement of Mr. Jones follows:]

PREPARED STATEMENT OF BOB F. JONES

Considerations for the Next Generation of Farm Policy

This Committee has picked an appropriate title for its discussion of future farm policy. The large-scale acreage reduction programs for 1982 and their high costs clearly indicate a need for review of present farm programs. Current programs have roots which go back 50 years. However, there have been significant changes over that period in agriculture and the economic and political environment in which it operates. One thing has not changed. The current weather stress on corn and soybeans in the Midwest reminds us that the size of the crop cannot be predicted with a high degree of certainty.

How Large Stocks Occurred

It may be helpful to briefly review how large grain stocks accumulated in 1982 and 1983. This seems especially relevant since they built up so soon after the major concern centered on the view that the world was heading into a period of relative shortage of grains and anticipated higher real prices for grains. Stock levels are indicated in Figure 1.

Both corn and wheat yields were about 10 percent above trend in 1981 and 1982 (Figures 2, 3). This factor alone accounts for about half the build-up in stocks from 1980 to the end of the 1982 marketing year. Relatively high loan rates and target prices in 1981 and 1982 encouraged farmers to produce rather than restrict production. Acreage

Prepared by Bob F. Jones, Professor, Department of Agricultural Economics, Purdue University, West Lafayette, Indiana, to be presented to the Joint Economic Committee of Congress, Regional Public Field Hearing, Jeffersonville, Indiana, August 8, 1983. The author wishes to thank Jerry Sharples, Professor, Purdue University for suggestions in preparing the paper.

reduction programs were not sufficiently attractive to encourage large participation. How much of the low-participation can be attributed to the guaranteed price, how much due to misreading the outlook and how much due to a belief that government can be counted on to bail out the farmer can not be determined.

Weak foreign demand following the spectacular growth of the 1970's was the other leading cause of stock build-up. Importers took less U.S. grain because of their lagging economic growth, reduced availability of credit and a strong dollar which increased import prices for U.S. grains.

U.S. exports were weakened further because of increased competition from other exporters and growing production in importing countries. From 1972-73 to 1982 U.S. grain production increased 41 percent. Non-U.S. grain production increased by an identical amount, 41 percent, during the same period. With slower growth in the world grain market starting in 1980, the U.S. share of the market slipped. During the 1970's the U.S. had increased its share. A part of this loss was due to the loss of share in the USSR market following the 1980 embargo. Grain sales by other exporters did not drop like U.S. sales.

The projected large build-up in U.S. grain stocks and the desire to hold down budget program costs were the principal reasons for the payment-in-kind (PIK) program for 1983 crops. Although stocks at the end of the 1982 marketing year* were projected to exceed early 1960 levels, they are less of a burden because they represent a smaller share of consumption than formerly.

* May 31, 1983 for wheat; September 30, 1983 for corn.

The Changing Environment for Farm Programs

The export market is much more important to U.S. grain and soybean producers now than in the 1960's. In the 1960's it was not necessary to pay much attention to the trade implications of U.S. farm policy. That can't be done now.

U.S. exports as a percent of production	<u>Grain</u>	<u>Soybeans*</u>
1960/61 to 1962/63	19%	32%
1980/81 to 1982/83	34%	55%

* Includes meal and oil exports.

In addition to an increased share being exported, U.S. grain production more than doubled over the two decades. More wheat and soybeans were exported in 1980 and 1981 than were produced in 1960 or 1961.

Although the U.S. is the dominant supplier of grains and oilseeds to the world, it is not large enough to act independently in setting its policies. The rest of the world looks to the U.S. for determination of export prices for grain, however, world market forces determine the level of prices for grain which enters the export market.

U.S. Share of:	<u>Soybeans</u>	<u>Wheat</u>	<u>Coarse Grain</u>
world production	63%	18%	34%
world consumption	---	5%	21%
world exports	84%*	45%	61%

* Beans only. The percentage is lower for the U.S. share of soyoil and soymeal exports.

While the U.S. export market has changed significantly over the two decades, other factors seem to have changed little, if at all. The U.S. is able to produce more grain than can be sold at acceptable prices. Doubts about production capacity were raised in the mid-1970's and again

in 1980 but evidence is not conclusive on this point. One thing is certain. Production is variable from one year to the next and will almost certainly continue its irregular path.

The demands for public intervention in the market, likewise, appear to have changed very little. The farm sector wants protection against low prices. Consumers want protection against high prices and a threat of shortages. The temptation to use embargoes or other controls to obtain foreign policy objectives seems ever present without adequate consideration of the long-run consequences of such actions.

Historical Choices

Historically, the debate has been over the level of support and the means for supporting price and income. Broadly speaking, the means have consisted of production controls and/or demand expansion, especially export demand. Restriction on production was a feasible alternative when the export market was relatively unimportant. With the growth in exports, production control has become a very expensive option. If we restrict production in order to support price, other countries step in under our umbrella. They expand production and are able to sell at just under our prices. We are in effect supporting prices for all exporters. We become the residual supplier, a situation we cannot avoid even though we are the dominant supplier. This year provides an excellent illustration. While U.S. grain production has been projected to be 24 percent less than last year, the rest of the world's production is expected to increase by 3 percent (June projections). Whether they can continue to expand production in the long run, depends in part on the level of our price supports, a crucial issue which I will return to shortly.

Export expansion in the current environment becomes a difficult process. The U.S. is confronted by restrictionist policies of importers. The Common Agricultural Policy of the European Community (EC) has reduced their imports of our wheat and has reduced the rate of growth in their imports of feed grains. Their policies have generated export surpluses of wheat and coarse grains which are subsidized into traditional U.S. markets. When we compete with the EC for export markets by using export subsidies, we find this a very expensive program because most of the benefits go to the buyer in the form of a lower price than would otherwise prevail.

Expansion of exports to less developed countries (LDCs) is limited by slow economic growth and availability of foreign exchange. For many LDC's, large external debts tend to soak up a large proportion of foreign exchange and limit the amount of new credit which the international banking community is willing to extend to them.

Expanded purchases by communist countries, with the possible exception of the USSR, are also limited by foreign exchange availability and by current debt service needs. Past borrowings relative to current exchange earnings positions indicate either a long period of retrenchment ahead and/or default on loans from the West.

In summarizing this section, the choices continue to be either limiting production or expanding demand. Either choice involves various means with different consequences.

Key Issues

As the U.S. formulates future price support policy, two issues must be considered: the level of price support and role of government in

grain stocks policy. If one could determine the long or intermediate run equilibrium price for grain there would be questions of how high the support price should be relative to the equilibrium and how much variability would be acceptable.

A major problem with high price supports is that they give the wrong signals to producers. If the support level is above the long run market price, farmers are encouraged to produce more and consumers are encouraged to consume less. Exports are reduced. To counter these actions we have relied on production controls. The principal result is an increase in government cost and increased quantities of grain in government storage. This leads to big government and more involvement in agriculture. Use of the two policies simultaneously is like driving a car with one foot on the accelerator and one foot on the brake. This results in little change in speed, a more rapid wearing of the brakes, and perhaps an overheated engine. The principal beneficiaries are those selling gasoline, new brakes, engine coolant and those providing repair services. The automotive repair industry grows like big government.

What is needed is a system which allows the signals of the market place to get through to producers. The signal should guide production decisions without destroying farmers in the process and encourage efficient production. A comparison of the consequences of high versus low supports is made in Table 1. Within the farm production sector, a change in support level primarily affects current land owners. Following the change, adjustments are made in land values. Future land owners should be able to earn a competitive rate of return on their land investment and investments in other assets. The position of land renters should remain essentially unchanged.

A price support tied to a moving average price rather than a loan rate tied to cost of production or parity price is an alternative that merits consideration. Currently, the support rate for soybeans is determined in this manner. A moving average of the last five years' prices would provide more appropriate signals to producers and consumers than the current rates determined by law. The rate could be 100 percent of the moving average or some smaller percent. Such a rate for corn at the 100% level for 1983 would be \$2.48. There seems to be inadequate justification for dropping out the high and low years from the five years when calculating the average as has been done for soybeans. By averaging over five years, the influence of any individual year is already reduced. An agreement to use the moving average should provide continuity to policy and should add more certainty to the planning situation for farmers and the grain sector.

Another aspect of the level of support is the form in which it is provided. Should this be through commodity loans or direct payments to producers? Commodity loans tend to directly affect market prices. Direct payments, e.g. deficiency payments tied to target prices, allow more flexibility for market forces to determine prices and allow commodities to move into markets. However, they result in greater potential budget exposure for the Treasury. As with high loan rates, they provide incentives to producers to expand production. Again, they give off signals which are counter to those reflected by the market.

The second critical issue is the role of government in grain stocks policy. As noted previously, production varies significantly from year to year because of variations in crop yields. Exports vary from year to year because of variability of yields in importing countries and the

price and import policies which other countries use to stabilize their internal prices and grain consumption. Stocks policies followed by the U.S. and other countries are an important factor in reducing price variability in world markets, especially in the U.S. where market forces are allowed to have a major role in price determination.

Since World War II the U.S. has been the principal holder of world grain stocks. These stocks have generally been accumulated as a result of price support activities. Past stocks policies have not been operated to obtain specific price stability objectives. The current farmer-held-reserve comes closest to such a policy. It could probably be operated to attain specific price stability objectives. However, the tendency has been for the government to manipulate the rules to obtain short run political objectives. Likewise, unlimited quantities have been allowed to enter the reserve in order to obtain price support objectives rather than be limited to only a predetermined amount considered necessary to provide the desired price stability.

One may ask why should the government be involved at all in a stocks policy. There is ample evidence that the private sector will hold stocks and be guided by market signals as to the amount to hold and when to release them back on to the market. Government stocks tend to substitute for private stocks thereby shifting the cost from the private sector to government. There is an argument that the private sector will not hold a large enough quantity of stocks because it values carryover stocks less than society.

Several reasons are given for this difference in perception of costs and benefits as evaluated by private firms versus society. Since the market reflects only the private costs, the market may underestimate

the costs associated with a carryover stock which is too small. Several reasons are given to explain why social costs may be underestimated by the private sector. Some examples are costs due to:

- Macro instability and inflation due to excessive grain price fluctuation;
- Excessive investment when producers view unusually high prices as permanent;
- The effects of farm bankruptcies due to temporary but unusually low grain prices;
- Long run effects of reducing the livestock herd when grain prices are unusually high or overexpanding when prices are unusually low; and
- Political instability caused by grain price extremes.

The conclusion is that stocks would be too small if they were held only by the private sector.

An alternative to present stock policies would be to provide more market oriented subsidies to private stock holders to encourage them to hold larger stocks. This could be done in at least two ways. One would be to offer a small payment per bushel to anyone who had grain in inventory at the end of the marketing year. The rate could be a fraction of the estimated cost of carrying stocks for one year. Some research would be needed to determine the amount of payment needed and the likely consequences of this approach. Another approach would be to subsidize the costs of storage facilities. This subsidy could be made available only for on-farm storage or a combination of on- and off-farm storage. Since a large part of annual storage costs become fixed costs the per bushel subsidy would not have to be large to encourage an increase in quantity of grain stored. The subsidy could be an interest rate subsidy for construction loans. It would be essentially an extension and perhaps an enlargement of the current farm storage facility loan program.

Critics of these types of storage subsidies note that such an approach gives the government very little control over the quantity of grain stored or the timing of its release into the market. They are correct but that would be an advantage rather than a disadvantage. Market forces would be allowed to determine the amount in storage and its release. Past policies with substantial involvement of government have contributed to the very uncertainty that policies were supposedly designed to reduce. The types of subsidies proposed here would remove the temptation from government to use stocks to attain other price objectives, foreign policy or trade objectives.

Summary

Obviously in a short paper such as this, not all aspects of farm policy could be covered. Emphasis has been on grains policy because of its key role in the overall farm economy. In formulating future farm policies it will be important to recognize the importance of exports as a part of total demand. Domestic policies cannot be designed without considering their implications for trade. The level of price support is a key element in maintaining access to foreign markets and in maintaining the U.S. competitive position in the long run. Giving the right price signals to producers is necessary if they are going to be able to adjust to changing world market conditions. Stocks policies have an important role to play in maintaining the U.S. share of world markets and price stability both internally and externally.

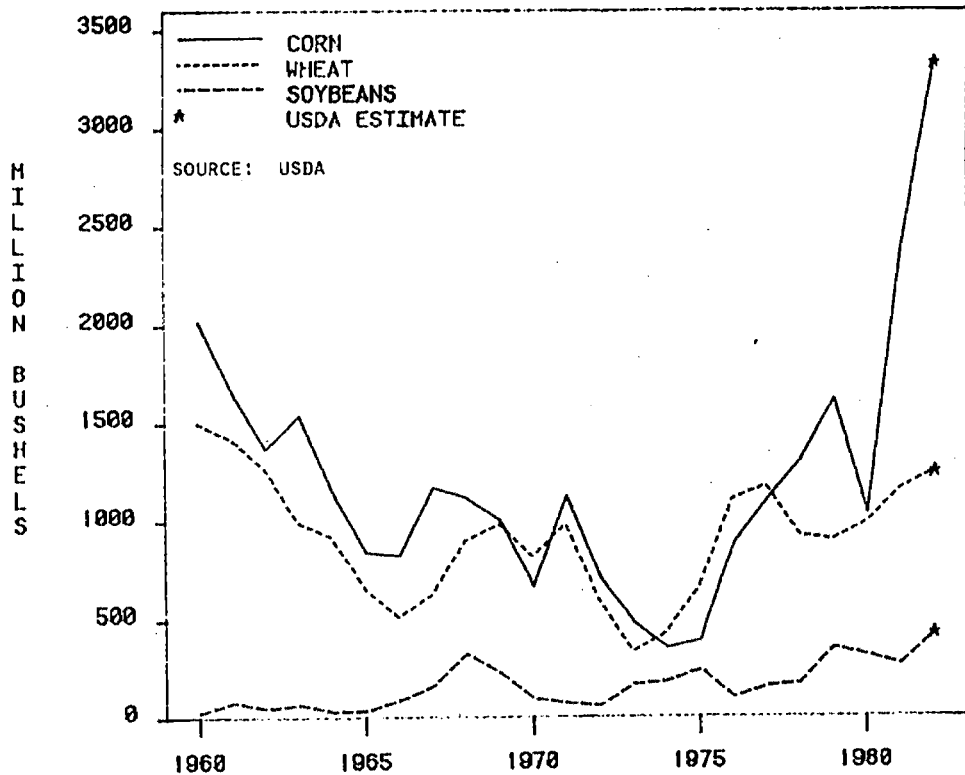


FIGURE 1. ENDING STOCKS.

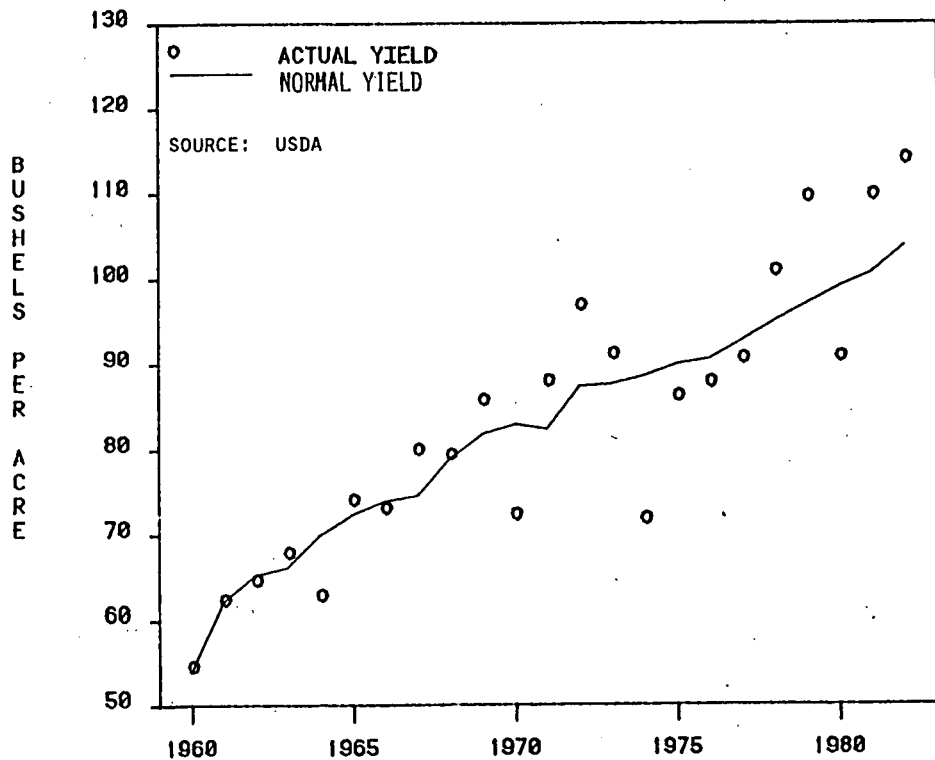


FIGURE 2. CORN YIELD.

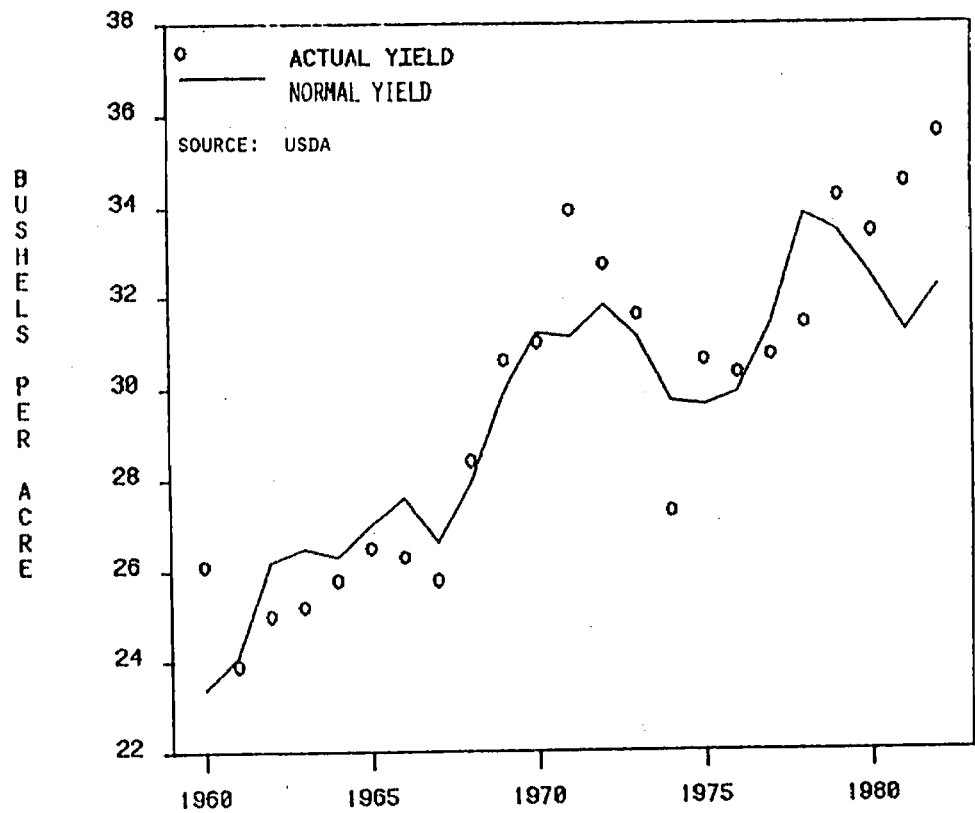


FIGURE 3. WHEAT YIELD.

Table 1 Impact of High Relative to Low Grain Price Supports (i.e., Level of Safety Net), Over a 5 to 10 Year Period.

Item	Level of Safety Net	
	High	Low
Grain prices - long run av.	Up ^{1/}	Down ^{1/}
Wealth of current landowners	Up	Down
Return to land investment by future farm landowners	Same ^{2/}	Same ^{2/}
Income of farmers who rent	Same ^{2/}	Same ^{2/}
Government program costs	Up	Down
Volume of U.S. exports	Down	Up
Volume of grain consumed by:		
U.S.	Down	Up
Importers	Down	Up
Volume of grain produced by:		
U.S.	Down ^{3/}	Up ^{3/}
Exporters	Up	Down

^{1/} The "up" or "down" refers to direction of change relative to the other safety net option.

^{2/} Incomes would average about the same over time but the year-to-year price risk would be greater with the low safety net.

^{3/} For the grain market to clear with price supports that support the world market, the U.S. would need to control crop production with Government programs.

Representative HAMILTON. Thank you very much, Mr. Jones. Mr. McIntosh, professor of agricultural economics from the University of West Virginia, and we are very pleased to have you.

STATEMENT OF KENNETH D. McINTOSH, PROFESSOR OF AGRICULTURAL ECONOMICS, UNIVERSITY OF WEST VIRGINIA, MORGANTOWN

Mr. McINTOSH. Thank you, Congressman. Thank you for the invitation to appear before the committee today. And in spite of what the director of my experimentation said, I am not really here to lobby for increased research funds, unless you just really want to push this for me.

Now, I would like to address the general rather than specific items of farm policy formation, in primarily what we call the price income and support program area.

And I would like to say before saying anything about those, that relative truths, as you know, are very difficult to find, it leaves you with some dangling strands when you think you have located it. So, what these hearings are is what we mean in our system of government is trying to determine what we call the national consensus.

Congressman Hamilton, distinguished members of the Joint Economic Committee, ladies and gentlemen, it is a privilege to be invited before the committee for my views on farm policy in the years ahead.

For more than 40 years American farm policy has generally been pragmatic, mostly short-run in outlook, largely evolutionary, and reflected the views of both farm and nonfarm interests. Granted, the early years of Federal intervention in farm operations was largely in behalf of farmers. In more recent times, however, non-farm interests have assumed greater importance in the shaping of farm legislation.

One might say that national farm policy has followed a trial and error course with considerable experimentation followed by fine tuning legislative efforts. Unfortunately, sporadic wars and food shortages from unfavorable weather events have occurred in such a fashion that no major program or fine tuning effort has been followed long enough to assess adequately the output from such efforts. In addition, there have been the complications which arose with the changing of the guard in the executive branch or in the party controlling each branch of the legislature. Finally, we have been an impatient people and our patience has been sorely tested when a new program did not resolve farm problems in short order.

Actually, when one pauses and reflects upon the viability and complexity of farm operations it is easy to adopt the view that, of necessity, farm policy should be flexible enough to change quickly when circumstances demand such changes. From past experience, however, we know that long-range planning tends to be undermined with frequent policy changes.

Another feature of our farm policy which should be kept in focus as we think about new policy directions is the relative success of supply programs when compared to demand programs. Surplus production has been the underlying reason for Government inter-

vention for many years and unlike the success of the little Dutch boy who saved Holland by sticking his finger in the hole in the dike and stemming the flow of water the Government stuck one finger in farm activities only to find that it then required a second finger. After a second finger it was noted that a third was necessary. Then a fourth and so on until all the fingers and thumbs were used. Then both arms and legs, and before you knew it the Government was in up to the neck and still supply outran demand. Enumerable demand increasing programs have been tried but it's tough to solve basic oversupply problems via indirect demand programs.

A minute ago I indicated that our farm policy has generally been shaped by experience and evolutionary development. As we survey the current scene there is enough concern and uncertainty with existing programs and policy to force us once again to ask: "Do we need a rather strong break with the past or is it simply some cosmetic retouching to attain reasonable and workable farm policy measures?" Quite candidly, I believe that we need more than a touchup job if American farmers are to ever achieve prosperity and economic independence.

One suspects that when the full array of side effects associated with PIK are documented and publicly proclaimed our image as well as our economic standing will be tarnished. A few months ago when the program was outlined by the Secretary of Agriculture there was much hoopla and much ballyhooing that quick fix had been located which would reduce production, stabilize or increase farm prices, increase net farm income and lead to decreasing costs for Government price and income support programs. Granted, the Secretary was under considerable pressure to initiate some type of program which hopefully would reduce or stabilize Government costs for farm programs.

There were voices that warned about problems generated by efforts to keep prices above world price levels, stimulation of production in other countries, difficulty in achieving effective supply reductions, location of stored surplus commodities for use as in-kind payments, weather patterns, and farmer response to risk reductions. These were brushed aside at the time but as the PIK drama daily unfolds there is a new revelation concerning yet another unanticipated side effect.

At first is a was a question of PIK allocations per county in the United States. Then the question about supply from nonparticipants. Then the question of real acreage reduction and real quantity reductions. As rain delayed the planting season in parts of the Midwest, some concern was expressed about total inventories and expected production. Next came the act concerning location of surplus commodities to be used of PIK payments. Someone had the temerity to question the costs of moving grains from one region to another. Then another group of farmers were informed that they had to grow their own PIK. Most recently we have been informed by the news media that large corporations are on the PIK dole for millions. Now there is concern that a drought is in process and future grain prices have increased. One can easily envision a scenario where the Congress would be asked to impose tariffs to prevent the inflow of foreign-grown grain. Our neighbors are begin-

ning to suspicion that Jesse James has been reincarnated and is in charge of the PIK operation. It seems that man's ability to concoct yet another experiment by the Federal Government is very elastic. Furthermore, it seems that a little Government intervention sets in motion an organic process requiring even more intervention as time marches on. From an historical perspective, adverse weather conditions or wars appear to be the major forces that interrupt the trend toward centralized decisionmaking in farm production and distribution.

Ladies and gentlemen in 2 more years the Congress will again be drafting farm legislation for price-and-income-support programs. In my humble judgment, the overriding orientation of that legislation should be a return to competitive conditions in U.S. agriculture with a gradual withdrawal of Government intervention. Our experience with Federal governmental intervention in the production and marketing of agricultural commodities had a long-time dimension. After that long experience, there is no overwhelming evidence that the Government can do it better than highly motivated farmers pursuing their own self-interests. On the contrary, there is much evidence that governmental intervention creates inefficient resource use in both production and marketing of products.

The latest program, like many of its predecessors, is supply control by another name. Further, it is a cumbersome and complicated indirect means of supply control. One gets the impression from media reports that it was simply another gimmick-type policy measure in the first instance.

As one observes the unfolding of events in the long line of Federal intervention, one is torn between the real needs of U.S. farmers and the imagined needs by our benefactors. Notwithstanding the sincerity of our friends, we in agriculture really need a return to competitive conditions with a minimum of Government interference.

The world's economic system has changed almost completely in the last 25 years and the interdependence between nations has become very strong. Our export earnings from the sale of farm products have assisted greatly in the payment for foreign oil, automobiles, and other imports. It is in the interest of the Nation as well as farmers that our farm policy promote a high and rising level of agricultural exports. Farm-policy measures in years past had a heavy orientation on the domestic economy. Further, they tended to promote prices that were higher than world prices. As a result, surplus commodities have long been a problem and the resources devoted to farming were in excess of the Nations' needs. Our farm policy must assume a different orientation to reflect the changing economic conditions on farms and between nations.

Under conditions of low annual growth in demand for food in the United States, we must expand markets in other nations or be content with a smaller market for our goods in this country. If we create policy which keeps our prices above world prices we will note increasing shares of foreign markets being served by other nations and our farm problem will become more complicated. Let's face it, farmers in this Nation know how to produce commodities, and if weather conditions are favorable, the normal tendency is

toward excess supply. Thus, we do have the capacity to meet our own needs while maintaining high level exports to other nations.

Of course, we can follow farm policy measures which enhance farm prices. Our surpluses would likely rise and we would indeed become the residual supplier to other nations. Our policy measures must take cognizance of farm production in other nations and the ability of other nations to absorb markets that we traditionally serviced.

Distinguished members of the committee, our farmers have the soils, the labor, and the managerial talents to compete with farmers throughout the world. Why not create farm policy which provides them that opportunity? Granted, some resources would gravitate out of farming in the competitive struggle. It would seem that changes in the world's economic order leaves us with limited choices in the farm-policy arena. Either freely competitive conditions and expanding exports or stringent supply controls and much Government intervention in farm operations. If the latter course is chosen, it will likely lead to enhanced domestic prices, stable or declining foreign exports, and relegation to residual supplier status for the world. As a final embarrassment, import tariffs would likely be imposed to protect the domestic market from imported grains. Thank you.

Representative HAMILTON. Well, thank you very much, gentlemen. I must say that your statements, each of them, really target on the key issues and you have analyzed them in an impressive way.

It is interesting to me to note the difference in your statements with the three panelists who preceded you, their statements were much broader, and yours were directed to the heart really of the agricultural policy questions, which relate to the price-support commodity programs that we have.

Now, let's start with a little talk about the free market. One of the themes that run all the way through agricultural hearings is that we want the free market, and everybody seems to be for it even when they take steps that go precisely in the opposite direction.

If you ask some farmers in the field: "What do you want us to do," they will say: "Get the Government off our backs, get the Government out of agriculture," and then they proceed to list a great many things where they want the Government to help.

So it is a tough one. You, Mr. McIntosh, have a rather ringing statement, in the great tradition of Adam Smith in the free-market economy for agriculture, return to competitive conditions in U.S. agriculture with a gradual withdrawal of Government intervention.

And Mr. Humberd, in his statement, has listed a lot of reasons why that might not be a good idea. You didn't advocate those, I don't want to misinterpret your remarks, but you listed them in your statement. Many farmers would be forced out of business, inefficient and marginal producers would be casualties, industries likely to become more concentrated, fewer farmers, what happens to the family farm, what are the social implications of all of that, would lead to a great deal of instability relative to farm commodity prices, and so forth.

So, I would just like you to philosophize a little bit with me on this question of the market. How do you get to the free market, what really are the consequences of the free market, if we move decisively in that direction?

Mr. McIntosh made his position clear. Mr. Jones, Mr. Humberd, how do you react to this business of a free market in agriculture and what do you mean by the free market?

Mr. JONES. Well, I'll start off, Congressman Hamilton.

As a policy educator, I try not to advocate any one particular solution, I try to look at what the consequences of particular solutions are.

And I would be one of the first to recognize that in today's world it is probably impossible to have what I would call the classical free market, but there are a number of imperfections in our system and in other systems with which we try to deal, that being that we really can't have a totally free market.

So, then I look at what the two, you might say, extreme alternatives are, and one is the totally free market and the other is a totally controlled market.

And as I see people, most of them don't really want either one of those. So we then come down to how we modify our system to get as many of the advantages of a free market as what we can possibly get.

That's why I put some emphasis on the support for grain through some kind of a moving average price.

That gets some of the benefits of the free market, but it still provides some support for farmers and provides some of the things that consumers want.

I also recognized the question about stocks, and that is clearly some intervention into the market. It is a pretty minimum kind of an intervention, but it still allows the market to work to some extent.

So, as I see it, I don't see how we can really get the totally free market nor do I think most of our producers want the other alternative.

Representative HAMILTON. In your mind, your recommendation of a price support tied to a moving average price, rather than a loan rate tied to the cost of production and so forth, is in effect your compromise with this dilemma that you're talking about. You would see that as a device for moving toward a more market-oriented economy, recognizing that the extremes aren't going to be accepted; is that correct?

Mr. JONES. Yes.

Representative HAMILTON. Would that kind of a moving average-price support, in effect, mean lower price supports, do you think?

Mr. JONES. It might in the short run. I went back and looked at what that price would be today if we had been using this, and it turns out that if you have it at 100 percent of the moving average price, that would be \$2.48 national average for corn, that is slightly lower than what the current loan rate is.

Representative HAMILTON. Over what period of time is that?

Mr. JONES. The more recent 5 years—that is through the 1981—5 year prior to 1981, up through 1982, I'm talking about for 1983, so it would be 5 years prior to 1983.

Representative HAMILTON. Mr. McIntosh, does this kind of an idea fit with your general philosophy here as expressed in your statement when you talked about a gradual withdrawal of Government intervention?

Mr. McINTOSH. Yes; actually, one shouldn't be put in the position of choosing between things unless the long-range policy has been determined, and once that is in place, then how is the means of achieving it, and one, of course, is gradually lower loan levels, gradually lower target prices with the expectation that at some period in time that might dissipate themselves.

Now, this is one means of doing it. The real focus, I think, in the long run, is how do we extricate ourselves and allow the markets to work in order that we don't lose continuing foreign markets which are our hope and our expectations to get us out of the excess-capacity problem we have in this Nation. If we don't have the foreign markets, Congressman, we'll have to be content with a smaller market.

Representative HAMILTON. Yes; Mr. Humberd, I didn't mean to shut you off here, I want your comments as well on this general topic.

Mr. HUMBERD. That is quite all right, I will be glad to pass the mike along. I guess I am in very much the same situation as Mr. Jones, I don't try to—as I indicated in my statement—I'm not an advocate of one position versus another.

But as I would see a completely free market means that no Government involvement at all, and I think our experience in the seventies would indicate that prices are likely going to be variable, there is going to be price instability, I believe, there won't be much question about that, if there is no evening out at all.

So, I'm not sure that a completely free market is acceptable to producers, or consumers, or to policymakers.

I think it would create some real problems in a State like mine for some of the marginal production areas. We might find ourselves in eastern Tennessee out of the production business, those areas might very well shift to another area of the country.

Representative HAMILTON. What do you do with this move toward the free market in relationship to other countries in the world which, as I understand it, really have a highly supported subsidized agriculture? What is that going to do with the American farmer's capacity to compete successfully if he is dealing against the Government-support programs in other countries? How does that fit into the equation here?

Mr. HUMBERD. Well, I think it creates a real problem for the American consumer if he as an individual is trying to compete against the Common Market or other groups of countries where they are controlling exports and subsidizing those exports, and we are asking the individual farmer to compete simply on his own.

So, I would see some real problems there. But I don't have a solution to your question.

Representative HAMILTON. Mr. Jones.

Mr. JONES. I would like to speak to that a little bit. If you look to who the major exporters are in the world, major exporters of grain, or wheat and feed grains, those are the United States, Canada, Australia, Argentina, and South Africa—for soybeans it's Brazil.

Now, in all of those countries, they really do not use any great degree of price support, in any of those countries, to support the prices of grains to their farmers.

Now, the main price supports are in the European Community and in Japan, and those countries are large importers of grains. So I don't see them—

Representative HAMILTON. Excuse me. The European Community is a large exporter of grains?

Mr. JONES. Is a large supporter of grains—net it is not wheat anymore—it imports wheat and exports wheat because it doesn't have the right mix, but it still imports a large quantity of feed grains and it imports, of course, a large quantity of soybeans.

So, I see us as really competing with these other four or five producers, and if we become more competitive, then I think we can out-compete them.

I think there is a lot of evidence that we can out-compete them and that we can maintain share of market through competition.

Now, sure, we are going to have problems of getting grain into the European Community no matter how long we run our prices, they are still going to restrict at least for a time.

Representative HAMILTON. Having the price support tied to the moving average price, which I think you point out, is similar to what we now have in soybeans, what is that going to do to farm income?

Mr. JONES. Well, conceivably in the short run it could result in lower farm income, but as I indicate in this one table that I have, I think in the longer run it wouldn't necessarily result in lower farm income.

If you were to immediately lower the price support, the main effect would be on the capitalized value of land, and that would affect the people that hold land at the time. But you have a young farmer out here that wants to acquire land, he's going to be able to acquire land at a lower cost a year or two from now, and once he acquires it at a lower cost, he is going to be able to earn a competitive rate of return on his land and I think on the other inputs that he uses.

Representative HAMILTON. All of you, I guess, reject the idea of mandatory supply controls and marketing quotas. We use those for some of our vegetables and fruits, which primarily are domestic markets. But you reject it, I take it, for wheat and other grains; is that right?

Mr. JONES. My response would be that, as I observe farmers, many farmers oppose this kind of a process, and then this comes back then to what that does also to our markets and what that kind of thing really costs us.

Representative HAMILTON. I take it from your comments, Mr. Jones, that you are really terribly optimistic about the export market. Do I misread that or not?

Mr. JONES. No; I don't think you do misread that, I think we need to put this in a relative context, and that is, over the 8 or so years before 1981, we had such a high rate of growth that I don't think we can repeat that.

Now, I do think that we are going to continue to see growth in the export market, but after we get out of the current worldwide

recession, that there's going to be a pickup, I believe, in demand for our products, and that if we don't get our prices too high, I think that we can see growth in exports.

But I don't see us going back to the same rate of growth that we saw during that period, and my estimate is that our rate of growth might be about half what it was during that period of time.

Representative HAMILTON. What about this business of export subsidies, would all of you support that? We hear a lot about the blended credit program, and I think the previous panel witnesses commented favorably on it, and it is getting to be a pretty sizable item in the budget now at the Federal Government, and the rationale for it is obvious. I mean, the other fellows are doing it, we have got to do it in order to keep those markets.

We have \$500,000,000 I think now in the blended credit program, a large part of it is guaranteed loans, but a substantial part is direct Government budgetary outlay.

So, the question I want to direct to each of you then is how you feel about this business of export subsidies.

Mr. McINTOSH. In the short run, those measures on that blended credit and so forth I concur with.

Representative HAMILTON. That is much more government involvement.

Mr. McINTOSH. It sure is. As a matter of fact, if it wasn't for the European countries, we probably wouldn't even be thinking of that in the Japanese economy. But you have got to remember that we do not have trade relations with them specifying x number of cars or x amount of grain.

In the absence of that, sometimes we have to compete in the only way we know how. And if that requires in the short run a blended credit extension, OK, because we really need the support now.

When you go back and look at it, it comes down to some rather fundamental supply and demand analysis on how we move.

We had those growing demand functions for our products overseas, and we had a very nice time from 1973 on.

Well, times have turned. The minute we retained our ability to create excess capacity, worldwide recession, all that that we've already heard, then the question becomes how do we realine policy now looking ahead and what orientation for it.

My argument for this one alternative is that that seems to be the one that might, if we move toward it, assist us for a long time rather than a short one.

But I do believe in blended credit for a short time.

Representative HAMILTON. Mr. Humberd, do you buy that blended credit approach, do you think that is necessary.

Keep in mind too that we have gone well beyond that in this recent sale to Egypt, for example. I call it a sale, that is pretty euphemistic, but it's clear to me that we are prepared to, under current policy, to protect those markets and we are going to do whatever is necessary to do it, and I say it has very broad support in the Congress including this Congressman.

Mr. HUMBERD. Well, I certainly agree that the current situation we have been involved in probably led us to the necessity to do some of the blended credit-type programs in order to maintain some of those markets.

I would hope that as we move on into the latter part of the 1980's perhaps our exports will again be in a position and we will be in a competitive position where we won't need those programs extended that we are considering now.

But in the short run, I think it has been a tool that is needed.

Representative HAMILTON. Do you support them too, Mr. Jones?

Mr. JONES. Essentially I concur with what has been said, and that is that I see a role for them in the short run as a strategy to try to get other countries to change their policies.

But in the long run, I think that could become a very expensive way to operate if we really made a plan that we were going to offer export subsidies for a long number of years.

And that is largely because most of the benefits of that are really exported—as I gave some cited figures earlier, in some instances it takes several dollars to generate \$1 increase income, and the benefits really go to the person who gets the commodity.

Representative HAMILTON. What are your judgments about the recent Soviet grain agreement? Do you think that is going to have a pretty solid favorable impact on price? I suppose you can put into the mix the textile agreement with China too, because that is going to have a bearing on prices perhaps.

Mr. JONES. I think it may have removed some uncertainty from the market, and that is, that is the kind of agreement that we honor.

And we remember that when we reduced sales back on January 4, 1980, we did not cut below what we agreed to in that agreement. So that does provide some assurance that we are going to have that much of a market.

So, I think there are some beneficial events of that kind of an agreement. But I go further to say that I don't see a role for that kind of an agreement on a large scale with a large number of countries. It is primarily the Communist countries that because of their intervention in their markets and the way they operate, that we may benefit from having agreements with people like the Russians and the Chinese, and perhaps some of the European countries. But I think we would not benefit by having say 25 or 30 of those kinds of agreements. I don't know what the benefits are to do that.

Representative HAMILTON. Do you want to comment on the impact?

Mr. HUMBERD. I agree with it.

Representative HAMILTON. Your suggestions, Mr. Humberd, on fine tuning where you talk about more flexibility could be provided for adjustment tools, farmer grain reserves should not be used as a price enhancement tool.

The impact of that kind of approach would also be lower price supports, and would that mean a lower farm income for the farmer too, in the short run?

Mr. HUMBERD. In the short run it probably would be true; yes.

Representative HAMILTON. Of course, there are great political problems to that because this farm income today is awful, and anything even in the short term that brings about a decrease in farm income has serious consequences for us. I'm sure you recognize all of that.

Let me ask you, Mr. Jones, to comment a little more on this storage business, if you would. Are you supporting the idea of subsidizing the cost of storage facilities in your statement?

Mr. JONES. I indicated that there were at least two ways that you could encourage larger stocks to be carried into the next year, and one of them is to decrease the cost of storage, and, of course, that can be done through subsidizing facilities, either by reducing the rate of interest on loans to build bins and making more credit available at those rates of interest. And that, I think, would encourage farmers to hold more grain.

What that does is that tends to keep up the price of grain at harvest time more than what it otherwise would be, and then of course when prices do rise, like they are now, largely because of the very poor weather we're having in the Midwest, there is going to be more grain available to put on the market.

Representative HAMILTON. Would that be an interest rate subsidy?

Mr. JONES. It could very well be an interest rate subsidy, right.

Representative HAMILTON. OK. We have had in some of these hearings in Washington and across the country some suggestions that maybe we ought to throw out the commodity programs altogether and that we ought to substitute in their place income insurance programs.

I must acknowledge to you that I am not very familiar with that, but I am just interested to know if you, in your work, have addressed that alternative, or have you not.

Do you consider it a serious proposal or not? Is there any discussion of it going on among agricultural economists? None of you included it in your statements, I noticed.

Mr. McINTOSH. I haven't heard any serious discussion of income insurance in quite a while. It goes back years ago when Congress didn't listen to it then.

Representative HAMILTON. I am not saying we are listening to it now; I'd have to agree with you that Congress is not discussing it now.

But we are looking at some far out ideas at these hearings, and income insurance is one of them that has been kicked around a little bit.

Mr. McINTOSH. Let's look at that a little closer. Earlier, Congressman, you said there were about 300,000 farmers in this country that are receiving about 90 percent of the payments that are made for price and income support programs.

Representative HAMILTON. Are getting 90 percent of the net income.

Mr. McINTOSH. Yes; and they too are interested in income subsidies and they too are interested in income insurance. That same concentration of effort on that program would be evident probably if you went into an income insurance program. That's all I would have to say about it.

So hence, as I said, it has been quite a while since we heard that one. I don't hear it being expressed very much in economic circles.

Representative HAMILTON. How do you all feel about the present commodity programs? Do you think they are equitable, do you

think they are reaching the right farmers, are they tilted too much to the big farmer?

Mr. JONES. Well, my response to that is that I don't see that they are tilted toward the big farmer, they are available to any farmer whether it is a small farmer or a large farmer, but because large farmers produce so much more than small farmers, they are going to end up getting much more of the benefit of it.

Representative HAMILTON. Should that be of concern to us in policy matters?

Mr. JONES. I think it should be because I think if the public fully understood how money was taken from the taxpayer and much of it was going to people that may have higher incomes than what the taxpayer has, that they would rebel against those kinds of programs.

Representative HAMILTON. You know, we have limitations built into the commodity programs. We didn't put any limitations into the PIK program, you know we are operating without a statute there, so you know you have no limitations to benefits in the PIK program, particularly flowing to the large producer in a very dramatic sort of a way. You hit upon that in your statement.

Mr. HUMBERD. Well, I would just like to reinforce what the other two speakers have said, that the large producers are those that are producing the commodities that are involved, and it is only natural that's where the large payments are going to go under the program.

A small 30- or 40-acre farm in east Tennessee doesn't have enough base to get very much benefit to start with. So it is only natural they are going to the larger producers under a program like that.

Mr. McINTOSH. Congressman, I would be interested in one piece of dialog. Since there is no congressional statutory provision for PIK, what is going to happen if a fine suit gets wrapped up in the courts?

Representative HAMILTON. One of the cardinal rules of congressional hearing is that the Members of Congress don't have to answer any questions. [Laughter.] We are very jealous in guarding that prerogative because we can't answer most of the questions you can put to us.

I'm not sure about the future of the PIK program. I think it's probably an accurate statement to say that if we have a PIK program in 1984, it will be sharply reduced from this year.

And the challenges of the legality of it, I don't have any inside information on that which would be helpful to you.

One of the people that testified before us—to come back to this equity idea—said that we ought to design the programs so that they benefit and sustain the smaller and medium-sized farmer and then let the big farmers be principally or entirely on the market. How do you react to that kind of an observation?

Mr. JONES. My reaction to it would be that I can't see a method under which that could be administered, and that goes back to the question of how you define a farm and who is a small farmer and who is a large farmer. Because many of our farms in Indiana, in particular, are really family farms, in fact, almost all of them are,

and they vary from one person being involved to several people being involved, and we still call those family farms.

And if we put limits on how much a farm can receive, then I can't see any way that one can do this without our ingenious farmers figuring out some way to really circumvent—and I'm not saying this derogatory against the farmers, I have been a farmer, I know how they operate, and I think they are just following their natural economic instinct, which I think they should, but they are going to figure out ways to get around those limits.

Representative HAMILTON. OK. I would like to give you a moment just to make any concluding observations about any events this morning, anything you want to say for the good of the order in general.

Mr. McINTOSH. Thank you for the opportunity of being here, and I hope in the location of the national consensus that we find some consensus rather than none.

Mr. JONES. I too want to say thank you, and as I said earlier, I appreciate the studious way in which we are discussing these topics, and I hope our dialog can continue in that way.

We are dealing with a very complex kind of a topic or set of topics, and each and every one of us has our own personal philosophic value positions as to what is an acceptable alternative.

I think we need to continue to recognize that and reach some kind of a compromise in how we operate in this area.

Representative HAMILTON. I know you would all agree with me that the policy decisions have tremendous impact on the lives of people in the country.

Mr. HUMBERD. I would just like to echo and say my thanks, Congressman, and ask that you as you pursue this matter over the next year or over a period of time, that you keep in mind the importance that agriculture plays in the economy of this country and in many rural communities so that we try to develop a viable good policy that will give the right signals to those young farmers who are making investments and plan to pursue farming as a career, so that our policy gives them the signals they need to make those investment decisions.

Representative HAMILTON. I want to really compliment you for your contribution, it has been outstanding this morning, and exceedingly helpful.

You have got a lot of experience represented with the three of you in agricultural matters, and your prepared statements, as well as your comments, have just been very, very good.

So, thank you, gentlemen. The committee now will stand in recess until 1 o'clock this afternoon when we will hear a little different point of view. We are going to turn to the farmers and farm groups, and I will ask that they be here and ready to go at 1 o'clock.

The committee stands in recess. Thank you very much.

[Whereupon, at 11:40 a.m., the committee recessed, to reconvene at 1 p.m. the same day.]

AFTERNOON SESSION

Representative HAMILTON. The afternoon meeting of the Joint Economic Committee will come to order. This afternoon we have two panels also, the first panel will be spokesmen and spokeswoman for various farmer groups, and the second panel will be several spokesmen representing specific areas of agriculture.

We are very pleased to have with us this afternoon Susan Bright, Harry Pearson, I understand Mr. Don Villwock will be with us momentarily, also Tommy Willis and Harold Wright.

It is good to have you all before the committee, and I appreciate very much your willingness to participate in the afternoon's discussions.

We will begin right away, and just go from left to right with your statements. Each of your statements will be entered into the record in full, and you may summarize them or read them as you prefer. Ms. Bright is president of the Indiana Women Involved in Farm Economics, WIFE, is that the way you do it, that's the acronym, and you are from Centerville, Ind.?

**STATEMENT OF SUSAN BRIGHT, INDIANA STATE PRESIDENT,
WOMEN INVOLVED IN FARM ECONOMICS [WIFE]**

Ms. BRIGHT. I'm real excited about being here today. It sounded so great until I got here, and now I'm scared to death. And I will warn you that I can talk for hours, so I have got just a few notes, and I'm going to be real brief because I want everybody else to have a chance too.

The first thing that I would like to address is the family farm. Our WIFE's No. 1 priority is prosperity for the family farm. I feel real strong about that because I consider myself a farmer, and I am married to a farmer—you know, Dallas eat your heart out because we have this little thing going there.

And I was concerned about who are the young farmers, you know, I'm getting pretty close to 40, and when they talked earlier about making it possible for young farmers to enter farming, I was concerned about it, I was just raising this question, Who are the young farmers? What about those of us that are just trying to get started and the last few years have not really been all that great. I think that is a question the committee should address.

Another thing was mentioned earlier that I just wanted to mention, to reemphasize the research. Lieutenant Governor Mutz mentioned new ag research on new products and new uses for agricultural commodities instead of just trying to have more bushels per acre and more pigs per sow and this kind of thing.

A third thing is this cargo preference thing. I think that is something we're going to have to look at maybe starting today and all down the road because we have got to be able to ship our commodities at a reasonable price, and this kind of thing. And we definitely have a situation there that needs to be worked out in an equitable manner.

And in my prepared statement, WIFE has a resolution, you know, with some suggestions there. I think it is on the second page—just some suggestions we have.

Another suggestion that I have, just kind of personally, that maybe we ought to call this 1985 farm bill a food bill. It was mentioned earlier that the person on the farm doesn't always understand what is going on, and when we talk about PIK costing \$21 billion sometimes they think they took that \$21 billion and brought it out to the farm and handed it out in \$100 bills. That would be nice.

So, it seems to me if we call this a food bill, it might put it in a little bit more perspective. And to me it is really more of a food bill than just a farm bill.

And the last thing that I have was I felt like the alcohol fuels idea and this sort of thing has kind of gotten lost somewhere, and it has always been my contention that if we could grow corn fence row to fence row and burn it in our cars, that we'd all be a little better off.

We had an old car, and when we put alcohol in it the first time—my husband said you'll kill it, you know, and the old thing came to life, and it seemed like it ran better on gasohol. Maybe I ought to try some, you reckon?

So, these are just some of the things that are in my prepared statement. A lot of what I said has been repeated already today. So, not to take up any more time, I just wanted to hit those points. Thank you.

[The prepared statement of Ms. Bright follows:]

PREPARED STATEMENT OF SUSAN BRIGHT

Congressman Hamilton, I am Susan Bright, Indiana State President of W.I.F.E. I appreciate the opportunity to share some thoughts concerning the next generation of farm policy with you and the other members of your committee.

Conditions in our economy change quite rapidly. When I first began working on ideas to be presented here today the need for PLK to continue for 1984 seemed great. In the last two weeks our Creator seems to have taken charge. I hope this is a lesson to us all. We should all be very grateful in our times of surplus. We should not let the producer suffer because he has done a good job. Today the need for any production controls or corn does not seem so great. The word seem is the key. This 1983 growing season is a perfect example of why we need a broad general farm program to help smooth out the boom and busts farming cycles. We can send a man to walk on the moon and make it look like a piece of cake. We should be able to put together a farm program to keep a safe wholesome and plentiful food and fiber supply for the consumer. At the same time allowing, even assuring, that the farmer producer who is responsible for producing this food and fiber can do so at a reasonable profit.

This 1985 farm bill needs to be in the best interest of all segments of agriculture. All outside factors that influence and affect agriculture need to be considered.

We in W.I.F.E believe it is in the best interest of our nation and the world to write a farm bill that is conducive to keeping American agriculture in the hands of the individual family farmer. Some of the steps we suggest include:

1. The definition for a farmer needs to be changed to more accurately fit the actual farmer-producer. W.I.F.E. suggests the following four categories for rural acreage:

1. Rural residential acreage: owned for reasons other than to produce and supported by off-farm income.

2. Subsistence farm: a productive unit of land too small to be economically viable, on which food is produced for the owner's consumption with any surplus to be sold or given away. Income from other sources probably required to support owners.

3. Commercial farm: a unit of land on which crops or livestock are produced to be sold at a profit which is intended to be the major source of income for one or more family members.

4. Agri-business corporation: A farm corporation which is involved in other business and from which it derives substantial income.

A FAMILY FARM is a form of business enterprise in which the management decisions are made by a family engaged in the production of food or fiber for profit, which is intended to provide the major source of income and capital for investment.

2 Tax laws need to be changed to make farm land and farming operations less attractive to outside investors. We cannot compete with buyers for land when our purchase must pay for itself. In many cases it is to the benefit of the outside investor for the farm not to profit.

3. Import quotas should be changed to float with supplies available of the products we produce here. Dairy and beef imports are prime examples. If we are producing too much beef here as compared to demand, then there should be no beef imported.

4. Maintain our export markets and develop new ones. However, exporting commodities at below the cost of production is not the answer to the farmers financial plight.

5. Cargo shipping laws need to be updated and revised to create a more equitable solution for shipping agriculture commodities. Transportation resolution - 1983 :

WHEREAS, it is vital to the health of our nations' economy to increase our agricultural exports and

WHEREAS, a productive agriculture is the cornerstone of that economy and WHEREAS, the budget of the United States Department of Agriculture and the Agency for International Development is designed for the promotion of the agricultural sector, and

WHEREAS, those two agencies underwrite 90% of the differential pricing that is necessary because of the "cargo preference" laws, and

WHEREAS, THIS RESULTS IN A LARGE TRANSFER OF FUNDS FROM THE AGRICULTURAL sector to the merchant marine fleet, and

WHEREAS, those funds should be used to increase the amount of agricultural commodities shipped overseas under the PL-480 program, and

WHEREAS, proposals to increase the amount of cargo transported on US vessels is a deterrent to increased export sales UNLESS an alternate method of funding the higher costs of using American vessels is conceived, then, therefore

BE IT RESOLVED THAT Women Involved in Farm Economics supports the concept of a strong merchant marine fleet ONLY if the additional costs of 'cargo preference' shipments are funded from sources other than the United States Department of Agriculture and the Agency of International Development.

6. Continue to emphasize and provide financial aid for soil and water conservation. The real wealth of this nation is our land and it is everyones' responsibility to preserve it, not just producers. We cannot continue to mine the land and still provide productive land for future generations. Legislation such as the Armstrong Sodbuster Amendment is very much needed.

7. We need to have a longer term commitment to alcohol fuels programs. The present commitment has eroded to little more than an interesting side-light in the energy saga. W.I.F.E. feels that the use of commodities for alcohol production would lessen the grain surplus and provide a source of energy, with a by product being used for food. At the same time our balance of trade or deficit could be reduced thru needing less imports instead of relying on creating more exports.

8. In government sponsored agencies, avoid sensationalizing in such areas as cancer causing feed additives, publications which advocate animal rights, and other hastily released information. This isn't to say that cancer causing drugs are to be used. It is saying that we need to evaluate the research and discontinue use of these drugs if they are dangerous before we lose our red meat market because of consumer disapproval. Once an idea is implanted in the consumers mind, it is difficult to retract that idea if it is proven false.

9. We all need to work toward the goal of a reasonable income plus a profit for our producers. It seems that almost daily we hear companies saying we must make a reasonable profit or we can't stay in business. Labor and management say they must have an income to live at a reasonable level. Even Congress needed a raise to bring their earning up to a point they could live with. Agriculture has no real quarrel with any of these situations. What we are saying is simply "me too"! We need a profit to stay in business and we need an income we can live with. Profit is not a dirty word. It has too many letters. A profit for agriculture will raise the cost of food a small

amount. Weigh this cost against the end result of nearly 100% employment, increased government revenues and less deficit spending and I don't believe anyone will complain with a full mouth.

10. I would like to suggest we call this 1985 Farm Bill the Food Bill. I believe this will more accurately relate to the non-farm sector the idea that the majority of our agricultural budget is for food and not to subsidize big farmers. It is estimated that the 1984 budget calls for spending 79¢ out of every dollar for defense and 12¢ for interest on the national debt and yet only 6¢ for other federal operations which includes Agriculture.. How important is food compared to defense? How important is food compared to anything? When you answer these questions a lot depends on whether it is just before mealtime or just after! Perhaps Congress should consider this Food legislation while fasting. This should put food in the proper perspective.

11. We must continue a vigorous agricultural research program. We could not have become the world's agricultural envy without a strong Federal and state commitment to agricultural research. Work needs to be done in the development of quality agricultural products and new uses of crops and livestock products must be found. The possibility for alternative crops also needs to be researched.

12 We should keep in mind that any and all legislation should have the good of other commodities in mind. For example a bill or amendment that is favorable to the dairy producers but detrimental to beef producers is not good legislation. We must remember we are all in this together. We have a tremendous need for food and fiber. It should not be necessary for my neighbor to be put out of business for me to continue farming.

13. Reasonably priced credit is an essential. When prices are good and rates are low or even reasonable, purchases are made. When prices go down, rates go up and production costs go up, the borrower is left with few alternatives except to try to hang-on. He may have to be sold out with tremendous loss to his family and a sizable loss to his creditors. The Farm Credit Act and Farm Credit System address this issue perfectly on paper. If the farm credit system were operating in the best interest for the actual farmer-producers, it would be to agriculture like an iron shot to an anemic piglet. This would also aid in keeping other special interest groups out of agriculture when their motives deal with personal profits and not the overall good of agriculture.

14. Over the long run, there seems to be a need to get production under control. If production controls are placed on domestic production W.I.F.E. recommends that the basis be unit or bushels and not acres.

Congressman Hamilton, I ask that you and your committee consider the points that I have presented here today. Through compilation of these ideas may your committee add direction to planning farm policy for the next generation.

I thank you for permitting me to have input at this hearing. May we continue to communicate and respond to one another.

Susan Bright
1854 West Grove Road
Centerville, IN 47130

1981 Production

UNITED STATES 1982 AGRICULTURAL BALANCE SHEET

1982 Prices

COMMODITY	UNIT	PRODUCTION	U.S. AVERAGE PRICE PER UNIT	VALUE RECEIVED	U.S. AVERAGE PARITY PRICE	VALUE OF PRODUCTION AT PARITY	DIFFERENCE BETWEEN VALUE RECEIVED AND VALUE AT PARITY
CORN	bu.	8,200,951,000	\$ 2.37	\$ 19,436,254,000	\$ 5.04	\$ 41,332,793,000	\$ 21,896,539,000
WHEAT	bu.	2,793,436,000	3.52	9,832,895,000	7.25	20,252,411,000	10,419,516,000
SOYBEANS	bu.	2,030,452,000	5.78	11,736,013,000	12.86	26,111,613,000	14,375,600,000
OATS	bu.	508,083,000	1.69	858,660,000	2.79	1,417,552,000	558,892,000
GRAIN SORGHUM	cwt.	492,949,000	4.00	1,971,796,000	8.48	4,180,208,000	2,208,412,000
BARLEY	bu.	478,301,000	2.29	1,095,309,000	4.75	2,271,930,000	1,176,620,000
COTTON	lb.	7,551,936,000	.54	4,078,045,000	1.94	14,650,756,000	10,572,711,000
COTTON SEED	ton	6,254,000	78.71	492,252,000	212.91	1,331,539,000	839,287,000
ALL HAY	ton	143,105,000	69.50	9,945,798,000	110.00 1/2	15,741,550,000	5,795,752,000
CATTLE Slaughter	cwt.	247,401,000	61.57	15,232,480,000	94.97	23,495,673,000	8,263,193,000
Calves	cwt.	186,570,000	60.25	11,240,843,000	112.42	20,974,199,000	9,733,357,000
HOGS	cwt.	211,109,000	54.05	11,410,441,000	85.00	17,944,265,000	6,533,824,000
LAMBS	cwt.	8,593,000	54.52	469,490,000	105.50	906,562,000	438,071,000
ALL MILK	cwt.	1,326,340,000	13.55	17,971,907,000	20.98	27,826,613,000	9,854,706,000
TOTAL -----				\$115,771,183,000		\$218,437,664,000	\$102,666,481,000

The agriculture dollar turns in the national economy 7 times.

The 7 times turn of the \$103 billion underpayment to United States agriculture equals ----- \$721 billion.

This is the amount of earned income that the Nation could have received had United States agriculture been at parity.

In a balanced (parity) economy every farm dollar generates approximately \$1.40 in taxes nationally.

The Nation lost \$144 billion in tax revenues due to the fact that United States agriculture was not at parity.

Prepared for: W.I.F.E. (Women Involved in Farm Economics)
National President: June Saylor, 113 Kathie Drive, Clovis, NM 88101

Prepared by: Susan Frazier, Rt. #2, Fairmont, NE 68354
and Betty Majors, Box 484, Osceola, NE 68651

Sources of information: USDA, National Organization for Raw Materials
1/ January 1982 parity price

1951 Production

INDIANA 1982 AGRICULTURAL BALANCE SHEET

1982 prices

COMMODITY	UNIT	PRODUCTION	INDIANA AVERAGE PRICE PER UNIT	VALUE RECEIVED	U.S. AVERAGE PARITY PRICE	VALUE OF PRODUCTION AT PARITY	DIFFERENCE BETWEEN VALUE RECEIVED AND VALUE AT PARITY
CORN	bu.	654,000,000	\$ 2.40	\$ 1,569,600,000	\$ 5.04	\$ 3,296,160,000	\$ 1,726,560,000
SOYBEANS	bu.	151,800,000	5.81	881,958,000	12.86	1,952,148,000	1,070,190,000
WHEAT	bu.	62,100,000	3.17	196,857,000	7.25	450,225,000	253,368,000
ALL HAY	ton	2,256,000	70.67	159,431,520	110.00	248,160,000	88,728,480
CATTLE Slaughter	cwt.	3,741,000	58.99	220,681,590	94.97	355,282,770	134,601,180
Calves	cwt.	2,457,000	54.68	134,348,760	112.42	276,215,940	141,867,180
HOGS	cwt.	14,337,000	54.53	781,796,610	85.00	1,218,645,000	436,848,390
ALL MILK	cwt.	22,820,000	13.59	310,123,800	20.98	478,763,600	168,639,800
TOTAL				\$ 4,254,797,280		\$ 8,275,600,310	\$ 4,020,803,030

The agriculture dollar turns approximately 5 times locally (state) and 7 times nationally.

The 5 times turn of the \$4 billion underpayment to Indiana agriculture equals ----- \$20 billion.

The 7 times turn of the \$4 billion underpayment to Indiana agriculture equals ----- \$28 billion.

This is the amount of earned income that Indiana and the Nation could have received had Indiana agriculture been at parity.

In a balanced (parity) economy every farm dollar generates approximately \$1.40 in taxes nationally.

The Nation lost \$5.6 billion in tax revenues due to the fact that Indiana agriculture was not at parity.

Prepared for: W.I.F.E. (Women Involved in Farm Economics)
National President: June Saylor, 113 Kathi Drive, Clovis NM 88101

Prepared by: Susan Frazier, Rt. #2, Fairmont, NE 68354
and Betty Majors, Box 484, Cochrane, NE 68651

Sources of information: USDA, National Organization for Raw Materials

Representative HAMILTON. Thank you very much, we appreciate that. And I notice in your prepared statement you cover other items as well which I have taken note of. We appreciate your testimony.

And the next witness is Harry Pearson who is vice president of the Indiana Farm Bureau.

STATEMENT OF HARRY L. PEARSON, VICE PRESIDENT, INDIANA FARM BUREAU, INC.

Mr. PEARSON. I might make a comment before I begin that in reviewing some of the points you made in your opening statement this morning as well as points made by many of the speakers, many of the things I will say will be repetitious.

But I think maybe even from that standpoint occasionally repetition itself has some merit to it.

Representative HAMILTON. Sure.

Mr. PEARSON. I would like to thank you and members of the committee for the opportunity to appear before the Joint Economic Committee.

I applaud the committee for wanting to start early on the direction of the 1985 farm bill.

I am a farmer in partnership with my brother and my son. I am also vice president of Indiana Farm Bureau, Inc.

The PIK program has been, in our viewpoint, a success in that it reduced the surplus which has hanging over the market. With the 3½ billion surplus of corn hanging over our market, there was no way the market system could begin to function satisfactorily to serve the farmer, the market and the consumer. This is too much of a surplus to carry, and PIK was an effective way of reducing those surpluses so that supply and demand can begin to work in the markets again. Farmers have seen some rough economic times in the last few years—some the result of bountiful crops and good harvest, and others caused by economic conditions beyond our control—inflation, high interest, worldwide depression, a recession in the United States, unfavorable weather plus trying to meet the production requirements of Government programs.

Our country has the ability to produce an abundance of almost any crop, and many people do not consider that they have an obligation or concern for the marketing of that crop. There is a climate in which markets operate which includes the farm program, the economic climate, the transportation and infrastructure of moving these to market, as well as the related scope of market and production supplies and technology. Our country has been blessed for years with a great deal of research which has brought efficient production of agricultural commodities to our Nation. Farmers who are technicians and sharp operators know how to use these production tools to their advantage. In addition to being able to produce, we also need to spend time and energies in the areas of marketing these products.

The American farmer has not only learned to produce, but feels an obligation to supply food to markets around the world—not only from an economic standpoint, but for humanitarian purposes as well. Food has always been a vital part of the American economy,

and as a result, many who are not related to agriculture, tend to use it for purposes for which it is not intended—basically as a clout to world trade and world power. Future farm programs and governmental programs need to recognize the role of food in world government, but we also must be conscious of the impact they have on the American farm community when they are mishandled, or used as a club or foreign policy tool such as the recent embargoes.

If America is going to be a strong agricultural nation, it must also be a strong trading partner around the world. Fair play, marketing capability, and adequate finance, as well as high quality products, must be available to that market. The amount of agricultural products going to world markets today makes it imperative that the agricultural policies of the United States be conscious of all the problem associated with world trade in agriculture. Because of the large productive capacity of U.S. agriculture, world markets are necessary, and must act as a balance and stabilizer in our own consumer prices. Since we are producing a crop that is affected by weather, geographic climate, and biological forces, we can't always determine the right amount of production. If we were to give up the world market and come back to a protected domestic market, we would have to shrink the American production in agriculture to such a level that it would be difficult to administer. Because of the reduced demand for our products, it would make income and supplies more variable than if we participate in the world market which stabilizes the price levels in the United States. This makes production cheaper because the per unit cost can be lower as a result of increased production. Therefore, the American consumer can buy food at a lower cost when U.S. agriculture produces at near capacity and uses world markets as a viable part of our marketing system. Farm agricultural policies must be conscious of those things influencing access to world markets, specifically transportation which includes rail and barging, trucking, shipping, long-shoreman activities and cargo preference. If any one of these groups decide that they are going to carve their share out, they may also carve agriculture out of the market.

Now, back to the domestic farm program. We, as an organization, believe the farmer should have the highest net income he can obtain. We also feel that the highest net income over a long period of time must come from the market—not government programs. This burden would soon become too expensive for the Government, and most taxpayers would rebel. This would require stricter allotments and quotas which are unworkable in agriculture and too costly.

I believe that because of the risk and vulnerability of agriculture, there are some conditions beyond control. There has to be a safety net somewhere close to the variable costs of production.

If the support price is too high, it becomes an incentive resulting in overproduction which then tends to pull the market down below the cost of production. Primarily, farm support and target levels must be consistent with the prices on the world market; otherwise, you immediately price yourself out of that market. Quickly, the supply and demand situation is so far out of balance that we have immediate chaos caused by new Government programs. The only solution then is for the Government to spend money which it does

not have in an attempt to bail farmers out. That is the current situation.

We must compete for the world markets on an efficient basis. Government should support farmers with research, proper regulatory controls, and a safety net of farm supports.

We would ask the committee to consider reducing some of the emphasis of production controls and channel instead those efforts into financing of sales abroad.

Thank you for your attention.

Representative HAMILTON. OK. Thank you, Mr. Pearson, for a good statement. Now, we will hear from Mr. Willis, past president of Tennessee American Agriculture Movement and national chairman, American Agriculture Movement, and you are from Brownsville, Tenn. We are pleased to have you here, sir.

STATEMENT OF TOMMY B. WILLIS, NATIONAL CHAIRMAN, AMERICAN AGRICULTURE MOVEMENT

Mr. WILLIS. Thank you, Congressman Hamilton, I am Tommy Willis, a farmer from Brownsville, Tenn. I appreciate the opportunity of appearing before you today to represent the view of the American Agriculture Movement as its national chairman.

I would like to thank the committee for holding these hearings which are designed to mold a new generation of farm policy. We feel that a new approach is needed to face today's problems in agriculture.

As we search for guidance for the future, we must be ever mindful of the problems of the past.

With the passage of the 1973 farm bill, we embarked upon a course of market oriented agriculture which is sometimes called the free market approach. We continue this with both the 1977 and 1981 farm bills.

I would like to briefly review some agricultural facts, so that we may have a better understanding of the problems that we face today.

My staff has prepared some charts to help illustrate these conditions.

In observing these charts, one can see that while agricultural assets have risen, so has the national farm debt and while parity ratio for agriculture products has fallen dramatically, so has national agricultural taxable income and so has taxable income as a percentage of agricultural production assets.

On all of these charts, I have penciled in the year 1973 which should show the effect the our market oriented agriculture has had over the last 10 years. As can be seen by these charts, it would be penny wise and pound foolish to continue the same course of market oriented agriculture as is being presently presented by some Government officials and industry leaders.

Concerning future agricultural legislation, there is only one point on which the AAM feels there can be no compromise. We must have supply management now. There must be strict mandatory controls, straight across the board, for big and small farmers alike, that will insure a profit for agriculture. With proper supply management, the loan rate could be raised to this level with little

cost to Government. With proper management, under such conditions, the loan rate would serve as a minimum price as originally intended.

The methods by which we obtain this supply management are debateable. While a paid diversion is probably the most legislative possibility at this time, we question its effectiveness, particularly in the case of wheat when we know that such a program would encourage more summer fallowing, thus increasing yield. The AAM feels that the most effective way to accomplish this goal is through a quota or marketing card concept. This type program has been used for tobacco for years and a similar approach is presently being offered for dairying. Under such a program, the carrying charge for any overproduction would be the responsibility of the individual farmer instead of the Government, thus releasing government funds to be used for export subsidy, export PIK, et cetera, to maintain our overseas market, much the same as other agricultural exporting nations do.

One of the keys to such a program would be the establishing of quotas. This quota would consist of domestic need, export need, and national reserve.

We of the AAM feel that all major commodities should be supported—Government loan—equally so as to prevent farmers switching from one crop to another; therefore, avoiding expensive machinery outlays and the problem of over production in certain areas, thus depressing prices. Over the years, there have been ratios established between certain crops at which we will not have this switching from crop to crop due to prices. Such a policy would tend to stabilize both domestic and world production. These ratios are as follows: Beans to corn: 2½ to 1; Wheat to corn: 1½ to 1; and Beans to cotton: 10 to 1. Due to the lack of history of rice, there is no ratio to corn, we feel that a 2-to-1 ratio is in order.

The final step of our recommendations is that once these prices are established that they be tied to parity. We recognize that the parity concept has not been popular with Congress in recent years but with our present economic conditions, it should be sellable. Presently we are seeing the administration attempt to lower or freeze target prices because they claim that our inputs have gone down. If the loan rates were tied to parity, they would automatically go down if our inputs declined. Likewise, they would rise as our inputs rose.

We have made a few observations of past agriculture programs and some general recommendations for the future.

We recognize the need for a vehicle to persuade many officials in Government for a change from the free market policies. We feel this could be done with an agriculture revenue study.

We are aware of the fact that agriculture is the nations largest industry, No. 1 employer, No. 1 inflation fighter, No. 1 exporter. It is impossible for an industry such as agriculture to suffer as it has for the last 10 years, without adversely affecting our national economy.

We are reminded of a quote by William Jennings Bryan, "Burn down your cities and leave our farms, and your cities will spring up again as if by magic; but destroy our farms and grass will grow in the streets of every city in the country."

The farmers of the United States produce approximately 20 billion bushels annually of wheat, feed grains, and oil seeds. If we could raise the price an average of \$1.00 per bushel, this would equal, quite obviously, to \$20 billion to the farmer.

Many agriculture economists say that this would turn over from 5 to 7 times in our economy.

If we use the lower number of five it can be seen that this would generate a \$100 billion worth of GNP, with a 30-percent tax base this would generate \$30 billion for IRS. While we recognize this as barnyard economics, we would like to see some studies made that follow this through the economy and the effects that it would have on such things as unemployment, social security paid in, balance of payments, et cetera.

Chairman de la Garza of the House Agriculture Committee has requested such a study.

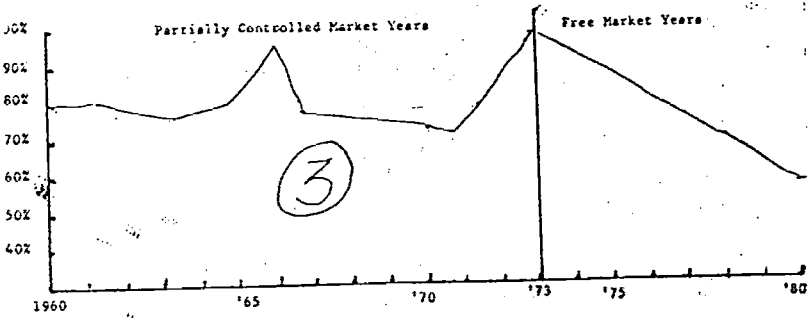
The study was begun last fall and a recent visit with a GAO official has indicated that they are now compiling the results and they should be ready soon.

After visiting with this official, we have certain reservations concerning this report because they did not use a multiplier factor. While they recognize that there is a certain multiplier, they stated that they could not prove whether it was 5, 6, or 7. Therefore, they used what is termed a "value added" approach.

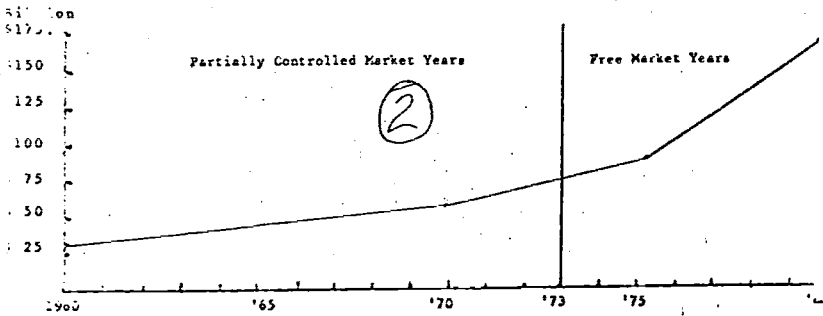
They have determined that in 1982, gross farm sales were \$120 billion and by the value added method, this equated to \$584 billion in final sales. While this is certainly a significant figure, this may not present a true effect on our total economy. For this reason, we of the AAM, are looking at the possibility of having a private concerned such as data resources or chase econometrics do an additional study. Thank you.

[The charts referred to follow:]

PARITY RATIO AVERAGE FOR ALL FARM PRODUCTS



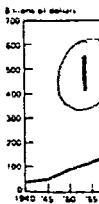
NATIONAL FARM DEBT



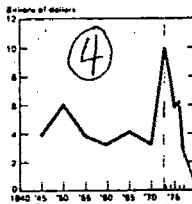
Estimated National Farm Debt for 1981 is \$200 Billion.

Source - USDA

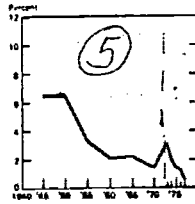
AGRICULTURAL PRODUCTION ASSETS (USDA)



NATIONAL AGRICULTURAL TAXABLE INCOME (IRS)



TAXABLE INCOME AS A PERCENTAGE OF AGRICULTURAL PRODUCTION ASSETS



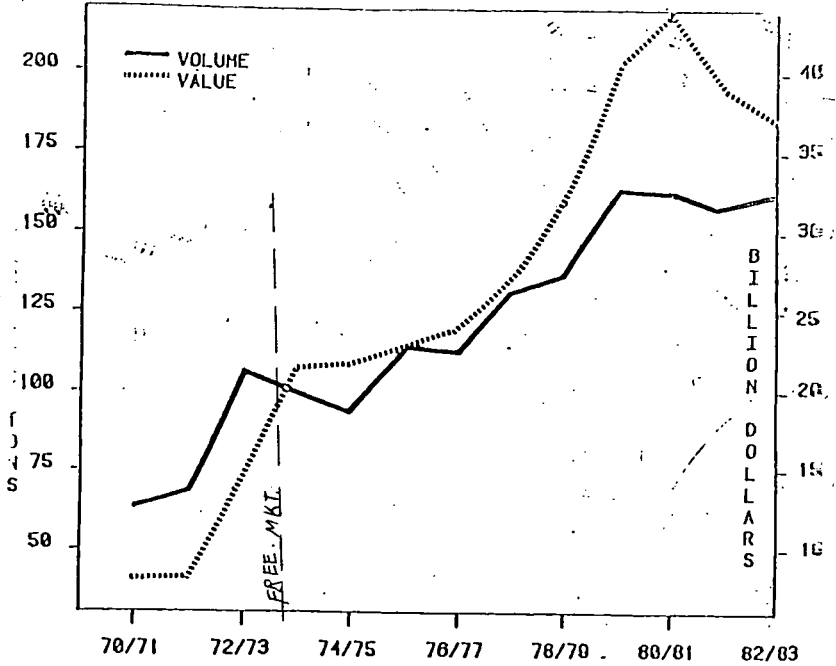
Year	AGRICULTURAL PRODUCTION ASSETS (USDA) - \$ billion of dollars	Net Farm Income - \$ billion of dollars	NATIONAL AGRICULTURAL TAXABLE INCOME (IRS) - \$ billion of dollars	TAXABLE INCOME AS A PERCENTAGE OF AGRICULTURAL PRODUCTION ASSETS - Percent
1940	36.7	6.6	3.919	0.48
1945	60.4	11.5	6.07 (1947)	0.76**
1950	89.8	11.5	3.918 (1947)	2.26**
1955	122.8	11.5	2.250	0.23
1960	182.3	14.2	0.194	0.16
1965	268.1	14.2	0.224	0.32
1970	350.4	24.5	10.071	3.98
1974	371.9	24.5	0.156	0.19
1975	424.3	22.0	5.9	1.29
1976	461.9	22.0	6.2	1.29
1977	503.9	22.0	3.8*	0.8
1978	543.5	22.0	NA	NA
1979	583.8	22.0	NA	NA
1980	720+	22.0	NA	NA

* Includes real estate and farm equipment

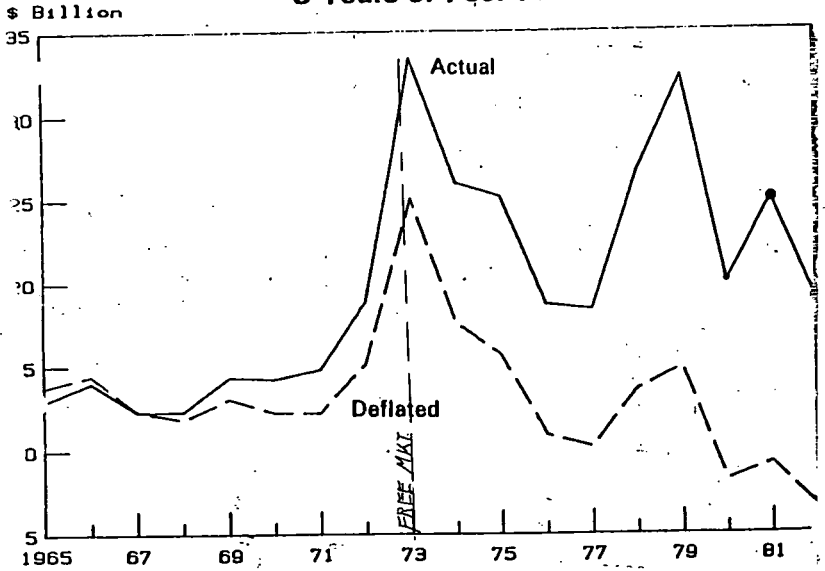
SOURCE: CBO ANALYSIS OF USDA BALANCE SHEET OF FARMING SECTION: 1979 AND 1981 DATA

** Based upon 1947 & 1947's net value transfer

Farm Exports Have Dropped



3 Years of Poor Farm Income



Representative HAMILTON. Thank you very much, Mr. Willis. The next witness is Don Villwock, and you are the chairman of the American Farm Bureau's Young Farmers and Ranchers Committee and cochairman of the Eighth Congressional District of Indiana Agricultural Advisory Group, and your home is Edwardsport. We are very pleased to have you, sir.

STATEMENT OF DONALD B. VILLWOCK, CHAIRMAN, YOUNG FARMERS AND RANCHERS COMMITTEE, AMERICAN FARM BUREAU FEDERATION

Mr. VILLWOCK. Thank you, Congressman. I am very excited to have this opportunity to visit with you on the shaping of farm policy for the future. I represent over 8,500 active young farmers and ranchers of the American Farm Bureau Federation. The policies I represent to you today are the policies of the American Farm Bureau, but hopefully I can inject some of the viewpoints, hopes, and dreams of our Nation's young farmers, as it applies to AFBF policy and to the direction of the 1985 farm bill.

First, I feel I must let you know a little about myself so you can understand where I'm coming from. I started farming full-time in 1972 after graduation from Purdue University. I began with 170 rented acres and traded my labor and management to my Dad, for the use of the machinery. Today I farm 1,200 tillable acres of which I am purchasing about 400. I still help my Dad on his farm of about 500 acres. In 10-plus years I have been farming, I borrowed money from my local bank, Federal Land Bank, Farmer's Home Administration, CCC, machinery companies, and my wife. I've also grown 200 bushels of corn, 70 bushels of soybeans and 80 bushels of wheat. I've also lost 400 acres to a flood, part of a corn crop to cutworms, and as I sit here today, I'm losing my first crop to a drought. Unfortunately, I've also lost a good marketing plan down the drain, because of grain embargoes and a last minute change in farm policy: such as letting farmers rollover reserve corn a month earlier than previously announced.

Agriculture is so complex, and I can't have much influence on the weather, or insects, but hopefully today I can have a small influence on farm policy.

I'm not going to cite statistics, like I do when I speak to consumer groups, for you well know the importance of the Nation's largest industry and there are others here more qualified to address the economic facts and figures than me. What I intend to do is tell you of the implications of possible policy decisions on young farmers and ranchers of the Nation.

We're at the crossroads of American agriculture policy, for soon we will have to decide if we want more Government in agriculture with controlled supplies and managed markets, or do we want to move to a growing agriculture and free-market system.

As I have flown over the country this spring, and seen all the PIK acres lying idle, I thought, "What a visual admission of failure of our past farm policy." Let's hope we can do better this time.

As your committee ponders the 1985 farm bill, please keep in mind what has made agriculture great in America. Why does my

generation enter productive agriculture when there are so many problems facing us?

I became a farmer as did many young farmers and ranchers across this Nation because you are only limited by your ability to dream and create. I can see daily the results of my management and labor, this in contrast to my two part-time helpers, who work in factories for over \$12 an hour. They have both indicated they go home from work bored and tired not looking forward to tomorrow, but when they come out to the farm they love doing things because their contributions are easily recognized. Which farm policy direction keeps the need for creativity and a reason for dreaming alive?

These dreams translate into productivity, the Nation's and probably the world's most productive industry is agriculture. This productivity gives the American farmer the economic comparative advantage in almost all commodities. Which farm policy direction takes advantage of this great economic resource? What will happen to the structure of American agriculture and to young farmers, if we go to supply management with preset bases of production? Can a young farmer enter agriculture without a base? Can he afford to buy a base, that may have value today but may change with the next election? Does not a supply controlled economy make the big bigger and limit entry? What incentive will there be to improve the farm, to increase one's education, to become more productive and cost efficient and a better marketer. Will not young farmers and ranchers of this country fall into the same trap as my two part-time helpers, bored with the job? Will the American consumer be happy with an average quality food supply that will cost more?

I think we must also look at what limiting exports will do to our balance of trade and thus the goods we import. Agriculture being one of our Nation's leading consumers will also have to pay a higher price. What good are higher prices if your costs go up as well?

Finally, what about our Nation's defense? Agriculture has been our strongest and first defense weapon lately. Who was first to suffer from conflicts in Afghanistan and Poland: American agriculture? Maybe we should shift money from the Defense Department budget into the USDA. Using food as a weapon, is no doubt controversial, but the option, or even the threat will be lost forever if we shift to supply management.

The list of alternatives could go on and on, but as I listen to young farmers and ranchers across this Nation I feel the choice is very simple. We must move toward the free-market system. Supply and demand respect no age limit, but it does respect good management with the chance to succeed and with that must also come the chance to fail. We cannot store our way to prosperity. Nor can we shut down the aggressive nature of American farmers; we must move products into the market.

I feel, as do the 8,500 young farmers and ranchers that I represent, the policies outlined by the American Farm Bureau Federation in the previous testimony will provide the best atmosphere for a productive, profitable agriculture in years ahead.

Let me leave you with this quote from the 1976 Yearbook of Agriculture, "If the harvest of the 2.8 million farmers is good, then America and the world eat well, but if the incentive isn't there to

work long hours, conserve the soil, invest in machinery, keep up with modern methods, and the income isn't there to make this possible, the American farmer will fail and all of us with him." Thank you.

Representative HAMILTON. Thank you, sir. And our final statement in this panel will be from Harold Wright, who is the president of the Indiana Farmers Union, Indianapolis. Mr. Wright, we are glad to have you with us.

STATEMENT OF HAROLD W. WRIGHT, PRESIDENT, INDIANA FARMERS UNION, INDIANAPOLIS, IND.

Mr. WRIGHT. Thank you, Congressman Hamilton. It is indeed a pleasure for me to have the opportunity to appear before this committee. I think it is significant in the fact that this is a committee that in most cases does not involve itself in agriculture issues, and I think it is important and pleasing to me that this important committee of Congress is looking into the agricultural economic conditions in America.

These hearings are timely because the current payment-in-kind program can be considered no more than a stop-gap measure. What happens after PIK is of great concern to all of us.

I think in order to get a little better perspective of our situation in agriculture today and just how we got here, I want to take a couple of minutes just to review our efforts in the past 50 years to improve farm income and assure our consumers of this country and the world a viable and nutritious supply of food. And I think most of us realize that our major farm programs were initiated in the early thirties and at this period of time, the farmers had experienced several years of declining farm prices. And a point that I think needs to be made is that each year the production of the farm commodities have been increased by the producer in an effort to generate farm income.

This happened—I think has happened several times since that time. But in my opinion, this refutes the opinion that low farm prices reduces farm production. In my opinion it has the opposite effect, it increases it.

If my memory is correct, I think every one of our economists who were here this morning indicated that the farmers were getting the wrong signals when their farm programs were revised just recently. The loan rates were increased, and they indicated that was giving the farmers the signal we needed more production.

The point I think needs to be made is the fact that yes loan rates were increased but at the time these loan rates were increased, we were in a period of declining farm prices. And I as a farmer, my main concern is income maintenance. And if the income that I receive from those commodities is reduced on a per-bushel basis, the only alternative I have is to go out and try to raise more bushels of corn or soybeans or whatever it is.

I think history shows, when you look at the facts, that every time farm prices have declined, we have experienced a corresponding increase in farm production.

Another thing I think that needs to be pointed out is the fact that we have experienced a tremendous evolution in agriculture in

the last 50 years. A major portion of our production now is produced by under 1 percent of our population. I think you really pointed the figures out this morning in your opening remarks when you pointed out the fact that under 300,000 farmers in our country produce 90 percent of production.

This major change in our agriculture community has forced us to require our farm programs to not only give a producer an adequate income, but also guarantee that 99 percent of our population, who do not produce, an adequate supply at a stable price. In my opinion this is the main reason the reserve program was made a part of the 1978 farm bill.

Another factor resulting from our farm evolution has been the expansion of a foreign market. Prior to the mid-sixties the primary function of a foreign market was used as a place to move our excess production. Since that time, we have aggressively promoted the expansion of these markets until now they utilize a substantial part of the production of our corn and soybeans and wheat. The expanded sales of our farm commodities abroad have greatly enhanced our balance of payments in foreign trade in recent years.

In my opinion the direction of future farm policy is clear. We can no longer rely on the free marketplace to set a fair price for the producers of our farm commodities. The free market only works when supply is kept within very tight constraints. Because of the above-mentioned farm evolutions, our expanded foreign markets and the uncertainties of agricultural production, there is no way we can keep production within the tight constraints that a free market demands and still give the consuming public, both domestic and foreign, the supply and price protection they demand and deserve.

A food program has to meet these important criteria:

No. 1, it must have loan levels high enough to assure the producer an adequate return on his labor and investment.

No. 2, it must have strong, workable supply management programs to keep production within reasonable limits, with land diversion programs both long term, to remove fragile or less productive farmland from production, and short term, for adjustments to effect immediate changes in either domestic or foreign demand for specific agriculture commodities.

No. 3, a reserve program with entry rates sufficient to attract the needed quantity and release levels high enough so as not to depress the market prices.

In our opinion, the dairy program that we have now has served both the producer and the consuming public well. I am the first to admit that we have a very serious problem with the overproduction of dairy commodities at this time.

And I would recommend one basic change. We should implement a supply management program which would encourage the producer to keep production in line with demand while still retaining a fair income.

For a few of our commodities that are not produced nationwide, producers have developed Federal or State marketing orders to counterbalance the dominant power of the handlers or processors. In the last couple of years these marketing orders have been attacked by various governmental officials and nonfarm groups. In

our opinion, we feel the Agricultural Marketing Adjustment Act should be amended to allow more producers of the various farm commodities to develop marketing orders if they feel it would be of benefit to them.

The American farmers today live and sell their products in a global food and agricultural economy. The prices they receive domestically are dependent to an important degree on what their commodities will bring in world trade.

Such prices in turn are designed to be weak unless there are cooperative efforts among nations to maintain prices for raw commodities at fair levels and provide for orderly conduct of commerce. The United States leads the other countries of the world in the volume of farm exports. This means that we are the basic price setter. It has been our policy in recent years to be the cutthroats and try to underprice most of the other countries of the world in the sale of our farm products. This action has forced these countries to lower their prices in the world market and initiate subsidies to counteract these low world prices.

It has also had a negative effect on the economies of the less developed nations because they were forced to sell their farm commodities, which in most cases are the only things they have to export, at lower prices. Rather than cut back on the domestic production, there has usually been the strategy to try to maximize the volume that can be moved to markets abroad. There is a limit, however, to how much can be achieved by such efforts. Even under ideal conditions, perhaps only half our surplus problem could be exported on a commercial basis. However, conditions are not ideal. World stocks are unusually more than adequate to meet demands and if they fall short, it is usually because of a crop disaster in major production areas.

Farmers need and deserve to be assured that they will have the right to sell their products in world markets if they are to maintain their productive capacity to serve the world market. We are greatly concerned over the numerous embargoes, suspensions, and other interruptions in agricultural trade that have taken place over the past several years. The greatest threat to our losing ground in the international marketplace is the reputation we have gained as an unreliable supplier.

Access to the world market is important, but if there are to be future gains in export earnings, they will more likely have to come from higher prices on those exported commodities. Therefore, we believe it is imperative for the United States to take the lead in attempting to negotiate a new international grains agreement with pricing provisions which would benefit both importing and exporting countries of the world. The culmination of such an agreement would return stability to the international marketplace.

The devastating effect of low farm income in recent years has been compounded as a result of high interest rates. These two factors have forced many of our young starting farmers off the farm and eliminated the reserves of several of our established farmers. This condition has also forced many farmers to abandon good soil conservation practices and to put land into crop production that was only suited to pasture and other noncrop uses.

Most farmers realize the fallacy of doing this, but when you have your back to the wall, you have little alternative. Most farm debt is long term. When you buy a farm or install a major farm enterprise, the obligation is substantial and in most cases, requires long-term financing.

Variable and excessive high interest rates can make these types of expenditures impossible. It is imperative that farmers have access to adequate capital at reasonable and stable rates over a long period of time.

In conclusion, I believe we have the laws now that could improve farm income and strengthen our efficient family farm system of agriculture. They just need to be dusted off and fine tuned to meet the needs of our modern farmers.

No one will deny that our present programs are costing too much. Raising loan rates to at least the cost of production in conjunction with workable supply management programs that would require participation by all farmers would be cost effective to all concerned.

The United States is the world's largest exporter of farm commodities and therefore has the responsibility to take the initiative in establishing minimum prices in the world marketplace. In my opinion, most of the countries of the world are looking to us for this leadership. Thank you.

Representative HAMILTON. Thank you very much, each one of you. I might comment first of all on your observation about the Joint Economic Committee, Mr. Wright, because I think it is instructive.

It is true that the Joint Economic Committee is emphasizing, to an extent that we have not previously had, interest in agriculture, that stems in part, of course, from the makeup of the committee, that Senator Jepsen, from Iowa, has great interest in farm matters, and Senator Abdnor, and other Senators likewise come from farm areas, as do I, and so we have focused on it.

And from that I draw a broader lesson, and that is, that one of the things that strikes me about several very powerful agencies of the Federal Government is the absence of farmer interest or farmer representation in key groups—I'm talking now about the Federal Reserve System.

You don't find too many farmers on the Federal Reserve Board, as of the last time I looked. And that may have something to tell us about interest rates, which are very important.

You don't find very many farmers in the Office of Management and Budget. That may tell you a little bit about budget priorities.

And you don't find very many farmers in the Council of Economic Advisers. And that may tell you a little bit about agricultural policies that emanate from Washington.

That is not a condition that is peculiar, I might say, to this administration. It is a condition that has existed as long as I can remember in Washington.

So, I think the JEC feels, and I would hope other groups in Washington would begin to feel, that the urgent conditions that you, each of you have articulated so very well this afternoon, require all of us in Washington to upgrade the visibility, as it were, of agriculture. And the JEC is trying to make an effort to do so.

Now, second, this panel—I have been counting the score here, and I have got it figured out, it is two to two to one—two of you are strong advocates for supply management, two of you are strong advocates for the free market, and one I'm not sure where, but I'd have to say that may be the politician of the group, I don't know.

But it does illustrate precisely the problem, of course, that we confront in Washington.

The farmer is a very productive guy, he is also a very independent fellow. And one of the things I have really been struck by in my period in the Congress is the way in which the farm community has changed in its approach to the Congress.

When I first went to the Congress, I dealt with a handful of farm organizations. I mean two or three—Farm Bureau, Farmers Union, the Grange occasionally, I haven't heard so much from them in recent years, and perhaps one or two other groups.

Every Congressman now comments on the fact that he is not lobbied by those groups alone but we now have the dairy people and the soybean people and the livestock people and the tobacco people and the sugar people and the rice people. You have broken down into commodity groups which makes our problem as politicians who seek to build a consensus on farm policy a great deal more difficult because the legislative process tries to be at its best a kind of consensus-building operation. And it makes our jobs as politicians or legislators, if you will, quite a bit easier if there is a broad consensus among the constituents we represent in the particular areas.

I don't say that by way of criticism of any one of you, it is not your fault in any way, it is just a reflection I think of the times we live in, and it happens that the groups that are represented by you do quite a bit to build consensus in the farm community, and for that I am appreciative.

Now, my first question is a very simple one, directed to you, Ms. Bright. What is WIFE? That is an organization I am not familiar with. I would just like you to tell me a little bit about your organization, if you will.

Ms. BRIGHT. WIFE was started in 1976 in Nebraska by a group of farm women that played cards, bridge. And it seemed like their conversation was just overtaken by their problems and low commodity prices and this type thing, and they thought maybe women ought to be heard. So, this is very basically how they got started.

Representative HAMILTON. How many do you have in Indiana?

Ms. BRIGHT. We have 25. Our first meeting was in April, so we are just very, very new.

Representative HAMILTON. Well, we welcome you this afternoon, and I can't help but note in these days when we are all conscious of the gender situation that you are the first woman to appear, and it is clear that we need more women. I'll tell you whose fault that is, that is a fault of my staff over here, they have fouled it up and didn't get enough women representation.

So, I don't want any of the blame to come onto me on this, I want it to be directed toward the staff because they goofed up. [Laughter.] We are glad to have you, Ms. Bright.

Ms. BRIGHT. A lot of times the wife, she's home doing the work, and the men are up here. And my husband doesn't always say what I'd like for him to, and so, you know.

Am I the one that you said was the politician that didn't exactly take sides; I will defend myself. You know, I didn't talk as long as these guys.

Representative HAMILTON. I was giving you a compliment.

Ms. BRIGHT. I know. This is a—I'm not going to take sides exactly, but it is a real hard problem because you said this earlier, nobody is going to say I'm against the free market, and I'm, not.

I pretty much take care of our farrowing house at home, and, you know, on paper we have to produce so much to try to make a cash flow.

So, I need to raise so many pigs and sometimes I find myself crowding and I find myself pushing, and sometimes I wean some pigs that maybe ought to stay on there another week, but I have got this sow coming in and she's going to have a litter on my back porch if I don't get her in the farrowing crate.

So, if I knew that I could make a profit on raising just what I could do a good job of, I'm not so sure that these controls would not be all that bad.

You know, we are an independent bunch, I don't like it when somebody tells me I have to do something, but yet on the other hand, I can see where maybe if I'd listen sometimes, I might be better off, and this kind of thing.

So, I am sitting on the fence, but I think it is not all that bad, and we all need to look at both sides.

Representative HAMILTON. You are expressing an attitude that is clear and I respect that. Let me ask this. There is a bill pending right now in the Congress as to whether or not we ought to freeze the level of price supports. I would like those of you who would like to, to comment on that.

That bill is pending in the Senate, Senator Baker, the majority leader, pulled it off the calendar the other day, and because there were some objections to it we have not taken it up in the House.

How do you feel about it? That is a short-term problem, not a long-term problem, but I would be interested in your remarks.

Ms. BRIGHT. We in Hoosier WIFE and Indiana WIFE are against freezing.

Representative HAMILTON. All right. You can just state your position or tell me why if you want.

Mr. PEARSON. Our policy states that an 1984-85 price level should be frozen at the 1983 level.

Representative HAMILTON. That is the Farm Bureau?

Mr. PEARSON. That is the Farm Bureau, and I strongly support that. I think we have to look at what has happened and go back to the 1981 farm bill when those inflation factors were put in there, realizing the inflation we had at that time.

Mr. VILLWOCK. My position is the same as Harry's, but as stated this morning and was stated by some here, we are in a worked market, that is the price for agricultural commodities. We have to move produce into the marketplace. Being the market works on the supply and demand, these commodities must go in the market-

place at a reasonable level to get them cleared out of the marketplace.

We need to freeze them at the level they are because escalation is stifling, this movement into the world market.

Mr. WILLIS. Needless to say, I have quite a different approach to the two gentleman on my right over here. We go back and look at the target price as we have under the 1981 farm bill and go back and look at the record that we the American agriculture movement took when that bill was drafted, and at that time we opposed the 1981 farm bill.

The reasons or the grounds on which we opposed it was that it would be expensive to Government and would not offer the farmer any protection. We still stand on those facts today.

But the administration wanted this bill, it was their bill, they pushed for it, and we feel as though they should live up to it.

We do know, we do recognize that we do have to live with the international exports, the international market. We cannot be expected as farmers to export our products into the world market that has subsidized export and import tariffs against our agricultural products.

This is one of the key factors, I think and as we move to the 1985 farm bill, this is one area that will have to be addressed before we really can have a workable farm bill probably for any one of the provisions that any of us have promoted here today.

Mr. WRIGHT. We are opposed to it for several reasons, I just want to mention three.

No. 1, there is still inflation out there on the farm, our cost inputs are still going up, and we think Congress was wise when they put an escalator clause in the farm bill.

No. 2, the way I understand the bill, it is being tacked onto a bill that already passed the House, therefore, it is my understanding that the House Members in general will not have an opportunity to debate this issue, it will just go before a conference committee. We feel it is strong enough that the full House should have an opportunity.

No. 3, in our opinion, it will not help us expand foreign markets. As has been pointed out by one of the economists this morning, the reason for foreign markets have declined primarily in the last couple of years is No. 1, the strength of the dollar, and, you know, the declining economy in the other countries.

So therefore, just by lowering our farm prices in our opinion, it will not help our foreign markets at all.

Representative HAMILTON. One of the things that struck me, Mr. Wright and Mr. Pearson, in your descriptions of the loan rates, was the way you worded your formula. Let me recall your statements for you.

Mr. Pearson, you spoke in terms of a safety net somewhere close to the variable cost of production. And, Mr. Wright, you mentioned raising loan rates to at least the cost of production.

In other words, although you differ quite a bit in the way you approach this question, you both phrased your statements with regard to the level of loan rates, tying it to the cost of production in some way.

And that was of interest to me, I don't know if you want to comment on that at all. And since you both come at it from different ways, you have that similarity in your phraseology.

Mr. WRIGHT. We in Farmers Union would consider the parity level index as a good barometer of our cost production. And I might point out that, and I'm sure you're well aware of, this is updated three or four times a year.

A percentage of parity could easily be determined as the farmers' cost production and, therefore, it would be a variable rate and it wouldn't have to—you wouldn't have to review it from time to time, and we think it would be a very effective way of giving the farmers some basic price protection.

Representative HAMILTON. Mr. Pearson, do you want to comment on that at all?

Mr. PEARSON. I will be glad to. I talked about variable cost production—you have variable costs and fixed costs in production. And I think our concern all along is that we don't get support prices and target prices so high that they again become the market producing for the Government and not the market.

So, what we are saying is that someplace below the total cost of production, there should be a support price in case we have the surplus crops we've had in the last few years so that there is some protection against losing the total income to that crop.

But there is nothing to say that that is going to guarantee you that there is going to be a profit in that crop in any given year.

Representative HAMILTON. Mr. Willis, you were the strongest in your statement on supply management. You come across as a very strong advocate of supply management. There must be strict mandatory controls straight across the board, big and small farmers, if you're going to insure a profit in agriculture. I am kind of paraphrasing your statement.

Do you really believe that most of the farmers in the country would support that kind of supply management, and if they don't, should we enact it anyway?

Mr. WILLIS. We have suggested or tried to get a referendum for a couple of years to put it to a vote. We feel as though the farmers would vote for mandatory controls if put to them.

Representative HAMILTON. For all commodities?

Mr. WILLIS. All major commodities.

Representative HAMILTON. Any disagreements on that among the panel?

Mr. WILLIS. We feel it is the only fair way to do it.

Mr. VILLWOCK. Well, being a member of the Nation's largest farm organization, it has no doubt been our policy for some time that we are definitely against any mandatory controls of any kind.

So, I want my nod to be recorded as nodding that the farmers are in disagreement with supply management, mandatory supply management.

Mr. PEARSON. I just might add that I want to produce for the market and not for the Government. I think the profit is there in producing for the market.

And I guess I can go back, basically, to when I started farming in a situation similar to what Mr. Villwock implied, and at that time we had a farm program.

I have got some trees in my yard that I call the CCC tree, because I plowed it up, it was on diverted acres and they're not in the yard.

So, we didn't have a fluctuation market back at that time in the farm program. If there was a fluctuation of 5 or 10 cents in the corn market, that was a big fluctuation.

You get fluctuation in the market created by supply and demand or by the market system, then I can make a profit. But I don't think I can do that when we have a flat applied to price levels.

Representative HAMILTON. Mr. Willis, when you were talking about the referendum a moment ago, were you talking about one farmer, one vote, or were you talking about one vote per acre, or have you figured that out? That is kind of a technical point that comes up in referendum discussion from time to time.

Mr. WILLIS. We would like to see it put to the producers.

Representative HAMILTON. One farmer, one vote?

Mr. WILLIS. For the producers. In other words, not necessarily—we have so many absentee landowners, and I am talking about a producer vote.

Representative HAMILTON. But the guy that farms 5,000 acres would have one vote, and the guy that has 50 acres would have one vote?

Mr. WILLIS. That is the way it has been done in the past. I wouldn't argue with it either way, as far as that goes. I think it would carry either way.

Could I make one comment here? You heard so much about producing for the Government or producing for the market. For the record, I would like to say that the American agriculture movement wants to produce for the market too.

As a matter of fact, that's one reason why we think we need supply management so we could produce for the market and not for the Government.

Representative HAMILTON. One of the things I would like you all to comment on and see if we have some agreement, what should we do in the Congress about export subsidies? How do you all react to that?

Mr. WILLIS. My reaction is that other nations have it and we are forced to deal with it in the international market where there have been attempts made in the last couple of years to get them to eliminate theirs and they have not done it, and they are not going to do it. At best, they will give you a token reduction.

So, it boils down to the fact that it looks like we may have to fight fire with fire.

Representative HAMILTON. Mr. Wright, do you agree with that?

Mr. WRIGHT. Partially, Congressman Hamilton. We have been basically opposed to export subsidies, and I think Mr. Jones, in his presentation this morning, pointed out their cost effectiveness. You'd have to spend \$2 to \$2.50 for every \$1 in value received, which we don't think is very cost effective.

We feel more strongly about that we should sit down and try to negotiate with these other exporting countries of the world a rational marketing world structure.

I think it needs to be pointed out that when you go to undercutting someone in any market, you always open up the possibilities of

retaliation. And I think this is what we are experiencing in our world market now.

Again, I want to point out that it has been the United States that set the world price. If I recall correctly, a couple of years ago we had some legislative people from Canada come down that wanted to meet with some Congressmen and Secretary of Agriculture to try to maybe work out some cooperative arrangements between the United States and Canada, who export—if my memory is correct—about 80 percent of the wheat that goes in world trade.

Well, you know, if you could get those two countries to basically agree on a pricing structure, you have got a great part of the battle won.

Representative HAMILTON. Do you think we ought to do that?

Mr. WRIGHT. We would very strongly support it, we think there needs to be some way of an orderly world marketing system, that we can no longer live with this price cutting system or situation that we have got now.

I didn't get the opportunity, I shook my head yes in voting for the mandatory farm program, and I want to express our support for that.

Representative HAMILTON. You favor the referendum idea?

Mr. WRIGHT. Yes; I do. We would oppose it unless it had the referendum provision.

Mr. VILLWOCK. Farm Bureau looks at the export subsidies in two ways, Congressman. It seems like it is a necessary evil right now to set the world back in line to the way reality really should be in that, you know, we understand the EC's position that they need a strong agriculture for their national defense, and we think that is fine if they want to subsidize their farmers to have adequate domestic production for that safeguard.

But when they get into the world market and start subsidizing, we feel that we must meet them through blended credit or things of this nature.

But the way we would really like to address the situation is send a message to them through the target price freezes or the freezing of the loan rates.

And the quickest way to send terror to Canada, to EC, to Argentina, is to send them a message that the loan price is not going to be at such a level that they can increase their production.

And if we lower these loan rates, we are going to take the Argentinians out of the market, we are going to take the Canadian Wheat Board to the cleaners, and they are eventually going to have to face reality.

The way is now, we cut production through the PIK program, and the Wheat Board tells the Canadian wheat farmer, "Boys, let's grow another 10 percent." That's the way it works, so I think we need to send a signal to them that we are not going to be the price setter and they can set one underneath us and take the world market away from us.

Mr. PEARSON. I basically have to agree that we do need to spend some money in financing the crops abroad through Public Law 480, CCC, revolving credit fund, credit buydown, and so forth.

I have a little problem with the exporting countries trying to divide up that share of the world market and say this is going to be our part.

Because I would like to believe as a producer in this country that we are efficient and we need to compete with those other export countries, and I think by doing that, we can get our share of the market and maybe a little more.

Representative HAMILTON. Let me ask about one other thing that came up this morning. I would just be interested in your response to it.

I raised several times the question of the small farmer/big farmer problem on commodity programs. Do you have any feeling or comments about the equity aspect of the commodity programs, the fact that the large producer is getting a large percentage of the price supports?

Is that something that concerns you, or is it fair the way we now have it set up, or is it something that we ought to look at in the Congress more closely?

Mr. VILLWOCK. Well, Mr. Jones said this morning, it may be all relative, what is a large farmer here in Clark County may be different where I am at and different in different parts of the State.

In the township I live in southwestern Indiana, there are over 26 four-wheel drive tractors in one township. I am farming approximately 1,700 acres, when I throw my dad's acreage in, and we're not considered a large farmer in our area.

Whereas, if you'd come over in this part of the country, we'd probably be one of the larger farmers in two or three counties.

So, I think you have to take that in perspective. And addressing this issue as a young farmer, and people who look to the future, if you take away the dream of our people, of that ability to become larger, to become progressive, to increase our part of the market share, I think we have to look at that question.

And if we take away that dream of agriculture, what is going to happen to us all?

Mr. PEARSON. I have trouble drawing that line between a small farmer and a large farmer. If I'm at 500 acres and the neighbor is 50, then sure, I'm a large farmer. I think we all have to be treated alike whether we're 50 acres or 500 acres or 1,000 acres.

If we want to start another social program, and I think we ought to draw that line, I think we have enough social programs in this country today.

Ms. BRIGHT. I think it comes back to the farmer-producer. In our particular instance, we farmed land for five farmers in 1982, one of which was us. But we were the only ones who had a farm debt, we did all of the labor, we carried all of the risk.

We are the producers and—I know this sounds selfish, but I would like to see the producer—I think Mr. Willis mentioned that, let's do something for the producers, these other people are absentee farmowners, and yet by the definition of a farmer, they are still considered a farmer. One is a 70-some-year-old widow lady who inherited the farm and has adequate finances, she doesn't have any debts, and she is fine.

And there is nothing wrong with her owning that land, but I think we need to make a little bit of a difference there between the landowner and the actual farmer-producer.

Mr. VILLWOCK. Let me address that real quickly as a young farmer who can't own all of the land that I farm. I need these landowners, they need a return on their investment just as I need a return on my investment.

They are the crux of my operation—of the 1,700 acres, I only own 400 of it, and I need landlords. If they don't get a return, and they traditionally take a lower return on their investment than most other investors do, so they shift their money out of agriculture and put it in the bond market and the stocks, or something like this. What is going to happen to the structure of agriculture, do the giant corporations come in? Who takes care of agriculture? These people are necessary for me.

Representative HAMILTON. OK. Now, I would like for you to comment on the PIK program. What do we do from here on, what about 1984, what would you like us to do on the PIK program?

Mr. WILLIS. I would like to say first off that the American agriculture movement did support the idea of the PIK program in the beginning. We realized it would be expensive, though it was paying for the past sins of government, to be frank with you.

Representative HAMILTON. Don't look at me so hard when you say that [laughter]. It makes me distinctly uneasy. I'll not take it personally.

Mr. WILLIS. I think it was designed originally to be a 2-year program. I think the Lord has implemented his own PIK program at least in some areas and probably we will not see it probably in areas of cotton and in the feed grains.

Representative HAMILTON. Did you say you would not need it in the area of feed grains?

Mr. WILLIS. We may not, it is too early to tell in the drought yet, but if this drought continues, it may solve that problem too.

In the area of wheat, we definitely do need some type of program because we're still going to have too much wheat. And it is just something we will have to reassess a little bit later on in the growing season, to see exactly how much is needed.

Representative HAMILTON. Do you have wheat down there in Tennessee?

Mr. WILLIS. Yes, sir.

Mr. WRIGHT. With regard to the wheat program, I would recommend that the loan rates be increased and the target price eliminated. I think the target price is one of the big costs to government.

The point I think needs to be made is the fact that when you give the farmer a loan on a various commodity, you have got something tangible to show for the money he has spent.

And at some point in time, you can move that commodity into the market channels and recoup your cost. Under a target price concept, this is a direct subsidy to the farmer—or gift to the farmer, which, you know, goes against the farmer's nature.

The Farmers Union wants a structure where the farmer can receive his basic price out of the marketplace. Now, we don't agree with the free market, we don't think there is a free market. We

think it's a competitive market and we think the farmer should have some opportunity of helping to set the price structure of that market.

So therefore, we are recommending some supply management programs, some reserve programs, which give the consuming public some protection which we think they deserve.

Representative HAMILTON. And what about PIK?

Mr. WRIGHT. On feed grains, you know, I will have to agree with my friend to my right here, right now you can't tell, we may not need a PIK program.

If we get some rain and we do get a halfway decent crop, you know, if our citizens of this country decide we still have an excess production and excess carryover that they don't want to pay the taxes to carry, then we would recommend a PIK for feed grains with the loan rates higher and the target prices reduced.

Mr. WILLIS. Can I make a comment? We have seen recently figures put out by the USDA where the cost of this farm bill or the farm program this year was \$21 billion. I am sure you have seen these figures.

The way this is presented, it appears as though this is an actual cost to Government. This may be the appropriation that is needed, but what they are not saying is it is right at \$17 billion that is recoverable.

So, you take the \$17 billion, actually \$16,926 billion away from \$21 billion, and you come out with something less than \$5 billion.

Representative HAMILTON. What do you mean recoverable?

Mr. WILLIS. This was listed in Mr. Dawson Ahorst's testimony before Mr. Glen English's committee. I think I have it in records back there with me. We take it this is Commodity Credit Corporation loans, reserve loans, and so forth. But he listed as \$16.926 billion.

Representative HAMILTON. I will be glad to check into that. I would like to see it if you have a copy of the testimony, why don't you leave it with me here? If not, I will look it up because I—

Mr. WILLIS. I don't have the whole testimony, but I have the charts.

Representative HAMILTON. Very good. Any further comment on the PIK program?

Mr. VILLWOCK. To address the PIK, Congressman, the PIK as we well know is a short-term solution to a long-term problem, and it was very effective, and what it accomplished, we needed to diminish the reserves. As long as we have the reserve over us, loans and targets become maximum and minimum. So, we have worked down the reserves hopefully, and hopefully we continue to do so. We are going to have to probably have a PIK program of some nature for feed grains—like the gentleman says, it's up to Mother Nature.

Mr. PEARSON. I think we can all probably agree on this one. I do think it's probably a little early to tell, you know, we're getting about 10.6 billion in corn crops at the beginning of this year for a 3½ billion carryover, trade estimates. Say we need a billion, billion and a half of corn to keep the pipeline functioning during the season. When you get down to this level, I think at that point probably the PIK program is not necessary. The same would be true for the commodities.

Representative HAMILTON. I don't know that I have the latest information here, I have got a report that was prepared in July, early July, July 8, about a month ago, which indicated that on corn production in 1983, it was expected to decrease by more than one-fourth from the record 1982 crop—8.4 billion bushels to 6.05, wheat production in 1983 is expected to drop by less than one-fifth from 1982 levels and from 2.81 billion to 2.35 billion.

Those figures may have been revised in more recent days. I know the Department is watching them very carefully.

I will be interested, Mr. Willis, in your cost figures on PIK. But I am generally under the impression that PIK has been the most expensive agricultural program ever put into effect.

Mr. WILLIS. It is another area of confusion. The \$21 billion he referred to does not refer to the cost of PIK. The PIK is to be added on to it. When you add that to it, then you're talking about some \$30-odd billion, the terminology that they're using.

The point I was trying to make is how confusing these numbers have become, you know.

I think it needs to be pointed out where this money is going to. For example, if you get a breakdown of it, Public Law 480 is costing Government a little over \$5 billion which is more than deficient payments and so forth to the farmer, you see.

Representative HAMILTON. Well, I'll certainly be glad to look at your figures, and I am impressed by the unanimity of the panel on the PIK program and your comments.

I must say that each of you have done an excellent job in presenting your point of view and the committee is grateful to you for it.

I will give you an opportunity to make any concluding comments if you are so disposed. If not, we will move on to the next panel. Do you have any comments at all? Thank you very, very much for your participation.

Our next group of three witnesses are not here. We don't have word from them and rather than delay you, I think we ought to go ahead. Mr. Keith Huston is director-at-large, North Central Regional Association of State Agricultural Experiment Station Directors.

We are seeking testimony in this final segment of the hearing from specific areas of agriculture. I presume, Mr. Huston, that you will be directing your remarks toward agricultural research. We are very pleased to have you with us and look forward to your comments.

Your statement, of course, will be entered into the record in full, and we would appreciate your highlighting it or summarizing it if you can, or reading it if you prefer.

STATEMENT OF KEITH HUSTON, DIRECTOR-AT-LARGE, NORTH CENTRAL REGIONAL ASSOCIATION OF STATE AGRICULTURAL EXPERIMENT STATION DIRECTORS

Mr. HUSTON. Congressman Hamilton, I find myself in somewhat of an awkward position because I really am representing three different sized hats. The smallest hat is representing the 12 Midwestern States. The second hat is cochairman of the National Agriculture Research Committee and is to represent both the State and

Federal interests in research. And the third hat is president of the Agriculture Research Institute of the United States and is to represent all aspects of agricultural research, both industrial and private sector and public sector.

I think much of the introductory remarks that I had have been made. Perhaps though I should reaffirm my pride and strong belief in our ability in agriculture to do what we can. I guess I go home every night excited by the fact that I know our producers and our suppliers and our marketers are among the best in the world.

Agriculture is one of our great strengths, and I feel that our long-term goals should be in building on this strength.

In terms of the research program, some people give us more credit than they should, they act as if somehow the research itself is what makes the wheels go around, but in truth, we are a handmaiden to agriculture and the service industries in that they must take the discoveries and must make them work and must be the ones who somehow get from them the important things to them.

My secretary is very active in the women's movement and I had some problems in deciding whether I should use the word "handmaiden," research is the handmaiden of agriculture. I got by with it all right.

The most important part to remember about research is that it is an investment, that it has a rather long maturation process—that is to say, the research that is undertaken today by and large will come on to stream 3 and 4 years from now and the major benefits of it will come 8, 10, and 12 years from now.

So, you're not talking about something that does something right this minute or in the next year or so.

Now, some aspects of it, of course, do emerge immediately, and these are important, but the basic issue is long-term effects.

As we see the research issues, we see the future needs of agriculture as being essentially finding a better way of enabling our producers and our suppliers to be more productive—that is to say, get more out of what they put in, to get higher incomes as a consequence of their productivity.

We also see this as being partly domestic and partly international trade. We believe that the international trade issue is one that we currently are handling in a relatively gross fashion, and over the course of the next 10 to 20 years, we need considerably more understanding of the opportunities that exist country by country.

We need to know the kinds of political and social and economic structures that they have because if we are going to market in those markets, we may need to help develop the markets.

Much of the international trade activities seem to me in recent years to be more of a general scope than more specific sort of information that was needed. In this connection, I might mention that we asked a group of leading trade economists, agricultural trade economists, to give those of us in research administration some broad prospective of what was needed in the way of research in the area and they just have completed and I have a draft of the copy, 70 pages.

They completed an overview of what was really needed in this country, and I find it as a former dairyman and not an economist very helpful in addressing what the needs are.

Specifically, they think we need to expand greatly our concern about trade, to learn more about the individual nations, about their trade policies, about their political views and about their governmental views that maybe in some way may affect our ability to trade with them.

I think we already have an effective research system, most of us are aware of that system and that we have a State segment, the State Agricultural Experiment Station, the one at Purdue, University of Kentucky, University of Tennessee, wherever it is at the land grant college.

Then we have the Federal system—the State system with the State experiment stations, one in each State at the land grant universities where they tie in with the extension service and where they tie in with the undergraduate and graduate research programs is an effective way of dealing with the research needs of the States.

The State site programs are by and large very broad-based and they encompass all of agriculture, forestry, processing, distribution, marketing, rural home and community affairs, natural resources, conservation, environmental issues, consumer concerns and human nutrition.

The Federal programs, on the other hand, are more narrowly focused. Agriculture research focusing on agriculture, forestry research focusing on forestry research, and then economic research focusing on national and international aspects of research.

One of the principal efforts during the last 10 years has been to try to identify more clearly the research needs of agriculture. In this process, I think I now have four shelves of a bookcase filled with priority reports—the national corn growers, the soybean growers, the soil and water, with focus of Western concerns, the cotton producers—and you can go down list after list in which both producers and processors and consumers and researchers have been together to try to identify priorities.

So, if anybody is curious about what the priorities are, there is a vast array of priority information.

And I guess as a research administrator, I go home at night a little bit weary trying to figure out how in the world we're going to get all of that done with the resources that we have.

One of the problems that we have in agriculture research is that it is a relatively tiny investment. The investment rate is something on the order of three-fourths to 1 percent of the total gross sales, and when you do the arithmetic on that, what it means is that you must have, if you're going to make your investments in proportion to the size of the commodity, which we don't do, incidentally, but if you were to do it as a nice simple way of doing it, you would find that in order to afford one scientist at the current rate of research scientists, you would have to have at least a \$15 to \$20 million crop to afford one scientist.

Now, the problem with it, take for example the problem over here in Vincennes with the melon growers, now, they have got a couple of entomologists from USDA, and then they have got some Purdue researchers there. The problem looks like a plant pathology problem, and they have an entomologist there.

The problem looks like a plant pathology problem or an ozone problem. And the size of the industry is not large enough that they really can afford to have the kinds of expertise that you really need to address those problems, which are essentially a plant biochemist and a plant pathologist and an entomologist and a production specialist on that size of a crop.

So, the shortness of investment make it very very difficult, particularly with intense specialization—one man knows this field just as fine as he can know it, but when he gets to jumping over into the next guy's field he doesn't know it as he should.

My own impression is that in terms of the requests of us in responding to the producers and the suppliers and the marketer's needs, is that we simply don't have the resources to do this.

And we have looked some at where those resources ought to come from, and I think you are aware that the States themselves, and this is the only field of research in the Nation in which this is true, that the States themselves provide by and large the vast share of research that goes to the States.

Now, in every other area as you look at research—you go to chemistry, physics, geology, any other sort of research that goes on in the States, you will find this comes principally from the Federal Government. This is not true in agriculture, it comes primarily from the State government.

My impression is that the deficient element in terms of investment is in terms of what the Federal Government has been willing to put in.

I would like to summarize rather quickly the issues that I see in terms of new emphasis, not in terms of new programs but new emphasis. The first thing we have created is a system, an effective, well-organized structure, both Federal and State units which makes it possible to have decisions made, both at the State level, at the area level within the State, at the regional level and then at the Federal level.

It makes it possible for the people in agriculture to be able to pick up the phone and call Purdue or call the University of Kentucky or call Ohio, wherever it is they call in that particular State and say I have got this problem, I need this answer, what can you do.

The nice part of it is that if the guy says I'll call you back tomorrow, you can pick up the phone tomorrow if he doesn't and call him back again.

I think we have had enough experience with centrally planned research systems and centrally planned economists to know that this is a more effective way of doing it than trying to have a completely controlled national system.

The second advantage of this particular system is that is is scattered throughout the whole country, that the people in Indiana have locations within the State, they have Purdue, just as the people in Kansas or California.

Another element that is significant is that all of the research is consolidated into a single unit in the State, and that makes it possible for resources to be shuffled from one to the other, to be increased or decreased as the problems change.

And the fourth one is there is close linkage between the States and federally directed units, so we have some complementarity between what the States and the feds do.

So, we have this system that has responded, that doesn't respond as rapidly as we would like but we could argue it is a consequence of specialization of the resources.

Now, what does the system need to do? I think our principal goal is to provide producers principally, and all other segments of the food and agriculture system, a better choice of options for improving their productivity and their efficiency.

We want to so that the young men and some of the young women can go home and say this is my issue, this is what I know, this is what I need to know in order to move my efficiency in terms of use of fertilizer, pesticides, tractors, whatever it is.

Now, within this particular area, in terms of the biology of plants and animals, we think there may be a special opportunity that lies ahead in the next 20 years in biotechnology and gene manipulation and related issues.

The second major emphasis that we see is the need to provide our producers and others with instead of piecemeal information, a way of fitting it altogether into a system that can be custom tailored to a particular location.

And the third element we think is quite important in terms of our research is to provide larger and more stable markets. This can be done a number of ways. One of them is alternate uses of agricultural products. The energy use was identified, I drove through the western part of my region into Iowa and alcohol-supplemented gasoline was on sale there, North Dakota is already working on diesel fuel from sunflowers, Nebraska is working on it, Indiana has a fueled bed approach to the use of biomass, so there are a wide variety of uses.

Product tailoring for international markets. This has been going on, for example, at North Dakota at this moment, with their pasta wheats. They have been working with the Italian Government to develop the kind of pasta wheat that the Italians like—not the kind that the Americans like but the kind the Italians like.

And this is true also of the wheat in Kansas in trying to develop bread wheats that are suitable for the European market, and we can go on indefinitely.

More effective international trade arrangements. We have had in most of our States, as the export markets developed, we have had our State departments of agriculture, we have had our State economic commissions working closely with our producer groups in trying to explore new opportunities in marketing.

And I believe, however, that we need something more than that because these marketing issues transcend State boundaries and go into regions and enlarge on that.

The fourth issue is one that has been discussed here, and we need clear economic signals to producers.

The second major emphasis that we think needs to be explored is one that your are here for, and that is somehow to develop trade policy options that fit into a coherent, cohesive national economic and commodity policy program.

We think it is important in this that we maintain our current advantage in most commodities and expand that advantage of our producers. We know that in order to do that we have to watch after the transportation system, which right at the moment has some real worries with it; we have to have our commodity policies consistent with an open economy, not a free economy but an open economy, which implies that we can have access to other markets just as other markets have access to our market.

We have to do something about the instability of prices on the international market. And then we have to be completely aware that the monetary policies of this country and other countries is a major factor in commodity market instability.

There are some other emphases, one that we continually worry about, and that is conservation, protection, and enhancement of our soils and water. We continue to worry about consumer needs, about providing the kinds of food that they need, foods that are free of toxic substances, foods that are nutritious, foods that the people will eat.

And then, finally, we are concerned about how well our producers and all of the residents in the rural areas get along and what sort of life they have. Thank you.

[The prepared statement of Mr. Huston follows:]

PREPARED STATEMENT OF KEITH HUSTON

Agricultural Research and the National Economy:
Current and Future Directions

Mr. Chairman, Members of the Joint Economic Committee, I share your concerns about the prolonged, depressed economic condition of agriculture and its historic exclusion from our national economic councils. Yet, I take great pride in agriculture's past and current accomplishments. Our economic productivity is virtually unmatched in the world. Even if we were to add to current consumer prices for food and other agricultural products our investments in farm income stabilization programs, we as consumers still would be spending less of our income for food than we would most anywhere else in the world. Although our export trade this year likely will be 20 percent under the 1981 peak, it nonetheless likely will be a substantial \$35 billion. During 1977-1980, trade in agriculture provided us a yearly average surplus of \$16 billion while nonagricultural trade provided an average deficit of \$44 billion. Clearly, agriculture is one of our Nation's greatest strengths both domestically and internationally. Our national well-being lies in building on such strengths.

Policy Changes: An Opportune Time

Now, just when we seem to be inching our way out of our current national recession, it is most timely that you seek to alter economic policies so that they will include agriculture as one of our Nation's pillars of strength. Those

policies must focus simultaneously on domestic issues and on international trade concerns. The impact of domestic commodity programs on international trade must be clearly assessed. Careful attention also must be given to the interaction between U.S. monetary policies and international capital markets for this interaction has shifted the impact of monetary policy onto the export and import competing sectors of the Nation's economy. Despite monetary policies that now lead to over-valued dollars that inhibit trade, many of our agricultural commodities still retain comparative advantage over those of most other countries of the world.. Our agriculture is resourceful, competitive, and already a "high-tech" major economic sector. It can continue and enhance the competitiveness of its many commodities under appropriate policies.

The Dawning Era of Science Management Power

I have been asked to comment principally about the role and direction of research. Since World War II, agricultural productivity has been fueled largely by science power. A new era of science management power is dawning. Research is its handmaiden. Research must set its sights on long range, agricultural goals. Some of today's investments in research likely will bear fruit in three or four years, but most will have their greatest impact in the 1990's. Today we are just harvesting the fruit of investments made in the early and mid 1970's. That period, you will remember, was the period of Soviet grain sales and price controls on meat: two totally unexpected events with major impact on our agriculture. I wonder whether we are

any better equipped now to predict what will occur in the 1990's than we were then!

There Is No Easy Fix On Overproduction

During each of our recurring periods of excess production and low farm incomes, there are some who simplistically see a direct and immediate cause-and-effect relationship between research and overproduction (or alternatively, inadequate marketing). They would reduce research investments. Yet those most intimately involved in agriculture see it quite differently. They would expand research for it can provide producers and suppliers and others in the food system new and broader options for improving their net income. Let me cite a recent example.

Early this year, the USDA's Agricultural Research Service proposed to redirect in the next six years 18 percent of its current research programs--roughly a three percent change each year. (ARS research is only one-third of the U.S. publicly-supported agricultural research.) The uproar has been so great that both Senate and House appropriations subcommittees directed that the plans be delayed until additional study could be given the proposal.

The real issue is underinvestment in agricultural research. I want to come back to that issue later.

U.S. Agriculture's Future

As we look ahead to the future of agriculture in the next two decades, we can confidently predict that both domestic and foreign demands for agricultural products will expand. Population growth and increasing wealth both here and abroad will

provide that additional demand.

For domestic markets alone, our capacity to produce now and in the future should easily exceed those demands--we can estimate that reasonably closely. However, international trade is another matter. International trade in food and agricultural products, only a minor concern until the 1970's, will loom ever larger in the scheme of things in the next two decades. Many opportunities will present themselves automatically, principally among the developed countries. Many other opportunities, principally among the developing and underdeveloped nations, will emerge only if we, ourselves, carefully nurture them. Currently, we carry on significant trade with more than 50 countries and some trade with many others. Clearly, while we now can predict an increase in demand we cannot accurately predict the magnitude or nature or sources of that demand unless we somehow set out to do that. To predict future demand accurately, we need to know as much about their national goals and policies and their productive capacity and the dynamic changes in their future as we will know about our own country. We do not have that capacity now!

The National Agricultural System:
An Efficient, Time-Tested System

How does research fit into that future? We already have in place a system of state and federal research units that have responded to similar challenges in the past. It is a good system that fits the special and complex characteristics of U.S. agriculture. It is dispersed across the country just as agriculture is dispersed across the country.

Priority setting, decisionmaking, fiscal support, research and program management are not centralized in a federal department or agency as is true in most other publicly-supported research.

The State Agricultural Experiment Stations

The central core and largest segment of the system is the State Agricultural Experiment Station system. The station system performs 58 percent of the Nation's publicly-supported agricultural research. Each state and territory has a centrally administered research unit, a state agricultural experiment station, most of which headquarter at the state's land-grant university. Though most research scientists of the state station are at the headquarter's location, some often are stationed at branch units placed strategically across the state.

The experiment stations are all broad mission units. Each deals with its state's research needs in agriculture; forestry; processing, distribution, and marketing of agricultural and forestry products; rural home and community affairs; natural resource conservation and environmental issues; consumer concerns; and human nutrition. Each is closely associated with the state extension service and with undergraduate and graduate education colleges of the land-grant university. In fact, each usually shares faculty with extension service and the colleges. Each also is the principal source of support for training future scientists in that state. Although the stations receive about 30 percent of their resources from the federal government, their programs are under state direction.

Additionally in many states, there are other smaller research units with relatively narrow missions in forestry or veterinary medicine and in some states special purpose 1890 institutions.

The Research Agencies of the USDA

The system is completed by four agencies of the USDA. Three agencies--Agricultural Research Service (ARS), Economic Research Service (ERS), and Forest Service Research (FS)--perform restricted mission research as indicated by their name, and the fourth, Cooperative State Research Service, administers federal funds supporting state-directed programs. The three USDA research agencies perform 37 percent of the publicly-supported agricultural research and, of course, are federally-directed.

Research Needs of Agriculture

The agriculture of most states continues to be very diverse, involving many different commodities produced under a wide range of agroclimatic and economic conditions that vary each year. Simpler problems already have been solved. Where once general answers to problems were adequate, even greater specificity and precision are being requested. Thus, research needs of agriculture are increasingly more complex and more demanding than in the past.

Researchable Needs; Priority Setting

During the past 10 years, practically all aspects of agriculture have been examined repeatedly and exhaustively. Users

and scientists have joined together to identify research needs and opportunities and to single out avenues of investigation most likely to be productive. These assessments have been performed nationally, regionally, within every state and research unit, by commodities and topics, and within scientific fields. Without doubt, there has been far greater attention to research priority setting and need identification in agriculture than in any other research field.

Needs of Agricultural Researchers

Solving modern agricultural research problems requires ever increasing scientific specialization. Problems once solvable by a single scientist now require teams of scientists. Solutions also require more sophisticated and costly equipment and larger, wider, more expensive experimentation. With static resources, research administrators are forced to choose between hiring the additional expertise needed to solve problems and providing adequate modern resources to support the investigations of those experts. Because administrators and scientists choose additional expertise, many scientists have only minimal support. Equipment often is old, obsolescent, and inefficient. Many scientists are seeking out grant support wherever they can find it even though it may not be wholly compatible with the pressing needs of agriculture.

Current Support of Agricultural Research

Federal support of agricultural research in constant dollars has been virtually stagnant for 20 years. Although the USDA

budget repeatedly favors its in-house agencies over state partners, the Congress has maintained the partnership. Until the recent recession, state support of agricultural research had increased. However, reduced state revenues caused by the recession have caused at least 30 states to fall behind in their support of agricultural research in the last two years.

Past Returns on Investments in Agricultural Research:
Future Investments

During the last 10 years, numerous studies have demonstrated an unusually high rate of return on public investments in agricultural research--on the order of 50 percent annual return. Many argue that this reflects a sizeable underinvestment in agricultural research. Who is missing this investment opportunity? Some states are but it is primarily the federal government. Some suggest the underinvestment is as much as 25 to 50 percent of the current investment.

Synthesis and Resolution of Issues:
New Directions for Emphasis

From the exhaustive analyses of needs and priorities, one can identify a number of new directions for emphasis:

- * Enhancing the research system's effectiveness in responding rapidly and efficiently to changing needs of agriculture.

The effectiveness of the U.S. research system depends on the integrity of its structural organization, stemming from

- * The plurality of its units, decisionmakers, and funding sources.

- * Its dispersion throughout all agroclimatic areas of the country where it is in close contact with and can respond rapidly to changing needs.
- * Its consolidation of most research activities related to the food and agricultural needs of a state into a single administrative unit which in turn provides flexibility to shift and to aggregate or disaggregate resources from one issue to another.
- * Close linkages between state-directed and federally-directed units created in part by federal formula support of state programs and by reciprocal sharing of state resources with federal units.
- * The existence of restricted mission federal agencies capable of responding to federal priorities and needs.
- * Providing producers and all other segments of the food and agricultural system a greater panoply of options for improving productivity and efficiency.
 - * Providing more precise information on important aspects of the biology of agricultural plants and animals, their products and their pests. A special area of opportunity lies in biotechnology.
 - * Providing systems approaches that integrate new biological, economic, and policy findings into individualized and custom-tailored agricultural production and marketing systems.
 - * Providing larger and more stable markets through
 - * alternate uses of agricultural products
 - * product tailoring for international markets
 - * more effective international trade arrangements
 - * clearer economic signals to producers
- * Developing agricultural trade policy options within a cohesive framework of national economic and commodity policies which
 - * Maintain U.S. comparative advantages in agriculture.
 - * Sustain an efficient transportation and marketing system.
 - * Maintain U.S. commodity policies consistent with an open economy exporting stance.

- * Accommodate or reduce price instability in international commodity markets.
- * Identify monetary instability as a source of commodity market instability.
- * Protecting, conserving, and enhancing our natural resource base, principally soils and water.
- * Providing for consumer needs.
- * Enhancing rural home and community life and affairs.

Biographical Sketch

KEITH HUSTON

Keith Huston serves as Director-at-Large for the North Central Regional Association of State Agricultural Experiment Station Directors. Educated at Wisconsin, Dr. Huston was later employed as a professor of dairy science, specializing in dairy cattle genetics, at Virginia Polytechnic Institute and State University, Kansas State University, and the University of Minnesota. Commencing his administrative career in 1969, Dr. Huston has served as assistant and associate director of the Kansas Agricultural Experiment Station and as director of the Minnesota Agricultural Experiment Station.

Dr. Huston currently is President of the Agricultural Research Institute of Washington, D.C. and Co-Chairman of the National Agricultural Research Committee (NARC) of the Joint Council on Food and Agricultural Sciences (JCFAS). He has served as Chairman of the Experiment Station Committee on Organization and Policy (ESCOP); Chairman of the Committee of Nine; and Co-Chairman of the International Science and Education Council (ISEC) Research Committee. His service on national committees and task forces includes: World Food and Nutrition Study, National Academy of Sciences-National Research Council; Panel on Agricultural Research, Office of Technology Assessment (OTA); Ad Hoc Joint Committee on Country Programs, Title XII Legislation, Agency for International Development; Commission on Undergraduate Education in Agriculture and Natural Resources, National Academy of Sciences-National Research Council.

He also has served as a member of the Board of Directors, Hormel Institute; of the Research Advisory Board, North Star Research Institute; and Advisory Council of the Committee on Science and Technology, Minnesota Legislature.

The Director-at-Large serves in a liaison role in planning and coordinating research among the State Agricultural Experiment Stations of the 12 North Central states. He is responsible for providing analyses of current research and projections for future research. He acts in behalf of the North Central directors on issues developing in the USDA and other governmental agencies and with the Congress. He serves as a representative of the North Central Regional Association of State Agricultural Experiment Station Directors on regional and national committees, and associations involved in or concerned with research.

Dr. Huston is author of more than 150 articles in his administrative and professional fields.

Representative HAMILTON. Thank you very much, Mr. Huston. Mr. Eddleman is here now from the Soil Conservation Service, and I guess Mr. Robison also has arrived. We will turn to you, Mr. Eddleman.

Mr. Eddleman is the State conservationist, U.S. Soil Conservation Service, from Indianapolis. Your statement, Mr. Eddleman, will be entered into the record in full, and we look forward to your comments.

After your comments, we will turn to Mr. Robison, and then I have a few questions for the panel.

STATEMENT OF ROBERT L. EDDLEMAN, STATE CONSERVATIONIST, SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Mr. EDDLEMAN. Thank you, Congressman Hamilton, I am pleased to respond to your invitation to appear before this committee and provide some views on future agricultural policy.

My comments will be directed toward the two basic resources required for a continuous agriculture—soil and water. My concern for these two resources developed as I grew up in an erosion prone water short area of southern Indiana, less 40 miles from here.

During the first 200 years of our existence as a nation we conquered the wilderness, developed the finest Nation the world has known, and are now at work conquering new frontiers in science and space.

Production of our bountiful food supply and other necessities has not happened without adverse effect on our future production potential. Research consistently shows that optimum plant growth and food production occurs in the mellow topsoil layer and we are losing that layer at an increasing rate.

Indiana, through the cooperation of State agencies, Purdue University, USDA, and others, is nearing the completion of a statewide soil survey effort. One of the facts shown by a soil survey—which is made by soil scientists examining the top 50 to 60 inches of soil material—is the degree of soil erosion. Early analysis of the soil survey data tells us that 10 percent or 2.3 million acres in Indiana is severely eroded having lost all or nearly all the topsoil layer. An additional 4.6 million acres or 20 percent of the State is moderately eroded having lost about one-half of its topsoil. These two erosion classes compose an area equal in size to 27½ average-sized Indiana counties.

Another 8.1 million acres has lost more than one-fourth of the topsoil layers.

Total soil erosion in Indiana is estimated at 98 million tons per year. That's enough to fill 4.9 million trucks with 20 tons each. Nearly 70 percent of this erosion occurs on our cropland soils.

Soil erosion has an effect on the agricultural economy. According to Purdue University studies—summarized in Bulletin AY212, "Indiana's Soil Series and Their Properties"—yield reductions of up to 20 percent can be expected when severe erosion has occurred. This is particularly true on the sloping Cincinnati soils here in southeastern Indiana that have the clayey fragipans. These soils in a slightly eroded phase produce a long-term average of 105 bushels of

corn per acre. However, when severe erosion has occurred, this yield drops to 85 bushels per acre and that's with the same fertilizer, chemical, and labor inputs. In economic terms, this 20 bushel yield reduction can mean between \$50 and \$60 per acre when corn is \$2.50 to \$3 per bushel. An 85 bushel per acre yield does not pay for production costs in most cases.

Soil erosion is a simple, yet complex process. It begins when a raindrop hits bare soil and breaks particles of soil loose. The process is completed when enough water falls that it begins to run off—taking the loosened particles with it. Not all the eroded soil leaves the field or farm. Some settles in low spots in the field, some stops in roadside ditches and some moves on downstream to lakes, streams and finally into our major rivers. It's estimated that 15 tons of sediment moves out of the mouth of the Mississippi River each second. Four billion tons of sediment are delivered to streams in the United States each year, 75 percent of this comes from agricultural land in the midwest.

These sediment deposits create another economic cost due to erosion. Sediment often stops in road ditches or other facilities reducing their effectiveness. Clean out costs can become substantial. One Indiana County Highway Department documented an annual cost of \$212,000 for sediment removal from roadside ditches alone.

Recent studies by Iowa University and others show that although most farmers believe soil erosion is a serious problem, many do not believe it to be a problem for them and even if they do, it is considered to be a long-term problem. Short-term concerns, such as cash flow difficulties, interest rates, commodity prices, and so forth are generally considered more important and thus receive the highest priority.

Water is also a concern in Indiana. We are blessed with an average of about 36 inches of rainfall each year. More than enough to meet all our demands for agricultural, industrial and domestic uses. Our concern is that this water doesn't always come when or in the quantities needed. This results in both flooding and drought conditions. Rural flood damages average \$83 million per year in our State. Urban damages are about \$43 million.

The purpose of my being here today is not to propose any new and exciting agricultural policies, but to remind us of the important role soil and water resources play in a healthy agriculture. And, second, to remind us of the fact that our soil and water resources have been and are affected by national agricultural policy.

Finally, my purpose is to ask, that as deliberation takes place on new policy decisions, we include the question—Will this policy result in further degradation of our basic soil and water resources?

Representative HAMILTON. Thank you very much, Mr. Eddleman, the final witness in this panel is Mr. Lindon Robison, professor of agricultural economics, Michigan State University, East Lansing. His field of expertise, as I understand it, is farm financing.

As you can note from this panel, we are hitting several different sectors of agriculture—research, conservation, and now farm finance. We look forward to your testimony, Mr. Robison.

I understand you do not have a prepared statement but that you will make some observations for us. We are glad to have you with us.

**STATEMENT OF LINDON J. ROBISON, ASSOCIATE PROFESSOR,
DEPARTMENT OF AGRICULTURAL ECONOMICS, MICHIGAN
STATE UNIVERSITY, EAST LANSING**

Mr. ROBISON. Thank you very much. I can make the prepared statement available on another day. I have been away from the office for about a week.

My testimony is divided into three parts. Before discussing the future direction of farm financing programs for the 1980's which is the topic I was asked to discuss, I would like to discuss the financial fortunes of farmers in the decade just concluded.

Indeed, any recommendation for future action should be made with a clear awareness of what has happened in the past and an understanding of the financial environment which now exists in the farming sector.

The second part of this testimony asks the question what should be the goals of the finance programs in the 1980's, and are there other programs which might make more difficult the achievement of these goals, and are there other farm program goals which may not be achieved because of the finance programs now in place.

And finally, I will discuss the third part, which is the principal topic for this discussion, what should be the next generation of farm programs.

Before I do that, I'm aware like you are that before I discuss the section on what is the current condition of the financial environment of the farming sector, it is clear that economists in retrospect appear to have 20/20 vision, and yet the future is seen through glass darkly.

The financial well-being of the farm sector depends on many critical factors. The key variable is the technological and managerial skills of the operator to convert inputs to land capital—seed, feed, chemicals, and fertilizer—into agricultural outputs.

To the extent that a nation possesses a rich natural resource base, of which we do, and farm operators are efficient in the task, the entire Nation will benefit.

The benefits occur because the resources are free from the agricultural sector and made available to other sectors in the economy. In fact, we often distinguish between developed and less developed economies on the basis of the amount of resources committed to agriculture.

In less developed countries, it is not unusual to find 50 percent of the population engaged in the production of primary agricultural products.

In this country less than 3 percent are engaged in the production of primary agricultural products.

In the efficient production of agricultural products, we have achieved unparalleled success. However, in the process of achieving this success, the number of primary agricultural producers has decreased, and the average size of farms increased.

Still, a large number of small farms survived side by side, large, full-scale production, supported to a large extent by their off-farm earnings.

It is difficult to say whether the gains in efficiency and the resulting farm structure has been the result of farm programs in the United States or have occurred in spite of them.

As I will point out, our programs have often operated at cross purposes. They may have occurred primarily because of nonagricultural programs which have encouraged rural residents to migrate to urban environments to take advantage of support programs not available in rural areas.

But, continuing with our description of the farm sector, technological efficiencies and successful managerial execution in the farming operations can occur providing the farm meets its financial obligations.

There is one rule that operates in farm businesses like all other businesses, that is, if you fail to meet your cash obligation, you are out of the game.

A measure of the farm sector's capacity to play this game is a ratio of its financial assets, those assets which can be converted easily to cash to its total assets. In 1970, 7.2 of their assets were in this form, in liquid assets. In 1982, this ratio was 4.1 percent.

This year, this ratio will likely increase because the equity in the farming sector, in the form of land, has decreased. Thus, in general, the liquidity or cash position of the farming sector has been weakened, and the possibility for farm failures has increased.

Now, I would like to explain why this weakened liquidity position has occurred which does not necessarily imply a weakened equity or profitability situation.

One of the characteristics of the decade just completed has been an increasing inflation. As a result of this, returns to the farming sector were in the form increasingly of capital gains a noncash return.

Inflation, however, increased the cash cost, primarily interest cost, so that cash expenses increased, returns maintained, or at least increased at the same rate but were in the form of a noncash return.

As a result of that, the agricultural assets in the form of land became an increasingly large share of the total balance of agriculture going from 68 percent and 70 to 75 percent in 1982. Meanwhile, a cost of the farm sector responded by increasing interest costs.

I constructed an example a year or two ago of some of the best farms in Michigan, cash grain farms. On those farms I—my figures indicated that if this were financed at 100 percent, there would be a cash flow deficit on an acre of land on the best farms, not the worst farms, of \$55.52.

Now, in that year, the year in which I calculated it, which was 1979, there was a 15-percent return to land—that is, capital gains were 15 percent.

So, if you took into account the \$185 capital gain, this farm was a very successful farm. But cashwise it was in disaster straits.

Thus, the inflationary conditions have restructured the financial community or the farming sector and made success tied more closely to cash flow management.

Now, I'd like to make a couple of observations with this regard. During the decade of the 1970's, the annual inflation rate was a

little over 7 percent, but the annual increase in the price of farmland was between 13 and 15 percent, of course, this varies State by State.

So, the increase in the value of farmland was greater than the annual rate of inflation, the average rate of inflation in the economy. And the reason for this was a monetary policy which had as its target the maintenance of a stable interest rate.

A study by the Dallas Federal Reserve Bank indicated that the real rate of interest—that is, take the interest rate charged by the banks, subtract off inflation, you're left with what we would call a real rate of inflation, was negative for a large part of the 1970's, negative—that is, farmers were being paid to borrow.

As a result of that, many farmers responded by increasing their leverage ratio and the farming sector in general has increased the leverage—that is the ratio of debts to assets or debts to equity, and correctly so, because the rules of the game were to increase your leverage ratio and increase your rate of growth in equity.

Then the national economy played what I call a dirty trick, they changed the rules of the game. Chairman Volcker adopted a policy of stable monetary growth which drove again this real cost of interest, the nominal rate less inflation, to a rate not experienced since the Great Depression.

Those farmers, of which there are a large class, with low debts of equity survived reasonably well, and the returns to their capital have been stable. Those young farmers with a high leverage ratio did not and are not succeeding because of the changed rules of the game.

The effect of this reversal in success formulas would have been much worse without the financial institutions which serve agriculture, and I am referring primarily to the Federal land bank and other lending agencies in the farm credit system.

And that is an interesting story. The Federal land banks provide 43 percent of the long-term debt, and they financed this debt through what is called a variable interest rate, which is in effect the average cost to them.

This average cost went up at a rate below other interest rates charged by private lenders.

As a result, the financial squeeze for those Federal land bank borrowers came at a slower rate; nevertheless, it is now catching up, and they are feeling the effects.

The other benefit of this rate was those who held low interest rate loans did not receive the windfall gains that would normally be expected.

So, summarizing the current financial condition of the farm sector we know that their welfare has not been tied primarily to agriculture programs per se, but national monetary policies with which all businesses are affected.

Now, I have one allegory that may or may not be helpful. Jumping from a plane—passengers flying in an airplane have a common goal of arriving on the ground, they are not, however, indifferent between the alternative ways to reach that goal. Jumping from the plane and flying without a parachute is the fastest way of achieving the goal, but the sudden stop at arriving reduces the desirability.

We have such a dramatic shift or change in our monetary policies that the farmers experience was somewhat like the passenger without the parachute.

I think a more gradual descent toward that goal, which I fully support, which was critical that we contain inflation, I would think the more gradual descent toward that goal would reduce some of the significant costs incurred by the farming sector.

Now, I turn to the second part of my testimony, and that is the goal of farm finance programs and their relationship to the other farm programs.

The major agriculture finance program initiated in this century with the creation of the Farm Credit System and the Farmers Home Administration, and more recently the Small Business Administration, the Farm Credit System, although now privately owned, its agency status; that is, its recognition as an agency of the Federal Government, most agree provides it with some interest rate advantage in its acquisition of its loan fund.

It was created in the 1930's as a result of other commercial lenders reduction and their lending activities and their concern that agriculture could not have access to adequate credit.

The second major credit program is the Farmers Home Administration, which has at least two programs affecting agriculture—ownership of land and emergency loans.

The goals of these programs have been justified because of agriculture's complete dependence and exposure to weather variables and other acts of God to which farmers' success depends. One might argue that a capitalistic system should eliminate and encourage admission to a sector of our economy based on managerial skills and efficiency in implementing decisions rather than acts of nature.

If one accepts this argument that farm operations should not be punished for acts of God, then a buffer, especially if private insurance is not available, may be warranted.

The second part of the program was the sort of national goal or belief that a large number of small farms is desirable to product the stable and secure supply of agricultural products. One reason for such a policy is that all farmers depend on a stable supply of reasonably priced farm products. One might argue that a large number of independent producers is a more reliable source of primary food than larger farms produce.

A third program that I will mention, which not intended on its surface to be a financial program, is the Commodity Credit Corporation loan program. And the principal purpose of this program is a control reduction of farm products released in the market. The justification for this program, like the Farmers Home Loan, is tied to acts of God.

Favorable growing conditions may be as difficult for farmers as poor harvests. High yield results in low prices, and the CCC loan program provides an alternative for farmers. If prices fall below some levels, they borrow the value of their products from CCC loans and if the prices never materialize, they turn the crops over rather than repay the loan. The recent PIK program, which has a similar goal, I will discuss in a moment.

Now, those are the major programs. The realities of the programs, and when I say the realities, I have to qualify that in realities through the eyes of an economist.

Let's talk about, first of all, the land ownership program at the Farmers Home Administration. Making funds available to potential farm owners because they cannot acquire the credit at competitive rates or from other sources increases the demand for their products or for land.

An interesting question arises, however. One of the stated goals of the Farmers Home Administration program is that they provide funds to allow their borrowers to acquire sufficient resources for them to become efficient producers of agriculture products.

Now, the question is from whom will they gain these resources, and with whom will they compete for the acquisition of these resources.

They will compete with other farmers who, without the advantage of Farmers Home loans at favorable interest rates, must compete with increased efficiency rather than agricultural subsidies.

The effect of these programs then is to provide, when they are successful, the low equity or inefficient farmer needs to compete on the basis other than efficiency, and in the process drive up the cost of land.

They bring into agriculture often land that is erosion prone or is less efficient. So one of the major effects of this program, while its goal is notable, is to increase the demand of land, increase the cost of land and increase agricultural output.

Operating loans and emergency loans have a similar effect of providing resources to produce agriculture products, which when produced in overabundance, lowers the price, a price which all farmers are subject to whether or not they have the advantage of the Farmers Home loan program.

This program which encourages resources to be maintained in agriculture and expands agricultural products flies in the face of the Commodity Credit program which has as its goal to maintain the price of primary agricultural products.

Their goal is to maintain for the farmer a stable price at which he can earn a profit. But if higher and larger amounts of agricultural products are being produced through Government loan programs, these programs operate in opposition.

I don't have data that would indicate the extent of these programs. It is something that I would like to study, it is something that I don't know how you would measure the effects of these two programs operating side by side as they do.

But the July 22, 1983, letter from the Chicago Federal Reserve Bank had this observation which I would like to share with you.

It says much of the first half turnaround in district farmland values no doubt reflects that perceived implications of the PIK program, the generosity of the PIK program attracted widespread participation among farmers. The high level of participation voids hopes that imbalance of grain markets from 2 years of record crop production and 2 to 3 years of declining exports could be corrected. Thus a major turnaround in the land market now, at least in Chicago's Federal Reserve District is attributed to the effects of the PIK program, not increased efficiency.

And that reflects an increase in the demand for land to increase production in the years that follow. So, I would not view as successful the programs such as the Farmers Home loan program and the Pik program that operate in opposition to each other. How much time do I have?

Representative HAMILTON. We would like you to summarize your statement fairly quickly because we do want to get to questions, and we are particularly interested, of course, in policy recommendations.

Mr. ROBISON. I will move to that. Being a professor on campus, I am prepared to talk to fill a distance of the time that you have allowed me to.

Representative HAMILTON. Keep in mind that your statement will be in the record in full and perhaps you could move to the policy recommendations, and then we will have questions for the panel.

Mr. ROBISON. I will summarize the third section, which is my suggestions of the goals for the future generations of farm programs.

First of all, identify clearly what the goals of the agricultural policies should be.

The agricultural policy programs and the agricultural finance programs have not been useful welfare programs, although they may have had some of these goals, particularly the Farmers Home program.

I'm going to skip this part where I talk about the programs that operate—the CCC program has in essence encouraged the concentration of large farms because they rewarded the efficient producers more than the inefficient producers.

I am going to skip over that. Now, my suggestion, first of all, is to maintain an agricultural sector in which all of the participants have equal access to credit available on terms comparable to other sectors of the economy.

The farm credit system has essentially achieved that goal although there is concern now that it is crowding out the other lenders. And allow the efficiency criteria to organize resources in the agricultural sector.

Where acts of God or Government create unfair burdens on the agricultural sector, there should be subsidy programs to ameliorate those impacts.

Avoid programs—and I wish I had time to talk about this a little bit more—avoid programs that unfairly subsidize a certain sector of the agricultural community—for example, price-support programs for grains may penalize livestock producers. And where a loan program is tied to an ownership of a particular asset, the value of that program gets built into the price of land and is, therefore, then paid by subsequent owners of that land.

Those programs should be avoided because they in essence enforce unfair competition.

Now, any elimination or reduction in the programs which allow efficient operation to prevail will result in reorganization of the resources and some farmers will leave.

My recommendation is that a transition program be made available that would emphasize soil conservation and permanent land set-aside.

The third part of the program is one of the most important factors affecting the well-being of the agricultural sector, our trade relations with other nations. We should avoid using food as a policy weapon.

The lessons we have learned in the past years have indicated that arbitrage permits countries to obtain their agricultural products whether or not we supply them. In order for us to maintain our position as a world trader, we must establish the reputation as a reliable and stable supplier of agricultural products.

Recommendation No. 4—phase out farmownership programs with Farmers Home Administration since they largely pay to bring inefficient production, operating marginal land, and penalize existing farmers who compete on the basis of efficiency.

Maintain the farm credit system which has been a reliable and stable source of loans.

And last, recognize that the reallocation of resources is a continual and necessary regeneration process for successful capitalistic economies.

These should be allowed, although programs, such as land diversification, might be implemented to ease the restriction. That is a summary of my testimony.

[The prepared statement of Mr. Robison follows:]

PREPARED STATEMENT OF LINDON J. ROBISON

U.S. FARM FINANCE PROGRAMS FOR THE 80's

Introduction

My name is Lindon Robison. I am an associate professor of agricultural economics at Michigan State University at East Lansing, Michigan. Before joining the faculty at East Lansing in 1977 I worked two years for the U.S. Department of Agriculture in the Economic Research Service. Thank you for the invitation to appear and give testimony on the subject of "the next generation of farm finance programs."

The remainder of my testimony is divided into three parts. As a prelude to discussing the future direction of farm finance programs for the 80's, I will discuss the financial fortunes of farmers in the decade just concluded. Indeed, any recommendations for the future should be made with a clear awareness of the financial environment which exists now and the effect of past programs.

The second part of this testimony asks the questions: What should be the goal of farm finance programs for the 80's? and, Are there other programs in effect which might make achieving the goals of our financial programs difficult or impossible to achieve?

Finally, the third section of my testimony will discuss the topic you assigned: What should be the direction of farm finance programs for the 80's?

I. The Financial Well-Being of Farming Sector: Where Are We?

The financial well-being of the farming sector depends on many critical factors. A key variable is the technological and managerial skill of the operator to convert inputs of land, labor, capital, seed, feeds, chemicals, and

fertilizers to agricultural outputs. To the extent that a nation possesses a rich natural resource base as we do and farm operators are efficient in the task, the entire nation will benefit. The benefits will occur because resources will be released from the agricultural sector and made available to other sectors of the economy to produce goods and services which increase the standard of living for all. In fact, we often distinguish between developed and less developed countries based on the amount of resources committed to the production of agricultural products.

In the efficient production of agricultural products, U.S. agriculture has achieved unparalleled success. However, in the process of achieving this success the number of primary agricultural producers has decreased and the average size of farms increased. Currently less than 3% of the population are engaged in farming. Still a large number of small farms survive, supported to a large extent by their off-farm earnings. It is difficult to say whether the gains in efficiency and the resulting farm structure have been the result of the farm programs sponsored by the United States Government or have occurred in spite of them.

Continuing with our description of the farm sector, technological efficiency and successful managerial execution of farm operations can only occur provided the farm firm meets its financial commitments. The basic rule for a farm business operation to survive is: "meet cash flow commitments." A measure of the farm sector's capacity to meet the cash flow requirements is the ratio of its financial assets, those assets which can easily be converted to cash, to its total liabilities. This ratio has fallen over the past few years. In 1970 the ratio was 43%. In 1982 this ratio was 22.1%. In 1983 this ratio is projected to be 21.8%. Thus, in general, the liquidity or cash position of the farming sector has been weakened during the past decade and the possibility for farm failures has increased (see Table 1).

Table 1
Balance Sheet of the Farming Sector (January 1)

	1960 ^{1/}	1970 ^{1/}	1975 ^{1/}	1980 ^{2/}	1981 ^{2/}	1982 ^{2/}	1983 ^{2/3/}
	<u>\$ Billions</u>						
<u>Assets</u>							
Real Estate	137.2	215.8	359.8	755.9	830.0	823.8	789.1
Non-Real Estate	54.9	76.3	115.2	208.8	218.9	223.2	233.5
Financial	18.1	22.8	28.8	40.1	42.2	44.8	47.4
Total	210.2	314.9	503.8	1004.8	1091.0	1091.8	1070.0
<u>Claims</u>							
Liabilities	24.8	53.0	81.9	165.8	182.0	201.7	217.5
Equity	185.4	261.9	421.9	839.0	909.0	890.1	852.5
Total	210.2	314.9	503.8	1004.8	1091.0	1091.8	1070.0
<u>Ratios</u>							
	<u>Percent</u>						
Liabilities/Equity	13.4	20.2	19.4	19.8	20.0	22.7	25.5
Fin. Assets/Equity	9.8	8.7	6.8	4.8	4.6	5.0	5.6
Fin. Assets/Liab.	73.0	43.0	35.2	24.2	23.2	22.1	21.8
Real Estate/Total	65.2	68.5	71.4	75.2	76.1	75.4	73.7

^{1/} Source: Economic Report of the President, U.S. Government Printing Office, Washington D.C., 1982.

^{2/} Agricultural Finance Outlook and Situation, December 1982, ERS-USDA, 1982.

^{3/} 1983 data are preliminary.

The reasons for this weakened liquidity position of the farming sector are clear. Returns to the farming sector in the decade just completed have been increasingly in the form of capital gains--especially in the form of increases in the value of land which currently constitutes 74% of the agricultural sector's assets--up from 68% in 1970. Costs to the farm sector, meanwhile, increasingly were interest costs which responded to the inflationary pressures of the 70's and early 80's.

An example I constructed several years ago illustrates the point. In this example, taken from the farm records of the best farmers in Michigan, not the worst, an acre of corn would produce a cash flow deficit of \$55.52 if it's production were 100% financed. The return to the farm, meanwhile was satisfactory, as capital gains in 1979 were 15% nationwide or \$185 per acre for the farm of my study (see Table 2).

Thus, in a significant way, the financial condition of the farming sector has been altered, not by agricultural finance programs, but by national monetary and fiscal policies which restructured the balance sheet of U.S. agriculture.

In a sense national monetary policy played a cruel trick on the farming sector (as well as other sectors of the economy). Generally, throughout the 70's, our monetary policy was to stabilize interest rates. Meanwhile, the real interest rate, the nominal or current rate less the inflation rate was being kept below normal levels of 3-5%. This suppression of the real interest rate was obtained by continual increases in the money supply which at first decreased the nominal rate but then as more dollars chased the same or fewer amounts of goods caused inflation and the nominal interest rate increased.

Finally, the Federal Reserve System abandoned the goal of stabilizing interest rates; instead they adopted a program to control inflation with tighter control of the money supply. Today's inflation rate attests to the success of

Table 2
Enterprise Budget for One Acre of Medium Yield Corn Grain

GROSS INCOME	\$200.00
(100 bu. x \$2.00)	
EXPENSES: ^{1/}	
Labor (6.1 hrs. x \$5.00)	\$ 30.50
Repairs and Maintenance.	9.80
Seeds.	11.33
Fertilizer	38.25
Insecticides & Herbicides.	12.40
Fuel	6.00
Utilities.	2.30
Harvesting, Trucking	6.20
Corn Drying.	14.00
Other Expenses (including interest on operating debt)	7.53
	\$138.31
NET INCOME (Gross Income--Expenses).\$ 61.69
INTEREST EXPENSE ON REAL ESTATE LOAN (9.5% x 1,233.80).\$117.21

^{1/}Nott, S. B., et al. "Revised Michigan Crops and Livestock Estimated 1979 Budgets," Agricultural Economics Report No. 350 (Revised), January 1979, p. 5.

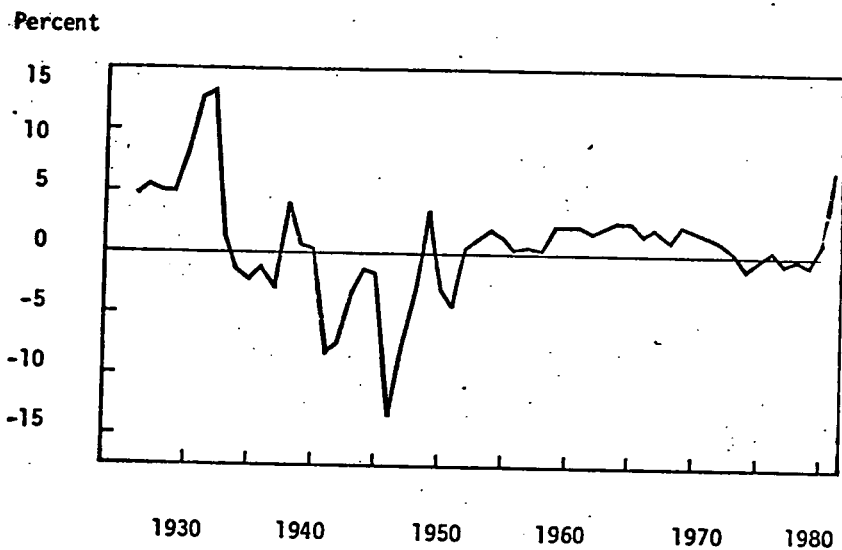
this program. The cost, however, imposed on U.S. businesses, including the business of producing U.S. agricultural products has been severe.

As a result of strict monetary controls real interest rates reached levels not seen since the great depression as Figure 1 illustrates. The sudden reversal in the real rate caught the farming sector off-guard. For a decade the formula for financial success was to obtain the maximum borrowings possible, refinance capital gains to overcome cash flow problems, and let inflation reduce the real value of one's debt. Then suddenly, as real and nominal interest rates shot up in 81 and 82, the clarion call for financial survival was to reduce debts and increase firm liquidity. For firms which had followed with enthusiasm the earlier success formula, the reversal could not be made in time. And as loan funds became increasingly hard to obtain, the value of land, for the first time in over two decades fell.

The effects of this reversal in financial success formulas would have been much worse without the financial institutions which serve agriculture. The Farm Credit System mitigated the effects of the sudden reversal of our monetary policy because of the manner in which they change interest rates. The Federal land banks which hold 43% of the total farm mortgage debt outstanding began around 1970 to charge variable interest rates. The advantage to the banks of this policy was that it shifted interest rate risk to the borrowers. For the borrowers, this method of changing interest rates has advantages and disadvantages. Since the variable rate turns out to be an average rate, as the new rate goes up, the average goes up at a slower rate. So newer borrowers benefit with rising interest rates because initially they pay a lower rate. On the other hand they may pay a higher rate as interest costs decline.

The difficulty with the variable rate is that unless borrowers include in their decision process, the possibility of higher future rates, they may borrow

Figure 1
Short-Term Real Interest Rates



Source: Lawler, P. J., "Are Real Interest Rates Good Measures of Monetary Policy?" Economic Review Federal Reserve Bank of Dallas, July 1982, pp 1-12.

larger amounts than might otherwise occur if loan interest rates were charged based on current cost of funds.

The mitigating effect of the variable rate in the current farm condition was that it slowed the rate of interest cost increases. It also eliminated some of the "subsidy" associated with traditional financial instruments with fixed interest rates for long term borrowing.

In summary, current financial conditions of the farm sector resulted primarily because of national monetary policy, not domestic farm programs. Moreover, financial survival of farm firms under the modified national monetary policies required changes in their use of debt. At this point an analogy may be useful. Passengers flying in an airplane have a common goal of arriving on the ground. They are not, however, indifferent between the alternative ways of reaching that goal. Jumping from the plane in flight without a parachute is the fastest way of achieving the passengers goal. The sudden stop at arriving at the goal reduces the desirability of this approach. In the farm sector, most I believe would agree that reducing inflation was a priority goal. I think a more gradual decent towards that goal would have reduced some of the significant cost incurred by the farming sector as we achieved the goal of reduced inflation.

II. Goals of Farm Finance Programs and Their Relationship to Other Farm Programs

The major agricultural finance program initiated in this century was the creation of the Farm Credit System. Although now privately owned, its agency status provides it some interest rate advantages in the acquisition of its loan funds. It was created in the 1930's as a result of other commercial lenders reduction in their lending activities in the farm sector. Thus to increase the access of farmers to credit, the farm credit system was created.

The second major credit program also a product of the 30's was the Farmers Home Administration. The FmHA emergency and other loan programs are justified because of agriculture's heavy dependence and exposure to weather variables and other "acts of God" on which the farmer's success depends. One might argue, for example, that our economic system should encourage admission to and elimination from a sector of our economy based on managerial skills and efficiency in implementing decisions rather than stochastic acts of nature. If one accepts the argument that farm operators should not be punished for acts of God, then a buffer should be provided to ensure survival. This is especially true if private insurance is not available.

Another justification for FmHA loan programs is the belief that having a large number of smaller family operated farms is desirable. If this is a goal, then we might argue, a fund should be set up to help new farmers gain entry into the farming sector. One reason for such a policy is that all consumers depend on a stable supply of reasonably priced farm products. Some might argue that a large number of independent producers is a more reliable source of primary food products than larger farm firms which may exert some collective control over the market.

A third class of programs, not intended on the surface as a financial program, is the Commodity Credit Corporation (CCC) loan program. The principle purpose of this program is the orderly marketing of farm products. The justification for this program, like the FmHA loan programs is tied to "Acts of God." Favorable growing conditions may be as difficult for farmers as poor harvests. High yields result in low prices. CCC loan programs provide an alternative for participating farmers. If prices fall below some levels, they may borrow the value of their product from the CCC loans--and if prices fail to increase sufficiently participating farmers may turn their crop over to the CCC rather than

repay the loan. The recently accepted PIK program has a similar goal, of supporting prices through withdrawal of agricultural products from the market and reduced planting.

The Realities of the Programs

Unfortunately the intended goals of these programs, however laudable, are not necessarily the final results.

Take for instance the increased availability of loan funds as an example of a program whose actual effects may not have been the same as the desired. The Farm Credit System has undoubtedly provided loan funds more generally than could be obtained without it; and these loan funds have been made available at rates below what other lenders charged.

A standard tenant of economic theory is that an increase in demand increases the market price of the product. Increasing loan funds availability increased the ability of farmers to purchase land and other farm related inputs. This result increased the demand for land and farm related inputs--and I believe increased their price. At higher prices, the ability of farmers to purchase land was reduced and offset the initial advantage of the credit programs--but not exactly. Those who owned the land saw the value of their assets increase and provided them an increase in equity due to a government program rather than as a result of their own good management. If our program justification is to shield farmers from losses due to acts of God because they aren't a reflection of a farmer's managerial skills, can we justify gains to certain classes of farmers resulting from acts of government?

Consider now FmHA loan programs designed to provide loan funds to farmers who otherwise would fail to qualify. At least two possible impacts may occur. The first result is that demands for land and other assets are increased, and the

results are as described above. The second impact is that land which might have remained idle or unimproved are brought into production. Obviously these marginal lands are not as productive as other lands and the efficiency of the agricultural sector is reduced. The third impact is that a prospective owner who would have purchased the land in the absence of the FmHA supported buyer has been excluded from the land market. But this inefficient farmer, brought into the farming sector via subsidized credit, will have a difficult time surviving because of the government's CCC loan and price support programs.

Price support programs reward efficient producers more than inefficient producers. Moreover, our evidence so far is that larger, more successful farmers are the ones who most benefit from CCC programs. So if a goal is to retain in the farming sector less efficient farmers, commodity control programs may actually increase the difficulty of this class of farmers succeeding.

Thus farm finance programs and commodity control programs may be operating to reduce the successful achievement of either set of goals. Subsidized finance programs result in capitalized gains for current owners of agricultural assets; and, they likely increase the production of agricultural outputs. Higher land costs resulting from subsidized FmHA loans reduce the possibility of success even those with FmHA low equity loans not only because of higher land costs but because of higher outputs and lower commodity prices. Thus commodity programs which reward efficient producers, actually may increase concentration of ownership and control of resources in the farm sector.

The competing nature of our U.S. farm programs makes it difficult to assess their net effects. For this reason, I stated earlier that it may be impossible to determine whether or not the efficiency and structure of the agricultural sector results because of or in spite of U.S. farm programs.

III. The Next-Generation of Farm Finance Programs

Now I turn to the third part of my testimony. The next generation of farm programs should, I believe, be designed to achieve the perceived goals of policy-makers, responding to their electorate. The national goals for the farming sector have always been the provision of a secure and stably priced food supply. Thus, in the eyes of many, programs to maintain a large number of farms appear the optimal method for achieving this goal.

Unfortunately, the attainment of this goal likely depends more on nonagricultural sectors of our economy than on the agricultural sector. For example, only a few cents are paid to agriculture for the agricultural products used to produce bread. The rest is paid for processing and marketing. Thus price movements are more likely to result from changed labor costs and agriculture's changed efficiency--and efforts to stabilize primary agricultural products will only partially stabilize food prices for consumers.

The second part of the nation's food goals, security of the nation's food supply, is also tied to factors outside the agricultural sector. For most major agricultural products, a healthy surplus now exists. However, the nation's access to these products depends on the trucking and transportation industry. Any disruption in our supplies may likely begin with these industries. Thus in the future the successful attainment of our agricultural goals may require more attention to sectors of the economy outside of agriculture and less to agriculture. Thus, efforts to achieve the goal of a stably priced and secure food supply might more profitably be directed toward nonagricultural sectors of the economy.

What about our national goals for the million who operate the nation's farms? Should our farm program guarantee their survival? The strength of our economic system is that it eliminates its unsuccessful business ventures. Consider the chaos that would have been created if our policy at the turn of the century had

been to secure the survival of firms producing horse drawn carriages. By allowing most of these firms to leave the industry, the nation had resources for the car industry. And as resources now leave the car industry, resources become available for the new industries we hope will emerge. While there is likely a welfare need to minister to the needs of those in transition, I believe it is a mistake to administer that relief in the form of an agricultural product subsidy. Thus efforts should focus not on securing survival for those in agriculture, but easing their transition to other occupations.

On the other hand, when the survival of participants in the farming sector is not tied to activities within the agricultural sector, outside aid may be warranted. It is essential that congress recognize the economic well-being of agriculture is inextricably linked to national monetary and fiscal policies. For example, trends in the price and number of farm land sales are mirrored by housing sales. And these are tied to interest rate policies and the availability of credit. Thus, this committee should support a stable monetary growth. They should worry about the level of the projected budget deficits and how they will be financed, recognizing that national monetary and fiscal actions will have a far greater impact on agriculture than any direct program likely to be enacted.

An important goal of the next generation of farm programs should be to reduce the contradictory signals now transmitted to the farming sector by our existing farm programs. It's unfair to simultaneously adopt programs to attract resources to the farming sector through subsidized credit which encourages production while simultaneously enlarging production control programs such as PIK. As a result, I believe FmHA loan programs should be greatly reduced. They currently account for 8.3% of the long term debt and 13.6% of the short term debt. Secondly, the CCC loan program should also be decreased. Currently CCC holds 15.4% of the short term debt, an increase of over 100% from last year.

If the subsidized finance and production program are reduced in the future, the farm sector will respond by a reallocation of its resources. As this happens, some of the farm sectors participants may leave or reduce their current level of farming activities. Programs should be adopted to facilitate this reallocation. For example, permanent land set aside programs might reverse some of the acreage expansion programs of the 70's and preserve some of our dangerously eroding soils for future use.

A third goal for farm finance programs is to accept as a tenet, that agriculture should not be made to bear the burden for international policies carried on at the federal level. If the supply of U.S. agricultural products is the carrot to be used to achieve the goal of encouraging foreign governments to adopt policies consistent with U.S. objectives, then agriculture should be protected from sudden starts and reversals. I believe that the law of comparative advantage should be allowed to operate both in the U.S. economy and in the world. This law states, economies should specialize in producing what they do best. I believe it is a true statement that the U.S. has a comparative advantage in the production of primary agricultural products. Unfortunately, as a result of CCC loan and price support programs we do not price our agricultural products competitively and some trading partners use unfair barriers and subsidies. We should direct our efforts to reduce agricultural trade barriers.

While these suggestions for farm finance programs for the 80's are not all specifically farm finance oriented--they will, I believe, contribute to the financial well-being of the farming sector and the attainment of a stably priced and secure food supplies for the U.S. and its trading partners.

Thank you. I will now answer any questions.

Representative HAMILTON. Thank you very much, Mr. Robison. Unlike the previous panels we have had, you represent separate areas of agriculture, so I am going to direct a few questions to each one of you in your particular areas and will not expect the others to comment on the question unless you want to. You are certainly welcome to do so if you would like.

Let's begin with the agricultural research, Mr. Huston, and we had some testimony a little earlier in the day that we ought to shift our research resources away from production research and more toward product utilization research. Do you agree with that generally?

Mr. HUSTON. I think a small shift is usual. The USDA—historically, to go back and look at what has happened, every time we go into one of these periods, we go through a utilization kick. Back in the 1930's the USDA created four utilization labs, one at Peoria, one here in the Midwest, one at Philadelphia, one in Albany, Calif., and one in New Orleans. And after about 3 or 4 years, then we got back into a situation which we didn't have the excess production and so we shifted back.

It's my impression that you need a balanced program. They have been successful in developing new uses; however, the uses are relatively slow in terms of development and relatively small in terms of use of their crops.

There are exceptions to this. One can talk about such things as corn sweetener, which has been a very nice thing in the Midwest, which now represents one of our major crops if you divide corn into its uses for feed grains and sweeteners.

But it also has kind of a disastrous effect on the sugarcane producers in the South and sugar beet producers in the West.

So, there are some of these utilization issues that have conflicting values. I think we have important work to continue in this area, but I am not as optimistic about it as most.

Representative HAMILTON. Do you think we now have a coherent national agricultural policy toward which agricultural research is focused?

Mr. HUSTON. Not really, and I think Mr. Robison probably can speak more significantly to this point than I can.

My impression about it is that the agricultural policy is separate from the national policy and that within the agricultural policy there are a number of conflicting elements, and I think there are ways in which this can be brought together in a more lucid fashion.

Representative HAMILTON. How?

Mr. HUSTON. I will turn to Mr. Robison, he is a student, and I am a dairyman. But seriously, I do think that we need a greater investment, perhaps Mr. Robison would feel that they already have enough information, but my information is that we need a greater effort in terms of policy at a number of centers of interest in this area.

Representative HAMILTON. Does that mean we have to give more Federal guidance to agricultural research?

Mr. HUSTON. No; what it means is that we need to have more resources to provide the people like him and his colleagues and political scientists who will examine in detail the issues that are there.

Now, I think it is more important that the resources go to the people who are interested in the area and interested in spending their careers at it.

I think to have direction from the Federal Government you are already doing that in terms of ERS programs, and I believe what we really need is some independent looks at it from the institutions.

Representative HAMILTON. What is the total budget for agricultural research in the Federal Government?

Mr. HUSTON. About a billion one.

Representative HAMILTON. I was going to say a little under \$1 billion, but it is about \$1 billion now.

And I think your testimony was that represents a smaller fraction than that contributed by State government.

Mr. HUSTON. No; what it represents is in terms of what is being done in the State sector of the system.

Representative HAMILTON. The State sector is largely federally financed; is that correct?

Mr. HUSTON. No; that is not correct.

Representative HAMILTON. I don't think I understand your point.

Mr. HUSTON. The point is that the investment from the State non-Federal resources is on the order of \$600 million. The Federal side is \$1.1 billion, so that gives you the totals in terms of that connection.

OK, now, as you examine the research activities independent of the Federal Government, that is to say those that can come out by the initiatives of people like Mr. Robison, that particular sector, the State sector, is about 70 percent State or non federally funded.

Representative HAMILTON. We hear a lot about, I suppose, the more revolutionary kinds of research, the more romantic kinds—embryo transplants, cloning, gene transfer, and all of these things.

What is your impression of where we ought to be really focusing our research in agriculture today? Is that sector, or I should say those sectors, lagging in research today?

Mr. HUSTON. My own impression is that with the resources that we currently have in agriculture, that our investment rate is about where it ought to be. If in fact we were looking ahead to the year 2000 or the year 2050 and we were to think about agriculture in the same terms as we do in space or defense, then I think it would be useful to have biotechnology in these related areas as a significant long-range investment.

But right now I think the traditional plant breeders, the traditional livestock physiologists, nutritionists, and so on, are probably going to get us kinds of answers we need in the next 20 years.

Representative HAMILTON. What do you mean when you say the real issue is underinvestment in agricultural research? Are you talking about dollars?

Mr. HUSTON. I am talking about dollars specifically, and I mean talent after that, because it takes the dollars to buy the talent.

Representative HAMILTON. Do you recommend increased appropriation to the Congress for agricultural research?

Mr. HUSTON. Yes; indeed I do.

Representative HAMILTON. And what magnitude of increase do you recommend?

Mr. HUSTON. Well, I am pleased to be able to say that our economists have looked at that and have suggested somewhere between 25 and 50 percent increase.

Representative HAMILTON. So, that would move it up to \$1¼ billion.

Mr. HUSTON. One and a quarter to one and a half.

Representative HAMILTON. Do you likewise indicate a comparable increase in the State resources going into—

Mr. HUSTON. Yes; I do.

Representative HAMILTON. Of course, you understand that that creates some problems for us, don't you?

Mr. HUSTON. Indeed I do. I guess I would argue that this one is an investment in that you do get your money back.

Representative HAMILTON. I personally agree with you. I think it is significant to note that at a period of time in the Congress when domestic aspects of the budget have taken some whacks, agricultural research has done pretty well and has not been cut back like some other programs, and I am encouraged by that.

But I agree with your observation that we are not doing enough in agricultural research today. Did you want to make a comment?

Mr. HUSTON. Again, it is a relative issue. Within the agricultural sector and within the Department, agricultural research has fared better than some. However, if you compare it to the Nation's expenditures in defense, in space, in human health, you find that agriculture really is among the little ones in terms of investment.

And my impression is that agriculture in the long term is significant to the economy of this country as is defense or space or—

Representative HAMILTON. How do you deal with the argument that agricultural research is really increasing supply and supplies are our whole problem?

Mr. HUSTON. There is an element of truth to that. I think one of the producers here said that the thing I have got to do as soon as my income—as soon as the prices drop, I have got to increase my production, so there is an element.

There is also an element of increased efficiency—that is to say, he can make his resources go farther. And so I think there really is two elements, one of efficiency and one of increased production.

Representative HAMILTON. I don't want to suggest that I agree with that question I asked a moment ago, I wanted to get you on record on it.

Do you see any emerging research that is going to help us on this problem that Mr. Eddleman talked about so much, soil erosion?

Mr. HUSTON. Yes.

Representative HAMILTON. What is happening in the area of soil erosion research which gives us a little hope?

Mr. HUSTON. The minimum tillage, no tillage operation has been very effective, and the calculations of the people who work in this area suggest that depending a little bit on the climate, the soil type, and all of the related things that you can probably talk about better than I can, that we can do considerable in reducing the rate of erosion.

One of the suggestions that emerges on both sides is that if there was a way in which we could make sure that the fragile lands, the

more erodible lands didn't come into production, it would be helpful.

But, even on those lands, we are able to do more than we were in the past.

I think the best illustration of this, in terms of what's happened, occurred out in Kansas when I was there back in the drought of the 1950's. You will remember in the 1930's the Dust Bowl was Kansas and Oklahoma, the Great Plains. In 1955 when I was there, we had a drought of the same magnitude as we had in the 1930's, and you don't remember the Dust Bowl of the 1950's, do you? And I think there is even better evidence accumulating in many States now.

Representative HAMILTON. We may have a Dust Bowl of the 1983's if we are not careful around here, this drought is hitting us pretty bad. But I think your point is very well taken.

Mr. EDDLEMAN, on soil conservation, how do you react to the idea of targeting out Federal conservation programs to areas that have the greatest soil erosion problems, and to what extent do you think that is needed?

Mr. EDDLEMAN. Probably the best way to talk about it is to talk just a little bit about Indiana.

I talked about the extent of the erosion and the 98 million tons that we estimate here in Indiana; most of that erosion occurs on about 5 million acres. Now, Indiana has a little over 22 million total acres.

Representative HAMILTON. Under cultivation?

Mr. EDDLEMAN. No; total acres, and about 13 million acres of cropland. Most of our erosion, about 70 percent, is happening on cropland. The next biggest areas is stream bank erosion.

So, it does seem to make sense, and I think we always have placed greater emphasis in all of our conservation efforts toward those areas that have the most erosion.

But there are other needs of the soil in the rest of the State that also need to have attention—there's drainage problems and soil compaction and so on that also cause agricultural production problems.

Representative HAMILTON. How do you feel about mandatory conservation practices—tying them into our commodity programs and assisting on those practices if they are going to participate in those programs?

Mr. EDDLEMAN. I really don't have a personal opinion. You hear some good arguments on both sides of that issue, that if a person is abusing the land, maybe they shouldn't be eligible for it.

Representative HAMILTON. I don't mean to put you on the spot, but let me ask you this: How do you think Indiana farmers would respond if we put it into the law?

Mr. EDDLEMAN. I think I could give you a fairly good opinion and there are probably some other people in the room who would also, more people are beginning to believe, as you talk to them, that that may be needed.

Representative HAMILTON. We hear a lot about conservation tillage now, is that a helpful way of addressing these problems?

Mr. EDDLEMAN. It is the most effective erosion control tool that we have available to us now.

Representative HAMILTON. How widespread is its practice in the State?

Mr. EDDLEMAN. About 4 million acres of the 13 million acres of crop-land has some kind of conservation tillage, not maybe the best, but at least a start toward it.

Representative HAMILTON. Did that come out of agricultural research?

Mr. EDDLEMAN. It came out of ag research, it came out of farmers' research, a lot of farmers worked on kinds of tillage tools and so on because they had heard it might work, but there wasn't any way to get started at it, so they worked on it themselves in some cases.

Representative HAMILTON. Of course, we're moving in exactly the opposite direction, I mean the percentage of farm credit farm loans has increased, has it not, in the last couple of years, by FHA as compared to some of the other credit instructions?

Mr. ROBISON. Let me just add one qualification of what I said. I indicated that the program sponsored by the Farmers Home Administration to own land should be reduced and eventually phased out.

Representative HAMILTON. The ownership aspect, the ownership loans?

Mr. ROBISON. Yes; now, I think there is some justification for farmers home programs when acts of God, drought, other emergencies—and sometimes reversals in government policy—there may be argument for those. My recommendation is that those programs that increase the demand for farmland in effect bring into the agricultural sector marginal land in some cases, and drive up the price of other lands, when you make more people able to compete for that land.

Representative HAMILTON. Every Congressman has. I certainly have, a lot of requests right now for the economic emergency loan programs. Would you just knock those out altogether?

Mr. ROBISON. The political pain of adopting a policy like this is proportional to its benefits, and—

Representative HAMILTON. I will have to think about that a little bit. I'm the politician, you are the economist. You just answer in terms of being an economist, and I'll figure the politics out. [Laughter.]

Mr. ROBISON. The PIK program, for example—the CCC loan program this year increased their loans outstanding by almost 100 percent. Both the CCC loan program and the farmers loan program have been increasing over the years relative to other leaders. Now, that does two things, one, it increases the demand for agricultural land, increases agricultural output, and it sometimes displaces other lenders who might make credit available were they not forced to compete. So yes, I would do just that.

Representative HAMILTON. We have been talking through the day a good bit about the export subsidies that have recently come into play in our Government in response, of course, to export subsidies from competitors.

Should we be shifting some of the Federal credit effort away from say trying to help the farmer out here in trouble and toward

export credit programs of various kinds; does that make economic sense?

Mr. ROBISON. In my opinion, that would be the logical way to help the farmer here.

Representative HAMILTON. Do you have any suggestion as to what kind of export credit programs you think are most effective? I would like your comment on the blended credit program, or any others that you think are effective.

Mr. ROBISON. My area of expertise is not international trade, and so I am going to tread somewhat lightly here. Whenever our CCC program has maintained loan rates about world prices, we have placed our own agricultural products into disadvantage.

It is a fact that the export program plays the more significant role in our carryover reduction than probably any other program that we have. And the result of large surpluses is to hold down prices.

So, any effort that we could make to increase our exports either through credit programs made available to potential buyers, any effort that we could make to reduce unfair competition with other agricultural suppliers would be in the best interest of our agricultural producing sector.

Representative HAMILTON. One of the things that has been of interest to me this afternoon and this morning too, in our discussions on agriculture, is the question of interest rates. It has not popped up frequently. I have said on a number of occasions that I thought the single most important thing that could help the farmer in the short term would be to get those interest rates down. You are an expert in that field, what do you think?

Mr. ROBISON. Let me just give you a little scenario of what happened in the credit policy. In fact, my opening statement was that the most significant effect on the agricultural sector was the national monetary policy.

Representative HAMILTON. I picked that up.

Mr. ROBISON. Now, let me explain why I think that is so. In the decade of the seventies we had a policy of wanting to maintain stable interest rates. Now in order to do that, we increased the money supply whenever there was an upward movement. Now the interest rate is—you might think of it as the price of money. When you increased the supply of money, it brought the interest rates down in the short run.

Now, the longrun effect was when you had a larger amount of money chasing the same amount of goods was to increase the price of all other goods.

That inflation rate was then eventually added to the interest rate requiring then another round of increases in the money supply.

It was a result of these sort of cyclical behaviors that resulted in our negative real interest rate.

Now, when we reduced the money supply rather dramatically that had just the opposite effect, it shot up the price of money; namely, the interest rate, so that real interest rates were very high, but the longer run effect of that was reduced inflation, which we have seen. The policy worked although painful.

One of the painfulnesses of the high interest rates was because of this phenomenon that resulted in capital gains, noncash return and high interest costs which were cash costs creating a cash flow problem in the farming sector—not a return problem, because the returns were still favorable, even though farmers in many cases were being driven out.

Now, we still have a higher than normal real interest rate. It is my belief that, with a moderate monetary policy, it will be reduced as the expectations about inflation get built into the rate.

Representative HAMILTON. Is that your prediction or is that your hope?

Mr. ROBISON. The prediction has to be qualified because we face right now this tremendous dilemma of enormously large Federal deficits, and how we handle the financing of those Federal deficits will to a large extent determine the future path of the interest rate.

So, you are in a better position to predict how that is going to be resolved than I am. If that is financed through increases in the money supply—

Representative HAMILTON. Well, let me interrupt you here. The course of the Federal deficit in the next few years is not in doubt. It is going to be huge, and that may not be desirable, I think it is not desirable, but it is going to be a fact; \$208 billion deficit this year. The administration just lowered their deficit projection for next year, which most economists acknowledge, as I'm sure you know, is going to be in the \$200 billion range.

Given that fact, how would you hope monetary policy would be conducted—we may not like that fact, and I understand the tie between the fiscal and the monetary policy, but how—

Mr. ROBISON. If the large debt is financed at the expense—at the finance of investments and borrowing by private individuals—that is, the Federal Government goes into the market, acquires the funds it needs, then there is—this will in fact drive up the interest rate to private borrowers, but the longrun effect, inflationary effect will not be unbearable.

If on the other hand, we respond to it by large increases in the money supply, which would have the short-run effect less painful, then we'll pay for it in the long run of higher inflation.

Representative HAMILTON. Would you support a somewhat more accommodating monetary policy than we now have, or do you think the Fed is about on target?

Mr. ROBISON. I would have supported a more gradual introduction of this tight monetary policy. Having already lived through a rather painful experience, I think the Fed is about on target now.

Representative HAMILTON. But that they were too sharp in the recent past in their restriction of the money supply.

Mr. ROBISON. It is my opinion that had the program been put into operation in a somewhat less jolting manner, it would have eased some of the pain.

Representative HAMILTON. I agree with your observations. OK. Gentlemen, I appreciate your testimony very much. I want to give you an opportunity to make any concluding comments, if you have anything you think should be said for the good of the order in any of your areas.

Your statements are very good and most helpful to us. We appreciate it. Thank you very much for being with us.

I think we come now to the concluding part of the session, and we will just take a few minutes to ask if there are any in the audience who would like to make an observation or statement about farm policy. I would be delighted to hear from you if there are such people.

**STATEMENT OF PHILLIP BRIGHT, LIVESTOCK AND GRAIN
FARMER, CENTERVILLE, IND.**

Mr. BRIGHT. I am Phil Bright from Centerville, Ind., and I am a livestock and grain farmer, and I spent the past months working in Indiana in the area of farm foreclosures, and I spent some time in the Indiana General Assembly last month working on a bill to extend the redemption period for some farms, farm foreclosures.

I am going to deviate from my prepared statement, and I would like to address an issue that was brought up here a little bit ago in reference to the Farmers Home Administration.

I think the problem we have today with the Farmers Home Administration is they are swamped by applicants and people who initially should have been served by the Farm Credit System—and by that I mean by the Federal Land Bank and the Production Credit Associations, because they were set up back in the 1930's to help fund agriculture and by having this agency status, they do get a break in interest rates.

And while profit is important, I understand this, you know, I realize they must be profitable to continue, but I think they have become bogged down in the profit areas so much that they are no longer looking after the regulations and guidelines which established those organizations. They are looking so much to the bottom line.

In the last issue of the Farm Journal, there was an article on the Farm Credit Bank in Louisville, and it is no secret what was in that article, we have known these things for months and years, that this organization has financed automobile dealerships and all kinds of things which did not fall within the guidelines of the law.

This is the problem we are experiencing with farm credit, and I think this is a real concern, and I think—

Representative HAMILTON. A lot of it being diverted from farm usage; is that correct?

Mr. BRIGHT. In the past it has. I'm not sure it's being done today, but it has in the past, and they are not adequately serving farmers today, they are looking strictly at the bottom line of their profit, and they have been overextended in the past, and they are trying to get their own books in order at the expense of farmers.

Several of their advertising says that CPA stands for farmer-owned, farmer-controlled, but quite honestly, I think it is operated by bureaucrats and investors at the expense of farmers, and I think that is a more adequate assessment of the situation today.

And I think this is the reason Farmers Home Administration is facing such a backload and cannot adequately carry the load, and in some cases are subsidizing people that should not be there.

But it is because of the inadequacy in the system. I'm not sure that I have a solution, but I think this whole thing needs to be reviewed.

Representative HAMILTON. It is a good comment. I am aware that FHA at least as it operates in southeastern Indiana is swamped, as you put it, and heavily overburdened at the present time.

Mr. BRIGHT. And I think another issue that has been brought out is that what we need is long-term prices for agricultural products. I think everybody is in agreement that we have got to make a profit on the farm to keep farmers in business and to keep the people in the world and this Nation, but what are we going to do in the short term?

We cannot sacrifice farm families today—you know, down the road it was suggested this morning that, you know, in 3 or 4 years, land and input prices are going to be lower and we can produce at lower prices, but that is not an immediate answer and the need is now as well as down the road.

Representative HAMILTON. That is very good. Mr. Bright, I just have had handed to me a copy of your statement. I have not had an opportunity to look it over, but I want you to know that it is clear to me in just a quick glance at it that you have given a lot of thought to this. It will be made a part of our record and we appreciate that very, very much.

Mr. BRIGHT. Thank you, sir.

[The prepared statement of Mr. Bright, together with attachments, follows:]

PREPARED STATEMENT OF PHILLIP BRIGHT

It is time for the American public, politicians, and bureaucrats, to wake up to the importance of American Agriculture and the American farmer.

Farming, mining, and forestry are the only true renewable wealth producing industries in this nation. Agriculture is this nation's largest industry. Yet it is treated as an orphan, a step child, some one whom will be looked after someday if there is anything left to go around. Agriculture is the very backbone of this nation and the free world. The American farm family is the very foundation of this nation. If we loose family farms we loose America. We are presently loosing family farms at the rate of 2200 per week.

Past farm programs with the brief exception of the late 1940's and early 1950's (during the Stegall Admmendment) have been failures.

I wish to present to you today a farm program that will work, that is sound, that will have the smallest amount of government intervention as possible, and one that is supported by over thirty farm organizations in as many states.

Critics of this program may say that there is too much government intervention and free market disruption. This is not so:

1. There is no free market today. Government embargos, tariffs, undue imports of products readily available here, all disrupt and distort the idea of a free market. We can never have a free market as long as we have ag products used as a political football.
- I. Parity Prices through the market place not through government subsidies. 100% of parity would add 4-5c to a box of cereal, 3-4c to loaf of bread, is it too much to ask when this country as a whole would prosper as never before. When people would be put back to work in real jobs, not a make work program.

29-527 3838

- A. World prices are based on U.S. prices. World prices would follow our prices to parity levels. Our markets would remain relatively unchanged. Recently I saw USDA figures that show our prices for grains currently below the prices of our competitors, yet our exports are declining. Price is obviously not everything on the world market.
- B. A farmer would be able to make a living from his farm with out a job in town. He would be able to send his children to college, make a living, and prosper as a farmer. Many unemployed would again have jobs.

Why do we think that a banker, lawyer, or stock broker, who produces nothing, should have a big house, new Cadillac, a swimming pool, a boat, etc.: and that farmers who produce 70% of the renewable wealth of this nation should go broke doing it.

II. Supply Management

- A. USDA would have the responsibility of:
1. Estimating world supply and demand
 2. Estimating U.S. supply and demand
 3. Determine each farm market share from supply demand info and past production history form each farm. These quotas would be based on information that they already calculate.
- B. Farmers who produce more than they would be allotted to sell could be stored and:
1. sell the following year and reduce planting
 2. hold over production until enough would be accumulated to completely skip a years planting.

This would eliminate the need for crop insurance and disaster payments.

We would have a truly farmer owned reserve.

III. Equity of Trade

We are presently importing beef, pork, and other farm products into this country when prices are depressed at the farm gate. Dairy Co-ops are importing dairy products and selling our production to the government as surplus. These type of transactions must be stopped. A fair and equitable exchange must be maintained between nations.

IV. Other issues

- A. Alcohol production must be increased. This so called oil glut is a short term situation at best. Gasohol and other alcohol fuels must be developed.

People can pay more for alcohol fuels if they have a job and are productive. With no job and no benefits----- they can't buy oil and gasoline at any price.

- B. Natural gas decontrol will add increased fuel and fertilizer costs to our farmers at a time when they absolutely can not afford it.

It is time we as a Nation look at agriculture and get our priorities in order

Proposed National Farm Program

Endorsed by the North American Farm Alliance

Preamble

American agriculture is today faced with an unparalleled crisis. We are witnessing the rapid disappearance of irreplaceable human and natural resources. While farm liquidations, bankruptcies, and forced foreclosures continue to destroy our family farm system, increasing economic concentration accelerates the decay of a needed healthy rural and urban economy and environment.

For too long, agriculture has been exploited by keeping farmers and consumers politically apart, by diverting taxpayers' attention to structural and farming practices, by preaching about "excessive" government regulations, by creating artificial divisions within the farm community, and by replacing a fair price in the marketplace with debt. Specifically, what we need today is a clear understanding of corporate/government/land-grant college planning since World War II and the success of that effort in obtaining its primary goal - namely, breaking farmers' economic and political power through forced liquidation caused by enforced low commodity prices.

Domestic food policy cannot be separated from agricultural policy. But as long as concerned individuals and lobbying groups are preoccupied with the secondary effects of the key issue - unfair prices in the marketplace for the farmer - all Americans will continue to pay an increasingly unconscribable qualitative and quantitative price for their food, no matter who occupies the congress, White House, or USDA.

The North American Farm Alliance, an alliance of organizations committed to building a united response to the farm crisis, has pledged to work for a new prosperity based on peace, social and economic justice, and creative non-violence.

In formulating such a response, we are dedicated to a national farm program that will provide parity prices for farm products, assure conservation of our soil, protect consumers, guarantee fair trade practices, and attain our commitment to full employment for all working people. Until such a program is in place, we will work to end all forced farm liquidations.

By adopting this program, we are not only committed to strengthening and expanding our family farm system of agriculture, we are also working to build solid coalitions with other groups which share our concerns, and we offer our support to them in their struggle to achieve and maintain the common good.

Key Points

- I. Parity Prices - All farm products will be priced at parity. For storable commodities, non-recourse loans at 90% of parity shall be available to producers.
- II. Supply Management - Annual national production goals shall be determined, and marketing quotas shall be allocated to each producer based on the production history of each farm.
- III. Equity of Trade - Import/Export laws shall be amended so as to assure freedom of trade based on a fair and equitable exchange between countries.

Specifics

- A. Parity Price Levels for Storable Commodities and Milk. The prices for storable commodities and milk shall be established at 90% of parity.
 - B. Parity prices shall be determined on a monthly basis.
 - C. For storable commodities, which include wheat, feed grains, cotton, wool, rice, peanuts, tobacco, sunflowers and sugar, non-recourse loans at 90% of parity shall be available to producers.
 - D. Milk shall be supported at 90% of parity through Federal Government purchases of milk or milk products.
 - E. Funds used for non-recourse loans should be drawn from a revolving fund.
- Section 2. Livestock. (Under Advisement).
 - A. The Federal Government and its agencies shall encourage and support the use of collective bargaining as a preferred method of marketing livestock.

Section 3. Supply Management for Storable Commodities and Milk.

- A. National production goals shall be established annually for storable commodities and milk based on:
 1. Domestic requirements, including any stocks held under any reserve or purchase program maintained by the Federal Government;
 2. Export requirements; and
 3. Levels of production consistent with agricultural conservation and soil management programs.
- B. Producer referendums shall be held to establish a marketing quota system. To meet the annual national production goals, these quotas shall be allocated to each producer of the commodity involved based on the production history of each farm. Any such allocation shall occur not later than 180 days before the planning period or 180 days before the beginning of the calendar year, whichever is appropriate.
- C. Production history shall be determined by averaging the highest production during 3 of the 5 calendar years preceding the allocation of quotas.
- D. The production history of each farm shall be retained with the land on which it is established.
- E. In the case of crop rotations for conservation purposes and normal farming practices, the production history of any crop planted under a rotation program shall be retained for 10 years preceding the allocation of quotas.
- F. Quotas shall be adjusted on a pro rata basis among all producers of the commodity involved.
- G. Equitable allocation of quotas will be assured by:
 1. Giving beginning farmers priority consideration in any new allocation of quotas.
 2. Limiting any new allocation of quotas to family-size farms. In the case of milk, any quotas unused by a producer for 4 quarters shall be reallocated. Any new allocation of milk quotas shall not exceed 3 million pounds of milk per year per producer.
 3. Allowing adjustments in any case where:
 - a. A farm has a production history of less than 3 years.
 - b. Bad weather has reduced production below normal yields.
 - c. A change in farm ownership affects the production history of a farm.
- H. Conservation practices shall be encouraged on all idle land.
 1. Storable commodities produced under any program shall be produced on normal crop acreage of each farm unless the ASCS authorizes a producer to use other acreage.
- J. (Under Advisement) Two years after the year in which quotas are first allocated, no quotas shall be allocated:
 1. To a corporation, partnership, or other legal entity composed of more than one person if a majority interest in such legal entity is held by stockholders, partners, or persons who themselves are not engaged in farming operations as a sole proprietorship; or
 2. To a trust or similar arrangement established by a person who would not otherwise have been eligible for participation under this section.
- K. (Under Advisement) The provisions of paragraph (J) of this section shall not apply with respect to the following:
 1. Any farmer-owned or farmer-controlled cooperative, corporation, or association which meets the requirements of the Capper-Volstead Act or the Agricultural Marketing Act; and
 2. Any family farm corporation, partnership, or other legal entity founded primarily for the purpose of earning income from agricultural production.
 3. Charitable institutions described in section 501 (c)(3) of the Internal Revenue Code of 1954 and exempt from tax under section 501 (a) of such code.

continued

Proposed National Farm Program

Endorsed by the North American Farm Alliance

Page 2

L. Whoever sells, trades or consumes any storable commodity or milk without a marketing quota shall be subject to a civil penalty. Whoever sells or trades any storable commodity in excess of their quota shall be subject to a civil penalty.

M. Producers of any other commodity who wish to be regulated by the production control quota system may do so by participating in a producers referendum.

Section 4. Government Reserves.

A. Reserve stocks of wheat, feed grains, milk products and any other storable commodity designated by the Federal Government shall be established. The government stocks shall be accumulated in quantities sufficient to protect farmers and consumers from the adverse consequences of extreme variations in supply.

B. Reserve stocks of any commodity shall be sold only in an amount by which the annual production for a calendar year is less than the national production goal.

C. Reserve stocks shall not be sold for less than 110% of parity.

D. Reserve stocks of any commodity may be used to meet short-term emergency or disaster conditions in the United States or in foreign countries.

E. Reserve stocks may be used to fulfill international treaties or agreements to which the United States is a party, provided that such treaties or agreements do not undermine or threaten to undermine United States price levels for agricultural commodities.

Section 5. Imports and Exports.

A. Between the US and its trading partners, the free movement of agricultural commodities at parity prices is to be sought.

B. Long-term trade agreements will constitute the bases of these partnerships. The principal objectives, at home and abroad, of all such agreements between the US and other nations shall be, in order: (1) the adequate nutrition of human beings, (2) the protection of the rural sectors (i.e. people, topsoil, water and agricultural efficiency) (3) profitability of agricultural enterprises.

C. Accordingly, these long-term agreements shall serve to coordinate prices and programs of foreign trade and foreign assistance (AID). (In this respect the arrangements of the Lomé Convention, already in place between several EC nations and their trading partners in Africa and Asia shall be a model.)

D. Quotas and tariffs shall be established in order to prohibit export sales and import purchases at less than domestic parity.

1. The tariffs shall be in an amount equal to the difference between the price paid for the commodity by the importer and the greater of:

a. 110% of parity

b. 10% more than the average market price during the month preceding the month during which the imported commodity is sold, or

c. the price at which any imported commodity is supported or subsidized in the country in which it was produced.

2. Whereas the trade agreements may well last as long as 10 years, quotas and tariffs should be renegotiated much more frequently.

3. Barriers (the direct exchange of foodstuffs, fuels and minerals) shall be encouraged and facilitated between trading partners.

E. The international flows of agricultural commodities are presently determined mainly by sectors who are unrepresentative of producing farmers and the US public: (1) private corporations, not least the "merchants of grain"; (2) government negotiators and bureaucratic officials; (3) foreign governments and their officials. So long as this is the case, the objectives A - D above cannot be achieved. Therefore, the US Congress shall establish a *Foreign Agricultural Trade Board* dedicated to the objectives in SB and representing farmers, consumers, labor, and agribusiness. This Board shall negotiate trade agreements, set and adjust the quotas and tariffs within those agreements. It shall also seek cooperative relationships and joint actions with the governments of other exporting nations in an effort to achieve more orderly international markets in agricultural commodities.

F. No agricultural commodity may be imported into the United States unless it meets health and quality standards imposed by the Federal Government on agricultural commodities produced in the United States.

Memorandum How State Minimum Price Supports and Protects National Farm Programs

We recognize the need to build the broadest possible support for our fight for parity. Today, for the first time in over 30 years, we have an opportunity to weld a farmer-labor-urban coalition that is powerful enough to succeed.

One of the most effective ways of building this coalition on a grass-roots level is the work being done in support of state minimum price legislation. We feel strongly that this work offers a special opportunity to raise the level of debate on farm issues, to educate and inform the general public, and to lay a base of political activity which can support our work for a national program.

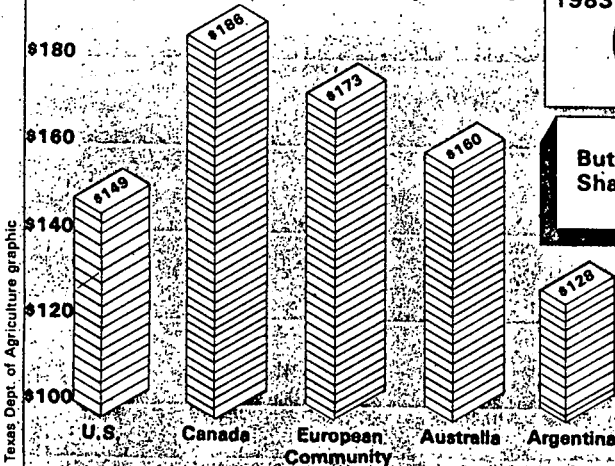
We also need to be serious about developing a political strategy that can protect a good national farm program once it is established. State minimum price legislation offers an additional defense for our program. Being vigilant at both the state and national levels strengthens the political process for farmers and working people, and reaffirms their mutual interest in parity as a base for economic prosperity.

TDA Flashfacts

Statistics that shape Agriculture, from the Texas Dept. of Agriculture

U.S. Wheat Still Cheap In World Export Market

Price per metric ton in U.S. dollars, basis FOB



A Texas Dept. of Agriculture graphic



But U.S. Market Share Falling

Prices gathered by USDA on June 14, 1983. European wheat export price expected to drop to about \$140 per metric ton on Aug. 1, because of increased government subsidies.

Some are claiming that the U.S. is losing export markets because our grain is too expensive, and they are urging farmers to take a lower price in order to expand U.S. grain exports. "But the facts don't support this claim," says Texas Agriculture Commissioner Jim Hightower. "For example, of the five countries that ship 95% of all the wheat exported in the world, the U.S. offers the next-to-cheapest price. The real causes of our declining share of exports are such non-farm factors as high U.S. interest rates and political ploys of the State Department."

Representative HAMILTON. Any other comments? Speak now or forever hold your peace, I guess I should say.

Well, one of the remarkable things about this hearing today, from my standpoint, is the number of you who have sat through the entire thing. You may get the wrong idea. When you watch them on TV, congressional hearings are long, lengthy, and you have to have a lot of patience.

All of you have displayed that today. We have had as many as 100 people in this room, far more than I expected, and many of you have sat through it throughout, and I appreciate that, and I think you will feel, as I have felt, that we have had quite an education in agricultural policy today because our witnesses have been quite exceptional, I do believe, in the way they have articulated the problems and put forward the solutions for us.

Keep in mind that this is just one of many regional hearings around the country, and we will get a great variety of input from our people as we begin to think about agricultural policy in the years ahead.

Thank you very much for your interest and participation, the committee stands recessed.

[Whereupon, at 4:10 p.m., the committee recessed, to reconvene at 9 a.m., Friday, October 14, 1983.]

[The following information was subsequently supplied for the record:]

STATEMENT OF WARREN HAMERMAN, CHAIRMAN, NATIONAL DEMOCRATIC POLICY
COMMITTEE, NEW YORK, N.Y.

FARM DEBT MORATORIUM AND OTHER EMERGENCY MEASURES ARE ESSENTIAL
TO PRESERVE THE U.S. FARM SECTOR;

IMPLEMENTING "FREE MARKET" POLICIES WILL BANKRUPT FARMERS AND
TRANSFER TOTAL CONTROL OVER THE AMERICAN FOOD SUPPLY TO THE
INTERNATIONAL COMMOOITY CARTEL

Congress must not support the proposal made July 29 by Secretary of Agriculture John Block, calling for reducing the price support loan level for wheat from \$3.65 to \$3.30 a bushel, and calling for freezing the wheat target price. Secretary Block is currently proceeding from an extreme "free market" philosophy, which if implemented, will wreck the support program and create a serious price deterioration and widespread economic ruin in the farm sector.

In contrast, the situation now exists of unprecedented world market potential, which can mean restored levels of net income to U.S. farmers, provided the proper policies are implemented in Washington. The necessary policy measures are outlined below. First, it is essential to understand the scope of the farm crisis now at hand.

The collapse of U.S. farming requires emergency action. Every Congressman must understand that our food supply and that of the free world have become a national security issue. We now face the loss of production for domestic needs, the takeover of our agriculture sector by foreign interests hostile to the American System, and starvation abroad which will lead to wars and global pestilence, if it is not reversed through food shipments from the United States.

The present threat to the nation's food supplies has been made possible through policies based on the widespread lie that the cause of farmers' problems is over-production, and that a "free market" would solve this. The real cause of the crisis is the high interest rates and destruction of productive

capacity imposed on both the U. S. farmer and the under-developed nations.

American farmers are being forced out of business, and where they remain, they are no longer independent entrepreneurs, but "operators" for the Big Five Swiss-controlled food production and distribution companies, Cargill, Continental, Bunge, Dreyfus, and Andre, whose policies are to reduce world population and control all raw materials.

As for the Third World, with the introduction of Volcker's high interest rate policy in 1979, its debt nearly tripled in two years, and it could no longer pay for adequate food imports. Forty-four million people are now dying annually worldwide from starvation and malnutrition, half of them children. In 33 out of the 69 lowest-income nations, per capita food production and consumption have been decreasing. And world food reserves are already dangerously low.

The trend of the past three decades has been the sale of agricultural products at prices substantially less than the farmers' cost of production. The U.S. independent owner-operated farm has been kept alive and producing solely through monstrous accumulation of farm indebtedness. The farm sector has been put through a financial bubble that bears strong resemblance to that which has brought financial desperation to the Less Developed Countries (LDCs). The deterioration of the terms of trade (prices paid for goods versus prices received for goods) of the LDCs and the American farmers since 1973 are remarkably congruent. The U.S. farm sector is, in its financial characteristics since 1973, essentially a Third World sector within the U.S. economy. Both U.S. agriculture and the LDCs are controlled by the world commodity markets and both were adversely affected by the 1973 and 1979 Oil Hoaxes.

As the world market ruined the terms of trade of U.S. farmers and LDCs, both sectors were compelled to seek loans to maintain production. Beginning with the steep rise in U.S. farm real estate values in 1973, a bubble was created where farmland prices soared while net farm income, on average, continued to drop. In the course of the decade, loans then shifted away from farm real estate (mortgages) and producer credits (loans to produce future harvests) to loans against already existing commodities. Beginning with the Paul Volcker policies of 1979, interest rates on debt have soared. By 1981, eighteen percent of gross farm income was diverted to debt payments--more than all expenses for seed, fertilizer and pesticides combined.

American agriculture is now entering the "end-game" phase of this debt-restructuring process. We submit to the Committee the results of a computer-assisted analysis of the American agriculture situation and the debt crisis performed by the LaRouche-Riemann Econometric Model for the Executive

Intelligence Review's quarterly forecast. Only emergency measures of the following kind can avert the impending collapse of our productive farm sector.

EMERGENCY MEASURES

Congress must pass emergency measures or mandate the Executive to issue emergency orders to stop all farm foreclosures, to implement farm debt moratoria, and to restructure farm debt to allow all-out production, based on maximum high-technology inputs obtained through low-interest production credits.

An honest national grain audit must be conducted, as was done several times during World War II to determine exactly what our stocks are. Seen in actual terms of world need, our grain production this season--which annually provides something like 30-70 percent of all world grain exports of various types, is desperately short of true demand.

Congress should initiate action to ship all possible food supplies to Africa and centers of famine, in a military-type mobilization, and to deploy U.S. farm expertise to build up the Third World's own productive capabilities.

Congress must initiate a national policy of support for "Operation Juarez," the effort of Ibero-American nations to band together for the purpose of declaring a joint debt moratorium against IMF-contrived debt, and arranging new, low-interest credit arrangements for large infrastructure development projects. "Operation Juarez" is based on a 1982 policy recommendation by National Democratic Policy Committee founder Lyndon H. LaRouche, Jr. What is required is that the currently unpayable national LDC debt, and U.S. farm debt alike, be rescheduled for a longer period of time, to greatly reduce and defer debt service payments so that production and trade and be resumed and vastly expanded. The credit flows will be made possible by turning the unconstitutional Federal Reserve System into a Third National Bank, to issue gold-backed reserve notes for production and exports. Only this revamping of U.S. monetary policy can ensure a real global economic recovery.

There is now underway in Ibero-America a process of deliberation among heads of state, and trade and production experts on how to ensure maximum supplies of essential food, raw materials, power and capital goods, outside the debt burden commodity controls and military threats of the IMF-connected political and financial alignment. Leaders of this effort, and the populations of Ibero-America, are open to cooperate with U.S. exports efforts, much needed for the immense Ibero-American

development projects--for example, a second Panama Canal, and the interlocking canal projects proposed for the headwaters of the Orinoco and Amazon.

In those regions where these projects are undertaken, multi-nation treaty arrangements can be made, pledging levels of food flows required to rapidly upgrade the nutrition levels and productivity of the populations involved. Government-to-government contracts can be negotiated, in which the major world company food cartels will not be permitted to intermeditate, so that price levels for American farm goods can be set at the levels necessary to increase the net farm income in the U.S. In this context of rescheduled debt, the availability of low-interest production and trade credits, and vastly expanded trade flows, prices for U.S. farm goods can be set higher without losing our markets or causing inflation.

How debt, commodity speculation made U.S. agriculture the economy's 'Third World sector'

by Lelf Johnson

American agriculture is now entering the end-game of a structural reorganization that began in 1973, coincident with the first major rise in oil prices. To the forces largely responsible for engineering that restructuring, the goal of a permanent cap on the output of American farms is now in sight. Such an output cap gives the major international grain and commodities trading companies greatly enhanced control over world grain production, a virtual "food weapon" to be wielded against the world.

The major political goal of the cartel this year and next is to push the United States to relinquish sovereignty over its food production. This is the intent of those who demand that the "government get out of agriculture" or that agriculture be given to the "free market."

The method by which America's farms have been subjected to a ten-year restructuring is clearly seen in the wild changes in sources of credit to the agricultural sector occurring in 1982 and continuing through 1983. The Payment In Kind (PIK) program of the U.S. Department of Agriculture (USDA) which relies on an immense increase in commodity-based loans coming from the Treasury-based Commodity Credit Corporation (CCC), has radically shifted the burden of farm debt away from farm real estate (mortgages) and producer credits (loans to produce future harvests) to loans against already existing commodities.

The farm sector has been put through a financial bubble that bears strong resemblance to that which has brought financial desperation to the Less Developed Countries (LDCs). The deterioration of the terms of trade (prices paid for goods versus prices received for goods) of the LDCs and the American farmer since 1973 are remarkably congruent. The U.S. farm sector is, in its financial characteristics since 1973, essentially a Third World sector within the U.S. economy. Both U.S. agriculture and the LDCs are controlled by the world commodity markets and both were adversely affected by the 1973 and 1979 Oil Hoaxes.

As the world market ruined the terms of trade of U.S. farmers and LDCs, both sectors were compelled to seek loans to maintain production. Beginning with the steep rise in U.S. farm real estate values in 1973; a bubble was created where farmland prices soared while net farm income, on average, continued to drop. Not only did this put U.S. farmers progressively more in debt but, beginning with the Volcker

policies of 1979, the interest rates on that debt soared. By 1981, eighteen percent of gross farm income was diverted to debt payments—more than all expenses for seed, fertilizer and pesticides combined.

The real estate bubble began to deflate in 1981, then with increasing force through 1982 and to the present. Farmland values have declined about 16 percent from the 1980 peak, as insurance company and commercial bank mortgage lending activity, reversed from net lending to net liquidation. Since producer credits also declined sharply, the lender of last resort—the bubble maintainer of last resort—is the Federal government. This accounts for the voluminous increase in CCC credits last year and this, pushing the cost of Federal intervention into the farm sector to record levels, in turn set off the chorus of free marketeers demanding an end to Federal "price supports."

If and when the Federal government pursues such a "free market" program by quickly curbing farm credits, as it has done with Farmers Home Administration lending, the agricultural debt bubble will be burst, precipitating widespread farm bankruptcies, and thereby putting the "restructuring" into an end-game. Thus would the American government yield its control—whether well or poorly exercised—over the supply of its food to the international commodity cartel.

A cap on U.S. agricultural production means eliminating both the existing farm system and destroying the potential, which now still exists, for rapid enlargement of the output. If a permanent cap on U.S. food production is achieved, the United States will not have the production necessary to carry out Operation Juárez, the program to liberate both LDC economies and the United States from the present world depression. In the longer run, the United States may be unable to produce sufficient food to satisfy domestic needs.

The intended shape of the end-game restructuring includes, over the next decade:

- 1) Permanent retirement of 300 to 400 million acres of U.S. farmland.
- 2) Eliminating the family farm as the fundamental unit of production in favor of absentee ownership (much of it foreign), and various forms of sharecropping, with a remainder of "super-efficient farms" still actually owned by Americans.
- 3) Virtually complete control of transportation, market-

Figure 1
Terms of trade for middle income non-oil LDCs compared to U.S. farm parity index

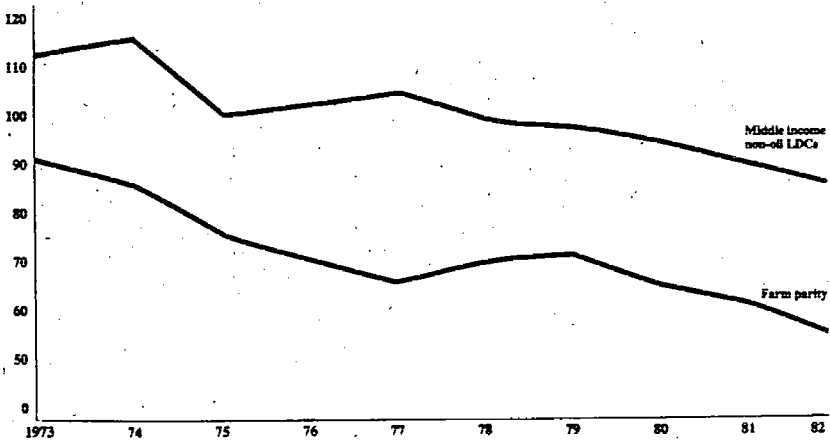
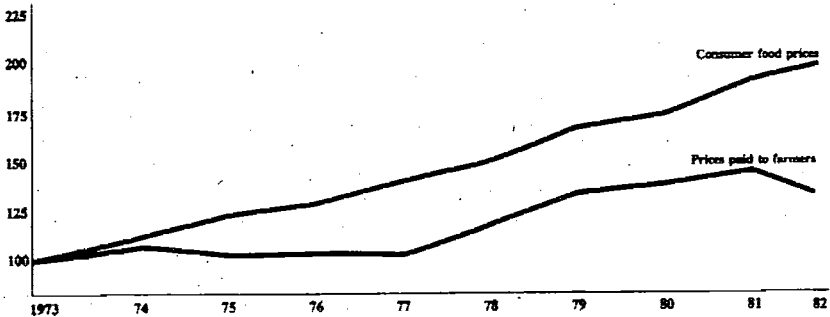


Figure 2
Food prices: What farmers receive and what consumers pay
(1967 = 100)



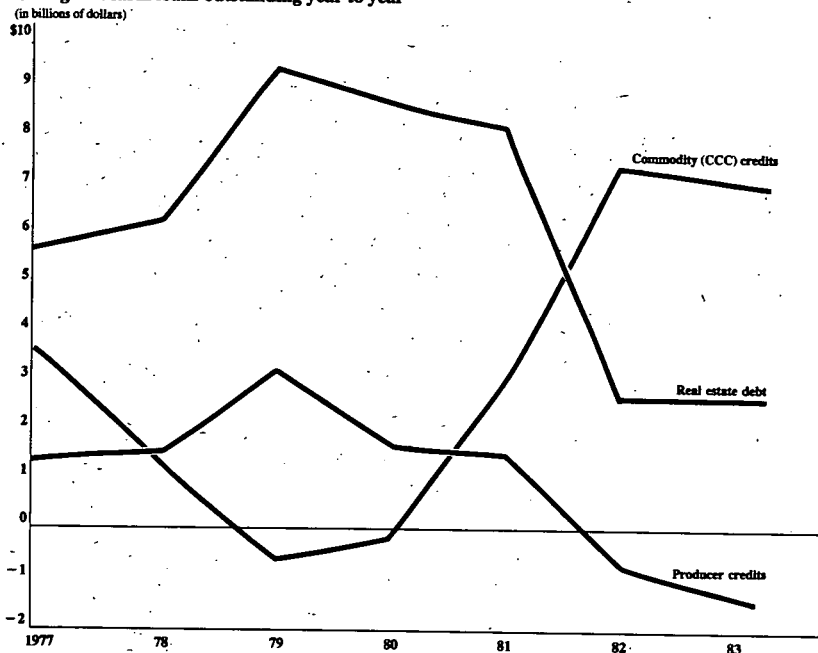
ing, and processing of food supplies. This goal of the commodity cartel has been largely accomplished.

The "feudalization" of American agriculture has a double effect on American industry. First it curbs immediate demand since there will be fewer farmers to purchase capital goods

and less land overall in farming. The U.S. agriculture sector is one of the largest consumers of steel, machinery, and chemicals.

Second, with the collapse of LDC industrial development, which in the short term is heavily dependent on U.S.

Figure 3.
Changes in farm loans outstanding year to year



Source: Federal Reserve System, *Agricultural Finance Databook*, June 1983. The net of Commodity Credit Corporation (CCC) loans are not actually producer credits but rather credits on produced commodities. The Producer Credit Association (PCA), one of three parts of what is called the farm credit system, claims that the net liquidation of its producer credits is due to the lack of creditworthiness of farmers. The shift towards CCC credits is dramatic.

exports, our industrial markets in these nations are withering away. Over the medium term, greatly reduced markets for U.S. industrial goods, especially capital goods, will severely damage the nation's ability to produce such goods.

The present policy course of the USDA, Secretary of Agriculture John Block, the U.S. Department of State, the Federal Reserve Board, certain farm organizations such as the American Farm Bureau, and the KGB-influenced Heritage Foundation is intended to achieve the farm sector restructuring described here.

The similarity in deteriorating terms of trade—the difference between what is paid for what is bought and what is received for what is sold—which the U.S. farm sector shows

to the LDCs is striking. It results, as we have indicated, from the fact that the American farmer must produce within the constraints of world commodity markets run by the international trading institutions that were originally created by the Genoese banking houses and based heavily in the Odessa grain trade. The second factor was the drastic increases in oil prices in 1973 and again in 1979 (see Figure 1).

Another way to visualize the terms of trade or parity for the American farmer is to compare the prices at which farmers sell their produce against the prices paid for food by Americans (see Figure 2).

The increasing divergence between what the farmer receives and what the American population pays is the famous

"middleman" problem. The middleman is not merely the international commodity cartel itself but all the other forces in the market that the cartel is able to shape, the futures markets, deregulation and abandonment of transportation, the storage rates, insurance rates, and in particular, the loan rates.

It is hardly surprising that the net income of American farmers—despite years of record crops and improved productivity—should fall. In constant 1972 dollars, the net income of farmers fell 50 percent from 1979 to 1982. The ratio of net farm income to debt is shown in Figure 4.

One asks, how do the farmers remain in business if their net income collapses and the ratio of prices received to prices paid falls by 37 percent from 1973 to 1982. The answer is apparent in the agricultural financial statistics: the farmers were offered debt to cover over their collapsed incomes—an accelerating descent into ruin.

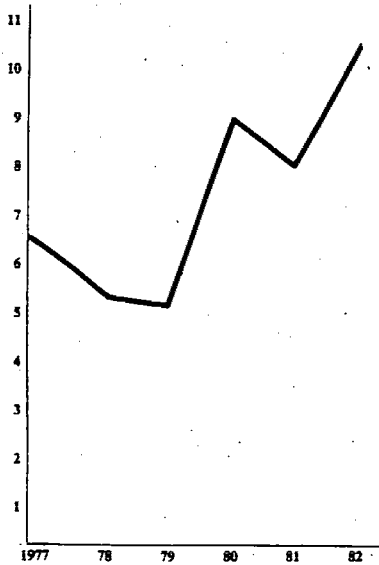
The farmers were offered the curse of the mortgage. Since their products were selling at such disadvantage, the only

thing left was the land. Miraculously, considering the fact that net farm income has dropped off more or less steadily since 1973, the price of farmland began to go up. In constant 1982 dollars, the total value of U.S. farmland bounded from \$520 billion in 1971, the starting year of the bubble, to \$915 billion in 1980, the peak year. No comparable land bubble of either such magnitude or duration had occurred in the post World War II period.

In the 1971-1980 land bubble, the actual demand for farmland was relatively weak. Farm purchases did not equal those of the World War II years. Instead, farmers in possession of land were increasing the mortgage on the property they owned or were buying adjacent property of farmers being forced off the land, thereby assuming the debt of the bankrupted farmers.

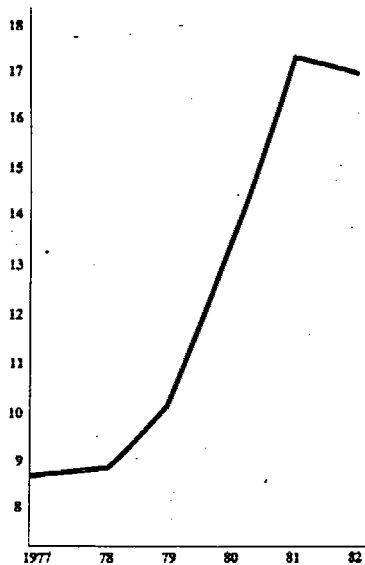
How is it possible that commercial banks, insurance companies, and the Federal Land Bank were lending heavily on land, when the return on the land, the net farm income was declining? Can mortgages be piled onto commercial or office

Figure 4
Ratio of farm debt to farm income



Source: FRB, *Agricultural Finance Databook*, June 1983 and USDA.

Figure 5
Average bank interest rates on farm loans



Source: Federal Reserve Board

real estate if the return of that real estate shows a pattern of continued decline? The answer is simple: such can be the case if the flow of new mortgages continues and there is not sufficient selling of that property to break the bubble.

The bubble was broken by the October 6, 1979 policy measures of Paul Adolph Volcker, the then-recently appointed chairman of the Federal Reserve Board. The Volcker measures had two immediate effects on farm mortgage financing. First, they severely restricted the funds available to the regional farm-related commercial banks for lending as mortgages, while the money center banks sought higher rate loans in the Eurodollar market and elsewhere. Second, holders of whole life insurance policies were encouraged to borrow against their policies at fixed rates lower than the prevailing rates at the commercial banks. This drained the funds the insurance companies would normally use for farm mortgage investment in such a way that the insurance companies began liquidating agricultural land mortgages. The temporary injection of Farmers Home Administration credits was reversed by the end of 1981, and with the continued shrinkage of new producer credits, it appeared that the entire farm bubble would break.

There remained, however, one more source of funds: the Treasury. Beginning in the fourth quarter of 1981, the Treasury began issuing record amounts of CCC credits against the stored crops of farmers. From the fourth quarter of 1981 to the first quarter of 1983, net CCC credits outstanding increased by \$10.1 billion.

Thus over the last decade, the American farm sector has been put through a classic financial bubble. From normal production credits, the debt shifted toward mortgages and then, in its final phase, was assumed by the government, the lender of last resort—and indeed, the last lender. The basis of credit has shifted from that which is extended to promote new production to that based on mere land to the CCC credits which are based on past production, as shown in Figure 3.

In Figure 3, the total of producer credits is listed net of CCC loans which are not truly producer credits but credit on produced commodities. PCA is the Producer Credit Associations, one of three parts of what is called the farm credit system, which claims that the net liquidation of its producer credits is due to the un-creditworthiness of farmers. The shift toward CCC credits is dramatically seen.

The result, shown in Figure 4, is a drastic deterioration in the ratio of farm debt to net farm income. As seen by the interest rates paid by farmers, the debt burden is unsustainable (see Figure 5). The debt crisis in U.S. agriculture must be solved in the same manner as that of the LDC nations. The world must be pulled out of depression by an international and domestic Operation Juárez: long-term, low-interest credit for expanded production within the context of nation-to-nation agreements for industrial development. Debt moratoria must be used if necessary to enhance production.

The American farmer's role in world development is a critical one, and world development is the only hope of saving the American farmer.

STATEMENT OF HON. ROGER L. JESSUP, INDIANA STATE SENATOR

THE ECONOMIC STATE OF THE FARM

Agriculture, efficient, modern and productive, dominates the rural setting in Indiana just as it does across the food basket of the Midwest and Plains of these United States. Among the great changes of the past generation are huge machines that have enabled each farmer to handle more and more acres of land. The turn to mechanization and new technologies as recommended for improved economic well-being of the farmer during the 50's and 60's, has created a population drain on rural areas. Dividing the economic pie among fewer people failed to recognize that the out migration of sons and daughters of farmers left the same number of acres of ever-increasing productive soil behind. Fortunately for Indiana, the migration of young people from the farm has not created the school, social and business problems that it did for the plains states. However, Indiana can not escape the economic plight of agriculture due to over production. Farmers are tilling the same and even increasing number of productive acres which, in fact now produces far more than American people can possibly eat. The farmers' bins and elevators are filled with corn, soybeans and wheat that farmers and traders would dearly love to sell to any nation willing to buy them, including the Soviet Union and the People's Republic of China, two prime customers. Mechanization has reduced the number of farmers to the extent that they are constantly engaged in a battle to remind the numerically dominant city workers that agriculture is still the core of the economy in Indiana and in most of the grain belt states.

The economic state of the farm is little different in Indiana than in other farm-belt states. A fourth year of low net farm income, projected to be between \$18 and \$22 billion for 1983 is down approximately 1/3 from the highs of the 70's. The depressed state of the farm economy correlating the recession affecting the general economy was further aggravated by the simultaneous reduction in grain exports. In 1982, for the first time in 13 years, the value of U.S. farm sales overseas declined; the figure was 11% below 1981. A number of factors accounted for this decrease, including a sluggish global economy, a strong U.S. dollar, and, in the view of many observers, trade barriers erected to protect domestic producers in other countries.

Farm exports are particularly significant to the agricultural sector because production from two out of every five acres harvested is shipped to foreign buyers. Numerous factors have contributed to the contrasting trends in U.S. agricultural exports between the 1970's and the 1980's. The U.S. dollar value in respect to foreign currencies has for many buyers offset much, if not all, of the domestic prices for grains. This fact tends to negate the exporters claim that low domestic prices are necessary to increase the volume of sales. Agricultural policy issues cannot ignore the disturbing trends in exports.

The depressed state of the farm economy is taking its toll among producers who have increasingly relied on debt financing to cover their production costs. This has been a serious problem, especially for young Hoosier farmers. High interest rates coupled with declining land values, depressed machinery inventory values and lower commodity prices suddenly cast many farm operators in a negative

net-worth position. Many Indiana farmers suffering from two years in succession of near or complete crop failure, suddenly found themselves in an untenable financial position with their creditors. The multiple effect of depressed commodity prices, lower valuation of land and equipment, high cost of borrowed capital, increased production costs especially for fuel, chemicals and repairs added up to disaster. The financial pain felt by highly leveraged farm operations is not unique to Indiana, the economic problem is nation-wide.

Realizing the seriousness of the problem, the present administration came forth with the PIK Program in January of this year. Most observers regard PIK as a band-aid, short term stopgap program to reduce the present large grain stocks. Agriculture suppliers, guilty of promoting increased production in the past, are suffering reduced sales and economic difficulties as a result of PIK. The 1983 payment-in-kind program will reduce production of grains and cotton this year. The record acreage to be removed from production is likely to result in a more rapid than previously expected adjustment in stock levels by the end of 1983/84 marketing years for all commodities except wheat. Analysts, though, differ on the extent that PIK, by reducing stocks, will improve the price outlook for crop producers during the next marketing year.

Perhaps of more significance are the longer-term policy implications of PIK. For a time during the 1970's it seemed as though the perennial problem of surplus supplies of farm commodities had disappeared. The 1980's, however, have seen the return of excessive stocks, weak demand and corresponding low farm prices. Despite this administration's advocacy of a market oriented farm policy, it has nonetheless initiated a massive supply control and acreage reduction program. Implementation of PIK represents further government intervention into the farm sector.

The current problem of surplus supplies, like those of earlier years, is in part due to the fact that farm productivity has increased more rapidly than demand for farm products. Over the past decade, crop yields have increased by an average of 3.1% annually, while the annual growth in demand averaged 2.8%. Additionally, some analysts assert that federal price support programs have also encouraged overproduction. Others disagree.

When supply is increasing more rapidly than demand the choices are simply these: produce less or sell more. For U.S. farmers to sell more means increasing export sales, since there is very little potential for growth in domestic markets beyond the increase in population -- currently less than 1% annually. Currently, however, the potential for increasing export markets is limited. Congress has provided the administration with increased program authority and export credit funds to vigorously promote U.S. farm exports and additional export promotion legislation is under consideration.

CONCLUSION

1. Agriculture is a victim of its own efficiency, modernization and productivity.
2. Excess production capacity must be dealt with and dealt with soon.
3. Any production controls should be in the framework of conservation.
4. A long-range agricultural policy needs to be developed.
5. Agriculture, especially beginning farmers, need much lower interest rates.

It is one thing to note that farmers have a serious income problem. It is quite another to devise an effective way of dealing with those problems so as not to be counterproductive. Similarly, one can lament that economic forces work the way they do. But it is quite another matter to pretend that those forces don't exist, or to try to swim against them.

It is clear that farmers have been victimized by secretaries of agriculture who challenged them to "full production" and "to plant fence row to fence row," by monetary policy that has made the dollar unusually strong, and by interest rates that have eaten up whatever cash flow some of them might have. The challenge is to deal with these problems in ways that do not make their situation even worse -- by policies that deal with the underlying economic problems and not with the symptoms. To do otherwise is to deal in self-deception and false promises.

TOWARD THE NEXT GENERATION OF FARM POLICY

FRIDAY, OCTOBER 14, 1983

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 9:30 a.m., at the Pilot's Grill, Bangor, Maine, Hon. Olympia J. Snowe (member of the committee) presiding.

Present: Representative Snowe.

Also present: Robert J. Tosterud, professional staff member; and Lisa Lausier, staff assistant to Representative Snowe.

OPENING STATEMENT OF REPRESENTATIVE SNOWE, PRESIDING

Representative SNOWE. Good morning, ladies and gentlemen. The Joint Economic Committee hearing will come to order. And I think it is time to begin. And I welcome all of you here today.

The Joint Economic Committee recently completed a series of eight Washington hearings on the theme "Toward the Next Generation of Farm Policy." During those hearings we heard from 28 national experts addressing a variety of subjects ranging from farm policy in the post-PIK era to the consumer's interest in farm policy, from agricultural trade policy to the economic condition of rural and agricultural businesses, conservation, and financing agriculture in the 1980's. The testimony was comprehensive, controversial, and certainly thought provoking.

In our first hearing, Secretary Block identified three basic options for future farm policy: Continue current programs; turn to protectionist policies as employed by the European Economic Community; or begin the movement toward a greater commitment to a more market-oriented U.S. agriculture.

In strongly recommending the third option, the Secretary requested congressional authority to set target prices and loan rates. The Secretary acknowledged that while some farmers would flourish under a more market-oriented U.S. agriculture, others would not and would be forced out of farming. Of course, I strongly feel that any new farm program should be designed to diminish adverse effects on as many as possible.

Representatives of major farm organizations testified during our second hearing. As might be expected, the entire spectrum of Federal farm policy was presented. We heard recommendations ranging from more market-oriented agriculture to strict supply control and income-support programs.

A panel of four prominent agricultural economists presented testimony during our third hearing. Almost in unison, they argued for farm programs that were more flexible and capable of being adjusted in response to changing domestic and international economic conditions. They did not hesitate to recommend that loan rates should be reduced to stimulate export sales and target prices froze or lowered to discourage production. They stated that the farmer-owned reserve program was not being used as originally designed and strict supply-control programs would be with us for some time.

The consumer's interest in farm policy was the subject of our fourth hearing. Given the divergent viewpoints represented on this panel of witnesses, it is a very difficult hearing to summarize. Perhaps it is sufficient to say that the administration's witness and the witness from a consumer-advocacy group had few areas of agreement. The third witness, however, presented a very interesting perspective, which he referred to as "the triangle of interests of agricultural policy," the triangle being the inherent conflicts and mutual supportive interests of farm, food, and foreign policy objectives, all three of which must be fully recognized and effectively addressed in any future agricultural policy.

Administration officials from the Departments of Agriculture and State and the Office of the U.S. Trade Representative were witnesses at our fifth hearing. No surprise here, but the point was made that the Reagan administration must set aside and avoid counterproductive turf battles between these three Government agencies. All three agencies are on the record in opposition to any future agricultural trade embargoes.

Agribusiness and rural communities, the unsung warriors of agriculture's depression, were discussed during our sixth hearing. Production agriculture generates 20 million off-farm jobs and is the lifeblood of thousands of rural communities. The present economic plight of America's 2.4 million farmers is truly only the tip of the iceberg.

Conservation was the focus of our seventh hearing. A critically important point was made: agriculture's sustainability must be both economic and environmental. Continued degradation of agriculture's resource base, soil and water, will eventually make profit a moot point.

The committee's final Washington hearing dealt with a very complex and challenging topic, financing agriculture in the 1980's. Because of agriculture's desperate financial condition, farmers are becoming increasingly dependent on Federal lending institutions. However, a recently completed 1979 farm finance survey performed by the Bureau of the Census revealed that almost one-half of all farmers were totally debt free.

One, of course, cannot even begin to adequately summarize the findings of eight congressional hearings, 28 witnesses, and over 20 hours of testimony. But in my mind, there was one overriding concern expressed or implied by virtually every witness. That concern was the absolute frustration over our failure to design and implement public farm policies and programs that would reflect the full competitive clout of the U.S. food production and distribution system in the international marketplace.

The next generation of farm policy must do just that, and I am here to listen to your ideas. As I originally anticipated, while these eight hearings in the Nation's Capital were very beneficial, Washington proved once again not to be the source of all wisdom.

Today's hearing in Bangor is the Joint Economic Committee's fifth regional farm policy hearing. Previous hearings, during which over 100 witnesses provided testimony, were held in Des Moines, Iowa; Sioux Falls, S. Dak.; Boise, Idaho; and Clarksville, Ind.

Clearly, you—the people, businesses, and organizations—who are directly and actively involved in agriculture and who will personally bear the consequences of farm programs and policies, must be the primary force behind the development of those programs and policies.

So again I welcome all of you here today. And I thank you for being present at this hearing. As my testimony has indicated, the Joint Economic Committee has had a number of hearings, and so today we are looking for testimony particularly from those who represent Maine and northeastern agriculture which I think, is more representative of the small family farmer. So we are looking forward to the testimony.

The first panel consists of Dorothy Kelley, who is the executive vice president of the Maine Potato Council; Stanley Greaves, executive vice president of the Maine Potato Sales Association; and Peter Crichton, executive director of the Aroostook Family Farm Core. And that will be the first panel, discussing the issues facing the Maine potato industry. Would those individuals please come forward.

Good morning. Dorothy, why don't you begin? Thank you.

STATEMENT OF DOROTHY P. KELLEY, EXECUTIVE VICE PRESIDENT, MAINE POTATO COUNCIL

Ms. KELLEY. My name is Dorothy Kelley, and I am executive vice president of the Maine Potato Council, which is an organization that represents all the commercial potato producers within the State of Maine. My testimony is very lengthy, and I will try to summarize as best possible.

Representative SNOWE. Please do. Thank you.

Ms. KELLEY. Several people here today will be addressing the agriculture problems in Maine, and since I have been working on trade problems since 1975, I feel that my expertise in this problem in agriculture is very important.

The situation can no longer be ignored, as many specialty commodities are feeling the effects of imports in their markets. And when I speak of specialty commodities, I mean the commodities that are not covered by Government price supports, such as onions, carrots, and cabbage, blueberries, and turnips. All of the producers of these products have suffered financial losses from Canada.

The southern States have problems with tomatoes, lettuce, citrus, and orange juice from Mexico and South America.

In regard to the problem of potatoes and Canadian imports, I learned that in 1975 the Canadian Government was working on a plan to increase potato production for possible export from 10.8 million hundredweight in 1975 to 14 million hundredweight in

1983, and the purpose of this strategy was for export offshore and especially to the United States.

Before 1979, the United States exported more potatoes into Canada than we received from them. But in the year 1979 there was a complete turnaround.

I would like to relate some of my frustrations with trying to seek relief in Washington. I sought legal assistance from local attorneys, and they told me that it was impossible for them to file a petition because they did not understand the tariff laws.

Since my directors asked me to file a petition, I attempted to do so and worked up a countervailing duty petition, went to Washington, worked with Commerce and the International Trade Commission. And they suggested that I had an antidumping petition instead of countervailing duty.

The documentation of injury in filing a petition is practically impossible for someone in my position. The method of determining injury within a petition was designed for large corporations such as United States Steel. It was not designed for perishable commodities. And there does need to be some legislation along that line to improve the method of filing petitions for small businesses and agricultural commodities.

After 4 months, I sent the petition I filed into Washington. It was denied, and it was suggested that I file a countervailing duty instead of an antidumping. I gave up on my ability to file a petition and began working on some legislation that might be of help. The legislation that we worked on called for Customs to make a determination and guarantee that the seed entering the United States would be entered as seed and be planted. We were successful last January in getting this piece of legislation.

And in July 1981 the Maine Potato Council retained a Washington legal firm who began investigating the amount of injury. This action has been very costly. However, on February 9, 1983, the Maine Potato Council filed an antidumping petition against the importation of Canadian potatoes. And the investigation on that petition is ongoing at the present time.

The reason for briefly relating this effort was to show how frustrating, and expensive, and cumbersome, and perplexing it is for a small association to file a petition, which investigation takes at least 10½ months before finalization.

I believe the complex purpose of filing a petition and the added legal costs have precluded small businesses and agricultural associations from pursuing their rights under the law. People and producers of specialty commodities, as I have mentioned before, have contacted me and they've questioned how they should get some relief. And when I detail the frustration of 5 years in order to get started on some relief, they lose their incentive to continue.

Agriculture across this Nation has financial trouble. I am sure all of you remember the first text that you had in grade school on economics, and it read that the basic economy in the United States was based on agriculture. Now I believe that the text today probably says exactly the same thing.

Our Government is afraid of protectionism. But I urge you to take a good look at what is happening to the producers of the United States in regard to the importation of agricultural commod-

ities. Free trade is all right, but free trade has to be fair trade. The trade on balance is causing many problems within the United States with unemployment as well as the bankruptcies of small businesses and agricultural farmers.

Senator Mitchell and Senator Cohen have legislation which has been added to the bill to reorganize the Commerce Department and the STR's office into one agency. The amendment calls for a smaller agency to be established to advise small businesses and agricultural associations on filing petitions; and after the first \$50,000 has been spent, then the Government would cost share.

This legislation also has a fast track within it. It's established on the 201 petition and calls for the Secretary to determine if there is injury and then establish a fast track. And Congresswoman Snowe has a similar companion piece in the House.

I think this is very important as well as Representative Gilman of New York has a very extensive fast-track legislation. And Congresswoman Snowe is a cosponsor on that piece of legislation.

I feel that the USDA should really take a look at both pieces of legislation. And I think they should support it for agriculture and small businesses.

There are many other problems in agriculture. Soil conservation has certainly come to the forefront in regard to agriculture. And there are presently several bills introduced this year that call for the encouragement of soil conservation in the United States by penalizing producers who continue to farm highly eroding land.

One bill would bar Federal price-support payments for any commodity grown on land susceptible to erosion. And the ban would also be extended into crop insurance protection as well as the Farmers Home Administration. In other words, these people could not get FHA loans or crop insurance.

We, in Maine, believe in soil conservation, and I think you will find more conservation practices being used by producers. However, this particular bill seems to take away a farmer's right to farm. It seems lately that the Government is telling the grower and the farmer how to farm and who he can sell his land to. Row crops, such as potatoes, have a tendency to erode more than grassland. And therefore, such legislation might be the demise of the potato industry, since 40 percent of our producers are financed by the Farmers Home Administration.

The Maine Potato Council has supported and worked for Federal crop insurance for many years, and Maine was pleased when the administration came up with a crop insurance program for potatoes.

The crop insurance program, however, needs more fine tuning. We feel that it is extremely important that growers are allowed crop insurance or the availability of potato insurance into storage. Most of our problems with potatoes during harvest will show up shortly after they have been placed into storage. We would like to see about 60 days' crop insurance in storage.

It might be possible to have various types of potato insurance. Many growers might desire to have nothing but the insurance into storage for a period of time. And I would certainly agree that perhaps this type of storage insurance might cost a little more than to have just field insurance.

Research is extremely important for agriculture. The potato breeding research is important to all potato producing areas, not only Maine. Maine is extremely interested in some new varieties. Many breeders are working on potatoes that are resistant to nematode and other disease problems.

It's extremely important that the research continue to develop methods of insect control, which can be very devastating to our potato fields. However, since the highly publicized concerns of the environmentalists, the use of some pesticides has caused restrictions, and many times eliminated a valuable pesticide.

Last but not least is the serious economic condition of agriculture. The trade problems, both methods of export and import, have caused bankruptcy of several farming operations in Maine and throughout the Nation. The importation of Canadian potatoes in such vast quantities at a time when Maine and New York and Pennsylvania are in the eastern market has caused producers for over 6 years to sell below the cost of production and, therefore, in some instances has caused bankruptcy.

The Farmers Home Administration has been the sugar daddy for agriculture. However, the Farmers Home Administration is vital to the survival of U.S. agriculture. The original focus of the FmHA was to help the small farmer. At the present time, the Farmers Home Administration is involved in home loans, town improvement, recreation facilities—as well as very large corporate farming operations.

Where are the national banks that supported agriculture in the past? The largest banks of our Nation loan billions to foreign countries, and they never seem to foreclose on any foreign loans when the country says, I am sorry, we can't pay at the present time.

The time has come really to take a good look at the banks and the Farmers Home Administration in this Nation. The deregulation of banks may be more costly to agriculture as local banks may become more protective of their investments. Many of our local banks no longer have a farm manager loan officer, and perhaps agriculture needs more local bank involvement with the FmHA subordination.

A viable agriculture is the foundation of this Nation, and farmers need money to farm. It seems that if you have money, you can easily get more money, and if you don't have any money then somebody is—and you're below the poverty level, then you'll get financial help. But there are a lot of farmers caught in the middle, and they are really being discriminated against, and they need help.

The USDA needs to take a long, hard look at the financial picture of agriculture. And perhaps they might come to the realization that agriculture can no longer support cheap food and fiber for this Nation.

Thank you for allowing me to address you.

[The prepared statement of Ms. Kelley, together with attachments Nos. 1-3, follows:]

PREPARED STATEMENT OF DOROTHY P. KELLEY

Chairman and Honored Members of the Committee:

My name is Dorothy Kelley. I am Executive Vice President of the Maine Potato Council. The Maine Potato Council is an organization representing all commercial potato producers in the State of Maine.

Several people here today will be addressing the agricultural problems in Maine. Since I have been working on trade problems since 1975, I feel my expertise is in the problems agriculture is having with imported commodities. This situation can no longer be ignored as many specialty commodities are feeling the effects of imports on their markets. When I speak of specialty commodities, I mean the agricultural products that are not covered by government price supports, such as onions, carrots, cabbage, blueberries, oats, turnips, potatoes, etc. All of the producers of these products have suffered financial losses from Canadian imports. The Southern states have problems with tomatoes, lettuce, citrus, and orange juice, from Mexico and South America.

In regard to the problem of potatoes and Canadian imports, I became concerned in 1975 when Robert Strauss, the U.S. negotiator, on the Tokyo round of GATT, asked me for information in regard to known subsidies that Canadian producers enjoyed at that time. In my search for known subsidies, I learned that in 1975 the Canadian government was working on a plan to increase potato production for possible export. An excerpt of the proposed plan for the Province of New Brunswick is hereto attached as Attachment No. 1. The attachment shows the develop-

ment strategy in New Brunswick which would increase the potato production from 10.8 million hundredweight in 1975 to 14 million hundredweight in 1983. The purpose of this strategy, so stated, is to increase the export by 40%, not only off-shore but also the United States.

From the year 1976 to 1981, the import of Canadian potatoes increased 700%. Imports of round white potatoes more than doubled from crop year 1979/1980 to crop year 1981/1982 as per Attachment No. 2. This increase from 1979/1980 crop year to the 1981/1982 crop year shows an increased share of the regional north-east market from 3.4% to 7.4% as per Attachment No. 3.

Before 1979, the United States exported more potatoes to Canada than we received from them. However, in the year 1979, there was a complete turn around. Because Maine has a close proximity to Canada and is completely surrounded by eight border crossings, the Maine Potato Industry was the first area to feel the effects of the increased imports. Seventy percent of the Canadian imports entered through Maine ports of entry and in 1980 that volume of Canadian potatoes had increased to more than 6,000 loads which was 25% of the total volume of Maine potatoes that went to the fresh tablestock market.

I would like to relate my frustration with trying to seek relief in Washington in regard to the infiltration of Canadian potatoes into the United States. In 1978, the directors of the Maine Potato Council asked me to file a petition regarding Canadian imports. I sought legal assistance from the local attorney that the Maine Potato Council retains and also from the legal staff of the Maine State Attorney General and all attorneys informed me that they did not know the tariff laws and therefore would be unable to file a petition. Since my directors had asked me to file a petition, I attempted to do so on my own. I worked up a draft of a counter-vailing duty petition and traveled to Washington to work personally with officials of the International Trade Commission and the Department of Commerce. Both gentlemen gave me assistance and advised me that I

should file an anti-dumping petition. I returned to Maine and worked for four months only on an anti-dumping petition. The documentation of injury is nearly impossible for someone in my position to prove, as the buyers who purchase Canadian potatoes instead of Maine's are very reluctant to provide you with the information needed for the petition. You must prove lost sales in an anti-dumping petition and it's impossible to get a buyer to tell you if he bought Canadian potatoes instead of Maine potatoes.

After working four months on the petition, thirty copies were mailed to the International Trade Commission and Department of Commerce. At this time, some hundred producers blockaded the border between Maine and Canada and the administration immediately sent a task force to northern Maine for a private meeting with a select group of growers. At this meeting, which I was not privileged to attend, it was decided that I should file a counter-vailing duty petition.

A telephone call was received from the administration and I was informed of this decision for me to file a counter-vailing duty petition immediately. The calling party suggested that the anti-dumping petition, which I had filed, would be denied before it was published in the federal register.

Following the blockade of the border, the administration did initiate a livestock feed potato diversion program throughout several fall producing states and again in 1980 a small area of northern Aroostook County received another livestock diversion program. The purpose, of course, was to remove surplus stocks from the market. During the same time frame, Canada was suffering from a similar surplus situation and under Canada's Stabilization Act, the Canadian potato growers were subsidized for the potatoes sold in the markets, including the U.S. markets.

I gave up on my ability to file a petition and went to work in hopes of getting some legislation that would give us some relief. Under the GATT, the

quota for importation of tablestock is at 45,00 hundredweight and the importation of seed stock was at 114,000 hundredweight. The old law called for the quota to come in at a tariff on tablestock at 37.5 cents. When that quota was reached, then it went to a higher tariff of 75 cents. However, under the GATT the United States conceded tariff reduction on Canadian potatoes entering the United States by 5 cents per hundredweight for eight consecutive years. Lower quotas would reduce at a one-half a cent until both of the tariffs were at 35 cents across the board and there would be no quota. This higher tariff caused seed potatoes to enter the United States under the lower tariff after the tablestock quota had been filled and those seed potatoes could be found on supermarket shelves. The legislation we were working on called for customs to make a determination and guarantee that seed entering the United States would enter as seed to be planted. We were successful last January in getting this piece of legislation into effect. It took about three years for this to come to pass.

The government granted the Maine Potato Industry a 332 investigation on March of 1982. This investigation continued until mid-August and the documentation gave us some very valuable information for filing a petition.

In July of 1981, the Maine Potato Council retained the Washington legal firm who began investigating the amount of injury. This action is very costly for a small agricultural association. However, on February 9, 1983, the Maine Potato Council filed an anti-dumping petition against the importation of Canadian potatoes. The investigation of our petition is ongoing at this time. On August 2, the Department of Commerce made a preliminary decision and increased the duty 17.3% believing that there is possible injury to the Maine Potato Industry from the importation of Canadian potatoes. The final determination of the Commerce will come on November 4, and the International Trade Commission will be holding a hearing on November 18 in Portland, Maine. If there are no extensions,

the final determination of the International Trade Commission should come on December 19. If the determination of the International Trade Commission and the Department of Commerce is in our favor, it is my understanding that the increase in tariff will be allowed to a percentage of the documented injury.

My reason for relating this effort by the Maine Potato Council is to show how frustrating, expensive, cumbersome, and perplexing it is for a small association to file a petition which investigation takes at least ten and one-half for finalization. I believe the complex purpose of filing a petition and the added legal costs have precluded small businesses and agricultural associations from pursuing their right under the law. People and producers of the specialty commodities I mentioned before have contacted me and questioned as to how they should go to get relief and when I detail my frustration of five years in order to get some relief, they lose their incentive for action.

Agriculture across this nation is in financial trouble. I am sure you all remember the first text you had in grade school on economics that read the basic economic foundation of this great nation of ours is based on agriculture and I believe that this text still reads the same today. The government is afraid of that word "protectionism." But I urge you to take a good look at what is happening to the producers of the United States in regard to the importation of agricultural commodities. The past few administrations have held strongly to the idea of free trade. Free trade is alright if it is fair. The trade unbalance is causing many of the problems in United States with unemployment as well as bankruptcies of small businesses and farmers.

It is very difficult for U.S. producers to understand how the Canadian government can close their borders to the importation of U.S. potatoes when they have potatoes of their own. This happened a year ago to producers on the Eastern shore, Virginia, and Delaware, as their potatoes normally go into Can-

ada during the month of July, a time when Canada does not have potatoes available. Normally, Canada grants easements for these Eastern shore potatoes to go in at this time of year and since they found they had Canadian potatoes available, they refused to give easements to the Eastern shore producers. This happened overnight.

Canada has also embargoed the importation of seed potatoes from Washington State, Oregon, and Idaho. This was done in the belief that these areas have a nematode that they did not want introduced into Canada. However, they do allow tablestock potatoes to enter from these areas, especially during the months of June, July, and August when they do not have potatoes available.

Canada also has a fast-track which they can put into place and they did this past season with the onion industry. This fast-track calls for any product coming into Canada to come in at the same price as the Canadian producer is receiving for his commodity. In other words, if the onion sold for \$1 in the United States and went into Canada at \$1, however, if the Canadian producer was receiving a \$1.25 for his onion, then you would have to pay 25 cents fast-track tax in order to get your onions into Canada. All of these various embargoes can be put into place by the Canadian government overnight and we in the United States do not, at the present time, have anything to curtail the importation when we have available commodities. The only relief we can seek is the lengthy, costly petition.

Senators Cohen and Mitchell have legislation which has been added to the bill to reorganize commerce and the STR office as one agency as an amendment. This amendment calls for a small agency to be established to advise small business and agricultural associations on filing a petition and after the first \$50,000 is expended, the government would then cost share the remaining amount for filing a petition. The legislation also calls for the fast-track to be

established a 201 petition if the secretary of agriculture finds that the petitioner is being injured. Congresswoman Snowe has companion legislation in the House.

Representative Gilman of New York has a very extensive fast-track legislation which he introduced this year and Congresswoman Snow is a co-sponsor of that fast-track legislation. The U.S.D.A. should take a look at both pieces of legislation here mentioned and support for the benefit of agriculture.

There are other problems in agriculture. Soil conservation has certainly come to the forefront in regard to agriculture and there is presently several bills introduced this year that call for encouragement of soil conservation in the United States by penalizing producers who continue to farm highly eroding land. One bill would bar federal price support payments for any commodity grown on land susceptible to erosion and the band would also extend to the crop insurance protection as well as Farmers Home Administration loans. We, in Maine, believe in soil conservation and I think you will find more conservation practices are being used by producers. However, this bill seems to take away a farmers right to farm. It seems lately that the government is telling the grower or farmers how to farm, and who he can sell his land to. Row crops such as potatoes have a tendency to erode more than grassland. Therefore, such legislation might be the demise of the Maine Potato Industry since 40 percent of our producers are financed by the Farmers Home Administration.

The Maine Potato Council has supported and worked for federal crop insurance for many years and Maine was very pleased when the administration came up with a crop insurance for potatoes. The crop insurance program needs more fine tuning for potatoes. Having studied the crop insurance program of Idaho many years ago, we truly realize that the potato program can become a very serious economic burden for the government. However, we feel that it is ex-

tremely important that growers are allowed crop insurance or the availability of potato insurance into storage. In many instances, any problem with potatoes during harvest will not show up until the potatoes have been stored for a period of time and Maine Potato Council feels that an insurance should be available for pre-storage. For instances, 60 days into storage. It might be possible to have various types of potato insurances available for the producer. Some areas are known to receive hail damage back through the years and this area often times receives more severe storms and a grower might wish to insure his crop for damage along this line. Many growers might desire to have nothing but insurance into storage for a short period of time and I would certainly agree that this type of insurance might be a little more expensive than in the field insurance. Canada has a very extensive crop insurance program and a copy of which is attached as Attachment No. 4 and it is known that the provincial government pays 50 percent of the cost of this insurance.

Research is extremely important for all agriculture. The potato breeding research is extremely important to all potato producing areas and Maine is extremely interested in some new varieties being available. Many breeders are working on resistance of nematode and other diseased problem in the potato and this would certainly save the potato producer a great deal of money if the research can be developed along this line. It is also extremely important that research continue to develop methods of insect control which can be devastating to a potato field since the highly publicized concern of the public against the use of pesticides has caused the restricted and many times elimination of valuable pesticide protection that producers use in their potato fields.

Last, but not least, is the serious economic condition of all agriculture throughout this nation. The trade problems, both methods of export and import, have caused the bankruptcies of several farming operations in Maine and through-

out the nation. The grain embargo several years ago against the Russians was devastating to many of our mid-Western areas. The importation of Canadian potatoes in such vast quantities at a time when Maine and New York and Pennsylvania are in the Eastern market has also caused many a producer for 6 years to sell below the cost of production and therefore, have to discontinue his farming operation due to bankruptcy. The U.S.D.A. cannot play the part of "mother nature" as there is no way that any of us can control the weather. The U.S.D.A. PIK program which was in place this past season looks like an excellent means of controlling the supply of wheat and corn. However, mother nature decided to reduce the remaining supply of those grains and therefore, many cattle producer does not have the grain necessary to feed his livestock. Texas ranches are having a very serious economic problem and many of them are stating that they will have to sell off all of their stock and also their land. They are asking for financial help from the government and the U.S.D.A. has stored grain available but officials are reluctant to give grain to Texas cattlemen since other states will also demand grain. This action would deplete the U.S.D.A. storage grain supply. Low interest Farmers Home Administration loans are available to Texas ranchers, but many a Texas rancher is already in debt beyond his means to repay.

The Farmers Home Administration has been the "sugar daddy" for agriculture. However, the Farmers Home Administration is vital to the survival of U.S. agriculture. The original focus of the Farmers Home Administration was to help the small farmer. At the present time, the Farmers Home Administration is involved in home loans, town improvement, recreation facilities, as well as very large corporate farming operations. Where are the nations banks that supported agriculture in the past? The largest banks of the nations loan billions to foreign countries, and they never foreclose on any foreign loan when told "sorry we can't repay." The time had come to take a good look at banking and the Farmers Home Administration. The deregulation of banks may be more costly to agricul-

ture as local banks may become more protective of their investments. Many of our local banks no longer have a farm manager loan officer. Perhaps agriculture needs more local bank involvement with a Farmers Home Administration subordination. A viable agriculture is the foundation of this nation and farmers need money to farm. It seems if you have money, you can easily get more money or if you don't have money and your income is below the poverty level you get financial help. There are a lot of farmers in the middle that are discriminated against and they need help.

The U.S.D.A. needs to take a long hard look at the financial picture of agriculture and perhaps come to the realization that agriculture can no longer support "cheap food and fiber for the nation."

ATTACHMENT No. 1

NEW BRUNSWICK AGRICULTURE SUBSIDIARY AGREEMENT

C. The Development Strategy

The general objective is stated in the first Agricultural Development Sub-Agreement: "to enable Canada and the Province to jointly participate in initiatives directed towards the attainment of maximum economic and socio-economic benefits from the agricultural resources of the Province of New Brunswick, and particularly to reinforce federal and provincial government policies and programs relating to the development or support of all aspects of the agricultural sector."

More specifically, the development strategy is aimed at increasing the agriculture and related sectors' contribution to provincial output, earned income and employment by concentrating efforts on increasing the volume and efficiency of production, expanding the range of processing activities and improving the marketing of commodities for which New Brunswick can develop a competitive advantage in the domestic and export markets.

The potential of the agriculture and related sectors to contribute additionally to provincial outputs has been identified and is based on the attainment, by 1983, of the following commodity targets:

Commodity	Production 1975	Production Targets 1983
Potatoes	10 820 000 CWT	14 million CWT
Hogs	12 176 000 LBS	20.6 million LBS
Dairy fluid	140 133 000 LBS	175 million LBS
Manufacturing	80 500 000 LBS	114 million LBS
Beef	14 070 000 LBS	18.2 million LBS
Sheep	630 000 LBS	963 000 LBS
Selected vegetables increase of 11 million lbs. valued at \$1.5 million		
Fruits: Apples	310 000 BU	700 000 BU (1988)
Strawberries	1 110 000 QTS	8.5 million QTS
Blueberries	3 835 000 LBS	7.8 million LBS

These production targets, at which the development effort is aimed, will, in all probability, not completely materialize in every case. However, the targets are regarded as realistic goals given existing production capabilities and current estimates on available markets. Given the attainment of the above targets, the physical volume of agricultural production can be expected to increase by 35% over the 1975 level. As a result of both increased output and gains in the efficiency of production, the annual gain in gross provincial product in primary agriculture is estimated at \$18.8 million by 1983, in 1975 dollars. The annual gain in earned income in the primary sector is estimated at \$14.1 million. It is further estimated that the production of this increased output will require an additional 900 man-years of labour given the attainment of productivity objectives. Earned income in gross domestic product per employee should increase by twenty-five per cent.

Because of the essential linkage which exists between primary agriculture and other associated industries, the strategy is intended as an integrated, comprehensive package for economic development purposes, touching all levels of the industry. In addition to

these potential gains in the primary sector, additional benefits will be realized in the related processing and supply industries. It is estimated that as many as four man-years of employment in the off-farm activities are created for every additional man-year in the primary sector.

This development strategy will apply province-wide, but will remain flexible enough to be consistent with, and appropriate to, New Brunswick's geographic diversity, resources endowment and cultural differences. Development opportunities will therefore be undertaken and constraints to such development removed wherever they exist in the Province.

Through the development strategy, assistance will be directed to those persons or enterprises which show potential to contribute to the objectives of the Agreement and demonstrate the need for such assistance.

The development strategy is designed to essentially implement the major thrusts outlined in the Commodity Sub-Strategies. However, because development circumstances can change rapidly, the strategy must retain sufficient flexibility to respond to presently unforeseen development opportunities which may occur over the life of the agreement. Development circumstances in the sector and program measures will be monitored and evaluated on a continuous basis throughout the life of the Subsidiary Agreement and program and commodity priorities changed accordingly.

In recognition of the desirability to meet specific commodity goals in the agricultural sector through the mechanism of this Agreement and, in recognition of the existence of possible supplemental funding in certain economically depressed regions with significant agricultural potential, every effort will be made to have proposed agricultural projects under regional sub-agreements reviewed by the appropriate working committees of this Agreement, to ensure their compatibility with the overall agricultural objectives.

The constraints impeding the attainment of the potentials in the agricultural sector are presented in the Commodity Sub-Strategies. While each commodity group has its own unique problems, most significant constraints to increased agricultural production are categorized in the following general groupings: Human Resources; Commodity Marketing, Land, Agricultural Facilities both on and off-farm and, Availability of Capital.

The 1983 production targets by commodity are based on presently estimated market opportunities. These estimates will be reviewed annually by the Management Committee and revisions may be made in light of changing economic and supply-demand outlooks.

D. Commodity Sub-Strategies

1. Potatoes

New Brunswick potatoes account for slightly over 20% of Canada's total potato production and can be found on national and international markets in three major product forms: tablestock, seed and processed potato products. This commodity is of primary importance in New Brunswick agriculture, accounting for 34% of total farm cash income during the period 1971-75.

Opportunities

There is an opportunity to significantly increase seed potato exports, not only offshore, but also to the United States, Ontario and Quebec. This would be facilitated by improving the quality of seed produced and ensuring efficient marketing. In order to increase the volume of the New Brunswick crop that is processed, sizeable acreages will have to be developed on the east coast of the Province. There is also an opportunity to increase the value to the producer of the raw product delivered to the processor. No significant growth opportunities appear in the tablestock sector, although steps should be taken to stop the erosion of Quebec and Ontario markets and to regain the New Brunswick market.

Constraints

- The quality of seed, tablestock and processing potatoes is low;
- Aggressive market promotion and after-sales services in seed and tablestock markets are lacking;
- The industry lacks an effective organizational structure;
- There are major deficiencies in transport and handling systems;
- The land area available for potato production is limited and there is a general lack of application of crop rotation technology;
- Land drainage is inadequate and soil erosion problems are common;
- Bacterial and viral diseases are major problems;
- There is insufficient product diversity... yellow-flesh as well as white-flesh tuber type;
- There are delays in implementing known technology, particularly with regard to storage.

Objectives — 1983

1. Establish an effective industry organizational structure;
2. Increase the land base to 125 000 "best suited" productive acres in Carleton, Victoria and Madawaska Counties to ensure adequate rotation and obtain annual production of potatoes from 62 000 acres;
3. Increase the share of local tablestock on the New Brunswick retail market from 125 000 to 400 000 CWT;
4. Increase seed exports by 40% to a total of 1.7 million CWT;
5. Evaluate the feasibility of producing and marketing yellow-flesh varieties and establish commercial production of 3 000 acres;
6. Establish the base of a potato industry centred on the east coast of the Province;
7. Increase unit output by 10% to an average of 225 CWT/acre;
8. Achieve a total industry production target of 14 million CWT of marketable potatoes.

Initiatives

Seed

- A designation system will be established to identify seed areas;
- Aggressive and systematic measures to eradicate ring-rot from New Brunswick potato fields;
- The promotion of seed quality improvements;
- The evaluation of the potential of yellow-flesh varieties;
- The establishment of a containerized handling system for seed potatoes;

- The provision of technical and after-sales services;
- The demonstration of seed production potentials on the east coast;
- The delivery of specialist advisory services.

Processing

- The promotion of quality improvement techniques to producers;
- The provision of on-farm demonstrations to upgrade production technology;
- The demonstration of processed-crop potentials on the east coast;
- The effective integration of the entire industry to ensure the supply of quality tablestock¹.

Tablestock

- The institution of an intraprovincial inspection service²;
- Programs to improve the quality of tablestock;
- The promotion of New Brunswick tablestock and improved merchandizing methods;
- The establishment of an efficient market information system;
- The introduction of palletized handling systems.

General

- The promotion of an effective industry-wide organizational structure;
- The improvement of storage technology on farms;
- The development of livestock feed potentials;
- The provision of assistance for land development.

2. Fruits and Vegetables

The fruit and vegetable industry is a modest sector of the Province's agricultural economy, representing 4% of the total farm cash income in 1976. In general, the industry is considerably underdeveloped and does not supply a significant portion of the domestic demand. Even the tourist trade, which could be accommodated due to the seasonal character of fresh fruit and vegetable production, is quite unexploited. The ready access to major urban markets in the northeastern U.S. seaboard further supports the attractiveness of horticultural development prospects in New Brunswick.

¹High quality tablestock which is currently used for processing could be diverted to tablestock market.

²The Province is to engage in negotiation with Agriculture Canada.

ATTACHMENT No. 2

Table 14.--Fresh potatoes, all:1/ U.S. imports for consumption from Canada, by selected customs districts and by quarters, crop years 1979/80 to 1981/82 and October-December 1982

(in thousands of hundredweight)

Period	Northeastern Region				Pembina, N. Dak.	All other	Total
	Portland, Maine	Ogdensburg, N.Y.	Other 2/	Subtotal			
1979/80:							
Oct.-Dec. 1979-----	340	50	12	402	116	4	522
Jan.-Mar. 1980-----	355	8	50	413	21	13	447
Apr.-June 1980-----	354	55	165	574	11	114	699
July-Sept. 1980-----	80	80	37	197	0	7	204
Total-----	1,129	193	264	1,586	148	138	1,872
1980/81:							
Oct.-Dec. 1980-----	531	149	69	749	61	22	832
Jan.-Mar. 1981-----	1,337	122	75	1,634	176	216	2,026
Apr.-June 1981-----	531	99	25	655	127	137	919
July-Sept. 1981-----	65	31	1	97	3	2	102
Total-----	2,464	501	170	3,135	367	377	3,879
1981/82:							
Oct.-Dec. 1981-----	515	108	8	631	239	6	876
Jan.-Mar. 1982-----	980	172	47	1,199	190	36	1,425
Apr.-June 1982-----	1,526	182	117	1,825	65	277	2,167
July-Sept. 1982-----	377	20	18	416	1	76	493
Total-----	3,398	482	190	4,071	495	395	4,961
1982:							
Oct.-Dec. 1982-----	487	79	20	587	87	24	698

1/ TSUS items 137.20, 137.21, 137.25, and 137.28.

2/ Buffalo, N.Y., New York, N.Y., Boston, Mass., Bridgeport, Conn., and St. Albans, Vt.

Source: Compiled from official statistics of the U.S. Department of Commerce.

ATTACHMENT No. 3

Table 18.—Fresh potatoes: Estimated Northeastern Region ^{1/} domestic supplies, out-shipments and in-shipments, exports, imports and apparent consumption, by types and by seasons, crop years 1979/80 to 1981/82

Crop year	(In thousands of hundredweight)							Ratio (per- cent) of imports to consumption
	Domestic			Exports ^{4/}	Imports	Apparent consumption		
	Regional supply ^{2/}	Out- ship- ments ^{3/}	In-ship- ments ^{3/}					
All potato types, all seasons								
1979/80-----	43,798	10,266	13,678	26	1,332	48,516		2.7
1980/81-----	38,949	8,039	13,960	41	2,633	47,462		5.5
1981/82-----	42,972	8,752	14,192	8	3,420	51,824		6.6
All potato types, fall-harvest season								
1979/80-----	43,798	10,266	8,436	26	1,332	43,274		3.1
1980/81-----	38,949	8,039	8,610	41	2,633	42,112		6.3
1981/82-----	42,972	8,752	6,753	8	3,420	46,385		7.4
Round white type, all seasons								
1979/80-----	37,673	9,753	2,257	26	1,066	31,217		3.4
1980/81-----	33,259	7,877	2,304	41	2,370	30,015		7.9
1981/82-----	36,840	8,256	2,542	8	2,462	33,380		7.4
Round white type, fall-harvest season								
1979/80-----	37,673	9,753	160	26	1,066	29,120		3.7
1980/81-----	33,259	7,877	164	41	2,370	27,875		8.5
1981/82-----	36,840	8,256	166	8	2,462	31,204		7.9

^{1/} Connecticut, Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont.

^{2/} Production harvested for all uses minus farm shrinkage and loss; compiled from official statistics of the U.S. Department of Agriculture for all potato types.

^{3/} Derived from an estimate that reported unloads in 7 cities account for half of the shipments into the Northeastern Region.

^{4/} Certified seed potatoes. Compiled from statistics of the Maine Department of Agriculture.

Source: Estimated by staff of the U.S. International Trade Commission, except as noted.

Representative SNOWE. Thank you, Ms. Kelley. Mr. Greaves, please proceed.

STATEMENT OF STANLEY P. GREAVES, EXECUTIVE VICE PRESIDENT, MAINE POTATO SALES ASSOCIATION, PRESQUE ISLE, MAINE

Mr. GREAVES. Thank you. My name is Stanley Greaves. I live in Presque Isle, Maine, where I'm employed as executive vice president of Maine Potato Sales Association. I am also the coordinator of a long-range plan which the Maine potato industry has adopted to address the problems associated with the one-crop economy of our industry. I am also involved in the transportation matters which face our potato industry.

The opportunity to appear before this committee today is very much appreciated, as is the fact that one of these hearings is being held in Bangor, Maine. I would like to thank Congresswoman Snowe and the Joint Economic Committee for inviting me to participate.

Probably one of the greatest concerns that I have observed in the past farm policies is that they are often not flexible enough to address the specific problems within small agricultural areas such as Maine or do not sufficiently involve crops not considered to be basic commodities. Programs are too often formed to address problems associated with large arid western or midwestern production areas and do not adapt to problems of smaller farms in the humid eastern areas. For instance, in the past a considerable amount of attention and money have been directed toward irrigation projects to make arid western soils more productive for cash crops. These irrigation projects are not needed in the eastern humid production areas. However, the East generally has very acid soils which require applications of ground limestone to neutralize the acidity. Some soils are so acid that cover crops cannot be grown successfully unless the applications of substantial amounts of limestone are made. I believe the same consideration should be given to all production areas when efforts are made to protect and enhance the productivity of our soils.

The application of ground limestone is as important to the productivity of certain areas in Maine and certain eastern areas as water is important to productivity in the arid western areas. The PIC program designed to reduce overproduction is another example of a program which may be in need of exceptions to accommodate certain production areas. For instance, in the West and Midwest grains are grown as a cash crop to earn profits. Production must be kept in line with demand to keep farmer profits and inventories reasonable.

The PIC program to keep supply and demand in line is a good program west of the Mississippi River; however, in Maine, we grow grains mostly as a rotation crop to add humus and water-holding capacity to our soils, and to reduce verticillium wilt, fusarium wilt and Rhizoctonia in our potato crops which follow. Chances of recovering production costs for oats or other grains produced in Maine are marginal, and if any profit is shown it will be negligible. By encouraging the Maine potato grower to reduce his grain acreage

the Government is reducing a much needed practice of crop rotation and thus damaging the productivity potential of the farmer for cash crops. In view of the one-crop economy, the farm program should consider encouraging more grain-rotation crops rather than trying to reduce them in this particular area.

Another observation that I have noticed over the years is that followup servicing of FHA crop production loans has lessened yearly. Crop financing should be based on encouragement of better management and planning, including soil tests, needed soil amendments and marketing plan. FHA should encourage complete farm management, including prevention of practices which could result in land-resource losses. Some resources could take generations to replace.

Consideration should be given to 3- or 5-year crop financing which includes proper rotation and soil conservation practices. When a farmer does not know if he will be financially able to farm again next year, he's quite reluctant to invest in land enhancement and preparation for the future. I believe yields could be increased 20 percent on many of the farms in our potato area of Maine through followup servicing of loans and improved long-term farming practices.

During the formulation of a long-range plan for our potato industry, it was included that the need for new russet and round white potato varieties is a top priority. This need has also been identified by nearly all major eastern potato production areas as of top importance. With the heavy use of chemicals, fertilizers, mechanical harvesters, and the improvement of growing practices to increase yields, the need for more compatible varieties has emerged. A need has also recently developed to cut back on our dependence on poisons to kill pests, disease, and weeds.

This can all be best accomplished through upgrading the ARS breeding program at Beltsville, Md. and the CSRS programs with various universities in the East. New varieties can now be bred which are resistant to various diseases and pests, and also more adaptable to the needs of producers and consumers. There are no private companies in the Eastern United States geared to accomplish or coordinate this very important work. The USDA research work at Beltsville, Md. and the work at universities has declined drastically in productivity over recent years due to inflation factors. It is appropriate that future farm policies have provisions to upgrade research to levels more in line with the needs of agriculture in the United States.

Other areas of concern relative to agriculture in the East are marketing and transportation. These areas both need attention in farm policy planning efforts. I must again confine my remarks to the Maine potato industry because that is the industry I know best. I believe it is very significant that nearly 50 percent of the value of Maine potatoes delivered in New York City, our largest market, was transportation costs last season. It is also significant that more than 50 percent of the fresh and processed farm products shipped from Maine last year were by trucks domiciled outside of Maine. These truckers, who are declining in numbers, have no investment in our area or responsibility to continue serving us. This leaves us in a situation where we do not have an acceptable rail option nor

an appreciable sized local trucking industry to fill our needs. Rail sidings are being removed and service has deteriorated to a point where shippers of perishables are reluctant to use rails. I am sure the situation prevails in many more rural farming areas.

At certain times in recent years Maine shippers have been unable to accept market orders because transportation was not available. In order to address this situation, we have called on the USDA Department of Transportation and the USDA Agricultural Marketing Service for professional advice and cost-sharing financial help. This has been very beneficial to our area and I strongly urge that future farm bills and policies provide a strong position for both the U.S. Department of Transportation and the Agricultural Marketing Service.

In regard to marketing, future farm policy should include incentives for improving the quality of products sold to consumers. In many crops, such as potatoes, it is very difficult to find alternative uses for sound lower quality product which has equal food value although it is less salable because of appearance, size or some other factor.

As an instance of this, the Maine potato industry is competing in our markets with potatoes from Canada which, by Canadian law, must be sized no less than $2\frac{1}{4}$ inch in diameter. Our U.S. No. 1 regulation allows $1\frac{3}{8}$ inch minimum diameter. If we remove the proportion of our potatoes from our competitive markets which range between $1\frac{3}{8}$ inches and $2\frac{1}{4}$ inches diameter to meet Canadian competition, we would in effect be holding 17 percent of our table potatoes from market with no alternative sale. This would all be U.S. No. 1 grade sound potatoes with food value equal to the best quality sold.

To compensate for the loss occasioned by holding these potatoes from markets, consumers must pay a higher price for the marketed portion. It is for this reason that those who farm need help from USDA in finding a use and value for lower quality product that still meets U.S. No. 1 grade specifications. Smaller crops, such as potatoes, are not included in any type of price support program in effect in the United States. It would seem appropriate that a provision be included in future farm policy which would provide some degree of assistance by USDA in finding a use for small crops which are U.S. No. 1 and which have high nutritional value. Thank you.

Representative SNOWE. Thank you, Mr. Greaves. Peter Crichton.

STATEMENT OF PETER CRICHTON, EXECUTIVE DIRECTOR, AROOSTOOK FAMILY FARM CORE

Mr. CRICHTON. Congresswoman Snowe, my name is Peter Crichton. I'm proud to state that I'm a native of Aroostook County, the northernmost county in the State of Maine, commonly referred to as simply the county by all who know her. We are not a rich county in terms of the number of job opportunities we offer, but we are rich in many other ways; namely, in the kind of people we are, because, for the most part, we are honest, determined, hard-working people. It is no accident that we are this way for, you see, we have an agricultural economy where young people learn the value

of a dollar and where a hard day's work is the rule and not the exception.

I'm here today speaking on behalf of the Aroostook Family Farm Core, a farm organization founded nearly 2 years ago out of a belief that the family farmers of Aroostook County needed a voice of their own to speak up for their hopes and needs. As I became executive director of this organization less than 4 weeks ago I will not pretend to be an expert. There are many things I have yet to learn, but of one thing I'm certain, there's a crisis today in America and it is the disintegration of the family farm.

Before I speak any further, however, let me say in all sincerity what a significant step I believe you have taken by coming here to Bangor, Maine, and listening to the concerns of organizations such as my own. Congresswoman Snowe, you are to be commended for your part in having this hearing scheduled. The only true way to develop a genuine farm program for this Nation's future is to do exactly what is being done today clear across this great Nation.

If I'm correct, not since the creation of the FmHA and the other farm programs of that period has there been a thorough and complete review of their original missions. While more and more programs have been added to meet what seemed to be increasingly new and challenging problems, the older farm programs have continued along largely unaffected and unchanged from their original purposes. Perhaps one of your tasks should be to look at these various farm programs and, with Congress, begin to make them less bureaucratic and more responsive to the needs of the present-day farmer.

The agricultural world in which we are living today has changed very rapidly over the past two decades in favor of the larger nonfamily farms, farms that are not owned and operated by a farmer with his family providing most of the labor. Thus it is necessary for those of us concerned about the future of American agriculture to be aware of what is happening to the family farmer.

For your benefit and mine, let me recall a few words of former U.S. Senator Gaylord Nelson, a staunch defender of the family farm. They are words that echo the concerns of millions of Americans across this Nation who recognize the struggles of the American family farmer and who are looking for our leadership in Washington to become more sensitive to the family farmer's problems.

Senator Nelson wrote:

At best, family farm life does not provide an easy life; and, in bad times, there are harsh difficulties. But it provides a good life and one in which independence, industry, hard work, foresight, cooperation, and other qualities central to America's needs are fostered.

Congresswoman Snowe, the loss of this way of life would be a tragic chapter in America's history and it is, without question, a crisis of deep national proportions that affects us all. From the earliest days of our Nation the family farm has represented the agrarian dream. One of this Nation's most influential Founding Fathers and the author of the Declaration of Independence, Thomas Jefferson, saw America's strength as directly related to agriculture. He expressed his strong belief in the family farm by writing of its virtues in numerous essays. He could see in the 1800's what we know today as true: that bigger is not always better; and that the further

removed people become from each other by centralization the more they are dictated to by big government, big business, big labor, and big agriculture.

The survival of the family farm is crucial to the survival of American democracy because we are talking about the crucial issue of who will own America's farmland. Will it be 100 corporations or 80,000 family farms? Because of these and other critical questions, the Aroostook Family Farm Core welcomes your examination of what type of farm system Americans want and what are the necessary changes to make that goal a reality. This having been said, I would now like to focus your attention on some of the specific problems and issues which have been raised by our members at various meetings.

First and foremost, a hearing such as this could not be held without the question of fair trade being raised. My colleague from the Maine Potato Council, Dotty Kelley, is much more knowledgeable of the adverse impacts that have resulted from the import of Canadian potatoes into Maine markets; but certainly I want you to be aware of the concern my organization has for this issue. If I am judging the Aroostook farmer right, and I believe I am, the majority only ask that they be given an equal opportunity to sell their product, based not on false advantages, but on its ability to meet the test of the consumer. He asks no more, no less.

On the deepening crisis of the family farmer in Aroostook and across America, the combination of low prices, high interest rates, high production costs, and declining net worth is forcing many growers to their last stand. But the real human tale of the thousands of farm families that are being affected by foreclosures and difficult times seems lost in the mass number of statistics. Just as when a friend is in need of your help, true friends of this Nation's family farmers would not walk away or turn their back on the problems and needs of the family farmer. Yet as I speak there is a visible effort by many in Washington, D.C., to cut back on FmHA credits and loans. This is a travesty and largely without sound reasoning to those of us concerned about America's rural agricultural future.

In this period of economic uncertainty, it hardly seems justified that any politician would seriously propose cutting 70 percent off the farmers' emergency loan program; but that is exactly what occurred in 1981 when this program was drastically cut from \$5.1 billion to \$1.6 billion. I would ask that you weigh the consequences of such cuts and speak forcefully against any future actions of this kind.

Almost 10,000 farmers who have borrowed from the FmHA were forced out of business between October 1981 and December 1982. Although it can be agreed that the loss of some of these farmers may, in part, be due to inefficient farm operations, it is more often a case of too high interest rates and too low prices for their commodities. Today, farmers' fixed expenses are so high that a farmer can lose in 1 year more than he can recover in possibly 5 or 10 good years.

As the cost of farm machinery, fertilizers, and family living has risen, his income has lagged seriously behind that of other sectors in the economy. Based on a 1981 report, compiled by Farm Credit

Service, in Presque Isle, Maine, the total cost of potato production per acre in 1981 was \$1,392—or, based on a yield of 150 barrels to the acre, a cost of \$8.91 per barrel—when, in fact, the Aroostook grower has been receiving much less than that.

In short, something must be done to make the costs of farming more in balance with the net income returned. As has been suggested by people, perhaps a minimum pricing bill to insure that the farmers receive a fair price or perhaps a price support system in which farmers would agree to set aside a certain percentage of their crop in return for a higher percentage of parity.

In addition to the questions of fair and equitable commodity prices, our politicians in Washington, D.C., should look closely at the issue of interest-inflated farm machinery costs, et cetera, and make a tough stand against high interest rates. Moreover, it would be interesting to have an investigation done by the antitrust division of the U.S. Attorney General's Office to see just how many companies control the purchase price of farm machinery equipment, fertilizers, and other fixed costs of the farmer.

As to the spiraling costs of farming, what about the young farmer who can't afford to take up farming? What is he to do? Legislation such as the beginning farmers' assistance bill, sponsored in 1982 by Representatives Berkley Bedell and Tom Harkin among others, must be encouraged and supported. The bill went nowhere. It never saw the light of day out of committee. But it was valiant attempt by those concerned about the next generation of farmers. The bill would have provided Federal loan guarantees to State programs that target assistance to new farmers with limited net worth. We need this kind of legislation.

We also need tax policies that favor the transfer of land to the young and beginning farmers instead of nonfarm investors and the restructuring of overall tax policies and Government programs to favor family-sized farms.

Finally, to drive my point home about the disintegration of the family farm and the difficulty young people have in getting started in farming, according to a study released by the U.S. Department of Agriculture last year 1 percent of the farms in this Nation accounted for two-thirds of all net farm income. A startling statistic which has prompted many people to rethink the issue of the family farm and its social and economic significance to America. Indeed, there is a growing movement in this Nation for legislation that will restrict the purchase of farmland by nonfamily corporations, such as a State constitutional amendment passed by the voters of Nebraska last year.

Now, for just 1 brief minute I would like to depart from the prepared text to point out to you an article that was in the Bangor Daily this morning on the business page. It had to do with the Statistical Report Service of the Government which comes out with the figure of yield in potato production for each of the regions in the country and in the Nation as a whole.

Over the years, as I understand it from talking to farmers, there has been great concern that they do not get the true facts; and, because of that, even a slight error can mean quite a difference in the amount of income that will be returned to them.

They would like to see an effort made by you—I was at an executive committee meeting of my organization last night and they unanimously agree that it should be a priority of yours and also our other Representatives in Washington to look at that and see if there is some way that it can be improved upon so that it does better reflect the number of acres that are planted so that the costs to the farmer are fair and equitable.

Returning to my text, Congresswoman Snowe, members of the Joint Economic Committee, many of you may have come from rural upbringings and therefore know and understand what the family farm means to this country. It is my hope and the hope of the Aroostook Family Farm Core that you have listened to what has been said about the plight of Aroostook and America's family farmers; and that you will return to the Capital reinvigorated and refreshed in spirit, in the knowledge that you know the family farms of this Nation need your help. Thank you.

Representative SNOWE. Thank you, Mr. Crichton. And I thank you all for providing some very informative testimony on problems facing the family farmer and more specifically, the potato farmer here in the State of Maine.

Peter, just to pick up on the point, before going to other questioning on the issue that you just raised on the statistical data. How is that data gathered currently? Are you talking about improving upon the way we gather that information to make it more accurate?

Mr. CRICHTON. Yes; I would say, and Dottie, you know more about this than I do, but I know that it's a concern of farmers and has been for years, and correct me if I'm wrong. But they feel that this particular division. I guess, of the USDA, does not do their job accurately. And that the figures that they came out—the statistics that they came out with, which they came out with the other day, are not a true reflection of the acreage that's planted, and if they overestimate, then that means that the price that the farmer receives is not going to be the price that he should actually receive.

Representative SNOWE. Would you like to comment?

Ms. KELLEY. Madam Chairman, may I address that situation?

Representative SNOWE. Yes, please.

Ms. KELLEY. I guess I probably have worked with the SRS for about 8 years at the present time.

It's been a great concern of farmers down through the years. They have an effort. They come into Aroostook County. They employ people that go out and take samples, I think it is three times during the year. Those samples, of course, are sent back. I have done surveys down through the years before the report came out, and actually, when the report did come out, there was not that much difference. I think there's been 3 years that they have been off a substantial amount, and they do revise in August.

Now, to me that's the big problem, is when they revise their figures. Many times they've had to revise them up. We have a tendency to look at our own individual area and not see the national picture which it does reflect.

I feel that, and I think many of the directors of the Maine Potato Council feel the same way at the present time, because I've managed to get a chance for various directors and potato growers to go

to Washington, when the report is coming out and to see exactly what is done. And I feel the growers now that have been there feel that it's as accurate as we can possibly have. It's the only report we have. And if we didn't have some guideline, why, then we would be in more problems than we have at the present time.

Now, I'll have to agree with Peter on the report that we just received. But none of us know exactly how accurate that report is, and we won't know until August. And to me, the situation that needs to be done is to have them revise their report during the season instead of waiting until after all the facts are in. After we've sold our crop and we've seen how many loads go to market, and so forth, of course, it's much easier to come up with a report. But it's a very interesting situation, and you might be interested in having one of your aides, on a day when the report is coming out, go down and see just exactly how it does work.

Representative SNOWE. Yes; but they do update the information, when they realize that their information is incorrect, at some point, but it's at the end of the season?

Ms. KELLEY. Normally in August, which is too late to help you.

Mr. CRICHTON. It's like closing the barn door after the cows have left.

Representative SNOWE. Is there any way to document the misinformation?

Ms. KELLEY. No; there actually is not, because they have SRS reporters in all areas, and those people send the report in to Washington, and that report is compiled in Washington on a special day. Anyone that works in the SRS, they can't get out of that building the day that the report is coming out, until 3 o'clock in the afternoon.

And it's a very secretive situation. And I know that we've had this problem for years and years, that we feel lots of times they are incorrect figures. And these certainly may be at the present time. But it seems to be the best we have.

I'd like to say, on behalf of the potato growers, that the figures certainly reflect that the production of potatoes in the East is down decidedly. The extra potatoes we have are in the West.

Representative SNOWE. Well, I am glad that was brought to my attention, and I'll see what I can do in working with you, as well, to improve the method by which they gather this information.

Is it better to have no figures in this situation?

Ms. KELLEY. I think not, personally.

Representative SNOWE. No.

Ms. KELLEY. The figures are what we base on our entire industry on.

Representative SNOWE. I see.

Mr. GREAVES. I would agree with that statement.

Representative SNOWE. You need some, even if they may be off the mark.

Ms. KELLEY. And may I add to that just one statement, that if we did not have these figures and private enterprise took the project over, most of us could not afford it.

Representative SNOWE. To do it. I see.

Dot, you mentioned in your testimony concerning crop insurance and the need to provide storage crop insurance, as well. Can you

tell me how many farmers have used the crop insurance this year in the county?

Ms. KELLEY. I don't know the exact number, I'm sorry. I could certainly get that information for you.

There are not as many as we expected involved with the crop insurance. They didn't feel it was that much benefit to them, the cost of it at the present time. And I think maybe the figures will show, with those that did have crop insurance, and in some areas had some losses where the plants did not emerge, and so forth. And I know a couple instances where they have stated that the crop insurance, the cost would not even cover their cost.

Representative SNOWE. Do you think that if there had been crop insurance for storage that more farmers would have participated? I mean, would that have made a difference?

Ms. KELLEY. Very definitely. We've had some hearings in regard to this, and all growers have projected that they would prefer to have the crop insurance into storage only for a short period of time. And the tobacco industry is the only industry that has insurance into storage, and it had to be legislated.

Representative SNOWE. Stan, at the end of your testimony you were discussing the need for some degree of assistance by USDA in finding a use for small crops, such as potatoes.

Could you suggest how that could be done by USDA, elaborate on that point?

Mr. GREAVES. Well, of course, there are several ways they could be used. We do have an alternative of using them for starch or for alcohol or for—in the case of seed, why there are export markets for small-size potatoes in other countries. But we need some help on this. I believe a year ago, we came to Washington, and we were talking about some export assistance for small-size potatoes to Venezuela and other areas to be used as seed, because we could not compete with the Dutch and with the Canadians, who have subsidies for such things as these. Now that's one way of doing it.

And I think probably some marketing assistance would be good. If we could just determine whether or not we could get a higher price for a better grading job in the markets of round, white potatoes than we're doing, and if there would be a consumer market, at a smaller price, for small-sized potatoes. There's work that could be done there.

There are various ways to do this, and I think one of the big potentials is in the export markets. And if we could help, as the Canadians are being helped, why, maybe we could get a portion of that. And I would say too that this has been one of our big problems in our markets where the Canadian Government helps the Canadians find export markets for small-size seed potatoes. This enables them to put a real premium size into our markets, often at less money than we're getting for our regular U.S. No. 1 potatoes.

I could mention, too, I am sure you are aware of it, that just recently the Canadian Government bought 8 million dollars, worth of New Brunswick potatoes over a 2-year period. These are seed potatoes for Algeria. These potatoes were being sold on a government-to-government basis, and I don't know if Algeria is paying the same amount that the Canadian Government is paying the growers over here. But programs like this that the competitive governments

are putting on for their producers makes it difficult for us to participate in those same markets.

Representative SNOWE. I'd like to ask all of you your opinion on what would be your suggestions for major provisions to be included in a "small farm" farm policy. And I think one of the benefits of this hearing, unlike the other hearings that we have held, we're really addressing the issues concerning the small farmer, which is representative of, I think, the New England farmer.

Would you have any suggestions for priorities, in terms of what should be included, as we begin to develop a farm bill for 1985? And, I think, frankly, some of the policies have to be directed toward small farmers, because the Federal policies have not specifically addressed the needs of the small family farm. I think this is largely characteristic of the farms in New England.

Do you have any ideas at this point?

Mr. CRICHTON. Well, I consider Dotty much more knowledgeable of the potato industry. You notice I took a lot of notes when she was speaking [laughter], but I'll take a crack at this one. I guess I would refer to a couple of things that I mentioned during my testimony, and one was about farmland and the purchase of farmland by nonfamily corporations. I think that's a critical issue. And out in the West, I understand that those people who are concerned about the future of the family farm have acted to see to it that there is legislation passed or State referendums to protect that farmland for the family farm.

Now that's something that here in the East I guess we haven't really caught up with, what I can see. I'm going to be going out in Nebraska and talking with folks out there to see what they're doing. Another thing that I am concerned about, and I know that Danny LeBre, the president of my organization is, is the young farmer being able to get into farming. And I think that has a lot to do with the family farm. That has to be a priority, one of the top priorities of this Nation, I think, of people who are concerned about the future of American agriculture, the next generation of American farmers.

If we do not try to do something to create the incentives, as Sam is referring to, for farmers to do a better job, also for a young farmer to want to get into farming, then we're not going to see the American agriculture that we have come to know, and some of us love, over the past three decades. So I would say, try to have bills like that bill that Tom Harkin was supporting, that would support young farmers getting into farming. Those are two keys, I think.

Representative SNOWE. Thank you. Ms. Kelley.

Ms. KELLEY. yes, I would like to address this just a moment. I think Peter will find—he says he's going to Nebraska to visit, and since I came from Kansas in the first place, and have been out there quite recently, he will find that they're pretty much family farmers out in those two areas in the Midwest, but if he wants to see the corporate farmer, he needs to travel west into the irrigation areas, where the Government has opened up the land. And he will see the corporate farmings there. We don't have that much in Maine, particularly, at the present time, but I am sure, due to the value of our land, that corporate farms will be moving if we don't

watch the situation, because it is a good investment for them, an tax writeoff, et cetera.

So I fully expect in a few years to see that situation change, and we have that problem in Maine. But since I have been involved in the trade problems for so long, and when you stop to think that I remarked about specialty commodities. Those are your small family farmers. The gentleman that raised this 20 acres of cabbage for his family and his livelihood. He is a small family farmer. He may have carrots also. But when you think of the grains and the price support programs, those are bigger farmers. Those are our corporate farms. And why are they? Because the Government has put price support on there. And they know what they're going to have. They can plant as much as they want to, and the Government is going to support them.

And so I think there needs to be a little balance in between the grains, which are valuable commodities to the United States for export, but also valuable commodities are what the small family farmer produces, the vegetables that we have, and potatoes included.

Representative SNOWE. Thank you. Stan, any thoughts on that question?

Mr. GREAVES. No; other than, when you stop and think about it, the larger farmers, your corporate farmers are more or less specialized in one commodity. And it's very, very difficult for a small farmer to afford the equipment and to operate with the efficiency of a large corporate structure.

Now if we do have young farmers, small family farmers, I think that they have potential of diversifying more and growing several crops on the farm, which would complement each other, and there are possibilities along this line. But as far as growing grains, as Doty says, even large quantities of any one commodity, I would think that there would be quite a lot more efficiency for the person that is specialized. And there is quite a balance here. We have to protect our family farm, but we also have to realize that there is fierce competition as to how efficient you can be without a unit that is of the proper size for the storages, the equipment, transportation, and everything else that is involved.

Representative SNOWE. I would like to ask each of you to comment on some measures that have been developed by the Maine Department of Agriculture to improve the quality of Maine potatoes.

One, of course, is increasing the minimum size of potatoes from $1\frac{1}{8}$ to 2 inches this year and to $2\frac{1}{4}$, I gather, next year.

Second, the restoration of field inspection by five field inspectors to check the shipments of Maine potatoes to insure that they meet grade 1 standards.

And also, the new seed law, which would require that seeds with a four-year limited generation provision must originate either from the State farms or from Canadian provinces with similar 4-year provisions.

Who would like to begin?

Ms. KELLEY. I will. Ladies first. [Laughter.]

No. 1, in regard to the 2-inch minimum this year, the industry asked for a 2-inch minimum, and hearings were held in regard to

the 2¼ inch, and there was very little testimony in favor of that. I can't speak to that directly, because I was out of town and did not attend that hearing, but this is what I am told by others.

We also ask that we have two branding law men back in Aroostook County, which is what you're speaking of as the quality assurance program. We got five. We get a little bit more than we ask for. We all believe in the industry that we need to start and work slowly and not jump in to everything, because you can make errors, if you jump too fast. We work very hard on the seed program that you were speaking of, and we want to try that. We believe, for your information, the industry organizations are working together beautifully. We have a problem. There are times when the dealers and the growers can't agree on one or two instances, but we work on what we can agree on. And we're making progress in that way.

We believe that the seed industry is the foundation of our industry. And we have to have good seed to grow and to get the better quality. Maine has good quality. We are our worst enemies. Any other area, any other State that has a problem with their potatoes, you don't hear about it. Even when you call the people and talk with them, you don't hear about it, but the first thing we have to do is put it in the media. We need our seed program, and we need some quality assurance, our branding law people to check what we are doing. And we need the 2-inch minimum.

It's very difficult for us to go to a 2¼ inch minimum, for the grower to do that, because he is going to lose a lot of his potatoes, and we haven't found a home for them. That will give him some return, some monetary return for a 17 to 20 percent that he has to take out of his production. But the 2-inch will give us one of the better bags within the United States. And you don't always find a 2¼ inch Canadian potato in the market and in the supermarket. Several areas have tried 2¼ inch, and when we had a marketing order, we had a 2¼ inch. And it was very devastating to our seed industry, because everybody became a seed grower. And there that reduced the price of seed for seed production.

So I'd like to see us move slowly into all of these. I think there are improvements in our industry, but I think we have to work slowly, and we do need, we have our long-range plan, and we're working on it.

Representative SNOWE. Thank you. Stan, any thoughts to add?

Mr. GREAVES. I think, as Dottie does, that the 2-inch minimum that we proposed, and this was proposed by the industry itself, it wasn't from outside, the industry requested it, they held a hearing and as far as I could see, there was no opposition to the 2-inch minimum. When it comes to the 2¼-inch minimum that was proposed, why, then, we have to consider—as I said before—what do we do with the off grades? The sales people that I represent, pretty much recognize that you will get very, very little, if any, more for the 2¼-inch minimum size potato than you will the 1⅞, because we're in markets, are competing with Long Island, Pennsylvania, Ohio, these other States, and the buyer is buying for price rather than quality, as he should be buying, with some exceptions. There are some premiums for 2¼ inch, but if everybody was offering it, why that would soon disappear.

As far as our industry and the 2¼ inch, I believe they would all like very much to be able to do this, but economics prevent this, and I do not believe that they can take 17 percent of their crop and hold it at home and be able to survive in the competition.

So, therefore, why, I guess we have to kind of look for a home for these off sizes, as I said before, before we can do it as we would really like to do.

As far as branding law, why, we have found that we've relaxed our branding law enforcement for the past 2 or 3 years. This will be resumed again this year, and we have found that we need it quite badly. It is very important that what is written on the bag is inside of the bag, as far as we're concerned. And I hope that this can be workable again and will do us a good job.

In regards to the flush out of seed which, in effect, means that we can only replant seed 4 years in a row, then we have to get a new source of seed or use it for 1 more year as table stock. This, I think, is some sort of discipline that we have needed, if we are going to compete as a seed area. And it helps our sizing for our fresh pack too, because most of the seed producers will sell their small sizes as need, and this enables them to put the 2¼ inch up.

If we lost our reputation as a seed area, this would hurt us in our table stock business. So I think it very important that we keep our seed industry clean. I recently saw in Red River Valley newspaper where they were plagued with the ring rot, which is a dreaded disease in potatoes, to the extent that nearly 50 percent of their foundation seed was rejected because of that disease. And this hurts them as a seed area.

And so I look at it too, I see the State of New York infected. I see Idaho infected by nematodes and diseases that prohibit them from growing seed. I think that we have great potential, by keeping our area clean, and this is the time to start. And maybe we will be one of the few remaining seed areas in the United States of recognition, as time goes on, if we take this discipline now. And this is the first step.

Representative SNOWE. Thank you. Mr. Crichton.

Mr. CRICHTON. On the 2¼-inch proposal, I guess in one word, echo what what they've said. At the meeting that was held last evening of the Executive committee of the Aroostook Family Farm Core, they unanimously voted against that idea. And I agree with Dottie and Stan in what they said about that.

As far as the branding law, I have not discussed that at any great length with the members of the farm core, but I do believe that they recognize the importance of trying to make certain that the crop that they grow and that is shipped down the road, is high quality, so that it does meet the test of the consumer.

And on the new seed law, I really have not adequate knowledge of that or the feelings of the farm core to respond. It is interesting for me to hear what you have to say about it, though.

Representative SNOWE. Finally, Dottie, I just wanted to ask you one other question. In your testimony you are talking about, obviously, the frustration in dealing with the Canadian imports and redressing those grievances with the Federal Government. You showed a little optimism in your testimony.

Do you think we're close to getting a favorable decision?

Ms. KELLEY. As far as that's concerned, I feel that we already have a favorable decision by having Commerce come out in their preliminary with a 17.3. Their final decision will be made November 4. And I feel that Commerce in their investigations have finally found that there certainly is some injury, and I feel that it is possible that we could have an increase in that duty fee from the 17, maybe, to 20 or 25. I'm very hopeful of that.

Now the International Trade Commission is another problem, because they base all of theirs on lost sales. And this is what I was referring to, when I said it's practically impossible for perishable commodities, to document the injury, because the vegetable industry, when they sell—and I don't care whether it's carrots, cabbages, or potatoes, they do it on the telephone. And if you call somebody on the telephone, and he says: "Well, I'm sorry. I'm buying Canadian potatoes today," how do you document that, particularly when it's a year back, and you can remember the man's name, but if the ITC calls him, I am sure that he will deny that he ever made such a statement. That's what is so difficult to document. And of course, this is what the ITC needs.

Representative SNOWE. Thank you.

I thank you all today for coming and for giving us your valuable testimony. I certainly appreciate your efforts, and thank you again.

Ms. KELLEY. Thank you.

Mr. CRICHTON. Thank you.

Mr. GREAVES. Thank you.

Representative SNOWE. I now will introduce the second panel on dairy, Philip Coburn, vice chairman of Agri-Mark, Inc.; Benjamin Grant, president of Grant's Dairy; and Richard Beal, Jr., chairman of the Maine Farm Bureau Young Farmer Committee.

And I also want to include in the record a statement submitted by Congressman McKernan for this hearing.

[The statement of Representative McKernan follows:]

STATEMENT OF HON. JOHN R. MCKERNAN, JR., A U.S. REPRESENTATIVE IN CONGRESS
FROM THE FIRST CONGRESSIONAL DISTRICT OF THE STATE OF MAINE

First, I would like to thank the members of the Joint Economic Committee for allowing me to comment on "Toward the Next Generation of Farm Policy," the topic of today's hearing. I would also like to commend members of the committee for holding this important hearing here in Maine. I believe that we in the State of Maine, and in the New England region, have a range of agricultural needs, problems, and concerns unlike those found anywhere else in the United States. I am looking forward to analyzing the testimony of invited witnesses, and hope that their insights into the special farm needs of Maine and New England will help us in developing legislation, and in making policy decisions, that will benefit both our ailing U.S. agricultural economy and the New England farmers whom we represent.

Public awareness of the broad role that agriculture plays in every aspect of our daily lives is growing. Each of us has an interest in insuring that our agricultural programs and policies continue to help our agricultural system to remain the most effective and efficient in the world. Our farmers need strong markets and adequate and reasonable financing; consumers need to be assured that America's farmers will continue to provide plentiful food, which so many of us take for granted; disadvantaged Americans need help in meeting their basic nutritional requirements; and our taxpaying citizens need to be assured that Federal spending to achieve these goals is responsible. These goals are the foundation of our agriculture policy.

The state of the farm economy has made meeting these goals a major challenge to the 98th Congress. Farm income for this year was projected early on to hit only about \$17 billion—a fourth low year in a row. The price support programs this year carry with them an extraordinary \$22 billion price, approximately 7 times the aver-

age \$3 billion previous annual cost of these programs. Price support systems have as their problematic goal, the matching of supply and demand, while maintaining full farming capacity in years when not needed. Problems may result, such as those in the dairy industry, where production has been in response to the Federal price support, rather than to demand. Consequently, price depressing surpluses have been growing in many commodities. Many farmers are also suffering severe credit problems, with low farm prices and farm income and heavy farm debts and excessive interest rates. These, and other forces have combined to bring about the present situation.

There are also a set of problems with which to contend that characterize the Maine farm economy. To once again use the dairy industry as an example, the problems created by the dairy commodity surplus have impacted Maine farmers especially hard. Maine is characterized by family operations and farming communities with stable levels of production. Most of Maine's dairy business is in fluid milk, not dairy products, leaving Maine farmers hard hit by the milk tax assessment, which is aimed at reducing the dairy commodity surplus.

And, finally, we in the State of Maine also have special problems in our poultry industry as well as trade problems in the potato industry. I am sure that all of these subjects will be addressed today.

Agriculture is a founding and integral part of the U.S. economy. It is vitally important in both a domestic and an international sense. According to the Department of Agriculture, agriculture—when viewed broadly—employs 22 percent of the Nation's labor force and has assets equal to 88 percent of all manufacturing corporations.

Over the past decade, changes in the agricultural economy have resulted in a decrease in the effectiveness of our traditional agricultural commodity programs. As the 98th Congress faces the forthcoming reauthorization of the farm bill, it is critical that we hear from the agriculture community about its needs and problems. We in Maine must speak out, so that our needs are met along with those of our Nation. Meeting these problems is the challenge that we face over the next few years. I hope that we may work together to get the job done.

Representative SNOWE. Before the panel begins, I'd also like to introduce the people who have joined me here.

To my left is Lisa Lausier, who works on my staff in Washington on the agricultural issues. I am sure many of you know her and have spoken with her. And to my right is Bob Tosterud, who is with the Joint Economic Committee, and who has attended all of the hearings, so he's had a chance to have a cross section of viewpoints from around the Nation.

Mr. Coburn, why don't we begin with you?

STATEMENT OF PHILIP COBURN, VICE CHAIRMAN, AGRI-MARK, INC.

Mr. COBURN. Thank you, Congresswoman. Let me express my appreciation for having the opportunity to appear before this committee. My name is Phil Coburn, and I own and operate a dairy farm in Corinna, Maine. As part of my operation, I grow and sell corn and consequently have a direct interest in both grain and dairy.

I am vice chairman of Agri-Mark, a dairy farm marketing and cooperative, representing 3,600 farm families and marketing over 3 billion pounds of milk and milk products annually. In this capacity, I am exposed to many of the problems and challenges facing all farmers and particularly, dairymen. My comments today I would like to direct toward agriculture in general and dairying in particular.

We have in the United States one of the most efficient and productive agricultural industries in the world. This productivity for the last 10 years has been at 4.4 percent per year compared to 0.7 percent for nonfarm. The cost to feed a family in the United States

takes 13.3 percent of the American worker's income, compared to England's 17.2 percent, and Japan's 24.9 percent, and France's 18.5 percent.

In addition, American agricultural exports have played a major role in the last few years in reducing our trade balances and in contributing toward the value and strength of the American dollar. This strong and efficient system is the result of many programs developed in the past and improved over the years.

I would like to comment and emphasize that these programs should not be forgotten and should continue to receive the financial support of our Government, if we are to continue to have the lowest cost of food for our citizens.

These programs are: Research and education at land-grant colleges; extension services to get the information to farmers; cooperatives that serve farmers in agriculture supply, financing, and marketing; National Government agencies that serve consumers and farmers for a consistent flow of inexpensive food—some of these are soil conservation, ASCS, and research; and encouragement, financial and otherwise, for family farms which have proven to be the most efficient production unit.

With increasing capital needs, more complicated national and international markets and with the new technologies about to burst upon the scene, American farmers and consumers, if they are to continue to have cheap food, need these programs now more than ever.

There are some who say programs developed in the 1920's and 1930's should be abandoned. This is not only untrue, it is a dangerous course for this country. Careful thought and review should be given before any changes are made. And I submit to this group that rather than the elimination or major overhauls, these agriculture programs need, instead, more support, if American agriculture is to continue to match its historic record of abundance and low cost.

The United States is involved in international trade in many areas, including high technology and agricultural products. Too often, the agricultural industry becomes the pawn in these trade talks, despite the contribution of this industry toward keeping balance in our trade payments. Grain embargoes, casein, and other dairy imports that interfere with domestic marketing and subsidizing of agricultural imports by other countries, and the reluctance of the United States to enter the world agriculture markets, have been injurious to the economy of the United States and consequently to the consumers of this country.

Less interference by the State Department and a more positive and flexible approach to exports of American farm products are necessary, if we are to continue to have a strong farm economy and an adequate food supply.

Dairy is, in many way, different from other agricultural areas because of the high capital needs, perishability of the product and the time necessary, about 3 years, after management decisions are made, to bring to fruition the results of these decisions. Because of these unique features, there are in place now a number of programs to assure the smooth, consistent flow of milk to consumers. These programs include the milk price support program and the

Federal order programs with classified pricing across the country where they are needed, to assure orderly flows of milk.

While these programs may need updating and changes, and they have had these over the years, they should be recognized for their benefit, not only to the dairy farmer, but also, and most importantly, the consumer. The real price of milk today is 38 percent less than it was 10 years ago. In other words, if consumers were paying the same price for milk as they were 10 years ago, relative to the rest of the economy, the price would be approximately 86 cents a gallon higher.

This is true, because the above-stated programs have given price assurances, not guarantees, and regulated the marketing of milk. The results are that dairymen are willing to make the necessary capital investments and changes in management for greater efficiency, and the marketing programs have reduced the risk of shortages and surpluses that cause wide price fluctuation to consumers.

In closing, I would like to say that farming is a way of life. It must also be a business or a farmer's future is doomed, and the consumer will be faced with shortages and high prices, which none of us want to see. The farmer is a small businessman who needs the support of the Government in these farm programs to maintain and continue to increase his productivity. This will help the entire economy of the United States and that is the most important message I can leave with you today. Thank you.

Representative SNOWE. Thank you, Mr. Grant.

STATEMENT OF BENJAMIN E. GRANT, PRESIDENT, GRANT'S DAIRY, INC., BANGOR, MAINE

Mr. GRANT. Congresswoman Snowe, my name is Benjamin Grant. I am president of Grant's Dairy, located here in Bangor. I wish to thank you for this opportunity to address you on the origins of our current dairy problems in this country and offer you some suggestions for Federal policy directions that will improve the situation in the future.

As you and I are painfully aware, there is considerable overproduction of milk in this country, requiring substantial Federal outlays through the Commodity Credit Corporation, purchases of cheese, butter, and powdered milk. Ironically, there are increasing numbers of dairy processors of both cheese and fluid milk products who are finding it increasingly difficult to obtain raw milk supplies at an equitable price. Excessive supply and shortage exist together. These seemingly inconsistent situations are just a symptom of a larger problem and they foreshadow increasing anomalies in dairy markets in the future, unless Federal policy is changed.

The current situation is the direct result of the complex interaction of two Federal agricultural policies: (1) the dairy-price-support program and the purchase of surplus dairy products by the CCC to maintain the price-support program; and (2) the relative protection from antitrust regulation and taxation, afforded to agricultural cooperatives.

At first glance, these two policies appear unrelated. However, I would like to explain to you today how these two sets of policies have created the current milk surplus situation to the detriment of

taxpayers, independent dairy farmers, dairy processors, and consumers. This is of utmost importance, for without examining these interrelationships and their impact, the future will be a repeat of the past, that being crisis management by salvation policy.

The dairy-price-support program is the most antiquated of all major commodity-price-support programs and has clearly outlived its usefulness in its present form. The detailed nature of the problem is explained in an excellent report prepared for the Milk Industry Foundation by a committee of independent experts in 1979, entitled "Examining Dairy Policy Alternatives." I urge you to study this report, as I have done.

I would like to briefly summarize how the price-support program evolved, such that it no longer meets its original objectives. Originally, the price-support program was intended to bring stability to the dairy markets by providing a buyer of last resort for excess supply. This was executed by the Secretary of Agriculture, who annually adjusted the percentage of parity price to somewhere between 75 and 90 to accommodate whatever the current market situation was. When milk, in general, was in oversupply, the support prices were a small percent of parity, and when there was a general undersupply, the support prices were targeted at a higher percent of parity.

The passage of time, however, has worked against this system. First of all, the shift of many producers from grade B production to grade A production has distorted the traditional relationships between manufactured and fluid milk. Second, in the 1977 and 1979 farm bills, Congress required that the support price be set at 80 percent of parity with semiannual adjustments, hence removing the Secretary of Agriculture's discretion to adjust the support price to reflect changes in market supply and demand. Coupled with this is the fact that the parity index in the 1910-14 base price are both hopelessly outdated.

Because of these changes in dairy technology, the parity index does not reflect the changes in dairy-production costs. So the index may increase when there is relatively little change in the cost of the dairy farmer or the farm cost may increase with little change in the parity index. Likewise, the continued use of the 1910-14 base price assumes that there has been no change in dairy markets in the past 70 years. Furthermore, the index ignores production efficiency gains.

Why does this cause the current problem of oversupply? Quite simply, the support prices are too high. There are dairy farmers who operate in this country literally so they can sell their milk to the Government, the price offered is so attractive. So the Government has become for some the primary market rather than the buyer of last resort. The dairy market today simply does not resemble the dairy market of yesterday, yet current regulations assume no changes have occurred. The net result has been a circular inflationary phenomenon resulting from archaic laws not the result of marketing or economic conditions.

This situation would be bad enough on its own, if it were not for a further problem of the dramatic growth in vertical integration of large dairy cooperatives in recent years. Federal policy, in general, in the Capper-Volstead Act, specifically, has encouraged the growth

of agricultural cooperatives. Originally, farmers were encouraged to work together in order to get fair prices for their products. In furtherance of this objective, cooperatives were given relative protection from antitrust laws and considerable tax advantages. Again, however, in the passage of time, the original objectives of this policy to aid groups of farmers to receive fair prices has been lost.

Many dairy cooperatives today now look more like major food-processing corporations than like groups of farmers trying to get a better price for their product. Because of low tax rates, cooperatives have been able to generate large sums of capital through retained earnings that have been used to vertically integrate into food processing. In fact, a number of cooperatives have become so large that they rank on the Fortune 500 list as if they were public stock corporations. It is not clear why these business organizations continue to need their current degree of antitrust immunity and tax advantages.

Even more disturbing is the way in which large dairy cooperatives are able to use the price-support program to force up the price of raw milk to earn what many term "over order" prices. A number of large regional cooperatives control over half the milk in the region where they operate. Traditionally, they have been seen as the balancing agents for the region, finding raw milk when supplies are tight and finding outlets for milk when it is abundant. When a cooperative controls enough of the milk within a region and the support price is attractively high, as it is now, the co-op can use this balancing role to drive the raw milk price. They do this by creating an artificial shortage of milk by diverting more of their members milk to their plants producing for the Commodity Credit Corporation.

The artificial shortage allows them to charge independent dairy processors, with whom the cooperative is often competing in the fluid milk market, prices in excess of prevailing Federal order minimum prices.

Hence, as I mentioned at the beginning, current Federal policy has led to the irregularity of tremendous dairy surpluses being bought with taxpayers dollars while milk is regionally in short supply.

It is my opinion that cooperatives have and will continue to have an important function in this Nation's policy. For the record, my presentation is not anticooperative; however, I do strongly object to Federal laws providing a competitive advantage to one segment of the industry at the detriment to another segment. Simply stated, this is unjust, inequitable, and anticompetitive.

I would urge you, as Ms. Kelley and Mr. Crichton have, for fair trade, equal opportunity, not false advantages.

I would urge this committee to seriously study the dairy price support program and the policy on cooperatives. The economic climate has so changed since these two policies were adopted that they are no longer relevant. In fact, they are detrimental to the groups that they were meant to benefit. Thank you very much.

Representative SNOWE. Thank you. Mr. Rick Beal.

**STATEMENT OF RICHARD E. BEAL, JR., STATE YOUNG FARMER
CHAIRMAN, MAINE FARM BUREAU ASSOCIATION, AUGUSTA,
MAINE**

Mr. BEAL. Congresswoman Snowe, my name is Rick Beal, and I am from Phillips, Maine, and I am a dairy farmer involved in a family farm, and I am the State Young Farmer chairman of the Maine Farm Bureau, and I also serve as a State board member of the Farm Bureau.

I would like to speak on the Farm Bureau's policy as far as Government involvement on our position on the milk surplus situation.

The Farm Bureau favors a market-oriented agriculture. The primary objectives of a market-oriented farm policy should be to: Allow the farmers to take the maximum advantage of market opportunities at home and abroad without Government interference; encourage needed adjustments in resource use; and reduce the need for future Government intervention.

A market-oriented farm policy should: Maximize long-term opportunities for profit in agriculture; reduce existing incentives for overproduction at home and abroad; insure price competitiveness for U.S. farm products in world markets; provide opportunities to reduce stocks through production adjustments and/or expanded demand; and assure consumers of adequate supplies of efficiently produced products they wish to consume.

The Farm Bureau feels that Government programs should be restricted to help farmers obtain needed crops and market information, research, educational systems, and credit, to provide workable grades and standards and to safeguard product quality through inspection services, to help farmers eradicate or control plant and animal pests and diseases, to encourage conservation of land and water resources, to prevent the exercise of monopoly powers and assurance of reliable transportation for agricultural commodities.

Concerning the dairy price support program, the Farm Bureau favors a program that will bring supplies down to demand levels. We feel the best vehicle for accomplishing this goal is the Agricultural Act of 1949, which had effectively served producers, consumers, and industry from 1949 until the Secretaries of Agriculture authority was reduced in 1977 and later removed.

Under the 1949 act, the Secretary had the authority to adjust the support price upward or downward or maintain the economic signal sent to producers so as to have a reasonable balance between supplies and demand. During 1949 through 1977, the Secretary left the support price unchanged for periods of 2 or more years on six occasions, raised the support price 20 times and lowered the support price five times. Each of the five reductions in support price brought about a decrease in Government purchases, and maintaining the support price for periods of 2 years or more served as disincentives to expand production.

We feel this resolution which ties support prices with Government purchases reinstates the basic principle of the 1949 act. It allows freedom of initiative for an individual dairy producer to make his own decisions and reduces dairy surpluses by reducing milk production and increasing consumption to achieve a reasonable balance between supply and demand. It is simple to adminis-

ter and easily understood by dairymen, and it provides the Secretary with flexibility to adjust price support levels with Government purchases, and it affects those areas of the country which produce milk products for CCC purchases, and it affects less those who produce milk for consumption.

As the young farmer chairman and as a young farmer myself, I am quite concerned about the future of where agriculture is going. Many young people view the farm as both a way of life and a way of making a living. To keep it viable in the future, ways must be found to bring a qualified new generation into farming, keeping in mind the potential for commodity expansion.

Certain barriers and problems and concerns that we feel are competing uses for land and decreasing availability and increasing land prices, which are caused by a large percentage of good land already in production and farmland being promoted for nonagricultural uses.

The agricultural education. For those who were interested in going into farming, there needs to be more expanded practical education of topics such as business management, production, and marketing.

Practical experience could be obtained through apprentice education programs to those who lack practical knowledge, and with this those who receive this practical education would be more likely to receive credit from different lending institutions.

As young farmers, we are concerned what the public awareness of agriculture is today. As the farming community becomes less than 3 percent of the total population, there is a need to educate the public on the complexity of the present agricultural system and its effects upon our lives.

Of special concern are the animal welfare groups who seek to disrupt agriculture by claming inhumane animal husbandry practices.

Government lending and regulation. It has been recognized that the effort of the Government to help the agricultural community has kept the supply of commodities artificially high and kept the prices received by producers relatively low and brings about the need for support.

Any Government lending should look at the economic feasibility and whether it would add to the surplus, and credit should be extended to those who are qualified.

As future farmers, we are concerned about soil erosion and feel that it should be protected and also the farmer's right of land-ownership. And for those who are going into farming, they should be going into a healthy economic situation.

At this time, agriculture is in an upheaval that sort of makes it hard for those who are going in at this time. Thank you very much for your time.

[The prepared statement of Mr. Beal follows:]

PREPARED STATEMENT OF RICHARD E. BEAL, JR.

PART I. Toward the Next Generation of Farm Policy

Farm Bureau favors a market-oriented agriculture. The primary objectives of a market-oriented farm policy should be to: allow farmers to take maximum advantage of market opportunities at home and abroad without government interference; encourage needed for adjustment in resource use; and reduce the need for future government intervention. Market-oriented farm policies should:

- 1). Maximize long-term opportunities for profit in agriculture;
- 2). Reduce existing incentives for over-production at home and abroad;
- 3). Insure price competitiveness for U.S. farm products in world markets;
- 4). Provide opportunities to reduce stocks through production adjustments and/or expanded demand; and
- 5). Assure consumers of adequate supplies of efficiently-produced products they wish to consume.

Concerning the dairy price support program, Farm Bureau favors a program that will bring supplies down to demand levels. The best vehicle for accomplishing this goal is the Agricultural Act of 1949, which had effectively served producers, consumers and industry from 1949 until the secretary of agriculture's authority was reduced in 1977 and later removed.

Under the 1949 Act, the secretary had the authority to adjust the support price upward or downward, or maintain the economic signals sent to producers so as to have reasonable balance between supply and demand. During 1949-1977, the secretary left the support price unchanged for periods of two or more years on six occasions, raised the support price twenty times and lowered the support price five times. Each of the five reductions in support price brought about a decrease in government purchases and maintaining the support price for periods of two years or more served as a disincentive to expand production.

The Conable amendment which ties support price with government purchases reinstates the basic principle of the 1949 Act:

- 1). It allows freedom of initiative for an individual dairy producer to make his own decisions.
- 2). It reduces dairy surpluses by reducing milk production and increasing consumption to achieve a reasonable balance between supply and demand.

- 3). It is simple to administer and easily understood by dairymen.
- 4). It provides the secretary with the flexibility to adjust price support levels with government purchases.

PART II.

Agriculture including the many support industries is an integral part in the economic health of our society. Many young people view farming both a way of life and a way of making a living. To keep it viable in the future, ways must be found to bring a qualified new generation into farming, keeping in mind the potential for commodity expansion. Barriers to entrance in farming are:

- A. Competing uses of land-Decreasing availability and increasing land prices are caused by a large percentage of good land already in production and farm land being promoted for non-agriculture uses.
- B. Public Education and Awareness-As the farming community becomes less than 3% of the total population, there is a need to educate the public the complexity of our present agricultural system and its effects upon their lives. Of special concern are animal welfare groups who seek to disrupt agriculture by claiming unhuman animal husbandry practices.
- C. Agricultural Education-There is a need to expand practical education of topics such as business management, production and marketing. Practical experience could be obtained through an apprenticeship education program to those who lack practical knowledge.
- D. Government Lending and Regulation-It has been recognized that the efforts of the government to help the agricultural community have kept the supply of commodities artificially high and kept the prices received by producers relatively low bringing about the need for support. Any government lending should look at the economic feasibility and whether it would add to surplus. Credit should be extended to only those who are qualified.

Representative SNOWE. Thank you. I want to thank all of you for your testimony.

As you know, there are several legislative proposals before Congress to address some of the problems we have encountered with respect to the dairy program and the dairy surpluses.

What are your recommendations on these particular issues?

In the U.S. Senate last week, for example, they passed a compromise, the dairy compromise legislation, which would pay for diversion. Do you have any comments?

I know that you, Rick, mentioned in your testimony the Farm Bureau supports the Conable—

Mr. BEAL. Right.

Representative SNOWE [continuing]. Which is to reduce the price supports across the board. Maybe we should start with you and talk about why you support the Conable versus the dairy compromise legislation.

Mr. BEAL. Well, as the Conable resolution states that they want to—which would keep—the resolution would tie the CCC purchases and the level, the price support level. As commodity purchases would go up, the price support level would go down, reflecting their purchases.

Representative SNOWE. I know there is a difference of opinion. I mean, I know what the Farm Bureau's position is on the Conable, and yet farmers who are opposed to the Conable amendment prefer the diversion program which would pay them for diverting production on a certain amount of output.

Why does the Farm Bureau oppose the diversion program, the paid diversion program?

Mr. BEAL. Well, basically, as I stated before, we wanted a market-oriented farm policy that reflects the need for the purchases, for the amount of products produced.

Representative SNOWE. So is it just a difference in approach or philosophy?

Mr. BEAL. Well, it is our approach between, you know, the two groups.

Representative SNOWE. Yes.

Do you have any comments, Phil? Yes.

Mr. COBURN. I would comment on it. I think, first of all, you have to look at the track record of the price support program, and it has been pretty good, pretty accurate over the years.

I recall back 15 years ago, when the price support was unrealistically low. I guess that gets back to the Nixon years. And you know, Government, or the administration, can't really go wrong by having the price support too low because if enough families go out of business you can import hide products, which the Nixon administration did. And many times, before they let this foreign product into this country, it was sitting just offshore in boats waiting for clearance to come ashore.

I don't think this is correct policy or is giving correct signals to American families to produce.

We probably have two problems involved with the supply of milk in the United States at this time. One of them is, as Benji has said, it is conceivable that the price support moved up a little too fast.

One of the reasons for this might be semiannual adjustments, where they customarily had had annual adjustments, but probably the biggest reason is because the Carter administration put other areas of agriculture in such a depressed state with embargos that many farmers who, if they have a choice, will strictly raise crops.

And if you travel across the Midwestern part of this country, you will see this just in the land. Where there is good land they raise just crops, and they don't fool around with livestock, and for a good reason. Nobody in their right mind is going to work 16 hours a day, 7 days a week, 365 days a year to take care of livestock if they can raise crops and have a little time off.

Now, if you start to get in trouble with the grains and things you are raising, then you go into hogs or you go into beef or you go into dairy cattle to try to generate a greater return off of your farm. And this has turned quite a few former grain farmers into dairy-men because they could get a better return, not because dairy was all that great a deal but because grains were so terrible.

Now, as a result of that situation, we have ended up with the PIK program to straighten out that situation, and in my opinion the U.S. Government has not been—has not tried very much to enhance exports in the world market with the world market situation being what it is.

The problem I find—I have problems with the compromise program, which as a director and as a member of National Milk we support, and the only reason we are supporting that thing is because that is about all that is politically feasible.

Now, there were better programs. We had a better program right here in the Northeast. It came out of New York State through Agri-Mark, and took it to the National Council Dairy Committee for discussion, and that program goes back and was based on the land retirement we had back in the 1960's.

It made a lot of sense to me if you had too much production you got to eliminate production. That is what Rick is talking about, too, and Benji said the same thing, that if you could retire complete farms it made much more sense.

Now, this probably could have been done on a 4-year program with a diversion payment to farmers to retire their whole farm for \$6 or \$7 a hundredweight, be covered by the same method that this current one is being covered by, a dollar assessment or the effect of a dollar assessment on the dairy farmers who remain, but the people in Minnesota and Wisconsin said you can't have a dairy farm without having cows on it.

Well, I submit to you the problem is we have probably too many dairy farms and too many cows on them. So you got to recognize that fact.

After that we came up with a dairy diversion program. The original talk was on the basis of 2 or 3 years, and I believe that this diversion program on the basis of 2 or 3 years would do the job, and the reason it is is because it has some time period to it where a farmer could sit down, put his numbers down, and I did. And I decided that I would be as well off cutting my production 30 percent as I would increasing it 20 percent. Very close.

When you are talking about \$3 or \$400,000 income a year from dairy and there is a \$5,000 difference, I figured I would save myself \$5,000 worth of troubles by cutting my production 30 percent.

But to look at that thing on a 15-months basis, it is not worthwhile to change your whole operation over, and that is why I don't really believe it is going to be all that effective in curtailing production.

Now, the other thing, for those who do go into this thing—and this is just what I would do—if I were going to cut my production somewhere between 1 and 30 percent. I would hold my heifers for another year and at the end of 15 months I would be back in business twice as big.

So you called it a compromise program, which it is, and sometimes compromises aren't the best, but they are politically feasible.

Now, there is a lot to be said for the price support program and cutting the price support program. The problem I have with a flat out cut in the price support program is it leaves no choice to farmers. You know you are going to choke somebody. You know you are going to drive them out of business.

And if I were an elected official in the Farm Bureau and I had to go to a county meeting and tell them that I supported a program which is going to drive some of them out of business, I don't know whether I would want to ask for volunteers or whether I would want to select those people who are going out of business. This is the problem I find with that.

Benji has mentioned the good thing about it, which is we have a substantial number of dairymen in this country today producing solely for Government sale, CCC purchases. It is not here. In the Northeast there is strictly a balancing operation, but when you get out in the Western part of the country there are plants that I know of that just produce for the Government, and this is not right.

And those people, if you cut the price support a buck, a buck and a half, will be directly impacted.

Representative SNOWE. Do you think the dairy support price that Mr. Grant mentioned is too high?

Mr. COBURN. I think it is too high in relation to other things. As I said, other opportunities were so much worse. Now, I think the grain situation, the cotton situation has got to improve with the PIK program, and I don't know how much this is going to affect milk production, but I suspect this will have more effect on it than the compromise plan or a price support cut.

Representative SNOWE. I know, Ben, you mentioned in your testimony that you did think the dairy support price was too high.

What level of parity would you suggest, or price level?

Mr. GRANT. I wouldn't suggest any specific level other than say that I think an appropriate level is one that lets the supply and demand balance—the supply and demand situation basically balance back out.

We just have too high a price, which has—and I would agree with Phil—has induced farmers to switch from growing the grain or some of the other crops in the Midwest into dairying, and the switchover into dairying was made because it was obviously a better opportunity.

If the price supports authority went back to the Secretary of Agriculture, if that support price was not mandated by statute, I think you would find a system that would work in the long run far better than the system we have today.

Representative SNOWE. Yes, Phil.

Mr. COBURN. One of the other problems with cutting the price support—and Benji mentioned this, and it is true, but you have to understand what he is talking about—he said there is over order pricing in the country. There is no over order pricing in the Northeast.

You get it primarily in the areas where they are less than self-sufficient or no more than self-sufficient on dairy—on milk supplies. So they had over order pricing.

Now, I think it is factual that if you cut the price support by any amount you are not going to see any substantial reduction in the price paid to dairymen in those areas. They are going to maintain that wholesale price where they sell to dairies such as Benji.

The net result of that is you are not going to accomplish with a price support cut the decrease in production, which you are looking for. And I really don't know, as areas like the Southeast, across the Southern part of the country, maybe some areas in the Northwestern part of the country, as they should be cutting production either because they are no more than self-sufficient, and I don't think—we aren't even really self-sufficient in the dairy business here in the Northeast because the majority of the butter comes in from out in the central part of the country, a substantial amount of cheese. New York State is getting a little more heavy in cheese now, but we are far from being self-sufficient, and I think the whole dairy industry in this country looks to the east coast, from Washington on up through, as a market for hide products.

Representative SNOWE. Yes.

In response to the PIK program, what would your comments and views be on that specifically?

I know there have been suggestions that the PIK program would indirectly reduce the dairy surplus by driving up the price on feed grains, thus making it more difficult for dairy producers to feed their livestock cheaper and thus reducing the number of cows producing milk.

Do you think that sort of describes the situation that might exist in Maine, or what are your thoughts on that?

Mr. COBURN. Oh, I think it will have an impact because everybody is looking at feed costs, and I am sure they are going to try to go more on homegrown feeds than they did in the past and probably even more in regard to protein. They will probably be switching off from soybean meal and going to more urea type feeds for protein for their cattle.

I think it is going to be a double impact on that, the cost of feed, and the other thing is some of these fellows that switch from grain to dairy cows are going to get rid of their dairy cows and go back to raising grain because if I had a choice that is what I would do because the grain business looks better than the dairy business to me right now.

Representative SNOWE. Does anybody else have a comment on the PIK program. Rick, do you?

Mr. BEAL. About the same, yes. The price of grain will be going up, and it will have a general impact on the dairy situation, and I would expect we will see some effect.

Representative SNOWE. Phil, I know Ben Grant mentioned about cooperatives and the advantages that cooperatives received from, you know, Federal legislation that has been enacted decades ago.

Would you care to comment in response to those advantages?

Mr. COBURN. Yes, I think they are pretty obvious they are necessary for agriculture. Benji looks at it solely as the milk supply, but there are other factors involved.

We have had some comments this morning already about financing of farms, and I truly don't know where the farmers of this country would be without the farm credit system today. You can talk about going to banks, but if anybody is farming much a lot of these small banks can't carry the kind of loans you need to begin with.

And as far as the supply basis is concerned, some tremendous supply co-ops across this country which are listed in Fortune's 500, I don't see any problem with a co-op being listed in the top 500. I don't know why they shouldn't be there just as well as car makers or steel companies or anybody else. Farming is a pretty good sized business in this country.

We try to do—farmers always try to do things cooperatively together. It doesn't make any difference whether Rick and I live side by side and if his chopper broke down and he wanted to use mine, that is one thing. Farmers also have a tendency to talk amongst themselves and share each other's ideas to make themselves a better farmer, and I think this is why we have many times the efficiency of the rest of the country.

And I think it would be bad to knock the cooperative structure unless you wanted to go back to the American public and double their food costs. I think this—not only this administration but others sooner or later has got to face the facts on this thing, whether it is more important to keep subsidizing farmers and give them advantages of some kind whereby you can make a living and stay on a farm as a way of life and make a living or whether you alert the American people to the fact that eating does have some bearing on their existence. It maybe is at least as important as a second car, as important as a vacation home or as important as 4 to 6 weeks vacation, wherever it might be.

I think sooner or later they got to realize this because today the American farmer is doing on the basis of his efficiency, which is unrewarded, and I look at parts and equipment that I have to buy and I look at the inefficiency of labor. I look at the inefficiency of industry because they haven't capitalized, and I buy a foolish little part I can lug out in my hand that costs a hundred bucks and I look at a tractor that costs me \$23,000 10 years ago and I replace that same tractor today and it costs 60,000 bucks, and I am telling you, sooner or later American agriculture does have to be rewarded or there are going to be corporate farms because the corporations are the only ones that are going to have the source of capital to put into an opportunity, which will be agriculture.

When the corporations start to control it, the American people no longer have real cheap food. Maybe they ought to be willing to settle for reasonably priced food instead of cheap food.

Mr. BEAL. I will second that.

Representative SNOWE. You second that? [Laughter.]

I thank you all very much for testifying here today, and I appreciate that you were able to participate.

Yes.

Mr. COBURN. May I just comment?

Representative SNOWE. You certainly may.

Mr. COBURN. You had a panel about family farms.

Representative SNOWE. Yes.

Mr. COBURN. You know, I have a real problem with family farms. I don't know whether a family—a man and his wife and his children—who work 7 days a week, long hours, is the only thing that constitutes a family farm. I think I am a family farm. I have four full-time employees. Everyone had time off on a regular basis. I am probably three to four times the size of the average farm in Maine or in New England. Our productive capacity is about five times.

But I still think I am a family farm because I am the president, I am the treasurer, I am the secretary and the troubleshooter. And I think of myself as a family farm, and I know there are many in Aroostook that are the same way. You have to have some kind of volume.

Now, you start talking about things to help a young fellow get into farming. And it's always been a little bit difficult. It was difficult for me. My situation is much the same as Benji's. The fathers died when we were a young age. He worked along into a business he could get into and keep it coming along. I leased out a piece of land left where I could start. But I am telling you it was tough, and there have been tough times since those beginning days too.

So it's always not easy unless you've got a godfather that can put you right into the business and let you go. And everybody I think finds it that way in most businesses. But you can talk about incentives, special incentives to put young fellows on farms and all these kind of things, and farming is a way of life, but I am telling you there has got to be profit to it. And if there is profit, you don't have all these other problems.

If there's profit, anybody is going to lend the man money if he knows he can pay it back. But the situation today is it's pretty leery whether or not you can pay it back.

I just happen to be involved in an area out there where we've involved in clean-up of the lake in my town. It takes in 40-45 dairy farmers. Substantial investment. Government-supported, you know, up to \$100,000 on big operations, but a lot of them is a small amount of money but on a 75 percent basis. And I know guys who have had a hard time trying to get into these manure containment facilities for lack of being able to borrow the money to put that stuff in. But if there was profit in that business, they wouldn't have that problem.

Representative SNOWE. Yes. I think that's very well put. And the statistics bear that out for the number of farms that have dwindled, particularly in New England, over just the last 10 or 20 years.

Thousands and thousands have left because people cannot make a living in farming and the risks are too great.

So I think that's why it is even more important to develop policies that will assist the small farmer and the large farmers to sustain the agricultural community nationwide so that it can be a profitmaking operation with the least amount of Government support, if it is possible. But we have to be there in the event that it does not work out that way.

Well, I appreciate your attendance here today and your participation and your testimony. And I thank you all very much.

Mr. COBURN. Thank you.

Representative SNOWE. The third panel will consist of the poultry/egg, blueberry, and apple industries, and we have with us today William Bell, executive director of the Maine Poultry Federation; Nancy Wilkinson, president, the Wild Blueberry Association of North America; and Michael Chick of Chick Orchards.

We will begin with Michael Chick.

**STATEMENT OF MICHAEL R. CHICK, CHICK ORCHARDS, INC.,
MONMOUTH, MAINE**

Mr. CHICK. My name is Michael Chick. I work at and am a part owner of Chick Orchards, Inc. in Monmouth, Maine. Representative Snowe, thank you for this opportunity to present to you and to the Joint Economic Committee some of the issues of concern for Maine's apple growers as they look to the future.

We have faced some difficult times. Last season prices for packs were as low as 60 percent of the prices we received in 1981 and 1982. But we are encouraged to find that there are those in Washington who are interested in our needs. This is evidenced by this hearing today.

The issues that we feel are critical include: Increasing labor costs, high costs for borrowed funds, and marketing. The three major factors contribute to our high labor costs: Payroll taxes; workman's compensation premiums; and harvest labor. Social security taxes continue to be increased in order to support a program in drastic need for restructuring. Unemployment taxes for growers are inflated by the inclusion of pickers into the calculations that determine our rates. Workman's compensation costs continue to rise due to high medical costs and liberalized qualification.

Many growers in Maine depend on the Federal H-2 program to provide sufficient labor to harvest their crops. Although they concede that our pool of qualified and willing workers has been exhausted each year, the Department of Labor alleges that the presence of H-2 workers affects local wages in such a manner that local workers must be protected by an artificially high wage rate, so-called the "adverse-effect wage rate."

This program actually forces growers to do without some local pickers who are marginal because we are unable to afford to pay them the adverse-effect wage rate.

The Department of Labor has addressed this entire matter in a preemptory and arbitrary manner. Often, ruling are published just prior to harvest, precluding proper responses from growers, or just

after the season has finished, requiring the administrative headache of opening closed payrolls.

We support the Simpson-Mazzoli bill, which calls for an expanded and streamlined H-2 program and sanctions against those employing illegal aliens as a step in the right direction.

We would also request that the Department of Agriculture and representatives of the apple growers be made a part of the H-2 decisionmaking process along with the Department of Labor so that we might arrive at a mutually agreeable solution to this problem.

The cost of borrowed money has increased as a result of competition for those funds between the private sector and the Government. We would ask that the Federal Government be accountable for its finances in the same manner that each of us finds we must in business, by balancing its budget.

Sixty-five percent of Maine's apple crop is sold out of State. This fruit is sold primarily in the Eastern markets, where we find ourselves in direct competition with Western growers. Although we offer the preferred variety, McIntosh, and we have apples of competitive quality, we lack consistency in our packs. While realizing that this is a grower responsibility, I suggest that if some Federal funding was rechanneled from direct advertising to inspections of packing houses and retail outlets, both the consumer and the producer would benefit.

In recent years, we have also faced growing competition in the juice market from imports of concentrates. The percent of the market made up of imported juice, many from nations who subsidize the growers, has increased from 21 percent to 32 percent. That is over the years 1979 to 1981. We support the Warner-Vander Jagt bill as a measure to put apple juice on an equal footing with other juices.

Again, thank you for this opportunity to share some of our needs for the future with you. I am certain that if business and Government are willing to cooperate with each other to determine future directions, that we will indeed find the next generation filled with promise. Thank you.

[The prepared statement of Mr. Chick follows:]

PREPARED STATEMENT OF MICHAEL R. CHICK

Mrs. Snow: Thank you for this opportunity to testify before the Joint Economic Committee. Your interest in future Farm policy and in our needs and concerns is encouraging to those of us involved in agriculture. We in the Apple Industry have many issues that are of importance that need to be addressed but a few that are of crucial interest. These issues fall into three areas: the increasing costs of labor, marketing considerations, and the cost of borrowed funds. Over the last several years apple growers have seen stable, and more recently, declining prices for our product. Last year some packs sold for as little as 60% of the price received the previous season. This was due to a variety of factors including the general condition of the national economy and a large crop across the country. During this same period we have seen our costs, particularly those for labor and borrowed funds, increase substantially. We have all learned to tighten our belts but this is at the cost of capital replacement and improvement. Unless fundamental changes in direction occur, apple growers in Maine face a bleak outlook for the future.

Today, more and more businesses are realizing that their costs for labor are increasing at a rate greater than their increase in income. The auto and airline industries have recently requested and gained substantial concessions from labor. The apple industry faces similar problems related to increasing costs associated with Workmen's Compensation, Unemployment Insurance and Harvest Labor. Increases in Workmen's Compensation are related to sky-high medical costs, but also to liberalized qualifications and insufficient follow-up on questionable claims. The burden of proof in these cases rests on the employer who

often has insufficient resources to pursue this issue. Unemployment tax rates are inflated by the inclusion of harvest workers in the calculations. This is particularly difficult for two reasons: we simply must use the workers during harvest and we work very closely with the Maine Job Service to actually take people off the unemployment rolls. We feel that we should be credited for our real contribution in this regard rather than penalized for ^{the} mis-perception that we are increasing the unemployment problem. Social Security taxes are also of concern. The Federal government must find a viable program that does not require benefits to be paid out of the paychecks of current workers. Until such time, Social Security will continue to be an increasing burden on employers and employees.

Harvest labor, and the unnecessarily high costs involved, are an ever-present problem for Maine growers. During harvest there are so many growers drawing on the available work force that the pool of qualified and willing pickers is quickly exhausted. Our experience at Chick Orchards shows that we can expect to recruit 75% of the pickers we need but find that only 20% of that number actually complete the season. With a perishable crop and a limited timetable for harvest we must be assured that adequate labor is available. Fortunately we have access to a pool of foreign workers through the H-2 program. In order to qualify for these workers the Department of Labor must certify to the Attorney General that sufficient local labor is not available for the grower to harvest his crop.

Here we find ourselves faced with a set of contradictory circumstances. While the DOL concedes that we cannot harvest our apples with local pickers they have determined that the use of foreign workers has an adverse effect on local wages and therefore penalize the growers using H-2 workers. Growers know that they cannot stay in business if they must depend on local pickers

but find it increasingly difficult to remain so under the H-2 program as well. Maine growers have not had success in any attempts to work with the DOL to a resolution of this difficult situation. This has more recently been further exacerbated by a recent ruling by the DOL increasing the wages for H-2 growers by nearly 20% to a level 24% greater than non-H-2 growers. We support a ^{PLAN} ~~plan~~ that would call for the DOL, the DOA, and growers to discuss the problem and arrive at a solution equitable to all concerned. It has been our experience that the DOL makes its decision with little consideration for the needs faced by those in agriculture who face acute shortages of harvest labor. We feel that we have been dealt with by the DOL in a pre-emptory and arbitrary manner and deserve better. There is a problem relating to the effect that foreign workers have on wages in this country. This, however, is related to the presence of aliens who are in this country illegally. Penalizing employers who are cooperating with the government in a legal program is not the answer to this problem. We support the Simpson-Mazzouli bill calling for an expanded and streamlined H-2 program and sanctions against employers hiring illegal aliens as a step in the right direction.

We in agriculture are dependent upon financing at reasonable rates for capital expenditure and off-season operating costs. The cost of borrowed money is an area where the Congress can have a major impact. We cannot afford the price that we will have to pay if we must compete with the government for a limited supply of funds. We could not expect to remain in business if we habitually spent more than our income. We expect the Federal Government to take the steps necessary to avoid further deficit spending and reduce its demand for borrowed funds.

Increasing competition for our traditional markets have made marketing an issue for Maine apple growers in recent years. Sixty-five percent of the Maine

crop goes out of state primarily to New York and other Eastern markets. Competition from western growers has^{30%} their market share in New York and New England triple over the last decade and resulted in the loss to Maine growers of the Philadelphia and Washington, DC markets. Maine apples are of competitive quality to western fruit and our predominant variety, McIntosh, was found to be the preferred variety in the east according to a study done by Washington state growers. Our problem has been that the quality of our packs has been inconsistent while western packs are known for their consistent quality. We recognize that this is a grower problem but ask for assistance from the government to achieve a comparable standard. In the past, most marketing funds and grants have been earmarked for advertising. Re-channelling these resources into inspections of packing houses and retail outlets would protect both the consumer and the producer. If we can satisfy the consumer that he can be assured of consistent quality in packages of Maine apples we will not need to be concerned with western competition as their transportation and advertising costs will make the eastern markets less profitable.

Finally, a relatively new source of competition in the form of apple juice concentrated from Argentina and Europe has become a matter for some concern. Many of these producers benefit from government subsidies to encourage exports. A current bill sponsored by Senator Warner and Representative Vander Jagt seeks to redress an existing inequity in current import statutes as regards apple and pear juices. As these foreign producers have increased their share of the U.S. market from 20-25%³¹ it is apparent that some measures should be taken to address this issue.

We appreciate this opportunity to make our concerns known to you and the committee. The future calls for greater cooperation between growers and the government in order that we may remain competitive from cost and marketing perspectives in the next generation. Your concern as evidenced by this hearing gives us cause for optimism. Reasonable labor costs, responsible government fiscal policies and concerted actions to increase the effectiveness of our marketing will go far toward allowing apple growers to remain the vital segment of Maine's Agricultural structure that they are today.

Representative SNOWE. Thank you. Nancy Wilkinson.

**STATEMENT OF NANCY W. WILKINSON, PRESIDENT, WILD
BLUEBERRY ASSOCIATION OF NORTH AMERICA**

Ms. WILKINSON. Thank you, Congresswoman Snowe. I am Nancy Wilkinson from Millbridge, Washington County. I represent the blueberry industry, and I know that everybody in Maine knows the wild blueberry but I am not sure about Washington. So if you will forgive me, a brief description.

Representative SNOWE. That's all right. You are probably absolutely right. [Laughter.]

Ms. WILKINSON. The wild blueberry of Maine comes from a very old blueblooded, of course, family. The wild blueberry was here long before the first settlers arrived and is one of the three native American fruits. For the Indians it was not only an important item in their diet but a panacea as well.

After competing with the bears for the fresh fruit in summer, the Indians dried the berries for use during the winter. They were used in soups, stews, and pounded into venison to cure the meat. Blueberry tea was used as an antispasmodic medicine and relaxant. Blueberry juice and syrup were used for coughs. Some tribes tell a legend of how during a time of starvation the Great Spirit sent the star berries down from the night of Heaven to relieve the hunger of His children.

The wild blueberry became an export item when the first settlers, following the lead of the Indians, dried them and shipped them back to Europe. Further processing came during the Civil War when they were canned for use by the Union troops.

Since the time of the Civil War the Maine blueberry industry has grown slowly. For the decade preceding 1982, the average crop was 18 to 20 million pounds. However, during these 10 years, an intensive effort was made to improve land management. The results became startlingly apparent when our harvest jumped to 36 million pounds last year. This year it is predicted to be over 40 million pounds. Therefore, in the last 2 years, our production has doubled, far surpassing our wildest expectations. In 1984 we expect an even larger increase in yield due to the application of Velpar, a new herbicide which is extraordinarily effective in ridding the blueberry lands of competing weeds and shrubs.

The wild blueberry crop is the mainstay of the economy of Washington County, officially designated as one of the poverty pockets of the United States. It contributes significantly to the economies of Hancock County and lesser amounts in other coastal areas such as Knox and Lincoln Counties.

There are over 1,000 blueberry growers in the State of Maine. During the harvest season approximately 3,000 rakers are employed, with a payroll of \$5-6 million in 5 to 6 weeks. There are at least 10 processors in the State, some of whom employ a year-round labor force with doubles and triples during the harvest. With value added from freezing, canning and other processing, it is a \$30 million crop.

As to the future, my conclusion, based on advice from skilled horticulturists, is that the 1982-83 crops represent a new norm, sig-

nifying a complete change in the industry. For the first time in the history of the industry, supply is exceeding demand. Therefore, our main focus and mandate must be highly intensive marketing.

Meantime, I should point out that the industry has not been idle. We have already made a quantum leap in marketing, evidenced by the fact that we were able to move substantially all of the 1982 crop even though it had doubled on us. As an industry, we have taxed ourselves heavily to promote blueberries both through the North American Blueberry Council and the Wild Blueberry Association of North America. We have had articles on wild blueberries in all national publications ranging from household magazines to select magazines such as *Gourmet* and more widely read magazines such as *Life* and *Reader's Digest*.

We have devoted many dollars to increased industrial uses. We have been in national trade shows as well as international trade shows in England, France, Germany, and Japan. We have had thousands of brochures printed in four languages espousing the features, advantages, and benefits of using the wild blueberry. And we thought our promotion was way ahead of production. This has turned out not to be the case.

This year we have been adversely affected in the export market by the strong dollar and also by the fact that Europe, normally a good export market, produced a good crop in Scandinavia. We are further being adversely affected by the fact that buyers are well aware that our production as compared to previous years doubled both in 1982 and 1983.

What can we do? To go back to the Indians, we must find, as they did, ever more diverse ways to use blueberries. To go back to our entrepreneurial forbearers who provisioned the military, we must find our way to the military. To turn to the present, our promotional efforts must be doubled and redoubled.

What can the Government do to help this expanding industry vital to downeast economy live through its growing pains? We would simply ask that the Government help us to help ourselves. Although we as an industry are spending hundreds of thousands of dollars to promote wild blueberries, the export market has scarcely been tapped. The military used only 230,000 pounds of blueberries last year, and that is both wild and cultivated. And there are still large sections in the United States which don't even know what a wild blueberry is.

This industry will continue to grow. The blueberry growers—and many of them small family groups, I would say, 50 percent of them—have labored diligently to improve their land management to bring down costs. We will realize larger and larger crops. As this happens, the health of the downeast economy should improve. However, if we are unable to move these large crops, our efforts to improve production and yields will turn out to be a disaster rather than a boom to the economy. Thank you.

Representative SNOWE. Thank you, Nancy. Mr. William Bell.

**STATEMENT OF WILLIAM BELL, EXECUTIVE DIRECTOR, MAINE
POULTRY FEDERATION, AUGUSTA, MAINE**

Mr. BELL. Thank you, Congresswoman Snowe. My name is William Bell. I reside in Whitefield, Maine, and I am executive director of the Maine Poultry Federation, which has its office at Augusta.

I know you didn't come up here to listen to any philosophy. I am glad you did, but I just have to say I am struck by the fact that we're all sitting here talking about problems and, thank God, they're problems of too much rather than too little.

Representative SNOWE. Yes.

Mr. BELL. I would also like to thank you for your interest in our industry's problems. And I think maybe I can skip the educational part of my testimony because, quite frankly, our industry's friends in Washington consider you well educated with our problems.

And as you, I think, pointed out in your work with this committee 6 months ago when the subject of the PIK program came up and you said, is't this going to cause some problems for our livestock producers, it certainly has.

And in the view of the poultry and egg producers here in Maine, the PIK program has been pretty much of a disaster. It is raising the price—together with the drought—it's raising the price of a pound of chicken by 10 cents in its production costs, and the price of a dozen of eggs by 15 cents in production of eggs. Some of that is going to be paid by the consumer and some of it will be borne by the farmer. And I think we did meet with Deputy Assistant Secretary Dawson Ahalt on this. He conceded that the program had been successful beyond all expectations. The New England Grain and Feed Council, which has also submitted a statement through me, has urged the purchase of commodities, livestock commodities, which were hurt by the PIK program. And to some extent, that has been helpful. But we are pleased by the fact that it appears that the PIK program was at least only a one-shot deal.

The egg industry would like to be able to deal with its marketing problems the same as other commodities, and as you are aware, the egg industry both nationally and here in Maine, where I have surveyed all the flock owners, would like to see eggs added to the 1937 Marketing Act as a commodity which can be covered by such an act.

And if I am correct, just a week ago the Senate in the dairy legislation included this amendment for the egg industry which would provide our industry with the enabling legislation for marketing order. Now, what we do with this remains to be seen. The majority of egg producers here in Maine would favor a marketing order. But it does require, obviously, both a national referendum and the cooperation of USDA. But we do appreciate the Congress' continuing support as necessary to give us this enabling legislation.

As you are also well aware, because we have come to you with this problem over the past 4 or 5 years, in New England the feed-grain users, both the New England Grain and Feed Council and the Maine Poultry Federation have been concerned about the rail rates coming into Maine from the Midwest. And we have finally, with cooperation from the railroads in extensive negotiations, got

these rates down to where they are on a ton-mile basis equal to our competition.

The are still higher, but that's because Maine is further from the Midwest than Pennsylvania is or Georgia is. But that's not the rail carriers' fault. It's certainly not the Congress' fault.

And we are not urging any further action in this area except the hope that the Congress can keep the ICC in business and not allow it to totally deregulate itself out of business. We need it to resolve disputes between carriers and shippers and also to keep an eye on noncompetitive or uncompetitive, anticompetitive practices among the railroads.

For instance, they can deregulate their rates, but then they get in a battle over reciprocal switching charges as they try to each secure a maximum share of the marketplace. And we the users are the victims of those competitive battles. If you had only Guilford Transportation Industries serving Maine and New England, we would not see the rail rate structure which in the past year has been beneficial to us.

Finally, as with other commodities, and I think in accordance with testimony previously given your committee, we would urge the support of Congress in urging the administration to push for more equitable export policy of the United States vis-a-vis the European communities and particularly Brazil. If there is going to be a commodity used again in the future to try to snap some heads around among the European nations, we would hope that it would be broilers or eggs as it has been done with wheat and flour.

And finally, the New England Feed and Grain Council is for the first time seeking congressional support of legislation which has expired in the past but which would enable the United States to negotiate with Canada reduced tariffs on feed ingredients, which would be beneficial to the American feed producers that can use Canadian feed ingredients and would also be beneficial to the farmers to the extent that they would receive feeds at more competitive prices or lower prices.

Thank you for your attention.

[The prepared statement of Mr. Bell follows:]

PREPARED STATEMENT OF WILLIAM BELL

1. From the point of view of Maine's poultry and egg producers, the U.S. Department of Agriculture's payment-in-kind program has been a disaster equal to the summer's drought in the Midwestern grain belt. New England consumers, as well as farmers, are sharing the burden of this unwise policy.

A year ago, a ton of poultry feed cost about \$140; today, it costs over \$200. This means an increase of 10 cents a pound in the cost of producing broilers, and 15 cents more in feed costs for producing one dozen eggs. The payment-in-kind program is responsible for a substantial portion of this increase, by reducing surplus corn and soy stocks and production acreage to a far greater extent than the U.S.D.A. had envisioned in putting the program together.

Nationally, the egg industry has urged that federally--stored grain reserves be released, and that the Commodity Credit Corporation call in grain price support loans. Our Federation would of course add to this the hope that we not again see the likes of the PIK program.

2. Our Federation has surveyed its membership and is virtually unanimous in support of S. 1268, sponsored by Senator Heflin of Alabama, which would remove eggs from their present exclusion from the Agricultural Marketing Agreement Act of 1937. In other words, this is enabling legislation which would permit, if the egg industry so wishes, a marketing order for eggs.

Most of our egg flock owners in Maine believe such a marketing order is necessary, for the long-range stability of the industry. Overproduction in the broiler industry left hundreds of Maine farm families not only without income, but with a farm worth only a fraction of its former value. In Canada, in contrast, an egg farm has a production quota, and the owner of that quota is assured a good resale value for the years that he has put into farming.

Even those Maine egg flock owners who are nervous about the extent of controls implied in a market order believe that our industry should have the opportunity to decide on the issue, rather than being specifically denied the opportunity as we are at present as result of our exclusion from the 1937 Act.

3. While the Staggers Rail deregulation Act has benefitted both our industry and the rail carriers serving Maine, we would hope that the Congress would keep an eye on the situation, lest consolidation among rail carriers create a situation where we are served by only one carrier coming from the Midwest to New England. The rail rates flexibility made possible by the Staggers Act has, as result of competition between carriers, resulted in substantially lower rail rates on feed grains coming into Maine. We have finally achieved our goal of paying no more per ton-mile than our Southern poultry producers. However, if the competition between Canadian National Railroad, Guilford Transportation Industries, and Conrail were to disappear, there would probably be a rapid escalation in rates.

4. We urge that efforts continue to force a more equitable agricultural export policy upon the European Community and Brazil. We have lost our Mid-East poultry exports to these nations which heavily subsidize their own exports, and as result prices in our domestic market have been depressed. It is clear that only Congressional pressure will enable the Administration to force changes in European practices.

We would also urge the Congress, through the Office of the U.S. Trade Representative, to pay close attention to bilateral agricultural trade issues with Canada. The Canadian Egg Marketing Agency, for instance, has this year several times sought to impose bureaucratic restrictions upon the import of eggs from the U.S.; only the close attention of our own Embassy and representatives, alerted by Members of Congress, has discouraged these restrictions.

Representative SNOWE. Thank you.

Well, Bill, we may as well start reviewing some of the questions. You did mention your support for the egg marketing order, and as you also mentioned, it is Senator Heflin's legislation that was attached to the dairy compromise legislation in the Senate. And I would expect a similar amendment would be attached in the House when that bill comes up for consideration.

Does the community, egg producers, for example, support this? And what type of marketing order do you envision?

Mr. BELL. Frankly, we're talking about a marketing order which would have production controls, somewhat similar to the Canadian system. When the broiler producers were forced out of business in Maine through surplus production, these farms where people had invested their livelihood suddenly became almost worthless as farms, although they have some value as real estate.

In Canada somebody who is now an egg producer, if he wants to retire or for some other reason leave the business, his farm has a guaranteed value because of the quota assigned to that production.

And the people in production in this country fear that without controls, foreign investors, who operate under somewhat different rules will in the egg industry through their—force the smaller producers out of business through production controls, somebody here in Maine with 50,000 birds and a quota assigned to that would be guaranteed that his activities are worth something.

Representative SNOWE. Do you think that the entire egg industry would by and large support the marketing order?

Mr. BELL. Nationally, the very large firms, some of them foreign-owned firms in Pennsylvania, Ohio, are pretty happy with the present system because they have grown larger and larger and muscle aside the smaller ones.

In the Southeastern United States the small producers have formed an organization to really fight for a marketing quota as their means of competing against the Cargills and the Central Soyas and the giant agribusiness firms who have the capital, as was previously suggested in talking about dairy, who have the corporate capital to create surpluses and muscle out the small farmers.

Here in Maine the vast majority of the egg producers do support production quotas. There are several who do not, and their opposition is based really on philosophical grounds: We don't want Government interference, or by the time we got them it would be too late.

Representative SNOWE. Nancy, the USDA recently announced a purchase program for blueberries, I guess, for 550,000 pounds of frozen blueberries and several hundred thousand pounds of wild blueberries. Do you think this is the sort of thing that could assist the blueberry industry this year, particularly where supply exceeds demand?

Ms. WILKINSON. We were absolutely delighted by this announcement. And as you know, the school lunch programs will be targeted, and this is exactly the kind of—this was just announced last week—the school lunch programs will be targeted, and that will give us exposure, which is very important because a large part of the United States does not know that a wild blueberry exists. And we are very much pleased with this.

Representative SNOWE. Do you think there will be the opportunity to expand the markets for other uses for blueberries? Is there strong potential for other alternative markets?

Ms. WILKINSON. Well, we need to do two things: We need to find more markets in the United States. And the school lunch program is terrific, in that once you get the children eating blueberries—and they are nutritious, healthy kind of food—they will grow up to eat blueberries. And the potential from that is terrific.

We need to find also more diverse uses for it. Blueberries are very popular in soups, for instance, in Scandinavia. We need to do that as an industry. We need to explore further the export markets. They have hardly been tapped. And a lot more can be done there, and we could use Government assistance there also.

And we certainly could use some in the military area. That should be a good help for us. If we can just get over this year, this growing pain, I think we can catch up with this explosion.

Representative SNOWE. Was part of the reason for this increase in supply because of Velpar?

Ms. WILKINSON. Well, no, we have not felt—

Representative SNOWE. That's next year?

Ms. WILKINSON. That's so scary. We haven't felt the effect of Velpar yet. And it's just the good land management practices that all these small growers have undertaken to improve their yields. And then all of a sudden, it comes to fruition all at once. It did last year. We thought it was really a fluke, that it was because of the

weather. But we believe now that all of these efforts, we are now reaping benefits from in terms of really high crops.

And I would hate to see us have such surpluses that the same thing happens to us as did in the poultry business.

Representative SNOWE. Exactly. So in other words, really, before the next season you have to develop some alternative markets because Velpar should increase your supply.

Ms. WILKINSON. Exactly. Exactly.

Representative SNOWE. So that is what the industry and the association that you head are involved in, in expansion of those markets?

Ms. WILKINSON. Yes, indeed. We are.

Representative SNOWE. And you feel it is encouraging?

Ms. WILKINSON. Yes.

Representative SNOWE. Do you have any information or is there any potential for long-term health effects with respect to Velpar, or is that even considered at all?

Ms. WILKINSON. That has all been approved by the EPA. And I guess there are small segments which are worrying about this. But there are always small segments which worry. But it has been totally cleared by the DEP and EPA, and we feel very comfortable about it.

Representative SNOWE. Confident that it's going to be OK.

Mike, with respect to the apple industry—and you all have your different problems, and some of them are similar in nature—but could you tell me does just the Northeast rely on a foreign pool of labor, or do all regions of the country rely on foreign labor?

Mr. CHICK. As far as apple production is concerned?

Representative SNOWE. Yes, that's right.

Mr. CHICK. I really don't have too much information outside of New England, but I do know that we depend very strongly in New England on the foreign labor.

Representative SNOWE. I thought you had a good suggestion in your testimony about having a representative from the industry as part of the Department of Labor in determining the adverse wage for foreign labor.

Mr. CHICK. We have felt a great deal of frustration in that of all our attempts to communicate with the Department of Labor. We seem to have very little success and very little interest, I guess, in our problem. I recall one area in the ruling that was published that mentioned that the department felt that the impact would only be felt on a few small farms and therefore wasn't significant enough to worry about. And we're the small farms that are being impacted, and to us it's quite significant.

Representative SNOWE. On the regulations that were implemented on the adverse-effect wage rate, which obviously would have significantly affected the apple industry because the minimum wage would have gone up substantially, do you think the surveys that were used in the past by the Department of Labor would have been much better than the methodology they used this time? Were the surveys as helpful when they first used those surveys as a way of determining the adverse-effect wage rate as opposed to the methodology they used recently which caused a lot of problems within the industry?

Mr. CHICK. OK. Well, you know, to start with, if you assume that an adverse-effect rate must be used, then the new methodology is really—causes a great deal of problems. It includes categories of worker that have no business being included in harvest costs, administrative personnel. As a matter of fact, I believe that airplane spray applicators were included as part of the categories. And these are just totally unrelated to the actual changes in harvest labor costs, wages.

Representative SNOWE. But I guess what I am trying to get at is, with your experience in the industry, do you think the surveys were much better, more effective, more accurate, provided more reliable information in making the determination in the adverse-effect wage rates then?

Mr. CHICK. From the Department of Labor?

Representative SNOWE. Yes.

Mr. CHICK. We feel that there are problems with the survey but that it is preferable to using the ES202 methodology. The problems that exist are due to cutbacks in the frequency and in the comprehensiveness of the Department of Agriculture survey.

One recommendation that we have had is that the rate for 1983 only, that the rate be based on the Department of Agriculture survey but that for subsequent years we sit down and discuss with representatives from the Department of Agriculture, Department of Labor, and from the industry to come up with some kind of equitable solution and hopefully that we do it at such time that we wouldn't come into conflicts with the harvest season and the related problems that we find with that.

Representative SNOWE. I gather from what you just said that you are not really in support of an adverse-effect wage rate. Why?

Mr. CHICK. No. Not at all.

Representative SNOWE. Why don't you think it is needed?

Mr. CHICK. Well, my initial impression would be that the reason for this adverse-effect rate is to discourage employers from using foreign labor and therefore to use local. Now, if we have the choice, we would certainly love to avoid going through the whole administrative process, the expense of bringing H-2 workers into the country to harvest our crops. But we have found from experience that there is just absolutely no way that we can pick our crop with the available labor.

In our particular experience at Chick Orchards in central Maine, we have five large orchards and about a dozen smaller orchards competing for the same labor. We can get initial interest or enough people to come in that are initially interested to form about 75 percent of the crew that we need, but by the time we get two-thirds of the way through the year, we have only about 15 percent of the pickers we need.

And one would think that over time, if the adverse-effect rate was going to have the effect of encouraging local workers by offering a higher rate and so forth, that we would be able to build up a local labor pool. But this has not been the experience. And in fact, the wages, the average wages based on the piece rates have been substantially higher than the adverse rate. In fact, in 1981 they averaged about \$4.75 as opposed to \$3.47 adverse-effect rate. In 1982 they averaged about \$4.98 as opposed to a \$3.53 adverse-effect rate.

Representative SNOWE. In your opinion, what would be more likely to encourage the circumvention of the adverse rate; having an adverse-effect wage rate or not having one?

Mr. CHICK. What we would circumvent the problem with—

Representative SNOWE. I think the reason for applying this rate is so we do encourage domestic producers to hire domestic workers rather than looking for foreign pools of available workers and for a lower price. And so I just wonder what is more encouraging to some of the companies in this country?

Mr. CHICK. Well, I think that in order to discourage—well, I understand what you're saying. I think that we're dealing with a situation where we're perceived to be looking for an inexpensive source of labor. And this really isn't the case. We're dealing with a perishable commodity, and we can't find any means to be assured of having the labor available to harvest that commodity.

If the problem that they're attempting to address is to cut out the effect that inexpensive foreign labor is having, I would think that measures such as the Simpson-Mazzoli bill which are seeking to address the problem of aliens here illegally is more to the point than the adverse-effect rate is.

Representative SNOWE. You know that we have postponed consideration of the immigration reform bill.

Mr. CHICK. Yes, I am aware of that. We're well aware of that.

Representative SNOWE. Bill, I was interested to know that the State decided to forgo the construction of a centralized grain facility because apparently transportation rates with the railroad systems in the State will be reduced over the next 3 years. But what about after that? You know, there is no guarantee that the rates for transportation will not increase after the 3-year period.

Mr. BELL. Well, we like to think that assuming we have competitive rail systems after that, that that will provide a tremendous incentive—which was not there by the way, when we first conceived the idea of a State terminal—that the competition will keep the rates down.

Second; the New England ethanol project in Auburn provides the technology for unit trains or bulk feed transport, which we also believe, whether we tie into this technology or not—and we have a meeting on that next Tuesday among our feed industry people—whether we tie into that or not, the fact that it's going to be there for ethanol we hope will provide a major incentive for keeping the rates within reason.

Representative SNOWE. So you feel fairly confident that that will be the case because there is increased competition within the rail system?

Mr. BELL. That's correct.

Representative SNOWE. Well, you have Maine Central, you have Canadian National?

Mr. BELL. That's correct.

Representative SNOWE. Conrail?

Mr. BELL. Conrail does not come into Maine.

Representative SNOWE. On the outside.

Mr. BELL. But it does come up into Boston and is a good origin carrier. And as long as we have those three competing at the origin

level and as long as we have two carriers coming in to Maine, we think it's a pretty healthy situation.

Representative SNOWE. So as long as that is maintained, you do not foresee that rates would go up significantly for transportation costs?

Mr. BELL. Not—they may go up because costs to the carriers go up. Our concern is that they not go up significantly coming into New England as opposed to other regions. As long as we continue to pay the same per-ton-mile transportation cost with our competing regions, we can deal with it.

Representative SNOWE. Right. Did they sign a contract with the railroads?

Mr. BELL. The arrangements that we worked out were kind of a private nature that we have not wanted to get into the details. But commitments have been made, I assure you.

Representative SNOWE. OK. What is the current import-export balance between the United States and Canada regarding the egg industry? Is it similar to the potato industry and the problems they have had with Canadians, or is it of a different nature?

Mr. BELL. I hope it's of a different nature, because certainly nothing could appear more devastating than the potato situation. Canada is, in general, an exporter of eggs to the United States. However, eggs from New England—I am not aware of Canadian eggs coming into New England, however. Eggs from New England, particularly brown eggs, do during periods of, I won't say shortage in Canada, but when they can absorb more eggs into their market.

As you know, they have this quota control system. It isn't always perfect; there are spot shortages, during which time U.S. producers can export into Canada. The Canadian egg marketing agency, CEMA, has operated under this principle but has in the past 6 months or so become very bureaucratic about how they are going to allow these imports and the net effect of that, of their proposed bureaucratic procedures would be to cut out the imports. Whether that is their intent or not becomes almost irrelevant.

The strategic—the Special Trade Representative's office, together with our Embassy, has constantly maintained an interest in this subject to the extent that the Canadians have backed off implementing their more restrictive policies. And we would hope that that would continue.

Representative SNOWE. You also mentioned in your prepared statement the loss of our Middle Eastern markets with respect to the poultry industry. We also know that the EEC and Brazil have increased the number of subsidies to their own domestic industries.

Do you think that the U.S. Government should utilize the same tool and employ export subsidies, or do you think that would just inflame the trade disputes already prevailing between the United States and other European nations?

Mr. BELL. I think the disputes are going to be pretty hardnosed anyway. And unless we at least upon occasion display our intent to fight back, we will have lost the battle. And so our hope is that these displays of intent be with poultry and eggs as commodities rather than just wheat and flour.

Representative SNOWE. And one final question. You also mentioned the PIK program and that it was basically a disaster. But

yet half of the farmers in the State have really taken advantage of the PIK program. Could you comment on that? I think the figures are that 54,000 acres were enrolled in this program, which is about half of the acreage represented in the State of Maine. So what type of farmer was involved in the PIK program?

Mr. BELL. Some of them were egg farmers, but if they had their druthers—

Representative SNOWE. They would not have been involved?

Mr. BELL. Right. One of them was somebody who was getting out of the grain-raising business anyway, which is, as I think one of the dairy speakers said, is not a great business in Maine to be in for climate and other reasons. He was getting out of it anyway.

The PIK program came along, and he received a tremendous windfall payment for retiring acreage that he had already decided he was going to retire.

And I am struck by—when we met in Washington with egg producers from all over the contry, there was a young farmer there from Illinois who represented a lot of constituents close to Secretary Block. And he said, yeah, he said, we raise grain, we raise eggs or produce eggs as well. And he raised a lot more grain than anyone here in Maine.

He was pleading, "Just forget about reviving us in the grain industry because what you're doing on that hand is destroying our investment in the poultry industry"; and I really am not aware of any egg producer in Maine who wouldn't like to go back to what it was before we had PIC.

Representative SNOWE. As it turns out, it's going to be a very expensive program.

Mr. BELL. For taxpayers, consumers—

Representative SNOWE. More than \$9 billion, and maybe more. You have to borrow money to pay for the commodities because you don't have enough storage, you know? As it turns out.

Well, I appreciate your testimony, your participation, your comments. They will be valuable in the recommendations that this committee will make in its report in November and beyond when the respective Agricultural Committees in the House and Senate make their reports on the 1985 farm bill.

So again thank you very much for providing very valuable input. Thank you.

We will next have panel IV which will consist of the New Hampshire Deputy commissioner of agriculture, George Cilley; and Stewart Smith who is the main commissioner, food and rural resources. We welcome you gentlemen.

We thank you Mr. Cilley, for traveling so far. We appreciate that. Who would like to begin?

Mr. SMITH. We can let the guest from New Hampshire go first.

Representative SNOWE. Good. Mr. Cilley, please begin. Thank you.

STATEMENT OF GEORGE CILLEY, DEPUTY COMMISSIONER OF AGRICULTURE, STATE OF NEW HAMPSHIRE, ON BEHALF OF STEPHEN H. TAYLOR, COMMISSIONER

Mr. CILLEY. Congresswoman Snowe, my name is George Cilley, I'm State veterinarian of New Hampshire. One of my side benefits is to have the title of Deputy Commissioner of Agriculture.

The statement that I have today is the statement of Stephen Taylor, Commissioner of Agriculture in New Hampshire.

We are in a period of difficulty in American agriculture right now and the difficulty is very apparent in New Hampshire. Our dairy farmers are producing more milk than the markets want to consume so lower prices and cash flow problems seem certain in the months ahead. Because of the strength of the dollar, our apple producers have lost markets overseas and have been having trouble moving inventories on the domestic market.

New Hampshire maple syrup is as fine as is made anywhere, but our markets here are being flooded with cheap syrup from other States and Canada. Practically every type of agricultural crop produced in our State faces tough and often unfair competition from elsewhere in North America or overseas.

Notice that these problems are almost always market problems and not production problems. Thanks to our talent for innovation, our tremendous scientific research capabilities, and our willingness to work long and hard we have been able to lick practically every production problem that comes along. We have bred cows that milk twice as much as their forebears did a generation ago; we've got dwarf apple trees that bear fruit in 4 years; we've fought off bugs, bad weather and blight; and we've figured out how to convince chickens to lay more eggs with less feed.

Farmers have put great emphasis on production over the past few years and, now, have we ever overproduced. The next step is for farmers to pay attention to promotion of our products through market development, advertising, and research into new ways to process and sell food. The farming community in New Hampshire is moving rapidly toward the understanding that profitable agriculture is agriculture that gives as much emphasis to promotion as it does to production.

The apple industry has embraced this thinking by working toward the establishment of an apple marketing order. A marketing order allows apple orchardists to initiate a self-help program for the purpose of promotion, marketing, and research. Through this mechanism, the New Hampshire apple industry can jointly promote locally produced apples and work toward countering and advertising effects of west coast apples.

The New Hampshire dairy industry has responded to the over-supply of milk by establishing a dairy promotion program to inform the public of the contributions of the dairy industry to the State and broaden the appeal of dairy products. The project has broad support and will work to generate a grassroots network of daily farmers to assist with identifying and initiating local promotion efforts.

Sheep production is enjoying a renaissance across New England. The shepherds of New Hampshire are committed to informing con-

sumers of the good taste of local lamb through the creation of the New Hampshire Lamb Promotion Council.

The maple producers, recognizing the stiff competition from Canadian syrup, have been working with a group of students from the university to generate ideas on how to effectively promote New Hampshire maple syrup. Through their association they have an avenue for coordinating the promotion of their high quality product.

New Hampshire farmers—and I expect the same is true for farmers elsewhere in the Northeast—above all want and need consistent public policy at all levels of Government.

Investment, the organization of production in marketing resources, commitments of human energy—these can be made efficiently only when there is body of Government agricultural policy that has been developed with clear, long-term goals in mind and after a commitment has been made to pursue these goals.

Agricultural policy ought to be developed from the standpoint of what best serves the national interest in the long run rather than in the piecemeal, quick-fix fashion that has characterized U.S. agricultural policy development for the past generation.

Regional needs and peculiarities must be addressed, too, and policy must take into account differences in soils, climate, transportation, patents, and other factors which may make blanket national policies unfair or unwise. Formulas for allocation of Federal funds must be carefully constructed to take into account differences between regions, and research support must be tailored to meet problems and needs of regions.

These would be the major goals I would propose being the basis for future farm policy development at all levels of Government: That plentiful food supplies be available for the American population at reasonable cost; that the strength and efficiency of American agriculture can best be assured by actions which help farmers obtain adequate return on labor and investment; that the United States must consider itself a part of the global food chain and follow policies of a responsible and reliable trading nation and supplier of food to needy people everywhere; and that the family farm has been and should continue to be the foundation on which American agricultural efficiency and productivity has been built. Thank you.

Representative SNOWE. Thank you, Mr. Cilley. Mr. Smith.

STATEMENT OF STEWART N. SMITH, COMMISSIONER OF AGRICULTURE, FOOD AND RURAL RESOURCES, STATE OF MAINE

Mr. SMITH. Madam Chairman, thank you, I appreciate the opportunity to be here; and Governor Brennan also appreciated the invitation to speak. As you know, his schedule did not allow him to be here. He has, as you probably know, a great interest in rural activities in Maine and economic development is a major part of his efforts, and economic development in rural areas is a part of that.

We really appreciate your interest in bringing this committee here to the Northeast. Sometimes we are not involved in the development of agricultural policy, as I think we should be. I think some

of that is because we're not always perceived as being major agricultural producers.

Just for the record, here in the State of Maine over 10 percent of our economic product is food and agriculture, and if you put forestry with that it's 40 percent of our total product. It is our major export-based product and the rest of our economy revolves around it. So we are interested in agriculture.

Obviously, the programs and policies that are developed in Washington affect all of our farmers, which means it also affects many other people in our economy.

I will paraphrase from my prepared statement, which I believe you have.

Representative SNOWE. Yes.

Mr. SMITH. I've been told that I have 5 minutes so I'll try to keep to that.

I would start by suggesting that Congress should direct the administration to rethink the present rural development strategy; and, again, we can detail this later. Basically, the Secretary under I believe a mandate from Congress—although I'm not sure it's a mandate from Congress—did develop a rural development strategy, reported that to the President and that was reported to Congress.

It basically relies upon creation of enterprise zones to attract business firms into rural areas. It relies upon the expansion of agricultural exports in order to enhance farm income. And it relies upon a significant increase in the amount of data collected.

Now, I don't disagree that all of these may be components of a rural development strategy, but I think they are woefully misdirected. I just don't see the benefits of trying to move a large industrial firm or large industrial enterprises into rural areas.

You know, we have people in rural areas who are entrepreneurs. We have small business opportunities in rural areas. I think that that rural development strategy should be directed to assisting those people, those entrepreneurs in management assistance and financing and in organization to develop those small businesses.

We don't need to try to put a massive industrial complex into the rural areas. I don't think it'll work in the State of Maine and I doubt if it works across the country nationally. I would just encourage you with whatever means you have to try to get that whole rural development effort redirected.

One of the essential pieces of any rural development strategy, of course, is a strong agriculture and that agriculture depends upon a land base. We are losing agricultural land in this country, as you know, and this is especially true in the Northeast and in Maine, for three reasons?

Some of it is being converted to nonagricultural use. Some of it is being eroded. And, third, and probably the major factor is some of it is being abandoned. I think all of these things need to be addressed and the Federal Government can help us do that.

I would just start by saying as far as the erosion issue is concerned we simply must maintain at least our current level of soil conservation programs. I think there's pretty good direction there. Others will speak to that issue more specifically than I.

Let me just leave it there. Don't let those soil conservation measures be decreased any more than they are. They're too important to us.

With respect to the conversion problem, I think there's quite a lot the Federal Government can do although not directly. The administration has just developed a Federal ag land policy which affects the Federal developments on prime agricultural land. It's a good start. It obviously does not go far enough, but at least it's a start.

But you also, I think, can provide quite a lot of indirect support to States and local governments, substate groups, who are becoming involved in this whole area of agricultural land being converted to nonagricultural use. Many States have gone into a very expensive program of purchase of development rights. I don't think that program is going to fit all States. Certainly I don't think it's going to fit the State of Maine, but there are many things you can do in supporting transfer of development rights programs and supporting creation of agricultural districts that have both restrictions and benefits in order to encourage farming in those districts.

It's a program that we are thinking about here in the State of Maine and if you would get your Federal programs directed toward agriculture districts or those areas that are targeted for maintenance it would be most helpful.

That also is the same technique we've used for addressing the abandonment issue. The only way we're going to slow the abandonment of agricultural land is to make agriculture more profitable in those areas and that means we're simply going to have to target our resources better.

One of those resources or some of that assistance is in the area of marketing. That, I think, is probably the major deficiency we have in the State of Maine now for more of our agricultural industries is marketing. There are several things that the Federal Government can do.

I would encourage you to ask the research and education system, the agricultural experiment station, and the cooperative extension service to direct more of its resources into addressing the marketing problems and the marketing opportunities. As you know, that system has created a very tremendous production capability without much emphasis on marketing.

Consequently, we have some very inefficient marketing structures. About two-thirds of the consumer dollar goes into marketing margins rather than, in fact, to the farm and especially in the Northeast and the State of Maine.

That system can be made much more efficient by linking up the producer closer to the consumer through other kinds of marketing systems, but that needs some research and education.

There are other existing marketing programs at the Federal level which practically every administration tries to cut. I would encourage you not to allow that to happen. The Federal State Market Improvement program is one of them.

That program has been very effective here in the State of Maine in several areas. It's helped the potato industry with a central marketing program. It's helped with the transportation program. We're working with the blueberry industry now in looking at that pro-

gram and helping address some of its marketing opportunities because of its increased production capabilities.

In addition to that program, we need more support from the Federal level in cooperative development. Now, I realize there has been discussion here this morning, by Mr. Grant in particular, raising concerns about cooperatives. I can assure you in the State of Maine that cooperatives are not being abused and we need more co-ops. We need farmers working together more than they are now.

The cooperative service did provide a field office, a New England field office. It happened to be located in the State of Maine. In fact, we provided the housing for that field office. Mr. Jerry Elie was there.

That field office was eliminated. The basic reason is that the Cooperative Service in Washington believes that its responsibility should be directed to the large co-ops and not to the small developing co-ops.

If there's one thing you can take back in this whole area of co-ops from this hearing I hope you tell the Cooperative Service that they should stand that policy on its head. They've got that exactly upside down. What we need is more support for developing co-ops rather than maybe continuing support for the very large co-op which, as Mr. Grant said, are in the top five, Fortune 500, and we think we need to work with local farmers in developing local co-ops.

Another area that you could be helpful in is in the area of marketing orders. Now, I do understand that marketing orders have been under challenge for some time. I guess OMB is playing the marketing order challenge game, also.

We're using marketing orders now in a very merging industry, a broccoli industry, which shows great promise in Aroostook County. The russet potato has a marketing order; the apple people just enacted a marketing order for a promotion program and Mr. Cilley, I notice, just mentioned that they would like to do something like that in New Hampshire.

Whatever you can do to help support market orders, I would encourage you to do that. I assure you that marketing orders in this State have not been abused. Maybe they have in some other States; I cannot attest to that. In this State, they have not.

We find them very useful and it would be helpful if you could call the wolves off from trying to tear apart the marketing order schemes.

In addition to marketing, I think the 1985 farm bill could be very helpful in the area of redirecting policy in the area of credit. As you probably know, we in the State of Maine are very dependent, in my opinion overdependent, upon the Federal Government for financing our agriculture.

The Farmer's Home Administration finances somewhere between 50 and 60 percent of all agricultural activity in the State. I'm not knocking that. If it were not for Farmers' Home, I don't know where we would be in terms of financing our agriculture.

I just caution you that, in my opinion, that is a too heavy involvement and the State of Maine has taken some steps to correct that, but it does need some support from your level.

You will probably hear later the Farm Credit Service picks up about a third of that financing which basically means that the private sector has withdrawn from agricultural financing.

The State's 111th legislature responded to that by creating a very significant new finance authority, the Finance Authority of Maine, which assumes all the responsibilities of the MGA, Maine Guarantee Authority, the Small Business Loan Authority and the Veterans' Small Business Loan Authority. Those no longer exist as of September 23. We have the Finance Authority of Maine.

A major component of that is a Natural Resource Financing Marketing Division which has its own board directed entirely at the natural resource industries—farming, forestry, and fisheries.

Now, those programs are going to be able to attract banks back into that financing by providing that capital with the use of industrial revenue bonds; but we must keep the tax exemption on those industrial revenue bonds and I understand, especially on the umbrella bonds, that that is under some attack.

I don't know exactly where that is, but if we are going to redirect that credit policy we simply must have those industrial revenue bonds, we must have the use of those as a tax-exempt instrument in order to make them attractive to investors.

I think if we do that we can entice the private sector back into agriculture financing relieving some of the burden of the Federal Government through Farmers' Home.

One minor item on credit. I would also encourage you to provide Farmers' Home with resources to service its loans, even if it means reducing some of the program aspects. I think that's critical.

I am most encouraged that they are requiring a new finance management system from their borrowers. I think it's probably past time that they did this. I would encourage that no continue, but provide them with the resources to service those loans; most critical.

You've also heard today, already, about international trade policy. I think we do need free trade, but we need fair trade. By profession I'm an economist. I support the theory of imperative advantages.

I think that whoever can produce the most efficient should do so and we should trade in order to maximize consumer benefits.

However, that breaks down when some producers get subsidized and then that subsidized product comes in to compete in our markets.

We've seen that in potatoes with the Canadian potatoes coming into our markets. Obviously, the Commerce Department has already determined that there is, at least, sales below cost there. We've seen this earlier in the poultry industry. The EC, European Community, simply took our Middle East markets by subsidizing their product.

Although I am a free trader and I think most of the agriculture people here are, we're also fair traders and I guess my message would be, use some subsidies on some of these products that we have until you get the European Community and some other countries to remove their subsidies.

The administration has done that with the wheat sale to Egypt. I would suggest you now do it with poultry and simply get that message across to the European community.

Finally, if you would, I'd like to make just a few comments on the basic agriculture price support production adjustment programs and I do that as much from my former position of Association Administrator of the ASCS which administered those programs as I do from my position as Commissioner of Agriculture.

Mr. SMITH. In my opinion, we do have the technical expertise, and we actually have the programs that have been developed, tried, and actually implemented to have a stable and sound agricultural economy. We have the loan programs, the commodity loan programs which maintain price. We have the deficiency payment program that maintains farm income. The farmer owned reserve program and the production adjustment programs, which as you know take many different shapes for different products.

The problem, in my opinion, of overproduction, massive buildup, expensive Federal outlays and then drastic adjustments, as we have seen with the PIK program, is not because the techniques have been wrong. It's that the policy has been inconsistent.

Now, that policy changes tremendously from administration to administration, and even within an administration from fiscal year to fiscal year, and we simply have got to bring more stability in those agricultural programs if we're going to send the right signal out to our producers.

Development of the 1981 farm program I think is a good illustration of what is happening, and I am not talking about the original writing of the bill. I understand that was written in the very conventional way, that congressional committees basically developed that bill, the administration had its crack at it.

But that program was tremendously changed by the budget reconciliation process in the next go-round, and I submit to you that the decisions that were made were based not upon the impact upon production or attracting people into agriculture or out of agriculture, but were basically based upon the budget constraints.

Obviously, we have to consider those constraints in any agricultural policy and program, but when we send the wrong signals, we simply raise havoc out there in the countryside. I mean we entice young people into agriculture by maybe getting prices or programs too high, then they have to be adjusted, and you get this tremendous loss. It's a human resource problem, a human spirit problem. We need to bring more stability into those kinds of programs.

I think it's time to take that basic farm policy out of the year-by-year, the immediate political arena, and place it in a more independent agency where redirection comes more slowly.

I would encourage this committee to give serious consideration toward establishing a separate agency to develop and maybe even implement basic commodity programs. That agency could be appointed not coterminus with the President. You might think in terms of the Federal Reserve Board where the terms are longer, where they're not quite as susceptible to political pressures. I think such an agency could determine program variables that would provide an optimal level of production, given that we have a reserve

program that can make up both in cases where the weather provides yields well less than estimates.

It could also serve an export function. We could have more stable prices and we could be more competitive in export markets. Administratively, I think this is not a difficult thing to do. The CCC, a good part of CCC, is now devoted to those programs. That is, as you know, a Delaware-chartered corporation. And I am sure that can be worked out administratively.

The difficult part, of course, would be the funding. Would Congress make up the losses that it now does to CCC to repay the Treasury. As you know, the CCC operates with borrowing authority. They borrow directly from the Treasury and Congress makes that up. That would have to be worked out.

Maybe it cannot be done this year. But I think that we need to seriously consider taking those basic program decisions and implementations which affect our total agricultural economy, we have got to take those out of the immediate year-by-year, day-by-day pressures, and put them into some agency which can take a little longer term and bring some stability into those programs.

That is probably a rather drastic suggestion maybe, and it's nothing that can be done immediately, but I think we need to give it serious consideration. I would encourage you to write such redirection in the 1985 farm bill.

Madam Chairman, thank you very much for the opportunity to be here.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF STEWART N. SMITH

MADAM CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO PRESENT THE VIEWS OF THE STATE OF MAINE AND THE BRENNAN ADMINISTRATION BEFORE THIS MOST PRESTIGIOUS JOINT COMMITTEE. YOU CERTAINLY DESERVE CREDIT FOR INSURING THAT THE CONCERNS OF THE NORTHEAST WITH RESPECT TO AGRICULTURAL POLICY WILL BE CONSIDERED IN THE DEBATE THAT SHAPES THE 1985 FARM BILL. TOO OFTEN THE NORTHEAST AND ESPECIALLY NEW ENGLAND IS OVERLOOKED IN THAT DEBATE BECAUSE OF OUR RELATIVELY SMALL AGRICULTURAL BASE. HOWEVER, AS YOU KNOW, AGRICULTURE IS IMPORTANT TO THE NORTHEAST, TO NEW ENGLAND, AND ESPECIALLY TO MAINE. AGRICULTURAL FOOD PRODUCTION AND PROCESSING IN MAINE CONSTITUTES 20 PERCENT OF THE PRODUCTION OF ECONOMIC GOODS. IF THE FORESTRY INDUSTRY IS ADDED TO THAT WE ARE TALKING ABOUT NEARLY 50 PERCENT OF THE ECONOMIC GOODS PRODUCED IN THE STATE OF MAINE. BEYOND THESE STATISTICS, WE ARE A STATE THAT IS RURAL IN NATURE AND PEOPLE IN MAINE HAVE A STRONG DESIRE TO MAINTAIN THAT RURAL CHARACTER. BUT WE NEED HEALTHY, PROSPEROUS RURAL COMMUNITIES IF OUR PEOPLE ARE TO ENJOY THE BENEFITS OF OUR RURAL AREAS. I

APPRECIATE THE OPPORTUNITY TO PRESENT TO THE COMMITTEE SOME CONCERNS I HAVE AND PROPOSALS THAT I THINK WILL MAKE STRONGER RURAL COMMUNITIES, NOT ONLY IN MAINE, BUT THROUGHOUT THE COUNTRY.

I WOULD START BY SUGGESTING THAT WE NEED TO RETHINK THE PRESENT RURAL DEVELOPMENT STRATEGY. AFTER A GREAT DEAL OF PROCESS, WHICH INVOLVED MEETINGS ACROSS THE COUNTRY, SECRETARY BLOCK SENT TO THE PRESIDENT A REPORT ON A STRATEGY FOR RURAL DEVELOPMENT IN THIS COUNTRY. THAT STRATEGY, IN MY OPINION, IS MISDIRECTED. IT DEPENDS HEAVILY UPON THE CONCEPT OF ENTERPRISE ZONES TO ATTRACT BUSINESS FIRMS INTO RURAL AREAS. IT RELIES UPON EXPANSION OF AGRICULTURAL EXPORTS AS A MEANS OF BOLSTERING FARM INCOME IN RURAL AMERICA AND IT PROPOSES SIGNIFICANT INCREASE IN THE AMOUNT OF DATA COLLECTED IN RURAL AMERICA. ALL OF THESE INITIATIVES HAVE A PLACE IN PROVIDING SUPPORT TO OUR RURAL COMMUNITIES, BUT AS THE BUILDING BLOCKS OF RURAL DEVELOPMENT STRATEGY, THEY FALL WOEFULLY SHORT. WE NEED A POLICY THAT DOES NOT RELY UPON PROVIDING EVERY RURAL COMMUNITY WITH THE OPPORTUNITY TO PARTICIPATE IN LARGE-SCALE INDUSTRIALIZED SOCIETY. INDEED WE NEED A POLICY WHICH RECOGNIZES DIFFERENCES BETWEEN OUR URBAN AND RURAL COMMUNITIES AND BUILDS UPON RURAL STRENGTHS RATHER THAN IMPOSE UPON THEM URBAN SOLUTIONS NATIONWIDE. RATHER, WE SHOULD BE WORKING TO MAINTAIN THESE DIFFERENCES.

WE NEED A STRATEGY WHICH SUPPORTS THE ENTREPRENEURIAL CAPABILITY THAT CURRENTLY EXISTS IN RURAL AMERICA. THAT ENTREPRENEURIAL CAPABILITY WILL NOT BE RELEASED WITH AN ENTERPRISE

ZONE EMPHASIS WHICH REALLY IS A TAX SUBSIDY PROGRAM. WE NEED, AT LEAST IN RURAL MAINE, A RURAL PROGRAM WHICH PROVIDES INFORMATION, CAPITAL, AND ASSISTANCE IN ORGANIZATION FOR OUR RURAL ENTREPRENEURS. SOME OF THE BASIC PROGRAMS ARE ALREADY IN PLACE; THEY SIMPLY NEED MORE RESOURCES AND MORE EMPHASIS. LET'S NOT TRY TO MAKE RURAL AMERICA INTO AN INDUSTRIAL AMERICA. LET'S USE THE RESOURCES AND ADVANTAGES THAT OUR RURAL COMMUNITIES HAVE AND BUILD UPON THEM.

ONE OF THE ESSENTIAL PIECES OF A RURAL DEVELOPMENT STRATEGY IS A STRONG AGRICULTURE, AND THAT AGRICULTURE IS GOING TO DEPEND UPON MAINTENANCE OF OUR AGRICULTURAL LAND BASE. THAT BASE, AS YOU ARE UNDOUBTEDLY AWARE, IS FAST ERODING. WE ARE LOSING AGRICULTURAL LAND FOR THREE REASONS: FIRST, SOME OF IT IS ERODING AND BECOMING LESS AND LESS PRODUCTIVE. SECOND, SOME OF IT IS BEING CONVERTED TO NON-AGRICULTURAL USES. THIRD, ESPECIALLY IN MAINE, OVER THE PAST FORTY YEARS MUCH HAS BEEN ABANDONED. WE NEED PROGRAMS WHICH ADDRESS EACH OF THESE THREE CAUSES. I BELIEVE THE FIRST IS ADDRESSED REASONABLY WELL WITH CURRENT SOIL CONSERVATION PROGRAMS. I WOULD ENCOURAGE CONTINUOUS SUPPORT OF THOSE PROGRAMS AND THE REALIZATION THAT REDUCING OR ELIMINATING THEM IS GOING TO EVENTUALLY ERODE OUR LAND BASE AND, THEREFORE, OUR AGRICULTURE PRODUCTIVITY IN THIS COUNTRY.

SECONDLY, MUCH MORE COULD BE DONE AT THE NATIONAL LEVEL TO ADDRESS THE CONVERSION PROBLEM. I THINK THAT HAS NOT BEEN ADDRESSED

SUFFICIENTLY IN THE PAST BECAUSE IT IS NOT A PROBLEM IN THE MID-WEST AREAS WHERE OUR MAJOR GRAIN PRODUCTION IS. THE NATIONAL AGRICULTURAL LAND STUDY AND THE RESULTING LEGISLATION TO RESTRAIN DEVELOPMENT BY THE FEDERAL GOVERNMENT ITSELF ON OUR AGRICULTURAL LANDS IS A START, BUT IT FALLS SHORT OF WHAT SHOULD BE DONE AT THE FEDERAL LEVEL IN TERMS OF THE GOVERNMENT'S OWN DEVELOPMENT PROJECTS. IN ADDITION, MUCH MORE COULD BE DONE IN ASSISTING STATE AND SUB-STATE GROUPS IN ADDRESSING THE AGRICULTURAL LAND CONVERSION ISSUE. MANY STATES, ESPECIALLY IN THE NORTHEAST, HAVE ALLOCATED SUBSTANTIAL AMOUNTS OF MONEY TO MAINTAIN THEIR AGRICULTURAL LAND BASE PRIMARILY THROUGH THE PURCHASE OF DEVELOPMENT RIGHTS. THAT PROGRAM IS PROBABLY TOO EXPENSIVE FOR MOST STATES TO UTILIZE IN ANY MAJOR WAY, AND I DON'T BELIEVE THAT TECHNIQUE IS NECESSARY TO MAINTAIN OUR AGRICULTURAL BASE. OTHER PROGRAMS, LIKE THE TRANSFER OF DEVELOPMENT RIGHTS AND THE CREATION OF AGRICULTURAL DISTRICTS WHICH HAVE BOTH RESTRICTIONS AND BENEFITS, CAN BE AN IMPORTANT ASPECT TO AGRICULTURAL LAND MAINTENANCE. THOSE PROGRAMS COULD USE SOME SUPPORT FROM THE FEDERAL LEVEL, AND THAT SUPPORT WOULD NOT REQUIRE A GREAT OUTLAY OF FUNDS.

FINALLY, THE FEDERAL GOVERNMENT COULD DO MUCH MORE IN ADDRESSING THE ABANDONMENT ISSUE. WE, IN MAINE, ARE CONSIDERING A POLICY OF AGRICULTURAL DISTRICTS WHERE WE WOULD TARGET STATE LEVEL AGRICULTURAL SUPPORT TO ASSURE THAT AGRICULTURAL PRODUCTION CAN STAY VIABLE INTO THE FUTURE. A MAJOR COMPONENT OF THAT STATE SUPPORT IS TO IMPROVE THE MARKETING OPPORTUNITIES FOR THOSE PRODUCERS WITHIN AGRICULTURAL DISTRICTS.

THE FEDERAL GOVERNMENT CAN DO MUCH WITH ITS EXISTING PROGRAMS TO SUPPORT SUCH STATE EFFORTS. THE RESEARCH AND EDUCATION SYSTEM OF THE AGRICULTURAL EXPERIMENT STATIONS AND THE COOPERATIVE EXTENSION SERVICE CAN BE INSTRUMENTAL IN PROVIDING SPECIAL ASSISTANCE TO PRODUCERS IN AGRICULTURE DISTRICTS, ESPECIALLY IN MARKETING. THAT SYSTEM HAS, IN THE PAST, CONCENTRATED MUCH OF ITS RESEARCH EFFORT IN THE PRODUCTION AREA, AND THE RESULT IS DEMONSTRATED EVERY DAY BY THE ABILITY OF THE AMERICAN FARMER TO PRODUCE. UNFORTUNATELY, NOT ENOUGH EFFORT HAS GONE INTO DEVELOPING EFFICIENT MARKET SYSTEMS WHICH PROVIDE CONSUMERS A WIDE CHOICE OF FOODS AND PRODUCE A BETTER RETURN TO THE FARMER. INSTEAD, THE MARKETING MARGIN NOW ACCOUNTS FOR TWO-THIRDS OF THE PRICE THAT WE PAY FOR FOODS. THAT MARKETING SYSTEM NEEDS TO BE ADDRESSED WITH BOTH RESEARCH AND EXTENSION RESOURCES, AND I WOULD ENCOURAGE THE JOINT COMMITTEE TO DIRECT THAT KIND OF SUPPORT IN THE '85 FARM BILL.

THERE ARE SEVERAL OTHER EXISTING PROGRAMS IN USDA WHICH CAN BE VERY HELPFUL AND DESERVE YOUR SPECIAL SUPPORT. ONE OF THOSE THAT HAS BEEN EXTREMELY BENEFICIAL TO NEW ENGLAND AND THE STATE OF MAINE IS THE FEDERAL/STATE MARKET IMPROVEMENT PROGRAM THAT IS ADMINISTERED BY THE AGRICULTURE MARKETING SERVICE IN USDA. BECAUSE IT IS A SMALL PROGRAM IT HAS NOT HAD MUCH SUPPORT OF EITHER PAST ADMINISTRATIONS OR THIS ONE. HOWEVER, IT IS AN IMPORTANT PROGRAM. IT HAS HELPED DEVELOP BETTER MARKETING SYSTEMS IN THE POTATO INDUSTRY, IT HAS ADDRESSED AND PROVIDED TRANSPORTATION OPTIONS FOR

OUR FEED GRAINS, AND IT HAS ASSISTED IN THE PROMOTION OF BLUEBERRIES. IF TARGETED TO KEY SUB-STATE AGRICULTURAL DISTRICTS, THIS PROGRAM COULD CONTINUE TO BE EXTREMELY HELPFUL TO RURAL DEVELOPMENT IN MAINE.

WE, IN MAINE AND NEW ENGLAND, NEED MORE COOPERATIVE DEVELOPMENT. WE HAVE BEEN SLOW TO USE THE COOPERATIVE STRUCTURE FOR MARKETING OUR AGRICULTURE PRODUCTS. IN 1980, USDA PROVIDED A COOPERATIVE FIELD OFFICE IN NEW ENGLAND STAFFED BY ONE PROFESSIONAL AND, THAT PERSON WAS EXTREMELY HELPFUL IN ASSISTING FORESTRY, FARMING, AND EVEN CRAFTS PRODUCERS TO FORM CO-OPS. UNFORTUNATELY, THAT OFFICE HAS BEEN CLOSED BECAUSE, I BELIEVE, THE COOPERATIVE SERVICE SEES ITSELF AS A SUPPORTER OF LARGE EXISTING CO-OPS RATHER THAN SMALL EMERGING CO-OPS. I THINK THAT'S A POLICY THAT SHOULD BE STOOD ON ITS HEAD, AND WOULD URGE CONGRESS TO WRITE THIS DIRECTION INTO THE NEW FARM BILL.

MARKETING ASSISTANCE CAN ALSO BE PROVIDED THROUGH YOUR AND USDA'S CONTINUED SUPPORT, AND ENCOURAGEMENT OF MARKETING ORDERS. MARKETING ORDERS ARE EXTREMELY HELPFUL TO ESPECIALLY SMALL PRODUCERS WHO ARE TOO NUMEROUS TO PROVIDE QUALITY CONTROL AND MARKETING INFORMATION ON AN INDIVIDUAL BASIS. BY USING MARKETING ORDERS INDUSTRIES IN MAINE LIKE THE EMERGING BROCCOLI INDUSTRY, THE APPLE INDUSTRY AND THE RUSSET POTATO INDUSTRY CAN ESTABLISH QUALITY STANDARDS AND PROMOTION FOR THE PRODUCT WHICH MEETS THOSE QUALITY STANDARDS. MARKETING ORDERS HAVE BEEN UNDER ATTACK FOR SOME YEARS

NOW, AND PERHAPS THERE ARE SOME INSTANCES IN LARGE, ESTABLISHED INDUSTRIES WHERE THEY ARE BEING ABUSED. I CAN ASSURE YOU THAT MARKETING ORDERS IN THIS STATE HAVE NOT BEEN ABUSED AND ARE INDEED HELPFUL, NOT ONLY FOR PRODUCERS BUT ALSO CONSUMERS, AND I URGE YOU TO SUPPORT THE FURTHER USE OF MARKETING ORDERS.

ANOTHER METHOD OF TARGETING SUPPORT IS IN THE AREA OF CREDIT. THE STATE OF MAINE, AS YOU PROBABLY KNOW, IS OVERLY DEPENDENT UPON THE FARMERS HOME ADMINISTRATION (FMHA) FOR FINANCING OUR AGRICULTURE. FMHA NOW PROVIDES SOMEWHERE BETWEEN 50 AND 60 PERCENT OF THE AGRICULTURE FINANCING IN THIS STATE, AND THE FARM CREDIT SERVICE ANOTHER THIRD. THAT MEANS THAT THE PRIVATE BANKS HAVE SUBSTANTIALLY WITHDRAWN FROM AGRICULTURAL LENDING. IN RECOGNITION OF THIS SITUATION THE 111TH MAINE LEGISLATURE ENACTED AN INNOVATIVE PROGRAM THAT ALLOWS THE STATE TO AGGRESSIVELY PROMOTE THE DEVELOPMENT OF OUR NATURAL RESOURCE INDUSTRIES BY USING INDUSTRIAL REVENUE BONDS. WE ARE ESPECIALLY INTERESTED IN USING THESE FUNDS TO ENCOURAGE PRIVATE BANKS TO COME BACK INTO AGRICULTURE FINANCING. THE PROGRAM ALSO PROVIDES SOME TECHNICAL ASSISTANCE TO THE BANKS AND BORROWERS. HOWEVER, THAT PROGRAM WILL NOT SUCCEED IF WE ARE NOT ALLOWED TO USE TAX EXEMPT REVENUE BONDS. IT IS CRITICAL TO AGRICULTURE AND RURAL DEVELOPMENT IN MAINE AND INDEED IN THE NORTHEAST TO HAVE TAX EXEMPT REVENUE BONDS AVAILABLE TO RESTRUCTURE A FINANCING BASE FOR AGRICULTURAL ACTIVITY. WITHOUT A RESTRUCTURED BASE, AGRICULTURE IS GOING TO BE DEPENDENT UPON A FEDERAL PROGRAM. ALTHOUGH FMHA HAS A VERY LEGITIMATE AND CRUCIAL ROLE TO PLAY IN

AGRICULTURE, WE DON'T BELIEVE THAT OUR AGRICULTURAL ACTIVITY SHOULD BE DEPENDENT UPON A FEDERAL FINANCING PROGRAM. WE BELIEVE THAT IS NOT GOOD FOR EITHER OUR AGRICULTURE OR FOR THE FEDERAL GOVERNMENT.

IN ADDITION, I WOULD ENCOURAGE YOU TO PROVIDE FMHA WITH THE RESOURCES IT NEEDS TO SERVICE ITS LOANS. FMHA STARTED AS A PROVIDER OF CREDIT TO THOSE WHO COULD NOT GET CREDIT IN THE PRIVATE SECTOR AND THOSE BORROWERS GENERALLY RECEIVED GOOD SERVICING AND DIRECTION FROM FMHA. OVER THE YEARS THE ABILITY TO SERVICE THOSE LOANS HAS DIMINISHED, AND TODAY FMHA DOES NOT HAVE THE RESOURCES TO PROVIDE THE SUPPORT THAT IS NECESSARY TO MAKE THOSE NEW FARMERS SUCCESSFUL. I WOULD ENCOURAGE THAT YOU PROVIDE FMHA WITH THAT CAPABILITY EVEN IF IT MEANS REDUCING ITS PROGRAMS.

YOU UNDOUBTEDLY WILL HEAR TODAY SOME CONCERNS ABOUT OUR INTERNATIONAL TRADE POLICY AND HOW IT EFFECTS AGRICULTURE IN THE NORTHEAST AND ESPECIALLY IN MAINE. IT SEEMS TO US THAT WE NEED FREE AND FAIR TRADE; AREAS THAT CAN PRODUCE MOST EFFICIENTLY SHOULD DO SO AND WE SHOULD PURCHASE THOSE ITEMS THAT WE CANNOT PRODUCE AS WELL. HOWEVER, THAT CONCEPT BREAKS DOWN WHEN LESS EFFICIENT PRODUCERS GET SUBSIDIES THAT ALLOW THEM TO PRICE THEIR PRODUCT BELOW COST. WE HAVE SEEN THAT STRATEGY WORK FOR THE CANADIAN POTATO FARMERS AS THEY HAVE SUBSTANTIALLY INCREASED THE VOLUME OF POTATOES COMING INTO THIS COUNTRY, REDUCING THE MARKETS AVAILABLE TO OUR OWN FARMERS. WE HAVE SEEN THAT ALSO IN THE POULTRY INDUSTRY. WHEN THE EUROPEAN COMMUNITY STARTED SUBSIDIZING

ITS POULTRY PRODUCTION WE LOST PRACTICALLY ALL THE EXPORT MARKETS THAT OUR UNITED STATES INDUSTRY HAD. I THINK WE NEED TO MAKE IT CLEAR TO THOSE COUNTRIES THAT ARE SUBSIDIZING THEIR EXPORTS THAT WE WILL NOT TOLERATE THAT KIND OF ECONOMIC DISRUPTION. I WOULD ENCOURAGE THIS COMMITTEE TO DIRECT THE USDA TO USE SUBSIDIES IF NECESSARY UNTIL OTHER COUNTRIES DISCONTINUE THEIR USE OF SUBSIDIES. WE WANT OPEN TRADE BUT WE WANT FAIR TRADE.

FINALLY, IF I MAY, I WOULD LIKE TO CHANGE HATS AND TO SPEAK JUST BRIEFLY ABOUT THE BASIC AGRICULTURAL PRICE SUPPORT AND ADJUSTMENT PROGRAM. I WOULD LIKE TO PUT ON THE HAT I WORE AS THE ASSOCIATE ADMINISTRATOR OF THE ASCS WHICH WAS RESPONSIBLE FOR THE ADMINISTRATION OF THOSE PROGRAMS. LOAN RATES, TARGET PRICES, AND PRODUCTION-ADJUSTMENT REQUIREMENTS FOR OUR CORN, WHEAT, RICE, PEANUTS, TOBACCO, MILK AND OTHER COMMODITIES HAVE A GREAT IMPACT UPON WHAT WE PRODUCE IN THIS COUNTRY AND HOW WE CAN SELL IT. FARMERS MAKE THEIR PRODUCTION PLANS BASED UPON THE PRICES THEY ARE LIKELY TO RECEIVE AND, THOSE PRICES ARE GENERALLY AFFECTED BY OUR BASIC AGRICULTURAL POLICY.

IT APPEARS TO ME THAT WE HAVE THE TECHNICAL EXPERTISE TO OPERATE THE PROGRAMS THAT WE HAVE AT OUR DISPOSAL. THIS INCLUDES THE COMMODITY PROGRAMS, THE DEFICIENCY PAYMENT PROGRAM, THE FARMER-OWNED RESERVE PROGRAM, AND THE PRODUCTION ADJUSTMENT PROGRAMS IN WHATEVER FORM THEY MAY TAKE; THAT FORM, AS YOU KNOW, VARIES BETWEEN COMMODITIES. THE PROBLEMS OF OVER-PRODUCTION,

MASSIVE BUILDUPS, EXPENSIVE FEDERAL OUTLAYS, AND THEN DRASTIC ADJUSTMENTS TO BRING OUR PRODUCTION BACK INTO BALANCE ARE NOT CAUSED BECAUSE WE DON'T HAVE ADEQUATE PROGRAMS. THE PROBLEMS ARE CAUSED BECAUSE THERE IS A GREAT DEAL OF VOLATILITY IN THE WAY THESE PROGRAMS ARE ADMINISTERED. THIS VOLATILITY IS DUE TO CHANGES IN AGRICULTURAL POLICY FROM ADMINISTRATION TO ADMINISTRATION AND EVEN WITHIN ADMINISTRATIONS BECAUSE OF BUDGET CONSTRAINTS WHICH CHANGE FROM FISCAL YEAR TO FISCAL YEAR.

THE FLUCTUATIONS IN THESE BASIC FARM PROGRAMS WAS AMPLY DEMONSTRATED DURING THE DEVELOPMENT OF THE 1981 FARM PROGRAM. THAT PROGRAM WAS WRITTEN FROM BUDGET CRITERIA AND WAS SHAPED BY RECONCILIATION ACT RATHER THAN BY ANY ESTIMATES OF WHAT WAS NECESSARY TO PRODUCE OR NOT TO PRODUCE ON THE FARMS IN THIS COUNTRY. I DON'T BELIEVE THAT WE CAN CONTINUE TO DEVELOP FARM POLICY IN THIS MANNER WITHOUT HAVING A GREAT DEAL OF HAVOC ON THE FARM AND AT GREAT COST IN TERMS OF HUMAN RESOURCES AND HUMAN SPIRIT. HIGH LOAN RATES AND TARGET PRICES DRAW NEW PEOPLE INTO FARMING, INCREASE THE PRICE OF LAND, AND THEN A POLICY WHICH PROVIDES LOW-TARGET PRICES DRIVES THOSE YOUNG PEOPLE WITH HEAVY INDEBTEDNESS OUT OF BUSINESS. IT'S TIME TO TAKE THE BASIC FARM POLICY OUT OF THE EVER CHANGING, YEAR-BY-YEAR POLITICAL ARENA AND PLACE IT IN A MORE PROTECTED AGENCY WHERE REDIRECTION COMES MORE SLOWLY.

I WOULD ENCOURAGE THIS COMMITTEE TO GIVE SERIOUS CONSIDERATION TOWARD ESTABLISHING A SEPARATE AGENCY TO ESTABLISH BASIC FARM PROGRAMS. THAT AGENCY MIGHT BE MODELED AFTER THE FEDERAL RESERVE BOARD WHERE MEMBERS ARE APPOINTED NOT CONTINUOUS WITH THE PRESIDENT, WHERE POLICIES WOULD OVERLAP ADMINISTRATIONS; WHERE CLEAR DIRECTION WOULD BE GIVEN; AND WHERE TIME WOULD BE ALLOWED FOR ACTUAL IMPLEMENTATION OF A PARTICULAR POLICY. SUCH AN AGENCY COULD DETERMINE PROGRAM VARIABLES TO PROVIDE AN OPTIMAL LEVEL OF

PRODUCTION, WITH A RESERVE PROGRAM TO MAKE FOODS AVAILABLE DURING YEARS WHERE WEATHER YIELDS BELOW ESTIMATES. A SOUND, STABLE, FARM POLICY COULD BE DEVELOPED. SUCH AN AGENCY COULD ALSO BETTER SERVE OUR EXPORT FUNCTION. ADMINISTRATIVELY IT WOULD BE A RELATIVELY EASY MATTER TO LIFT THOSE RESPONSIBILITIES OUT OF USDA SINCE THEY ARE NOW RESTING WITHIN ONE AGENCY. THE FUNCTIONS OF THE CCC WOULD BE SUBSTANTIALLY CHANGED. THE USDA COULD THEN GO ABOUT ITS BUSINESS OF BEING CONCERNED WITH THE ALLOCATION OF INCOME WITHIN AGRICULTURE BUT WOULD LEAVE THE GENERAL ESTABLISHMENT OF OVERALL PRICES AND PRODUCTION LEVELS, TO A SEPARATE AGENCY WHICH DID NOT HAVE THE POLITICAL PRESSURES THAT OUR CURRENT SYSTEM PROVIDES.

SUCH A PROGRAM WOULD PROVIDE MORE STABLE INCOME TO OUR GRAIN FARMERS AND OUR BASIC COMMODITY PRODUCERS. YOUNG PEOPLE WOULD GET BETTER SIGNALS ABOUT WHEN TO GO INTO FARMING AND WHEN TO STAY OUT. CREDITORS WOULD HAVE A BETTER SENSE OF SOUND LENDING POLICY, AND THE USERS OF GRAIN, LIKE OUR POULTRY, DAIRY AND LIVESTOCK, INDUSTRIES IN NEW ENGLAND AND MAINE WOULD FACE MORE STABLE PRICES AND A BETTER ESTIMATE OF THE AVAILABILITY OF PRODUCT. SIMILARLY, EXPORT MARKETS WOULD BE BETTER SERVED BY THIS MORE CONSISTENT POLICY.

WE HAVE THE TOOLS, WE HAVE THE PROGRAMS: IT IS SIMPLY A MATTER OF GETTING THE BASIC DECISION-MAKING INTO AN AGENCY WHICH CAN LOOK AT THE LONG-TERM IMPACTS AND MAKE THE TOUGH DECISIONS WITHOUT BEING CONFRONTED ON A DAY-BY-DAY BASIS WITH POLITICAL PRESSURES. THIS WOULD BE THE MOST SIGNIFICANT CHANGE IN OUR FARM POLICY SINCE THEY WERE BASICALLY PUT IN PLACE, IN THE 1930'S. IT IS ONE THAT IS PROBABLY OVERDUE. I WOULD ENCOURAGE THIS COMMITTEE TO WRITE SUCH A REDIRECTION INTO THE '85 FARM BILL.

MADAM CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU AND TO SHARE MY THOUGHTS WITH YOU.

Representative SNOWE. Thank you, Mr. Smith. Regarding your point at the end of your statement. You suggest that we should create an agency similar to the Federal Reserve Board. There are some who suggest that the Secretary of Agriculture should have the discretion in implementing farm programs, others would suggest that Congress should establish, obviously, the target programs, the loan rates, and other farm programs.

But you are suggesting a more protected agency to take it out of the political arena. Would we not, in effect, be yielding the interests of Maine's farmers or the Nation's farmers to some unaccountable bureaucracy?

I can see problems with that because, like the Federal Reserve Board, many would suggest that right now it is independent—originally it was not independent; now it is independent—and some are suggesting we should put it back under the umbrella of a President or the U.S. Congress.

Could you not envision some problems with that kind of insulated Federal agency making decisions that would affect the farmers in this country?

Mr. SMITH. I would take that risk. Those are tough decisions. I know we had fights when I was there over a few cents on sorghum loan rates. We had fights on practically all of the loan rates and the set-aside, the amount of the set-aside.

When you're dealing with farmers across the country, some in areas that have higher production costs than others. It's an extremely difficult decision. I would take the risk of putting those decisions into an agency which is a little more isolated and insulated from the day-to-day political pressure. That's not to say that Congress couldn't take back any time they wanted to.

My guess is that Congress might like to have some of that decisionmaking in a separate agency and let them apply the pressure to that agency rather than making those decisions directly themselves.

I don't see the danger. If it gets too far out of whack again, Congress could take it back. I think it's worth a try.

Representative SNOWE. Mr. Cillely, what would be your response to such an idea? There are a number of viewpoints, obviously. But what would you suggest?

Mr. CILLEY. I would think that Commissioner Smith's proposal might tie in very closely with what Commissioner Taylor has said, in that he feels that we would have more or better production marketing resources if we had in fact a body that would look forward along the range. And this might be a possible answer as opposed to a change with every budget from year to year.

Representative SNOWE. But isn't there something worthwhile about having these programs debated in Congress? I mean that's the other issue. You never have the opportunity to air these issues in an in-depth way in the Congress if you remove it and place it in the Federal agency. I mean at least the way I see it in these farm programs, when the issues come up, you have all regions of the country debating the philosophy, the approach, and the benefits or the demerits of many of these programs. Otherwise, you remove it from an arena that allows these issues to be debated and explored.

Mr. CILLEY. Well, maybe the proposal is one that should be debated and explored.

Representative SNOWE. Yes; I suspect it would be. [Laughter.]

Well, we are encouraging new ideas.

Mr. SMITH. But what has that debate resulted in? You know, what are the results of that debate? Do we have a good trade policy now? Do we have consistent—have those debates brought a consistent and stable production adjustment program?

I mean look at my good friend the secretary, who is my counterpart in Illinois, and he and I had some debates when I was in Washington with the AFCF. Illinois did not like to participate in the production adjustment program. Iowa always did, but Illinois, we had problems in Illinois.

Basically, he was opposed, philosophically opposed, to the production adjustment program. And what do we have now? We have the largest production adjustment program ever implemented by the USDA—I believe that's correct—from a President and a secretary who are basically and philosophically opposed to that kind of program.

Why are we in that? Because we have such extreme implementations of those two. They came in without any kind of production adjustment program. We built the inventories up. World demand is soft for a number of reasons, which we don't have to get into now.

And now in order to bring that supply somewhere near into balance, we have to have just a massive production adjustment program, which obviously has sent shockwaves throughout the country, not only to farmers but to suppliers, machinery dealers, to our poultrymen and livestock people here in the State of Maine who would like to purchase with some knowledge of what the Federal programs might be 1 or 2 or 3 years out. We really don't know now, given the current situation.

So I agree it's very helpful to debate these issues. I would also suggest that the refining of agricultural issues to debate, even if you take those basic decision making functions directly out of that process, you know, the USDA, in my opinion, should be much more concerned about the structure of agriculture, about income transfers within agriculture, how are we going to maintain the family farm structure. Those I would submit should not be given to any kind of an independent agency; those should remain right in the political arena, right in the USDA, debated regularly in Congress.

I am just talking about those basic commodity programs which basically serve as the basic structure of all the other agricultural programs. You can see it in the USDA, everything is really dependent upon those basic programs in terms of farm income, and practically all other programs fall out of that. Bring stability to that one, and then those other programs, providing credit to farmers, providing marketing services to farmers, all of those things are still a function of and responsibility directly of USDA and Congress.

Representative SNOWE. What would the role be of the consumer and the taxpayer in this agency? What would the role be for the consumer? I mean who would represent the consumer or the taxpayer if it was an independent agency?

Mr. SMITH. I wouldn't even at this point suggest to you who should be on that board. But I assume that it would be representa-

tives of many different groups. I would not suggest that that would be strictly a farm producer's or a producer's group at all.

And you know, you want tough people. But as you indicated, you don't drive Paul Volcker off his position very easily, and he's probably taking a different tack than he would if he were in the immediate political arena. And I understand that's a very unpopular example right now to use, but that is an agency that can be tough and stick with it, and I think that's what we need in our farm program, our basic commodity program. And that's all, that's all I am talking about.

Representative SNOWE. All right. You mentioned the Farmers Home Administration and the withdrawal essentially of the private sector in financing farmers' operations. What do you think the primary reason is that the private sector has gotten out of the business of issuing loans to farmers?

And Mr. Cilley, I would like to have you comment, too, on what the circumstances are in New Hampshire with respect to the percentage of the loans issued by Farmers Home Administration and whether or not the banks are participating in issuing loans to New Hampshire farmers.

Mr. SMITH. I don't have the adequate evidence. We have debated this inhouse.

Representative SNOWE. Yes.

Mr. SMITH. You know, there are two basic arguments in the extreme. One is that Farmers home was extremely aggressive two decades ago and simply drove the private sector out. And you know, the other argument is the private sector withdrew for a number of reasons, for the perception of risk in agriculture, for their opportunity to let their money elsewhere. I don't know whether the private sector withdrew when Farmers Home took over or whether Farmers Home got extremely aggressive and therefore kind of forced the private sector out.

And I am not sure it's really worth—at least we've decided inhouse anyway, at least when we went before the legislature and got the factor which created the Finance Authority of Maine and we wouldn't debate that issue. I don't have a resolution to it. We simply said that that is the fact now, that Farmers Home does have a substantial part of the agricultural financing, over 50 percent. And we just feel that's a precarious situation.

Representative SNOWE. I would agree.

Mr. CILLEY. I really don't feel in a position to give a comparison between private finance and government finance. I do feel that private finance is undoubtedly limited in New Hampshire, realizing some of our local banks at least have had farm-oriented officers in the past are no longer maintaining them on their staffs. And I think that that would be an indication that they are not that much interested in agricultural loans. But as to say whether the percentage balance, I am not in a position to say.

Mr. SMITH. I would encourage you to be sure that you have access to tax-exempt revenue bonds. I think that's the solution out of that problem.

Representative SNOWE. To have access to what?

Mr. SMITH. The tax-exempt industrial revenue bonds.

Representative SNOWE. As a way of broadening that base?

Mr. SMITH. Right. Because we have the mechanism in the State with the Finance Authority of Maine, and especially with the Natural Resource Finance and Marketing Division, we have the mechanism to get those funds into the banking sector to be used for agricultural lending. But that's all going to evaporate if we do not have access to the capital markets through the tax-exempt revenue bonds. I can't stress upon you strongly enough to try to maintain that tax exemption.

As you know, IRS ruled against that tax exemption, and it was overridden. I believe Senator Dole was instrumental in that, and I understand that he may have second thoughts on that. We would encourage you to do whatever you can to keep that tax exemption.

Representative SNOWE. Mr. Cilley, how do you feel about the PIK program, and has it worked well in New Hampshire?

Mr. CILLEY. My impression is that it hasn't worked well.

Representative SNOWE. That it hasn't?

Mr. CILLEY. That's right. That's just my impression.

Representative SNOWE. OK.

Stewart, I know your Department announced a minimum size of round white potatoes that would be increased from 1½ to 2 inches this season and 2¼ next season. And I understand at a hearing on August 4 there were some concerns expressed by growers and potato packers that there wouldn't be a sufficient outlet to accommodate the smaller size potatoes. Could you respond to these concerns and outline what specific actions the Department could take to assist the industry in developing new markets for these products?

Mr. SMITH. First of all, maybe to clarify some misperceptions, there was general agreement at that hearing that 2 inches for this year was proper and that some larger size, probably 2¼ inches, was a proper size at some future time.

So what I am debating with the industry now is not the substance but really the timing. I think they—most people in the industry, the majority of the industry—realize that we should be going to something larger than 2 inches. We are having a little debate about the timing of that.

At the same time that I announced the 2¼ inch for the next marketing season, I named a task force to investigate the possibility of utilizing those smaller potatoes. Now I think there is a good possibility that we're going to find some good outlets. We think there is a possibility even at this early stage in the analysis, there is a possibility of 500,000 hundredweight of exports of seed potatoes which would be small-size potatoes at fairly premium prices. We may need some additional assistance from FAS, Foreign Agricultural Service, on that project.

And also the Federal-State market improvement program has been helping us on seed potato exports. But we think there is an opportunity for 500,000 hundredweights. That's about 50 percent of the market in Latin America now completely dominated by Canada. We think we can get half of it, especially with the new seed program we have coming onboard.

There is also opportunity for small potatoes directly into the fresh market. In fact, some shippers in Maine are already doing that. We will be test marketing that kind of product this winter.

We probably cannot get exactly the same price you can for larger peels, but somewhere near that price.

There is also an opportunity in certain kinds of processed products, prepeeled and certain kinds of so-called white products that can bring a fairly good return. We think there is an opportunity in those three outlets for all the additional 1.2 million hundredweight, which is about what would be created if you took all the 2¼ or below off, out of the regular channels.

If there is an outlet there, there are outlets for other kinds of processing or for animal feeds. Those don't return much to growers. We think there are outlets in the higher value markets that I referred to first, those three higher value markets.

I know that the industry would prefer that I did not make the 2¼ ruling until we've absolutely demonstrated that those markets were there and that we actually had them. But I would suggest to you that it's just as well to keep a little pressure on because I think we will find those markets a little faster if they know it's coming.

Representative SNOWE. So there does not appear to be a debate about going to the 2 inch, but it is beyond the 2 inch where there seems to be?

Mr. SMITH. Even that, even the general consensus with that, the disagreement is in the timing, whether we should do that—

Representative SNOWE. The timing.

Mr. SMITH [continuing]. Next year or whether it should be 2 or 3 or 4 years down the road. There was only one person at that hearing that testified against going to a larger size in the future. There was another witness that had no opinion about going to the larger size in the future. Every other person at that hearing testified in favor of going to a larger size sometime in the future. The debate is on the timing.

But I submit to you that when you look at the decline in our acreage and the decline in our market share, that we don't want to wait much longer and we better get our house in order and get our quality up to where the consumer wants it and we better do it fast.

Representative SNOWE. Very good.

Finally, I would like to have your opinion regarding what should be incorporated in a small farm policy for the future. I think this issue is essential and one of the reasons obviously for this hearing.

I think New England is clearly different from the other regions of the country, the other farming regions and farming operations. And that is especially what I would like to bring to the attention of my colleagues once the farm bill is developed and written, to have, I think, a small-farm policy.

Do you have any ideas that you could recommend or suggest that should be included in such a policy? Mr. Cilley, would you like to begin?

Mr. CILLEY. Not really.

Representative SNOWE. Not really? [Laughter.]

Well, back to Stewart. [Laughter.]

Stewart, do you have anything?

Mr. SMITH. I am glad you asked.

Representative SNOWE. I think a small farm policy is really essential.

Mr. SMITH. Absolutely.

Representative SNOWE. I think most of the programs in Congress relate to the big farming operations in the West and the Midwest and they have been very biased toward those operations and have simply not helped the small farmer in the Northeast.

Mr. SMITH. I couldn't agree with you more, Madam Chairman. In fact, when I suggested that even if you took the basic commodity program decisions out of USDA, that still would leave the USDA with a tremendous impact upon agriculture. And obviously, one of those issues is structure, small scale versus large scale. I think it's an issue that is not being adequately addressed at this time. And as you suggest, that has a very negative impact on the Northeast and the State of Maine.

We have just completed—they have just completed it; it has taken almost 2 years to do a rather extensive needs assessment of small farms in Maine. And surprisingly, at least in some areas, the small farm, their perceived needs are very similar to the perceived needs of the larger scale farm.

And basically they break around two areas and one is in marketing, and in that area, the small farms perceive needs about the same as the larger farms perceive needs.

They are looking for marketing support, probably more direct marketing support than the larger farms need and more cooperative marketing support than the larger farms need. And again, that was the value of that cooperative field service that the agricultural cooperative service had here at one point, and it could work with the small-scale farmers in developing marketing co-ops.

In terms of production, we need better-scale production techniques for our small farms, and that is going to require primarily a redirection in the experiment station and the cooperative extension service and redirection of their resources.

That whole system, as you undoubtedly are aware, has been pretty much directed toward commercial traditional agriculture and it obviously has been very effective in that area.

It has not—at least right now it is not directed very much at the smaller-scale agriculture. There is a production technology out there; it is used in other countries. We simply don't have it in this country. Some of it does not have to be developed from research, some of it can be simply pulled out of other areas in other countries who have that kind of production technique, but we simply have got to get the experiment station, the cooperative extension service, more involved in that.

If we don't do that, then I think we need to set up separate programs to address that small-scale production technology.

It's out there; I think more and more people are becoming—realize that it is a viable agriculture. It is not pie in the sky, it's a viable agriculture. Sometimes we may even be talking about agriculture units which supplement their farm income with all farm income. We're seeing a lot of that in the State of Maine.

But I submit to you that that is a viable piece of agriculture in the State and in the Northeast and it's one that should not be overlooked. They do need some help in getting some production technology scaled to their size.

Mr. CILLEY. I agree with the commissioner. There is no question but that in our State the small farm person is becoming more and

more evident, the person that is working at another job, and these people definitely do have to have the support and the directive from the extension service.

There's no question about it, we receive calls—I receive calls in my office and I'm sure the commissioner does in his office almost daily of people that are looking for help and we try to direct them toward the extension people to get their help in all phases of agriculture, and I think perhaps more particularly in the poultry industry as far as New Hampshire is concerned.

We have had a problem and I don't know that it should be addressed on a national level. It certainly has been a problem to us on the State level and that is one of zoning where the persons because of the integration of people from our neighbors to the south into the southern tier of our State, they infringe upon our farming operations and have found them distasteful when they originally like to move to the country. And when they get there and they smell it, it's not that interesting to them anymore.

As I say, I don't know that that can be or should be addressed at the national level, but it certainly is a State problem.

I don't know what further I can address other than what Commissioner Smith did. I think he's covered the subject very well.

Representative SNOWE. I guess you mentioned, Stewart in your testimony, that we should send the right signals to farmers.

Do you think that we should freeze target prices at this point on commodities?

Mr. SMITH. I have not been involved in that issue sitting here in the State of Maine. I would have to evaluate that.

Obviously we can trade off efficiency payments with higher loan rates. My own opinion is that we probably should rely more heavily on the efficiency payment program, the target program, to encourage the right level of agricultural production and let the market price be more free to compete in the world market and to bring a better balance to supply and demand.

I personally would get nervous when I see too much emphasis upon the loan rates and putting floors under those market prices.

I think it's a better policy to rely upon the target price payment to protect our farmers and provide the adequate income that is necessary, but again, I've not been close to that for two and a half years now, I guess, and I would not make a judgment at this time.

Representative SNOWE. And finally just one more question. I guess it's basically the fundamental issue Congress will be addressing eventually and we're attempting to address several problems that we have right now with commodities and the dairy diversion program.

The compromise legislation passed by the Senate, and which will be considered by the House, is one such example as to how we may discourage production. There are several predominant views in Congress.

Obviously one is, as I mentioned in my opening statement, the diverging viewpoints that Secretary Block mentioned. We have one of three options: We either continue the current programs as they are; or two, we develop protectionist-type programs; or three, we encourage a more market-oriented approach.

I have a feeling it's going to be a little bit of all three. I don't know at this point, but do you have any thoughts on those methods or those various schools of thought?

Mr. SMITH. I think you left out the best option, and that is, use the current techniques we have but just get it out of the political pressure cooker and put it into where we can do some long-term programs.

So it's basically the number one option with very substantial refinement. No, I don't think we should leave—and again my training is in economics and I basically have great faith in the marketplace, but I don't think because of the potential volatility of production and therefore the volatility of price because of the generally extreme inelastic demands for most of our farm products, that we can leave farm commodities to the price determination of the unfettered marketplace.

The signals they send out—sure in the long run it's going to balance supply and demand, but you get a lot of waste in terms of investments that have to be then withdrawn.

I'm not so concerned about the waste to society that way—that's a marginal waste—but the waste in human terms. The person that actually goes into a farming operation attracted by potentially higher prices only to be overcome by low prices is a very sad one in human terms, and I think that our farm policy can be directed to even that out to give your young people better signals on what to produce, when to produce it, whether they come into farming or they stay out of farming, gives our creditors a better opportunity to evaluate their loan decisions if they can have some confidence on what those market prices might be at least into the reasonable future.

Obviously you can't design programs that can bring absolute stability and precision within a cent or two, but certainly we can design programs—we have programs, but if they were properly administered and if our policy was accurate, was proper, we have those kinds of programs that can give us a great deal of stability.

I think that's a role of the Federal Government, we must keep agriculture resources in place, we must have food production in this country. It appears that we overproduce at times. We know that's very incremental, that's very marginal. We're not talking about overproducing 20 and 30 percent. Even the milk program which is probably the most visible one that's out of kilter, when you look at it you're only talking 10 percent overproduction.

That's not a whole lot considering that that production is responding to a price that was set in place through the political process some—what? 12 years? I forgot. Prior to the Carter administration, Nixon administration actually, increased that price to 80 percent parity and that set off the wrong price signals which producers have responded to. Now they've built up investments and now people are going to have to suffer because of that unnecessarily.

Representative SNOWE. Well, these farm programs as we've found out in Congress, have now increased to about \$23 billion. That's not talking about the cost of the PIK program and other forms of assistance which is an increase from \$12 billion just over a little more than 1 year ago.

I guess it's these schools of thought that will have to be incorporated, and it probably will be sort of a little bit of everything eventually.

Mr. SMITH. But more stable production adjustment programs in the past have prevented that. In fact, the estimates, as you well know a few months ago prior to the jolt in the extent of the PIK program, I believe the estimates were that the \$21 billion farm income was going to be about equal to Government payments. In other words, a total farm income would be due to Government programs, all of that because of an overreaction caused by a policy that was adopted 2 or 3 years prior to that, inconsistent policy.

The tools are there, if we could just get our policy straightened out.

Representative SNOWE. Well, I appreciate your testimony. I thank you both very much. Thank you, Mr. Cilley, for coming from New Hampshire, and thank you, Stewart for being here and for providing very essential input into this hearing.

Mr. CILLEY. Thank you for coming here.

Representative SNOWE. Thank you. I appreciate it. Thank you.

Now, we'll hear from panel V, which will be on the issue of conservation. We have with us today John Fogler, chairman of the Maine State Soil and Water Conservation Commission; Mort Mather, president of the Maine Organic Farmers and Gardeners Association; and Robert Spear, director of the Northeast region of the National Association of Conservation Districts. Nice to see you.

Would you like to begin, Mr. Spear?

STATEMENT OF ROBERT W. SPEAR, DIRECTOR, NORTHEAST REGION OF THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

Mr. SPEAR. Congresswoman Snowe and members of the Joint Economic Committee, I am very pleased to be here today to discuss soil conservation, agriculture, and the 1985 farm bill.

I am Bob Spear, a dairy farmer from Nobleboro, Maine, where I farm with my brother, my wife Janet, and our two sons. I have been involved with farming for the past 20 years and a member of my local soil and water conservation district for 15 years. Many changes have taken place during those years, but the challenge of earning a living by farming the land, and also taking care of the land, is becoming more difficult with each passing year. I say this because controlling soil erosion and taking proper care of animal wastes, in order to prevent water pollution and maintain soil productivity are essential in the long run, but are postponed in the short run by many farmers because of their economic situation. I firmly believe conservation pays over time, but the initial costs incurred by the farmer may be too large for many to undertake in today's economic climate.

But instead of dwelling on today's economic situation, let me focus on the regional issues facing soil and water conservation in the Northeast. For the past 2 years I have served on the board of directors of the National Association of Conservation Districts [NACD], representing the Northeast region. I'd like to highlight the major concerns expressed by conservation district people at our

NACD regional meeting held in Pennsylvania this past August with over 450 people in attendance:

Conservation districts in the Northeast are deeply concerned about the conservation problems of urbanizing areas. In the Northeast, we are losing too much of our limited supply of prime farmland to development and abandonment. In both cases the land is being taken out of agricultural production, leaving fewer and fewer acres and farms in the business of farming. If this trend continues we will end up with scattered, isolated farms throughout the Northeast which are too few in number to maintain the local AG-related business needed by farmers for their equipment, services and supplies. This is already a problem in various parts of the Northeast.

In the northeast we have shallow, fragile soils and serious soil erosion problems on urbanizing land, forests and cropland; and there are water quality problems in virtually every part of the region.

Complicating these resource problems is the fact that, in terms of current USDA programs, these conservation issues are being placed on the back of the burner. USDA programs such as ACP and technical assistance are being targeted more and more to the problem of soil erosion on cropland. We in NACD feel controlling soil erosion on cropland is indeed important, and we have supported USDA's efforts to get additional funds for targeting those areas where serious cropland erosion could be reduced by accelerated conservation work. But the result of today's USDA's targeting is resulting, in many places in the northeast, in the loss of personnel and dollars that are needed to keep the basic conservation program active and effective. In my view, this is going too far because resource problems and national priorities shift over time.

In light of my preceding comments, let me briefly outline future agricultural policy recommendations made by the Conservation Districts in the Northeast:

(1) There must be a higher national priority for the conservation of the Nation's productive soil and water resources. Conservation is essential to maintain the resource base to meet our long-term food and fiber needs, fight inflation, meet environmental goals, maintain a favorable balance of trade, protect our national security and maintain our country's standard of living.

(2) New and better systems of economic incentives for conservation are needed to take advantage of the willingness of farmers to voluntarily carry out needed conservation measures.

(3) Federal natural resource programs should maximize the role of State and local governments and landowners in defining priorities and carrying out action programs.

(4) National agricultural programs must be coordinated so that food, agriculture, and natural resource conservation policies will be linked together and provide appropriate private incentive to produce while still protecting resources. An economically strong agriculture is essential so that private producers will be financially able to properly manage their natural resources.

(5) Congress should establish a special dedicated revenue source to provide stable, adequate and continuing financing for needed re-investment in natural resources through conservation programs.

(6) Basic and applied research on natural resource management and conservation must be improved. The answers to the conservation problems of the 1990's must be developed in the research programs of the 1980's.

(7) New policies and programs are needed to encourage balanced rural and urban growth with less waste and misuse of natural resources. Prime and unique farmlands need special protection to prevent their permanent conversion or loss to other uses.

(8) Through effective environmental education programs, every citizen—both student and adult—should have the opportunities for classroom and field study to acquire the knowledge, skills, values and attitudes, and commitment needed to protect and improve our natural resources.

(9) Congress should reverse the continuing decline of federally-supported technical assistance and financial incentives which we believe to be partially responsible for the increasing levels of soil and water damage and waste which currently threaten America's agricultural productivity, and therefore, our Nation's basic strength.

(10) We commend Congress for passing the 1981 farm bill which contained significant new natural resource law. We encourage both Congress and USDA to seek adequate funding and personnel authority to implement the Special Areas Conservation program, Matching Grants to States and Conservation Districts for Conservation Activities, Resource Conservation and Development program, Farmland Protection policy, Conservation Loan program and other provisions of the 1981 farm bill.

(11) We urge the Congress to aggressively seek adequate funding of all conservation programs and adopt a policy recognizing that a permanent, sustainable society depends on a permanent, sustainable agriculture based on a stable resource base. It should be recognized that as a long-term policy, national conservation efforts should strive to prevent soil degradation.

Thank you for the opportunity to appear before this committee and present my views on soil conservation and agriculture.

Representative SNOWE. Thank you very much. Mr. Mather.

STATEMENT OF MORT MATHER, PRESIDENT, MAINE ORGANIC FARMERS AND GARDENERS ASSOCIATION, AUGUSTA, MAINE

Mr. MATHER. Congresswoman Snowe, thank you very much for this opportunity. As a small and part-time farmer myself and president of the Maine Organic Farmers and Gardeners Association, which is largely small and part-time farmers, I did not stick strictly to conservation in my statement.

For the past two generations farm policy in the United States has not only been directed solely toward large capital intensive farms but it has worked against small family farms. Some may say, "So what if a few farmers are displaced?" The economic impact is greater than the displacement of farmers, however, whole farming communities have been dismantled for as the farmers who bought supplies, clothing, cars, food, and appliances left the area the businesses that served them folded as well.

Small farmers today are generally a very proud lot. We don't want handouts. We don't even want special treatment. We do want a fair shake. We want to be allowed to compete in the marketplace with any other farmer.

You would agree that it wouldn't be fair to New England farmers if the Federal Government paid California growers \$1 for every case of lettuce they sold in New England. The actual subsidies that exist are much more subtle than that, but they do exist.

And so, I would suggest that all farm policy be judged on what its effect will be on all farmers—large and small, East and West, North and South. If Federal money is to be used to subsidize irrigation in one part of the country where water is the problem, perhaps the Federal Government would like to subsidize greenhouses or large plastic bubbles to cover farms in the North where a short growing season is the problem. I personally feel we would be better served if neither were subsidized. Fairness is the key, however.

I like the word "toward" in the topic for discussion. It is particularly important in my next suggestion.

I believe the Federal Government could and should help us move toward a more regional food production and distribution system. During the energy crisis many thought we might some time be cut off from the long distance food lines that had been established. Transportation may still become a large part of food costs in the future.

California ex-Governor Brown has said that California would not be able to export food 25 years from now if current trends continue. If each State realized that there needed to be some balance between the population of the State and its ability to raise food, it is much less likely that there would ever come a time when we found that there was not enough food. Greater regional self-reliance would also make people more aware of the origins of their food and better able to make decisions related to food policy. Also farmers are good people to have in a community—every community ought to have a few.

One way to help move toward a regional production of food would be to educate the public in each area of the food that is available to them in season from their region. There is a season for melons, for lamb, for apples, and for lettuce. I can see the television commercial now that starts the vegetable season for Maine. The camera is in tight on a bare piece of soil and the theme from Star Wars issues forth richly from the speakers. Suddenly the ground starts to move, a purple-white point pushes through the surface, it grows taller and turns green as it grows until there is a full size asparagus stalk and music reaches a crescendo. A voice announces, "Asparagus, about to arrive fresh from local farms. Wait for it!"

I call this idea the "Great Parsnip Promotion." Gardeners know that parsnips are marvelous vegetables for a couple of weeks every year when the spring thaw releases them. If they were only available in markets for 1 or 2 weeks a year, I'm sure they would be a great seller. But if you don't have to wait for them and if you haven't been sustaining yourself through the winter primarily on root storage vegetables and winter squash harvested in the fall, you just can't reach the fullest level of appreciation of a parsnip.

People are already becoming more aware of the quality of the food they eat and they are looking for more fresh foods. That trend should be encouraged.

The third point I would make is that we must protect our Nation's most valuable resource—our soil. There is only one way to protect it and that is to add organic matter. There are a lot of ways to add organic matter to soil under production but much is yet to be learned about the most efficient ways to save our soil while still farming it profitably. There are many organic farms ranging in size from an acre to over 1,000 acres that are operating profitably. Agricultural policy should be aimed at increasing the amount of humus in our farm soils.

Finally, we should elevate agriculture to a place of prominence in people's minds. Our school children should learn where their food comes from. They should learn that milk is extracted from the udder of a cow and that there is nothing yucky about that fact. While they should wash their hands before eating they should not be freaked out by vegetables that grow in dirt.

In later grades children should learn that packaging, mere packaging, of food does not remove the reality of its origins. Today people will picket a farmer for cruelty to animals because a calf is not allowed to frolic in a field and then go out to a restaurant and order veal parmesan. I believe the consumer should have some say in farm practices but that say most come from an understanding of the economics with which the farmer is dealing. The consumer should have his and her say in the marketplace. It makes no sense to attack a farmer's practices on one hand and then turn around and demand low price food. The farmer has been responding to consumer and voter demand for low price food. Few have ever said they wanted quality food or morally acceptable food.

Our agricultural colleges are suffering from decreased enrollments. This is a very dangerous trend during a time when we are facing perhaps the greatest challenges ever in agriculture. Education in our schools and the elevation of farming to an admired occupation will reverse this trend.

Concisely put, my four points are:

(1) Federal farm policy should not give preference to any farmer over another.

(2) We should encourage agricultural production in all parts of the country rather than encouraging food from a few areas transported to the rest of the population.

(3) We must encourage agricultural practices that protect our soil for future generations because there is no new frontier of virgin soil we can move into when current farmland is depleted.

(4) Education at all levels, not direct education of farmers but general education of the populous so that they can become better voters and make better decisions about policy that will effect the food they need to sustain their lives.

I have one paragraph that isn't in my statement. The Innovative Farming Act introduced by Congressman Weaver was one of the most promising pieces of legislation I have seen in many years. It should have been passed last year. I fear the current version is languishing in committee.

I am very proud of the Cooperative Extension Service here in Maine and the University of Maine for their recent progressive actions concerning agriculture. Maine is leading the Nation today in primary and secondary research in agriculture. The Nation should follow quickly.

Thank you very much for the opportunity of expressing my views.

Representative SNOWE. Thank you, Mr. Mather. Mr. Fogler.

STATEMENT OF JOHN FOGLER, CHAIRMAN, MAINE STATE SOIL AND WATER CONSERVATION COMMISSION

Mr. FOGLER. Congresswoman Snowe, members of the Joint Economic Committee, I am John Fogler, a dairyman from Exeter, Maine, where I farm with my two sons and a nephew. I believe such family farms are the backbone of this Nation and that it is in the national interest to maintain a strong viable agriculture in which family farms can survive.

Through lifetime farming and long-term association with my local soil and water conservation district, and as a 1982 national winner of the Gulf Soil and Water Conservation Award, I firmly believe that wise soil and water conservation management is imperative to maintaining long-term agricultural productivity. I am, therefore, opposed to any long or short range plan that allows continued deterioration of the Nation's soil and water resources. This Nation would not accept anything less in a long-term national conservation program.

I further believe that this Nation has an excellent, proven, democratic delivery system to achieve this. I refer to the farmer-local-State-Federal partnership that exists with the individual landowner-soil and water conservation district, the State Soil and Water Conservation Commission, and the USDA-Soil Conservation Service.

The beautiful part of this system is that the soil and water conservation districts are made up of local, volunteer landowners who serve without pay but have a commitment to conservation and help sell their neighbors on the idea of farming in a conservation manner. Also, we district supervisors are able to rely on the technical standards and specifications of the Soil Conservation Service. As district supervisors, when a farmer questions a decision we make and we respond that it is based on the technical standards and advice of SCS, then the farmer accepts this because he knows SCS is a professional, nonpolitical agency that he has confidence in.

Representative SNOWE. I was very pleased that the USDA's national conservation program maintained the current delivery system and Maine hopes that future funding and policy for soil and water conservation will continue to utilize this effective and proven delivery system.

Soil and water conservation problems exist in Maine as they do in every State. For instance, here in Maine approximately 52 percent of our cropland is considered to need conservation treatment. This represents 162,310 acres of cropland with excessive soil erosion. In addition, we have 1,839 livestock farms which need im-

proved animal waste disposal systems. Although these numbers may not be as large as the resource problems in some States, they still represent a considerable conservation need here in Maine and we will need the continuing assistance of the Federal Government to help solve these problems. The agricultural conservation program [ACP] is vital to our efforts to solve these conservation problems and we support funding at the \$190 million level.

Our district has also used the Public Law 566 small watershed program to implement a much needed agriculture-related water pollution program. My district has assumed the responsibility of contracting officers for the Sebecook watershed project and are saving the Federal taxpayers \$40,000 in administrative costs. Furthermore, the district supervisors work with the local farmers assuring that they maintain the practices, including proper manure storage and spreading. We have signed 10-year contracts with 90 percent of the landowners in the watershed. In my opinion, this is targeting at its best. We feel the land treatment program of the small watershed program is an excellent program—a way to fully utilize districts as receivers and dispensers of cost-share dollars, a way to spread the ACP dollars to other high need but less concentrated areas and a way to spread and back up the technical expertise of SCS by having the district supervisors assume responsibility for friendly persuasion of long-term maintenance. We support increased funding for this phase of SCS budgets.

Maine has an excellent working partnership between ASCS-SCS and the conservation district. ASCS and SCS are not in competition in Maine but work their programs together to solve our varied problems.

In representing Maine's 12,000 soil and water conservation district cooperators I feel a keen responsibility to adequately express and convey to you their thoughts and needs concerning soil and water conservation that was expressed during the period November 1981 through February 1982; 1,184 citizens of Maine—two-thirds identified as farmers—expressed their thoughts and opinions on the development of a national soil and water conservation program. In my district and many others in Maine we held kitchen meetings and really dug into the RCA proposed program. Maine citizens were loud and clear in their support of the existing USDA-State Soil and Water Conservation Commission-Soil and Water Conservation District Delivery System, as I have discussed earlier. Any proposal to weaken this system through the appointment of politically-oriented coordinating boards should be vigorously opposed. Maine citizens thought it was self-evident that local people identifying what they know are the high priority conservation problems and then monitoring the progress in protecting natural resources would insure the best use of limited financial and technical resources.

There was almost unanimous support for targeting to zero in our critical soil and water conservation problems. Maine citizens were firm in their belief, however, that targeting and any new program funds should not be taken away from existing and ongoing conservation efforts. Maine folks recommend that Congress and the administration fully fund and staff existing USDA programs, including RC&D, and support efforts through districts to bring erosion

under control within the next decade. There was also strong support for the special areas conservation program as enacted in title XV, subtitle B, of the 1981 farm bill. It was felt that this would finance targeting with new Federal moneys. I suggest that this program be implemented and funded at the \$50 million level.

Targeting new moneys to conservation problem areas must be done on a priority basis. There was great concern that the present national priorities did not provide the protection of agricultural lands from conversion to nonagricultural uses with the same emphasis that control of soil erosion is presently receiving. Both of these problem areas must have the highest national priorities. Maine makes a major contribution to our national food basket, and its location close to the major population areas of the east coast must be noted in setting funding and staffing priorities and in allocating these resources.

Maine citizens pointed out that Maine's soil and water conservation problems, involving shallow and fragile soils, are as serious as any in the Nation. This fact must be recognized in making national allocations of funds for conservation. Our country would be less than prudent if it failed to take every reasonable step to insure the continued availability and productivity of Maine's croplands. It is only prudent to maintain our options in regard to where our Nation's future food and fiber can be produced most economically. Transportation, energy, and other considerations may dictate the Northeast should grow a large part of our food and fiber.

I support S. 663 currently before Congress. This bill, introduced by Senator William Armstrong, is a reasonable approach to removing the Federal economic incentives which are encouraging the plowing of marginal, fragile land, especially rangeland in the West.

S. 663, commonly referred to as the "Sodbuster bill," would restrict participation in USDA programs with individuals who till highly erodible lands that have not been farmed in the recent past, unless they are farmed under an adequate conservation system. This wouldn't prevent an individual from farming marginal lands, but he would do so at his own risk and without Federal price support.

Maine citizens indicated stronger emphasis must be placed on the control of agriculture-related pollution if we are to improve and maintain the health of the environment. More emphasis must be placed on assisting farmers in addressing agricultural waste problems, particularly the storage and recycling of animal waste and the proper handling and disposing of pesticides.

Including a section in the Clean Water Act to provide cost-sharing for State and local nonpoint source pollution programs would be beneficial to solving water quality problems resulting from animal waste. Conservation districts are a logical choice to receive funds from EPA to work with farmers in solving nonpoint source pollution.

The continued 50-year effort of USDA and farmers working together on conservation has made major contributions to Maine and this Nation. A large number of farmers have been assisted in putting soil and water conservation practices on their land. These practices to remain viable require annual maintenance and most have a life expectancy of about 10 years and require periodic re-

placement. We cannot afford a national program that only leapfrogs around the country addressing critical problem areas. We must maintain a national soil and water conservation presence in every county in the State of Maine and the Nation. While we support increased involvement, we do not support a reduction in the presence of Federal support. A substitution of State for Federal would cause duplication, be more expensive in the long run, and abandon a proven delivery system. Again, we emphasize the importance of maintaining the existing Soil and Water Conservation District-USDA team at the county level and not decrease our national commitment to support this effort by siphoning funds out of our existing programs and directing them to special problem areas.

Conservation of natural resources and agriculture rank with the defense budget in maintaining the national strength according to Maine citizens. Conservation is a responsibility of every U.S. citizen, not just the farmer. Therefore, its cost should be shared by all.

More must be done to insure that every citizen understands the need and develops a strong conservation ethic. We hope our congressional leaders will help bring the Nation together in an effort to protect our farmlands and work to achieve this objective within 10 years.

Representative SNOWE. Thank you very much Mr. Fogler. I want to thank all of you. I think you all indicated very well in your testimony the need for conservation, particularly as we face the problems of soil erosion and water conservation, and implementing strong conservation techniques. In that respect, part of the testimony here today is targeted toward small farm policy.

Do you see any of the conservation programs at the Federal level that are effective for small farms?

Mr. MATHER. Yes, I've used several of them myself and yes, I think they are effective. There are also some abuses at times, I think, and it's very difficult any time you get a broad program to make sure that it's not used by someone for gain in the pocket rather than gain in the soil, and that does happen.

I think that it's probably administered about as well as it can be on the local level through the local committees.

Representative SNOWE. Bob?

Mr. SPEAR. I would say that the districts in the Soil Conservation Service will oblige to either small or large. It doesn't matter how small a parcel of land, if you have a problem, they would take a look at it and give you recommendation.

Representative SNOWE. John.

Mr. FOGLER. Yes, I feel it's true. I know districts work with all farmers regardless of size, no matter what their operation is.

Representative SNOWE. I guess it doesn't matter whether you're small or large. You essentially have the same problems.

Given the economic pressures that farmers are facing and also the restrictions placed on farmers today, do you think the Federal Government should require conservation practices as a means of getting Federal support or as a prerequisite or precondition for Federal support?

In other words, that farmers would have to employ certain conservation techniques in order to secure Federal assistance.

In that kind of a drastic method?

Mr. SPEAR. No, that's been a controversial question here for quite a while and I know we've faced it on the national level, our national board, and we have—we're leaning to the feeling that if you're going to put out federal moneys in other programs, you should be following a conservation plan.

I mean, why give out money to ACP or whatever and not put it into a conservation plan and let it run down your river somewhere?

We feel that if you're going to receive some Federal moneys, then maybe you should be following a conservation plan.

Representative SNOWE. Well, could you establish a minimum level of assistance? I mean, minimum level of conservation practices as a requirement.

Mr. SPEAR. Yes, it is possible.

Representative SNOWE. Is that possible, or can you draw the line?

Mr. SPEAR. Yes, you could have some basic concepts—levels. It is possible.

Mr. MATHER. I think the best money spent in the USDA is on conservation programs, and if there's any cutting it should be the last place to cut. And I think that I wouldn't mind seeing a lot of other expenditures cut, but I think that it's very important that we do everything we can to conserve our soil.

And even with the dollars that we're spending right now we're still losing tons per acre, which is very disturbing.

Representative SNOWE. Absolutely. Not only in this region but nationwide. I mean, it's dwindled considerably.

What are your feelings, John?

Mr. FOGLER. I feel very strongly in support of the voluntary program of conservation, but I also feel that as addressed in the "Sodbusters bill" it is foolhardy for the Federal Government—one agency do something which is contrary to the interests of the general public in conservation, but I wouldn't be in favor of the type of situation where you had—certain requirements before you were eligible.

Representative SNOWE. You wouldn't want to mandate it in other words?

Mr. FOGLER. No, but I think a lot of this, a lot of conservation is tied to the financial condition of the farming in the area, and I think as probably as good as an example as there is in the country, is the district we're sitting in there, the Penobscot County district in the areas of Crin and Exeter where we made great strides, but it's been on a chip potato market and most of your milk has gone to the local Maine market over the years and the farmers have been able to do, and I think it's very evident.

Representative SNOWE. You mentioned in your testimony the method of friendly persuasion.

Do you think that that would work in the way of employing conservation practices?

Mr. FOGLER. I certainly do. I certainly do because nobody can afford to buy conservation by dollars, all that needs to be done. If you can't develop a conservation ethic in the people, you're not going to get the job done.

Representative SNOWE. Good. Bob.

Mr. SPEAR. I've got to agree with John. It is the voluntary effort that will sell conservation. You can't force anything down a strong farmer's throat, but through the voluntary—but the point I made first was, once you are putting Federal moneys in, you've got to be careful with them being wasted out the other side.

So it's going to have to be a little halfway in between that to not waste it.

Representative SNOWE. Somewhere in the middle we should draw that line. Obviously it's essential, given the loss of farmland, to any one of those reasons. Simply, there has been a dwindling of farmland throughout the country.

Do you feel that USDA currently targets enough funds toward research and development and conservation practices and small-scale technology or organic farming?

Mr. MATHER. Obviously I don't. I think—well for instance this year it's called the Agricultural Productivity Improvement Act, is asking for one-half of 1 percent of the fiscal year 1983 ARS budget—would not be diverted from any funds from existing research programs.

That's not asking very much for research that I think is essential for the future of agriculture, and some research is going on. There's some going on at the university here in Maine which we're very proud of and there's private research going on.

And that's why I said in my original comments, "Let's be fair somewhere along the way." One-half of 1 percent doesn't come close to being fair. And I've seen a letter from the USDA to the congressional committees that this bill is in right now opposing it because first, they say there isn't enough money, that you're not requesting enough money, and then they say "but if you requested enough, that's too much."

Well, we ought to start somewhere, and I think that this is a start, and I appreciate your concern for decreasing the deficit and I share that. If we're going to decrease it, that's fine.

Representative SNOWE. I guess you've gotten my letter.

Mr. MATHER. Let's come a little bit closer to fairness. Let's decrease on the one side and increase on the other and come out with an overall decrease is fine, but give us at least one-half of 1 percent. At very least.

Representative SNOWE. It sounds fair.

Mr. MATHER. Thank you.

Representative SNOWE. John. Do you have anything to say?

Mr. FOGLER. I feel very strongly that one of the serious mistakes we're making right now that we're going to pay for later is that we are not funding our land-grant colleges and the research programs in this country the way we did prior to this time. And really, agriculture is great in this country primarily because of what these institutions have done for agriculture, and we are taking an awfully short-sighted look if we don't support them because I am not of the opinion that private industry will take over this part because there's not enough, it's too long before you get economic returns from this.

And this research has to be a sustained type of research that the private economy I don't believe will ever replace.

Representative SNOWE. So you think it should continue to be supported by the Federal Government.

Mr. FOGLER. More than it is now. I certainly do.

Representative SNOWE. Point No. 8 of your prepared statement, Mr. Spear, regards effective environmental education programs. Every citizen, both student and adult, should have an opportunity for classroom and field studies to acquire the knowledge, skills, values, attitudes, and commitment needed to protect and improve our natural resources.

Do Maine schools currently have any of these programs in place relating to environmental education, agricultural education?

Mr. SPEAR. Well, I don't think—it's up to each individual district or whatever, but I think probably the districts, probably inject more conservation programs into the schools than there are set up on the school systems.

Like in my own district right now we have a bureau that's going out and putting on a conservation program in those schools, and we put on poster contests and whatever trying to emphasize conservation by natural resources, and this goes over very well.

We have talked to the education department some and it's very hard to get—but I don't think it's impossible. I think it is possible and we just have to show that it is a viable part of our education.

So, I think there's a lot of hope in that area.

Representative SNOWE. In other words, the local school system should be encouraged to incorporate that.

Mr. SPEAR. Yes.

Representative SNOWE. Those programs in the schools.

Mr. SPEAR. It goes over very well. That's the time that those youngsters will pick that up and they can make it part of their life from thereon in. They grasp it very well.

And we do have a lot of educational information that even the soil conservation service has put out that is very good for the schools, and so I look forward to the future as a real important part of conservation education.

Representative SNOWE. We passed a jobs bill in Congress recently. The 4.6 billion jobs release program. It provided \$100 million for soil conservation service for watershed and flood prevention problems.

Has the State of Maine received its share and which projects have been targeted for assistance? Are you familiar with that?

Mr. SPEAR. I believe they have but I cannot come up with the answers to that. I do not know what you're talking about but maybe John knows more.

Mr. FOGLER. I don't know particularly—Maine has done very well in the small watershed programs in receiving their share of funds.

Representative SNOWE. Yes; we passed the bill in Congress and earmarked \$100 million for conservation purposes.

Mr. FOGLER. I do think we got some of it, but I can't specify what it was. There's a number of watersheds in Maine—

Representative SNOWE. Another issue, of course, that's important to the topic that this panel is addressing is the losses by cropland to urbanization.

Do you think that Maine faces this problem particularly? I know there have been other States that have been mentioned, even in the New England area, that eventually may lose all of their farmland because of conversion.

Do you think that Maine has a major problem with this issue as much as soil erosion and water conservation?

Mr. MATHER. It depends on where in Maine you are. I live in the southern part of the State in Wells and yes, it's a severe problem.

Oh, it must be 5 or more years ago I was on a flight coming up and I fell asleep, and I think I was coming up from Washington, in fact, and fell asleep and woke up over Long Island and it was early spring and the trees had just budded out and the grass was green, so what you were looking at was either a lot of green or a lot of gray, the gray being parking lots and rooftops and roads. And Long Island was all gray until you got right to the tip, the end and then there are farms up there at the northern tip and they have a program where they purchase—I believe that's Orange County, N.Y., and they purchased development rights of farmland, and then flew across some water and flying over Rhode Island and Massachusetts and New Hampshire and it was all gray.

The major green areas were the interstates. It was amazing, these curving green lanes that made it very easy to identify where you were if you were familiar with the interstate system at all.

And I thought at the time that the interstates really are set up like movie sets with all of this green so as you drive along—or what is that, they put on their rose-colored glasses. You drive along as all is green and everything, but right behind them it turns gray looking down from the air, and crossing into Maine it was mostly all green. There was a very definite and refreshing change from the air.

I am certain that if you took that same flight today that you would find that the color of Maine between Portsmouth, N.H., and Portland has changed considerably from the air.

Representative SNOWE. OK. Very good.

Do you see it as a problem, John?

Mr. FOGLER. Of course it's been documented in Maine our greatest problem is abandonment of lands rather than development of land in the—the gentleman said it's in the southern part of the State and along the coastal areas.

Mr. SPEAR. I said in my statement here abandonment and development and we discussed it before, John and I had long discussions on it. It's according to where you're from. And you just said it, it's around the cities and along the coast it is a problem and I'm near the coast myself and I might be farming an 8-acre field and all of a sudden next year there's a house in the middle of it, or whatever.

It is a problem in certain areas. In the whole of New England there's a problem of six out of—four States out of the six are now appropriating money to buy the development rights. And Vermont and Maine are the only two that aren't right now, but we're fortunate, I think we've got time to study this, but we can't wait too much in the future because those houses and parking lots are encroaching on us and we should be prepared for this in the future.

I think it's a good thing to be thinking in 1980, farm policy, 1985 policy we should be thinking about farm land retention.

Representative SNOWE. Even more essential because New England is 80 to 90 percent dependent on importing its food.

Mr. SPEAR. That's right.

Representative SNOWE. We can get much more so and the question is whether or not we can avert the worse. And I'm sure it's probably not realistic to assume that we can be self-sufficient, but I think we can obviously minimize our dependency in bringing in food from the outside because it's even more expensive for us because of the transportation costs.

Mr. SPEAR. It gets back to the economics that we talked about earlier, lose a lot to abandonment. If the economics are right, we could be quite self-supported here in Maine.

Mr. MATHER. As I said in my initial remarks, the encouragement of farming in all regions I think should be part of the policy. I think that should be a very definite part of farm policy for the future for a variety of reasons, and perhaps the most important one is so that there are farmers in every community who can speak up and are respected in the communities and can be heard.

Representative SNOWE. Very good. Well, I thank you very much for being here today, for your patience, for waiting. Your testimony was very thoughtful and very valuable for the consideration of this committee as we begin to make recommendations on the farm policy for 1985, and more specifically, for small farm policy.

So again I thank you very much.

Mr. MATHER. Thank you for inviting us.

Representative SNOWE. Well, this is the last panel, but not least. There are some very important issues to discuss here.

Let me introduce panel VI on farm credit. We have with us today Dwight Sewell, Maine State director, Farmers Home Administration; Gary Sirois, president, Aroostook County Federal Land Bank Association; Joseph Williams, vice president of agricultural development, Northeast Bankshare Association; and also, unfortunately omitted from our list, is Arnold Roy, who is president of Farm Credit Service of Southern Maine.

Thank you, gentlemen, for being here. Who would like to begin? Mr. Sewell, would you like to start?

Mr. SEWELL. Fine.

Representative SNOWE. OK, thank you.

STATEMENT OF DWIGHT SEWELL MAINE STATE DIRECTOR, FARMERS HOME ADMINISTRATION, U.S. DEPARTMENT OF AGRICULTURE

Mr. SEWELL. Madam Chairwoman, I am Dwight Sewell, State director of the Farmers Home Administration for the State of Maine, an agency of the United States Department of Agriculture. I appreciate the opportunity to be here today to discuss our program as it operates in our State. I hope it is helpful to you as you consider new farm legislation.

The Farmers Home Administration has the responsibility to provide financial assistance to rural people and communities who cannot obtain private commercial credit at affordable terms. In Maine, the agency operates 29 county offices, four district offices, and the State office at Orono. We have 180 employees who are

servicing an overall portfolio of 36,000 loans totaling more than \$900 million to 24,000 borrowers.

Farm borrowers, totaling 2,340, hold 8,300 loans amounting to \$187 million. Nationally, FmHA has more than 276,000 farm borrowers with a total of 700,000 loans totaling more than \$25 billion.

Most of the farm loan dollars in Maine are related to dairy, potato, and poultry production. In dairy 456 producers account for almost \$38 million in loans. Potato farmers in Aroostook County total 428, who hold \$90 million in loans. Poultry producers total 294. Their debt amounts to approximately \$30 million.

Farmers Home Administration is very much part of the scene in all regions of Maine in all programs—farm, housing, and community programs—because of a lack of private capital in rural areas of the State.

For instance, we are presently financing 38 percent of the potato acreage in Aroostook and 48 percent of the growers there. We are working with the Maine Department of Agriculture to improve potato storage in the county, and with other USDA agencies, in an effort to establish better farm practices generally.

Madam Chairwoman, I believe you are familiar with the particular set of economic forces that have brought about declines in the number of potato, poultry, and dairy producers in our State in recent years. So I won't go into that unless you have some questions.

Although the number of family type farms is decreasing and the average farm size is increasing slightly, there is no advantage, no evidence that the size dictates success. We have many small farmers that are successful.

We at Farmers Home Administration will continue our efforts to emphasize a better marketing program at all levels for our farm borrowers, and we will continue working with our creditors to increase the amount of private and commercial credit available.

I will be happy to answer any questions you might have. Thank you.

Representative SNOWE. Thank you, Dwight. Next, Gary Sirois.

STATEMENT OF GARY B. SIROIS, AROOSTOOK COUNTY FEDERAL LAND BANK ASSOCIATION

Mr. SIROIS. Yes, ma'am. It is a privilege to be here, Madam Chairman.

Representative SNOWE. Thank you.

Mr. SIROIS. I will read my statement, and then Mr. Roy, who handles 15 of the 16 counties for Farm Credit, has some further comments.

Representative SNOWE. How many counties?

Mr. SIROIS. We handle one.

Representative SNOWE. You handle 1 and he handles 15?

Mr. SIROIS. He handles 15. Quite fair. It doesn't seem fair, but—

Representative SNOWE. Sounds like my congressional district. I can sympathize.

Mr. SIROIS. However, we handle the bulk of the potato industry in the State of Maine. He does have some potato in the central part.

Mr. RÔY. I will give that to you.

Mr. SIROIS. No, thank you. [Laughter.]

It has become apparent to some of us involved in agricultural finance that the traditional forms of farm financing have been altered substantially over the past few years as the farm economy has gone from good times to bad. In looking over the history, we find that many farmers were able to use the increasing value of their land to easily obtain more credit, and in many cases that credit replaced farm income.

Many farmers subsequently found themselves in trouble and ultimately found themselves at the doorsteps of the Farmers Home Administration or other Federal lenders. Records show that a substantial shift in the market share of lenders for both real estate and non-real estate debt from traditional sources to FmHA and the Commodity Credit Corporation. This is not only true in Aroostook County and the State of Maine but nationally.

With liberalized policies by the FmHA and the CCC and the passage of the emergency credit, we found that a lot of our farmers were taking advantage of the low interest rates and extended terms being offered, and as a result of that there was a massive runup in the Federal farm lending. In my opinion, significant numbers or amounts of those were of poor quality and in many instances counterproductive to the best interest of the individual farmers as well as to the agricultural community as a whole. As a result of that, a lot of our smaller farmers have found themselves under major economic stress.

In order to keep farmers from borrowing themselves into more trouble, I feel that the liberal policies of the Federal Government should be replaced by a sound Federal policy of lending and emergency financing should be replaced by the Federal Multi Peril Crop Insurance program. If the Federal Government can withdraw somewhat from farm lending, it is my feeling that the commercial banks and the farm credit system would be readily available to take over the requests that are considered to be economically feasible—and I would like to underscore "economically feasible." Perhaps the Federal Government could concentrate on financing the areas that would improve the export of farm commodities, thereby indirectly assisting the farmers and allowing them to make a profit and therefore a living.

In my opinion, the plight of the U.S. farmer today, namely, excess supply and low prices, is a result of policies made sometime ago whereby too much credit was extended and an over-abundance of product was produced, thereby causing below cost-of-production prices for finished products and showing up as net farm losses. I believe that if the Government invested in financing export sales of farm products that a higher return for that investment would be attained than by continuing to lend under liberal terms to producers. Over the last 2 years, as an example, gross value of U.S. agricultural exports have fallen by over \$9 billion.

It is recognized that farmers need adequate credit, but credit alone is not the solution. An increase in prices must be the long-

range solution. I firmly believe that there is a place for Federal credit to famers; namely, to assist young farmers to get started and to be a lender of last resort to farmers in trouble, basically only to those who are working out of their problem and have a potential of being successful and not those already, in effect, bankrupt or insolvent.

The United States no longer has a domestic farm program, in my opinion. Every farm program, it seems, before it becomes law is reviewed by many different Government agencies, taking into consideration the impact of that program on world affairs. Hence, we have an international farm program with little or no regard for its impact on the American farmers. The order of the day in international discussions is cheap food at all cost, but can the United States have a stable agriculture and a cheap food policy? They are simply incompatible.

As far as the farm credit system is concerned, the most important consideration is to make credit available to a full range of agricultural producers in all areas of our country, during all phases of the economic cycle. But it seems that Congress and the administration have thought about tampering with that agency's ability to do the job. There have been some proposals to remove the Farm Credit Services agency status, which allows the agency to obtain funds at reasonable rates. If the administration pursues this avenue of eliminating the agency status, then the ability of the system to provide farmers with funds will be greatly impaired.

Reliable lending is the mandate given by Congress to the farm credit system and unless we are able to obtain funds at reasonable cost, our ability to provide that reliable lending will be greatly impaired.

In summary, I find that if this committee were to assess the impact of Federal financing of farmers, namely, through the FmHA and the CCC programs, that a lot of the credit extended would be found to be of less than acceptable quality and also very counterproductive.

I believe that Mr. Roy will address other areas of concern by the agency. I want to thank you for allowing me to testify at this meeting. If there are any questions, I would be glad to answer them. Thank you.

Representative SNOWE. Thank you, Gary. Joseph Williams.

**STATEMENT OF JOSEPH N. WILLIAMS, VICE PRESIDENT,
NORTHEAST BANKSHARE ASSOCIATION, AUGUSTA, MAINE**

Mr. WILLIAMS. Yes, I am pleased to be here, Congresswoman Snowe, and have this opportunity to give some thoughts concerning farm credit.

My name is Joseph Williams. I am presently vice president of agricultural development for Northeast Bankshare Association. Four years ago, Northeast Bankshare embarked on an agricultural program to the bank's belief that Maine, which is primarily a resource State from an economic sense, and the State's economic future will be tied to its natural resource base—forest, agricultural land, and the sea.

Pursuing this objective to improve the economic climate, particularly on agricultural enterprises, we have arrived at the following conclusions:

No. 1, Farmers Home Administration, Farm Credit Services and commercial banks can presently supply needed financial support to the agricultural community.

No. 2, Northeast Bankshare Association is the only commercial bank actively working directly with the farm community. There should be more participation from commercial banks.

No. 3, available credit to the farm community by farm machinery dealers and other suppliers of farm equipment often creates farm debt repayment situations which force farm enterprises into situations whereby the farmer must abandon his enterprise or accept bankruptcy.

No. 4, most farmers cannot afford to pay present interest rates on borrowed money.

No. 5, more important than providing money to farm enterprises, those individuals working on farm programs should devote their effort toward improving farm profitability, and it has come out in practically every panel this morning that we have lost farmland not through development but through abandonment because of lack of farm profitability. Improved farm profitability would make debt services manageable, and I am sure it would stimulate lenders to become more involved.

No. 6, capital and operating requirements in today's agricultural enterprises make it practically impossible for qualified young people to enter farming.

No. 7, entrance farmers, as owners and managers, should not enter into farming until their experience and training indicates they are capable of managing a present-day farm enterprise.

There are many serious problems to be solved in the food chain from farm to consumers. The farmers have less and less political clout, and their responsibility for producing food becomes greater and greater, but their less political clout has come about in the diminishing numbers in the national political climate that does and has to recognize the following:

No. 1, the family farm is the most effective food production source in the country. I don't have to go too far. When corporate—corporations in Maine tried to get into the farming business they both went bankrupt. So the family farm is the most effective way.

The family farm can be a family farm—most people conceive it as a 40-cow milking herd or 10 acres of vegetables. A family farm can also be a situation like Phil Coburn has. Those are all family operations, and there is a big difference.

No. 2, increased farm profits must be recognized as necessary to conserve our present food production system.

No. 3, with improved profit there is and would continue to be moneys available for farm enterprises, and commercial banks are pretty severely criticized for their lack of participation, but realistically, when you look at the profitability in most farm enterprises today, a good conscious individual, banker and all, would say "Who in the hell should be giving them money?" We have to get this profitability factor.

No. 4, ownership of farms by individuals merely to maintain a tax loss situation, not profit-oriented, should be discouraged.

And finally, identifying the farm profitability problem is much easier to identify than the solutions. I would be pleased to answer any questions that the panel would have. Again, thank you for the opportunity to be here.

Representative SNOWE. Thank you, Mr. Williams. Mr. Roy.

STATEMENT OF ARNOLD ROY, PRESIDENT, FARM CREDIT SERVICE OF SOUTHERN MAINE

Mr. Roy. Madam Chairman, I am pleased that you have offered me the opportunity to voice our concerns. We find very many issues facing the future generation of farming, and we find no easy solution.

My name is Arnold Roy. I am president of Farm Credit Service of Southern Maine, and geographically, basically we cover and represent all of the State of Maine except Aroostook County and northern Penobscot.

Our association has a membership of some nearly 700 farmer borrowers and today has in excess of 200 commercial fishermen who borrow from its Production Credit and Federal Land Bank Associations.

As the largest single nongovernmental lending agency in Maine, we have a very high level of concern with regard to the economic welfare of the farming community.

First, we would urge you to consider modifying the Government's present philosophy of providing cheap food through Federal subsidization of the American farmer and rancher. This position is not at all compatible to the long-term welfare of agriculture.

A policy which provides adequate cash flow through pyramiding debt and not profit provides for very short-term food surpluses. In the long term, it may enhance the corporate, the foreign and the investor type farmers' positions, while the bona fide producer of food and fiber becomes increasingly vulnerable and not able to service his increasing debt obligations which were permitted by the various government lending agencies—and possibly I could add by other agencies also, not government.

The present vulnerable position of many farmers who have been over-leveraged now places the Government in a very difficult position where it must continue to forbear while good business practices suggest liquidations.

I do not wish to imply that the Government lending programs are not necessary. On the contrary, I feel they play a very important and constructive role in farm financing. The programs are necessary to assist with, for example, the young and beginning farmers, disaster situations, and, third, to assist with special programs such as conservation, environment, et cetera.

The key is constructive credit, which brings all the fundamentals of lending in focus. Financing to provide a family farm a livelihood is much different than providing credit to a business that has the reasonable chance of success.

Foreign policy is another area which needs special consideration. Food has become a major political influence worldwide. The use of food as a political tool needs to be curbed.

Permitting excess of imports of commodities has seriously affected many of our producers of food and fiber in Maine. Potatoes, timber, and fish have all suffered significant economic adversity in recent years. Also, the effects of supplies made by import-export often compounds the subsidy problems.

We would like to address you to two pieces of current legislation which we feel needs your consideration.

The first one is H.R. 568, the Fragile Lands Act. Under the Evans bill, applicants for Farmers Home and Federal land bank loans would have to submit a soil conservation plan with their loan applications.

Loan approvals would be conditioned upon plan approval by the Federal Land Bank, the Farm Credit Administration, and the Secretary of Agriculture after consulting with representatives of the local soil and water conservation District. Once approved, deviations from the plan would require approvals by the same chain of authorities.

Concern lies in the following areas: Loan processing time would be extended. Staffing additions would add costs. The Farm Credit Service would then become an enforcement agency, and we don't feel it is necessary; since conservation practices have always been a significant factor in Federal land bank loan appraisals and decisions.

The second piece of legislation is H.R. 3966, which would preempt the farm products exemption provision of the UCC as adopted in most States.

Under section 93071 of the UCC of most States, a buyer of farm products from a farmer is still responsible for any duly perfected interest created by the seller. This enables the lender to look to the buyer of farm products to satisfy the lien in the event the seller diverts the proceeds.

Congressman Harkin's suggested preemption would still provide lender protection if it gave actual notification to specific buyer or buyers of mortgage commodities to inform them of the lien. However, we feel that this is not practical to agricultural credit.

Section 93071 of the UCC enables agricultural lenders to rely on formal notice; that is, a filing in the public record, and provides the lender the ability to look to the buyer in event of proceeds diversification.

An important issue is that a softening of the agricultural lender's position reduces the farmer's ability to have such products viewed at market value for collateral. Historically, these farm products have been significant assets available to offer as collateral.

Your consideration to these two bills is critical, as they would impair on the farmer's ability to borrow adequate funds.

Just briefly, I would like to return to the issues of Government lending programs for a minute. I think there are some good arguments to be made.

The first argument for the support of Government loan programs is that there is not adequate sources of credit for farmers today. I

would feel very comfortable in challenging that statement in southern Maine.

First of all, Farm Credit of Southern Maine's lending policy clearly addresses important issues such as young farmers, failing farmers, and cooperation with governmental agencies.

I would like to expand this to not only include southern Maine. It is a district policy of the Farm Credit Bank of Springfield, Mass.

A quote of my board is—I quote—"It is the board's intent to finance the broad spectrum of southern Maine's agriculture, ranging from part-time, young, and very large integrated corporate borrowers.

As chief executive officer, it is my mission to provide constructive financing to all farm operators who can demonstrate economic viability.

Second, availability of funds has not been an issue, in my opinion. During the recent economic downturn, commercial banks have had strong cash positions and were actively seeking the best return on investment. During this same period, Farm Credit had all of the necessary funds available to meet its needs.

At this present time, commercial banks are aggressively seeking agricultural credits, and in many cases they are gaining a larger market share by underbidding the production credit's current prime rate of 10½ percent.

And one of these competitors is sitting right next to me. [Laughter.]

The competitive nature of nongovernment lenders keeps rates close and often under FmHA's rates. However, the administration's recent proposal to remove Farm Credit's agency status could impair this credit availability as far as Farm Credit is concerned.

We ask that you support the continuation of this agency status, which is a significant factor influencing Farm Credit investors, the cost of our money.

In closing, I am pleased that your committee came to me for one of its hearings. Maine, like many other parts of the Nation have suffered severe agricultural economic adversity. Eighty percent of our broiler processors have shut their doors in the last four years. At one point, Farm Credit Service of Southern Maine had 55 broiler houses and three processing plants for sale.

My counterpart from Aroostook can attest to the high percentage of potato farmer failures. The dairy industry is seriously being threatened nationally.

My comments address only a few of the many issues threatening our agriculture. We ask that you look at the big picture and try to keep intact some of the industry's present advantages and take action on correcting obvious deficiencies.

Thank you for allowing me to testify.

Representative SNOWE. Thank you. You all certainly represent, I think, the variety of lending possibilities to farmers.

First, I would like to ask all of you—there is legislation currently in Congress that would prohibit or delay farm foreclosures, and that particularly addresses, obviously, the loans that you make, Dwight, with the Farmers Home Administration, and also legislation that would include farm debt repayment moratoriums.

How would you feel about either of those bills?

Mr. SEWELL. Well, I can take no position on the legislation.

Let me tell you what we have available at this time as far as procedures in our present regulations. We do have the ability to re-schedule, reamortize, extend, and consolidate and many other ways of extending foreclosures. I think the way that we are handling it at this time seems to be adequate.

I can't respond to the legislation question.

Representative SNOWE. OK, yes. I guess you have the flexibility. Obviously the Farmers Home Administration here in Maine has prevented a number of foreclosures.

Mr. SEWELL. Yes. We can extend a real estate loan up to 3 years, which has been very helpful, by the way.

Representative SNOWE. And reschedule payments?

Mr. SEWELL. Reschedule payments, and so forth.

Representative SNOWE. I see.

What do you think, Gary or Joseph or Arnold, on that type of legislation that would prohibit foreclosures on loans from Federal credit institutions and also a farm debt repayment moratorium? Do you have any ideas?

Mr. SIROIS. Yes, I do.

Representative SNOWE. An opinion?

Mr. SIROIS. An opinion. [Laughter.]

Basically, I don't believe that the Congress should act on that. I think that the Administration—the Farmers Home Administration has the responsibility to assess each individual case on an individual merit basis and make a decision on that information.

To forbear on a blanket basis doesn't resolve any of the problems, nor—to prohibit foreclosures in an orderly fashion just seems to add—in my opinion, seems to add costs to the Federal Government doing business in that arena, and it really doesn't do anybody any good, although you have to take into consideration that the FMHA must act prudently in this area because if they were to foreclose on too large a number of farmers at the same time they are going to affect the value of farmland and the value of machinery and equipment in a particular area, and that could be very devastating.

But I believe the FMHA has the ability to assess those situations and make individual judgments. That is my position. I don't believe Congress should mandate.

Representative SNOWE. Joe.

Mr. WILLIAMS. I would agree with that. Of course, I have a big problem with just maintaining somebody in business if they are not going to develop into a viable economic unit and continue to over-produce food, which is the biggest single reason that we have lack of profits. We do produce too much food in order for the farmer to survive.

I certainly wouldn't want the extreme the other way either. We haven't arrived at that middle ground yet. I don't even know what that is. I wish I did.

Representative SNOWE. Arnold.

Mr. ROY. I agree. I think it should be left in the hands of the local Farmers Home people. You have got to be practical. You can't forbear too long where there is no economic viability. You are compounding the food situation, the profitability of other farmers.

However, you have got to play a delicate balance, for example, in the broiler and the potato industry, where there was major—broad failure of many farmers. By putting too many farms on the market with foreclosures really can depress the economic situation.

But I think the local people can better assess that situation and then constructively work toward the best alternative.

Representative SNOWE. Dwight, is there any State more dependent on Farmers Home Administration for loans than the State of Maine?

I mean, we are obviously highly dependent.

Mr. SEWELL. That is right.

Representative SNOWE. It is interesting to note that, you know, Joseph Williams is here today representing the Northeast Bank, and I gather the only bank that issues loans to farmers. Am I correct?

Mr. WILLIAMS. Actively solicits business.

Representative SNOWE. Actively solicits business.

Mr. WILLIAMS. Right.

Mr. SEWELL. There is no question, we are very visible in the State of Maine in the farming community. In my statement I mentioned we were, as an example, financing 48 percent of the farmers in Aroostook County.

I see figures where nationally Farmers Home Administration finances approximately 12 percent of the farmers. So we are among—I would say among the highest.

Mr. WILLIAMS. We were the highest not too long ago. I don't know what it is today.

Mr. SEWELL. I don't know exactly, but we are up there.

Representative SNOWE. Well, how can we draw the commercial sector into providing loans to farmers?

I asked, I think, Stewart Smith earlier, the Commissioner of Agriculture, about that whole issue, as to why banks got out of the lending business to farmers and Farmers Home seems to have taken over, and it seems to me there should be more of a balance.

But can you suggest what the causes are, beyond the risk factor. I am sure there was a risk factor years ago.

Mr. SEWELL. Right. Beyond the risk factor, in the first place the Farmers Home Administration is supposed to be only financing those farmers who are unable to get credit elsewhere.

The farmers we have in our caseload now obviously were not able to get credit elsewhere or they would have been over to the other commercial sources.

I think in our caseload we have many, many good operators, good farmers. We have a policy in Farmers Home Administration that we are to graduate those farmers who are able to get credit elsewhere.

We are working with the local banks and PCA's, and we are sending a few of our farm borrowers to them. This is in the law. It never was intended that the Farmers Home Administration finance farmers forever.

The idea of the Farmers Home Administration was to start out young farmers and help those farmers who have had a hard time and get them back on their feet and ask them to go over to other credit.

Unfortunately, we have not done as much of that as we would like to do in Maine. But we think we have got some good farmers, and I feel that banks and PCA's maybe ought to be taking a closer look at what we have because we have got some pretty successful people out here.

Mr. ROX. There are various ways of trying to get commercial banks into agriculture. You could have special lending programs. However, if you look at interest rates today—I don't know what the Northeast Bank's rates are, but our best rate is 10½ percent. It is all in the low teens, and even Farmers Home's is in the 11 percent range.

Joe Williams said a minute ago we have got to make agriculture more profitable to attract the commercial bankers. They are smart businessmen, and if they look at a farmer as a good risk besides having his checking account, they are going to try to put some money in there, and that will attract them and make them much more competitive.

Representative SNOWE. Well, when are farmers turned away from a bank? Is it generally because the bank is not interested in providing that loan or because they have examined the financial statement of the individual farmer involved? What is generally the rule?

Mr. SEWELL. Generally, they have examined their financial statement and they feel they are unable to provide further credit. Therefore, they are referred to Farmers Home Administration.

Representative SNOWE. Well, Joseph, then there are a few banks that are involved in providing loans, and you say the Northeast Bank actively solicits. Do other banks provide loans but they just don't go out and invite that type of lending?

Mr. WILLIAMS. Yes, essentially. They are not out actively looking for that business. From the point of view of the commercial bank, our history is that our loan losses, for example, are less with the farm community than they are in other commercial enterprises.

So the risk factor—there is all degrees of risk in the corner drug-store if you pick the wrong one. So I don't really think—if you are in the farm loan business you learn to live with different weather situations from year to year. If you are a lender, then you cope with that.

I think the biggest single problem in the commercial banks is there is nobody in these banking systems that has any conception or idea of an agricultural enterprise. So they are not comfortable talking to the farmer or his problems.

And we are addressing that because—I don't know much, but I do understand quite a lot about farm enterprises, and I can talk to a farmer, and I am training people in the bank, which is my primary mission, who are bankers so that they will be comfortable talking to them.

But if you go into—there's two generations of nonagricultural people in the banks today. So that is a major problem. They don't understand it and they are frightened of it and they read the headlines in the papers about how bad things are, but they get bad in the automobile business once in a while, too.

Representative SNOWE. Prior to the Farmers Home becoming a major instrument for lending, did many banks in this State lose their shirts because of the loans they issued to farmers?

Mr. WILLIAMS. This is the situation in the Northeast. It goes back to the Depression days. And I will just take a minute, because it really is what happened.

Banks did lose their shirts, and they were the primary source, and half the business was farmers because half the community was farmers.

After World War II, with the tremendous growth factors and with all the factors that came into new businesses and all these technical places around Route 128 and high technical plants and so forth, banks found lot easier places to put their money, and they still remembered what had happened to them in the Depression.

And that was really when the money funneled out of commercial banks as far as their participation with farmers. It goes back to that period of time.

Now that isn't true—commercial banks are heavily involved with agriculture in the Midwest because they didn't go through that little cycle and they weren't so firmly entrenched as we were.

So that is why it is the way it is, and it is a major education process in commercial banks to get them to understand that. And in Maine it is 10 percent of our GNP, agriculture and its allied businesses. You got to be interested in that if you are in the banking business in this State, and we are. But it is an education program.

But there really hasn't been any strong interest in the commercial banks in the Northeast—it is not just true in Maine—since after World War II because they remembered the Depression and what happened, which was just prior to.

Representative SNOWE. Yes, Gary.

Mr. SIROIS. Madam Chairman, in Aroostook County the latest FDIC call report shows that of all the commercial banks in Aroostook, that are located in Aroostook, less than 4 percent of their loss portfolio is with agriculture, and of that a substantial portion would be through FmHA subordination loans, which are really risk free. So their involvement is very, very small.

Also, going back over the years, to my knowledge, having been involved in banking, banks since the late 1930's have not lost money in agricultural lending; however, they have found opportunity for investment elsewhere that in their opinion reduced their risk, and they have diverted those funds to those areas. That seems to be the problem.

There is a move underfoot to subsidize interest rates to the banks to provide low capital to the banks to entice them back into the agricultural arena, and I disagree with that theory.

I think if the agricultural credit was economically feasible then commercial banks would reenter that arena, and until they become economically feasible then we will continue to rely very heavily on federal financing.

Representative SNOWE. Gary, now in your testimony, I get the impression that the farm credit system has not been overly liberal in its lending practices.

What has been your bad loan experience, if any, in the last few years?

Mr. SIROIS. I will let Arnie address the poultry situation, but we have had some bad experiences in the potato industry. As you know, it is a very volatile industry.

We try to judge our credit very closely. Obviously, we do provide the bulk of the remainder of the financing in Aroostook County for potato production other than what FmHA does, and there are some risks.

But the risks that we run basically are attuned to the ones that are very difficult to assess, basically weather problems, weather-related problems. There are quality problems that can sneak up on a farmer and maybe wipe out his crop.

We have taken losses, and I am sure we will continue to take losses, but that is part of the business of lending money. That is the risk inherent in that business.

We try to walk the narrow path so that we don't have excess losses that would jeopardize our ability to service the majority of the farmers. We are a farmer cooperative. That is our responsibility, to serve our members, and we will continue to do that, and we will make some bad mistakes. We will make some judgments that are incorrect, and we will take some losses, but it is a matter of minimizing those.

Mr. ROY. Well, compared to commercial banking, the little I know about commercial banking, I think Southern Maine's losses have been reasonably conservative, next to what the commercial bank is used to writing off very year. But we were financing—it is a public record, so I will tell you—three out of the five main broiler processors and four are now out of business. And out of the four, three went bankrupt, and I was financing the three bankrupt ones.

The first one went in bankruptcy August of 1979, and we are still liquidating. We have a full-time crew managing and liquidating the properties.

We have been faced with losses; however, we have managed them as aggressively as possible, and not being forced to forbear but to take good, hopefully good business decisions, we have been able to curb our losses and not hinder the ability of our other members to borrow at a competitive rate.

But there has been a serious test to us in the last 3 years, 4 years.

Representative SNOWE. Is the farm credit system more restrictive in its lending policies than the Farmers Home Administration, or do you have the same guidelines?

Mr. SIROIS. No, we are more strict, in my opinion. Basically, we don't have the ability to go back to the well like FmHA does, and we do have to account for our business to our membership.

It is run like a business. It is intended to be a profitable business. We borrow all of our funds. We pay current rates through the FICB in Springfield, and we have to run it very similar to what a bank would run.

The only major difference is the fact that we are not profit-motivated. We try to keep our costs as low as possible for the immediate benefit of our membership; whereas, a commercial institution,

the banks, for example, are profit-motivated to return a dividend to their stockholders.

That is their primary objective, and ours is to keep our costs down for our membership for immediate benefit.

Representative SNOWE. Joseph and Dwight, what is your feeling about the farm credit system and its Federal agency status?

Mr. SEWELL. Well, I think that farm credit is taking a good stand in the State of Maine. We work very closely too with farm credit. Gary mentioned the subordination program. This is one way that we can introduce our borrowers to farm credit, in that we run short of money and we ask Joe and Gary to help us.

And what it amounts to is that we ask them to provide credit for operating expenses to help the farmer complete his projects for the year. This way, like Gary said, there is no risk because we turn over the mortgage and so forth. So it's a good loan for them. And this way they can get a chance to look at our farmers, and maybe we can graduate them to the farm credit.

We work very closely with them.

Mr. WILLIAMS. Without the Farm Credit Service, agriculture in this country would be in a real difficult situation. They are good lenders—not because these two fellows are here but—

[Laughter.]

Mr. WILLIAMS [continuing]. But they take a business approach to every situation, and that's true across the country. And they are the primary source, I believe, probably not nationally any higher than commercial banks, but in a great deal of the Northeast they are.

And they're necessary. And they're excellent operators and they take a business approach. And the farm is a business. A little 40-cow dairy herd is a quarter-million-dollar investment. That's a big business, really, compared to what I can remember as a young fellow on the farm. It was about \$10,000.

Representative SNOWE. You're right.

Dwight, earlier testimony that was given first by Stan Greaves, and I think also Stewart Smith might have mentioned it, they were suggesting for the Farmers Home Administration perhaps more loan servicing by the Farmers Home Administration.

And in Stan Greaves' testimony he mentioned that the Farmers Home Administration should require complete farm management. What is your response to that? In a sense, should Farmers Home Administration require more assistance in providing services for these loans and also requiring more from the farmer in terms of the practices that they employ for management and conservation and so on?

Mr. SEWELL. You see, what makes Farmers Home Administration different from a bank is that we were set up by Congress to not only provide financial aid but to provide supervision to our farm family. This administration, under the direction of Mr. Schuman, has placed servicing as the No. 1 priority in the Farmers Home Administration. Right behind that, our number one concern is that the farm borrower. As you know, we have many other programs in Farmers Home Administration. The housing program that we have overshadows the farm program throughout the United States.

This administration has provided additional personnel this past year. We find that we have been offered overtime for our offices to perform the job that we have out here. There's no question about that we're pretty busy in these county offices with all the programs we have to administer.

We feel that we're providing supervision to our farm borrowers as much as possible under the circumstances. So I guess our position is that we feel at this time we're providing the supervision that's needed.

Representative SNOWE. Finally, Joseph, one question for you. Stewart Smith of the Commission again made recommendations talking about tax-exempt industrial revenue bonds as a way of broadening the base for credit available to farmers. What is your opinion of that?

Mr. WILLIAMS. Well, the tax revenue bond has been a common way to get lower interest rates for all kinds of development other than agriculture, really. Historically, this is not new. That's how these fellows here get their money sort of cheap. [Laughter.]

I am supportive of that as long as it doesn't create another lending agency of the administration, because one of the real problems today is the nonsupervised people that loan money, farm machinery dealers and all these other people, and it gets away so that even though Dwight is supervising his loans, if that fellow doesn't tell him he's down the road buying a \$40,000 tractor when he's having a hard time paying Dwight today anyway.

So I certainly would support that concept, because it does work in many development projects across the country. But I don't want another lending agency that should be supervised through existing lending agencies, because then it can be supervised.

And credit is okay, but it certainly has to be supervised, particularly the highly capitalized farm operation, and at least in the formative years for young people with not too much experience in the way you handle all that credit that you're going to need. Yes, I would support that.

Mr. ROY. I would just like to comment on that. I have no problems with competition. It's great for all of us. However, I have a reservation about quoting some lines to get somebody else interested. That's fine, however, it better be consistently applied because the industry, the commercial banking, the history of the commercial banking industry is that they come in, at times go through possibly some bad experiences, and then they get out of financing agriculture.

So if we go through a temporary influx of money through commercial banks through some bonds, and that is pulled away 4 or 5 years down the road, then that may just disrupt along with causing other problems of one agency lending not consistent with the other agency, and it could cause more harm. So it needs to be very carefully administered, and it should have a long-term commitment if it is.

Representative SNOWE. Do you think otherwise it could be effective? I mean if the supervision is in place with agency followup?

Mr. SEWELL. It's another form of low-cost credit.

Representative SNOWE. Low-cost credit.

Mr. Roy. It could be effective, but I don't really see the need for it.

Representative SNOWE. You don't see the need for it?

Mr. Roy. The farm credit system can get money nearly as cheaply as the Federal Government can.

Representative SNOWE. OK.

Mr. Roy. Usually within 10 or 20 basis points. The system is set up nationally. The national system has been in existence well over 50 years. It's proven itself. It has the ability; it has the resources; it has the personnel.

If the applicant and the plan is feasible, the system will finance it. OK. And that's the key. If the plan and the applicant is feasible, the system will finance it. We have the resources to do it. The availability of money has never been a problem. So why I say neither am I afraid of competition and I encourage wholeheartedly commercial banks entering into the arena, but why create another one between the commercial banks and the FmHA and the Farm Credit System today? All of the funds that anybody would ever need in agriculture are readily available in my opinion.

Representative SNOWE. Do you think that sufficient credit is available to farmers today?

Mr. SEWELL. No question.

Representative SNOWE. Do you all agree with that statement?

Mr. SEWELL. You say too much.

Mr. WILLIAMS. Too much.

Representative SNOWE. Maybe too much.

Mr. SIROIS. There is too much credit, yes. We continue to throw money at the problem, and then that doesn't solve the problem. It compounds it or delays the solution of the problem. It doesn't solve the problem.

Representative SNOWE. Very good.

I have just one other question for Joseph. In your testimony you mention, and I quote, "Available credit to the farm community by farm machinery dealers and other suppliers of farm equipment often create farm debt repayment situations which force farm enterprises in situations whereby the farmer must abandon his enterprise or accept bankruptcy."

Do you believe that these companies shouldn't be able to provide credit for the purchase of farm equipment?

Mr. WILLIAMS. It's more an administrative problem. I am not sure that they should be provided credit. But providing it's supervised, now, if Gary is involved with a farm operation and he's supervising his investment in that farm in the form of loans and debt, he's got a fellow who comes in and says, I want a \$60,000 tractor, and they sit down and they go over that, and they see if he has to pay out \$1,800 a month for that, he can't do it because there's not the money to sustain it and they settle at that.

But let's say that fellow leaves and he goes down the road to the farm machinery guy and he says, don't worry about that. He knows, he can get the tractor back. That creates more problems on individual-managed farm operations than anything else.

Now, maybe Gary tells him, yes, that's great, you can stand it, your cash flow will stand it, you go ahead and if they want to loan you money, you go ahead because my till is a little low today. But

it gets—too much of that is done on an unsupervised basis. And that's why I made that comment. And I am sure that Dwight runs into this on a regular basis.

And we have the same situation if we get involved with somebody and all of a sudden we know it's a tight situation, you go down to the farm and the fellow's got a new tractor there. How are you going to pay for that? I am going to pay so much a month. Well, if you do that, you can't pay this. You know, that and the supervision of the credit is critical.

Representative SNOWE. Any other comments?

[No response.]

Representative SNOWE. Well, I thank you very much for your very enlightening testimony. I appreciate it. And thank you for waiting until the end.

Mr. WILLIAMS. Think I can be in Stafford Springs, Conn. by 7:00 tonight?

Representative SNOWE. I think you can. [Laughter.] Only if you fly.

Mr. WILLIAMS. I can't fly.

Mr. ROY. Thank you very much.

Representative SNOWE. Also, I would like to mention to those people in the audience who are interested in providing written statements to be included in the record of the Joint Economic Committee on this hearing, please feel free to do so. And I would ask you to send those statements to my office in Washington or in Bangor, and we will have them submitted for the printed record.

Well, the last panel marks the conclusion of this hearing. I would like to thank all of today's witnesses who have taken the time and made the effort to share their views on the future of farm policy. The responsibility to transmit those views to the Congress and the administration is now mine, and I am proud to acknowledge and accept that responsibility.

Within the span of but one generation, U.S. farmers have turned this country from a new importer of agricultural goods to the largest and most powerful food producer the world has known. In fact, for the first time in the history of mankind, our country stands ready to produce and deliver food in proportion to the needs of the world's hungry, if we will only let it. The fact that this country is idling over 80 million acres of the most productive land on the face of the earth is tremendously regretful and borders on a crime against humanity and shamefully reflects past and current public policy ineptness.

America's agriculture is as much an obligation as it is an opportunity, as much a blessing as it is a business and technological phenomenon, for the world history books will call attention to the fact that the most food-productive land on earth was placed in the stewardship of the most capable, enterprising, and innovative individuals, and judgments will be made relative to our potential and actual contribution to the betterment of the human race.

The challenge and the responsibility before the Congress and administration at this point in our history is to create a political and economic environment which will permit our agricultural resource to achieve its greatest potential. It is time to implement a new era of agricultural policy, one which combines farm and food policy

with an ambitious, aggressive international policy which has as its foundation the most powerful partnership: the unmatched productivity of the American farmer and the economic strength and ingenuity of our representative government.

I finally want to say that it is my conclusion based on today's testimony from 18 witnesses that indeed the Federal Government, the U.S. Congress more specifically, has to develop a farm policy for the small farmer in this country. And obviously, that is the small farmer of the Northeast and the State of Maine and the New England region.

So I am going back to the Congress with recommendations and the testimony provided by the witnesses here today. I think the Federal policy for too long has minimized the benefits for the small farmer. If we are going to retain the future for the small farmer in Maine and throughout the New England area, I think we are going to have to address those specific needs.

I will be looking forward to incorporating my ideas and thoughts based on your testimony here today. I thank all of you for being here, and I appreciate your participation.

With that, the Joint Economic Committee hearing stands adjourned.

[Whereupon, at 2:35 p.m., the committee adjourned, subject to the call of the Chair.]

APPENDIX



UNIVERSITY OF MAINE *at Orono*

School of Human Development

Merrill Hall
Orono, Maine 04469
207/581-3120

TO: Joint Economic Committee
Room G-01 Dirksen Senate Office Building
Washington, D.C. 20510

FROM: Katherine O. Musgrave, Professor of Food and Nutrition

RE: October 14, 1983 regional hearing on "Toward the Next
Generation of Farm Policy."

This testimony is presented in support of the formulation of a Farm Policy that can promote production of healthful food and still provide adequate profit for producers. A comprehensive Farm Policy must encompass food production, marketing and availability and that will require professional advice from scientists in those areas. In addition, there must be input from nutritionists who can present the health and educational needs of the nation's citizens.

We speak for the nutritionists who are able to assess the population needs and to recommend education for selection of food to promote health. Numerous studies describing health problems arising from poor food selection can document the need for education and for accessibility of high nutrient-dense food.

A need that may assume first priority is that of educating our population to select a healthful diet whether at home or eating out. Although educational needs differ for various segments, it is widely accepted that the formation of food habits occurs in childhood and that early food patterns persist throughout the life span.

THE LAND GRANT UNIVERSITY and SEA GRANT COLLEGE OF MAINE

This will indicate that teachers comprise the target audience for implementation of food and nutrition education as they have daily contact with developing children and adolescents. They serve as role models and certainly eating is a learned behavior proven to be established within one's culture. Teachers plan the curricula and studies show that integration of food and nutrition information into the total academic curriculum in a planned sequence is the most effective manner of assuring sufficient knowledge for healthful living. The validity of this approach was confirmed by the passage in 1977 by the U.S. Congress of the Nutrition Education and Training Act (PL 95-166) authorizing funding for food and nutrition education for elementary and secondary school students. Within each state, since 1979, the program referred to as NET has been implemented in a variety of ways. In Maine, the major goal has been the education of teachers and school food service personnel. A needs assessment indicated that 65.5% of Maine teachers for grades 1-5 had no nutrition training. In the past 4 years, more than 1400 individuals have enrolled at 38 sites in a basic nutrition course offered by the University of Maine at Orono. Major outcomes of participation in this course include increased communication about wise food choices and more cooperation between parents, teachers, and school food service employees in providing healthful meals. Greater consistency between personal dietary behavior and concepts being taught has provided positive role models for students.

Attention should be directed to such legislation as the current bills in Congress that are attempting to restore funding for the

Nutrition Education and Training Program and to increase support for school feeding programs. They are Senate Resolution 1913 and House Resolution 4056. This kind of legislation is strongly supported by members of the Nutrition Committee who have identified the need for nutrition education in the schools.

Food selection is also strongly influenced by availability of food. Assuredly, the agriculture community has demonstrated ability to produce and market food, even to the point of surplus amounts. But how can production of healthful food be rewarded? If consumers are educated to select those foods, the demand will be greater. We urge strongly that future farm bills include more funding for food and nutrition education.



UNIVERSITY OF MAINE *at Orono*

COLLEGE OF LIFE SCIENCES AND AGRICULTURE
AND STATE EXPERIMENT STATION

Office of the Dean and Director
105 Winslow Hall
Orono, Maine 04469
207/581-3202

October 12, 1983

Congresswoman Olympia J. Snowe
133 Cannon Office Building
Washington, D.C. 20515

Dear Congresswoman Snowe:

SUBJECT: "Toward the Next Generation of Farm Policy"

Enclosed is a written statement which I have prepared in response to your September 15, 1983 invitation to testify before the Joint Economic Committee. Unfortunately my schedule is such that I will not be able to personally testify.

I appreciate the opportunity to share my views with the Joint Economic Committee.

Sincerely yours,

Wallace C. Dunham
Interim Dean and
Director

r1
Enclosure

INCREASED EMPHASIS ON RESEARCH AND THE DEVELOPMENT OF
HUMAN CAPITAL NEEDED TO SUSTAIN U.S. AGRICULTURE

The success of agriculture in the United States is unparalleled in human history. For example:

- 1) Food and agriculture comprise the nation's largest industry, accounting for 20 percent of our GNP and providing employment for 23 percent of our civilian workforce.
- 2) While farmers comprise only 3 percent of our population, they feed this nation with abundance and provide 70 percent of the food-aid to food-deficient countries.
- 3) United States farmers supply 60 percent of the grain and 75 percent of the soybeans in world trade, producing a trade surplus of 27 billion dollars in 1981. This compared to a U.S. non-agricultural trade deficit of more than \$60 billion.
- 4) Record breaking crops and increases in other commodities continue to overwhelm our already bulging storage facilities.

Our past record in agriculture shows high achievement. But what about the Future? In spite of the past impressive record, serious problems loom in the horizon. Consider the following:

- 1) Three million acres of U.S. farmland are lost each year to nonfarm purposes. One million acres of that are prime farmland.
- 2) About two billion tons of soil are lost yearly in this country due to erosion from surface runoff on cropland. We are losing topsoil faster than it is being regenerated.
- 3) Irrigated agriculture uses more than 80 percent of the water consumed in this country. About 40 percent of our irrigation draws on ground water. In many cases ground-water is being used faster than it is being replenished. In some parts of the country it is not replenishable.
- 4) The majority of river basins are polluted by dissolved solids, such as salts, excess nutrients and pesticides. In other words, soil deterioration and water shortages, not only in this country but around the world, may well be a major crisis issue before the end of this century.
- 5) By the year 2020 it is projected that there will be eight billion people in the world. This is a 70 percent increase over the current world population of about 4.7 billion. In essence, the world is locked into a race between population and hunger.

- 6) There is still another diminishing resource with which we must be concerned - human capital. These are the highly trained scientists, technology transfer specialists, and professionals needed to complement the food and agricultural labor force. These scientists and specialists are the source of the vital technology transfer links from which future progress will come.

To maintain our dominance in agriculture, we will have to invest more in scientific agriculture. National studies by respected scientists show that the annual rates of return on research expenditures in agriculture are in the order of 50 percent. In other words, the public gets an annual return of \$1.50 for each dollar spent on agricultural research. This high rate of return shows that investment in public research in agriculture is too low.

The scope of agricultural research is becoming more complex and wider. It takes more research effort to come up with every new improvement today than it did 20 or 30 years ago. Multiplied by the larger number of research areas necessary to develop and test the increased and improved inputs which go into modern agriculture production, and the result is staggering. This explains why each additional unit of efficiency in agricultural production comes only as a result of greater total research input.

Also, as agriculture becomes more productive, a higher proportion of the research effort must be utilized to maintain high yields. Disease resistant varieties of field crops usually must be replaced periodically to counteract new forms of pests. Monoculture often requires new compensatory practices to counteract soil deterioration. Regulatory actions require development of safer but productive alternatives to banned pesticides.

Add to this the fact that the last decade brought a host of new public issues and concerns that will undoubtedly continue into the foreseeable future. These include food safety, environmental protection, nutrition and increasing competition for soil and water resources, excessive soil erosion, increased energy costs, and continued environmental concerns.

Research funding for agriculture did not increase in real terms during the past decade. For example, State appropriations to the Maine Agricultural Experiment Station, for example, decreased by about 30 percent in real terms since 1973. Therefore, many of these new research problems have had to be funded at the expense of traditional research. Moreover, the cost of conducting research has increased. Research today requires more sophisticated and costly equipment and support staff than 10 years ago. Thus, many research areas are receiving relatively much lower real funding today than earlier.

In addition to adequate funding for research, new efforts need to be made to overcome the deepening shortages of highly qualified scientists, managers and technical professionals in the field of agriculture. The National Association of State Universities and Land-Grant Colleges recognizes this concern in its recently published booklet entitled, Human Capital Shortages: A Threat to American Agriculture (copy enclosed). This booklet makes a number of suggestions of ways in which both the public and private sectors can help in solving this problem.

People in positions of public trust and responsibility, as well as the public in general need to become concerned about conditions that affect agriculture. We will all benefit by seeing that it remains healthy.

Prepared by:
W.C. Dunham
10/83

MAINE SHEEP BREEDERS ASSOCIATION

OFFICERSPRESIDENT

Robert E. Clark
North Whitefield
Maine 04853

VICE PRESIDENT

Kenneth Yost
South Bristol
Maine 04568

SECRETARY-TREASURER

Richard N. Baston
RFD 2 Box 226
Cumberland Center, Maine 04021

SUPPLIES

David Averill
RFD 1 Box 97
Mechanic Falls, Maine 04256

**Sheep**DIRECTORS

Henry Jackson
R.F.D. 1
South Paris, Maine 04281

Chuck Rayburn
Mapleton, Maine 04757

James Davidson
North Country Farm
Round Pond, Maine 04564

Rodney Cookman
Penobscot, Maine 0476

Douglas Field

12 High Street
Dover-Foxcroft, Maine 04426

Glen Bowman
Route 22
West Buxton, Maine 04093

October 12, 1983

Administrative Assistant
Joint Economic Committee
Room G-01 Dickson Senate Office Building
Washington, D.C. 20510

Dear Sir:

I have received a letter from Congresswoman Olympia Snowe requesting written testimony concerning the topic "Toward the Next Generation of Farm Policy." In her letter I was advised to forward my comments to your office.

The most important aspect of any agricultural policy is research and the distribution of the results collected. Therefore, agricultural research and transfer of the results of that research to farmers must continue at the University of Maine, Orono. Research programs at Orono must be expanded to meet the needs of our expanding small-part time farmers.

I thank you for the opportunity to express my thoughts.

Sincerely yours,

Robert E. Clark
President, Maine Sheep Breeders Assoc.

REC:ms

10.11.83

Dear, Congresswoman Snow,

I would like to share some of my thoughts about the loan program for honey which is now in operation.

My first and most emphatic point is that beekeeper do need help at this time. Because we must compete with honey producers from other countries who flood the U.S. market with cheap honey we cannot exist without some financial help. If the loan program were to be abruptly discontinued many beekeepers would be forced to go out of business.

Secondly, as the program now stands I think that it is unnecessarily complicated and costly. I have some suggestions ~~as to~~ how beekeepers might be aided in a better and less expensive way.

2.
What I suggest is that there be a ceiling imposed on the number of pounds of honey that can be imported to the U.S. In addition to that there should be a duty imposed on all imported honey. The revenues from this duty would be used to support the price for honey paid to beekeepers producing in the U.S. The price for honey should be supported to a level of at least \$.60 to \$.65 per pound. Then I would like to see beekeepers be required to contribute \$.02 per pound sold to a National advertising campaign. This campaign could be created by and executed by a committee elected by the American Beekeeping Federation.

I believe that if we advertise our product in a creative way we can increase consumption of honey in the U.S. Increased demand would help to elevate and stabilize the price paid for honey if ceilings on imports are implemented.

3

Some questions which might be asked are, "Why should we even try to protect the bee-keeping industry? Of what concern is such a small group of people? Why not spend our tax dollars on some other, larger, more important industry?"

To these questions I would answer that it is estimated that approximately 90% of our food crops are pollinated by honey bees. The value of the honey bee is estimated to be between 8 and 9 billion dollars annually. These are figures published by the U.S.D.A.

For the most part beekeepers are hardworking individuals who enjoy their craft. They spend long hours working for a small economic reward. These people are not ready to collect unemployment. They cannot compete with inexpensive imported

4.
honey and continue to pay the
costs of operating a business
in this country.

If you are interested in
learning more about our small
but important industry I
would very much like to
meet with you. Perhaps you
would find a tour of a
honey house interesting. Perhaps
you could find time to put
on a hat and veil and
take a tour of one of our
apiaries. It would be my
pleasure to educate you on
these matters.

We will be in Florida
wintering our beehives from
Nov. thru May.

Sincerely

Suzanne Choisenek



Maine Association of Conservation Districts

L. Herbert York, Pres.
 RFD # 2
 Farmington, Maine
 04938

October 11, 1983

Administrative Assistant
 Joint Economic Committee
 Room - G-01
 Dirksen Senate Office Bldg.
 Washington, D.C., 20510

First, let me thank you for allowing my written participation in this hearing.

I personally consider Congresswoman Snowe's interest in future agriculture policy an indication of her concern for the wellbeing of this nation.

It is no great secret that the nation's agriculture is in serious trouble. These trends are in direct contrast to the small one family farm. Most of the farm policies have not been an asset to this type of farming but rather have been directed toward large western type operations, where a few dollars per acre materialized and multiplied by thousands of acres have led to government subsidized farming. Many times this tends to be counter productive to good soil conservation. Congress should support measures like the "sodbuster" or "Marginal Lands" Bill which would not sponsor government programs that deteriorate the efforts of the Soil Conservation Districts and the Soil Conservation Service. Commodity programs should be tied to good conservation measures in the future.

A strong support of the Soil Conservation Service technical assistance program coupled with the Agricultural Conservation Program, (ACP), cost-sharing is essential to maintaining this nation's ability to produce our future food. Even though we seem to be presently in a surplus situation, this could change dramatically if we lose our prime farmland base. If this resource should ever be depleted to the point where this country would be dependent for food as we are for oil, it would be a critical situation to say the least.

Just a word about some present programs. The Payment In Kind (PIK) Program has been a big asset to the farmers in this particular commodity even though the press has made Washington react in a negative manner. It has given the corn producer a chance to regain his footing. Of course, this is only a stop gap measure. What we really need is to sell the crop. Here is the governments opportunity --to sell the product!!



Maine Association of Conservation Districts

L. H. York, Pres.
 RFD # 2
 Farmington, Maine

The milk assessment is an unpopular and outrageous tax that will not achieve it's objective. The only thing it will do is to put the small farmer out of business and encourage the huge ones to get bigger. Putting the milk supply on a "quota" basis would be more direct, less expensive to administer and give the farmer who wants out an equity to sell.

It appears to me that congress and the administration react to pressures from the media and non-farming public much more rapidly than we farmers can keep up with. The case in point being the embargo to Russia. Farming is a long term planning enterprise that can't be efficiently stopped or started at the drop of a hat. This points to the need of long term agricultural policy that can and will be adhered to.

We have two great assets in this nation. One is the resource of productive land that is unrivaled anywhere in the world today and the second is the commitment by a very small segment of our population known as the American Farmer. Either one without the other is useless. The bottom line is that in any future legislation you consider these vital ingredients in proper perspective.

Again, I thank you for considering this paper conversation and look forward to any future chance for input.

L. Herbert "Bussie" York

L. Herbert "Bussie" York
 Sandy River Farms
 Pres. Maine Assoc. of Cons. Dist.

*West Breeze Orchards, Inc.**Specializing in McIntosh and Golden Delicious Apples*

PERKINS RIDGE

AUBURN, MAINE 04210

784-0004

October 11, 1983

Olympia J. Snowe
 Member of Congress
 133 Cannon H.O. Bld.
 Washington, D.C. 20515

Dear Olympia,

Thank you for your invitation to submit my comments to the Joint Economic Committee.

The response has been delayed awaiting the House Speaker's decision on the Mazzoli Immigration Reform Bill.

We are extremely disappointed that this legislation will not be brought to a vote in this session.

The Maine apple industry must be allowed to compete, on a fair and equal basis, with the other growing areas of the country.

To produce a market grade apple we must pick our entire crop by hand. To do this, after decades of experience, we must supplement our local labor supply. Domestic migrant labor was sought but did not respond to our needs.

We turned to the H-2 (temporary foreign worker) program and have endeavored over the period of its existence to meet all necessary criteria.

To do so meant paying in excess of the Federal Minimum Wage to meet the Adverse Effect Wage Rate Methodology. We must also meet strict rules regarding the housing, feeding and general care of our workers.

In 1983 we face a crisis. The methodology of the D.O.L., complicated by rulings of Judge Charles R. Richey, U.S. District Court for the District of Columbia, have required a wage scale impossible for us to pay. The methodology has produced results

which were delayed, confused, unfair, and bring to question the legality of their enforcement upon us.

As we seek to comply with the nonsensical methodology imposed on us near mid harvest, we find ourselves facing an unpleasant surprise from the House.

After many years of bi-partisan effort, and passage in the Senate of the Simpson-Mazzoli reforms, we find ourselves facing U.S. competition which seeks to comply with no law, no H-2 program, or even sense of human compassion and decency.

Many apple growers of the Mid and Far West simply ignore that to which we have complied, and continue to use illegal aliens to harvest most of their crop.

This inequity to both the farm laborer in these "uncontrolled" areas, and to the Maine apple grower, will have inevitable results.

The living conditions, pay scale, and standards for Western apple pickers will remain intolerably low; substandard by any measure. And the Maine apple industry will be forced out of business.

West Breeze Orchards cannot continue to meet the criteria imposed on us by a methodology which has become incomprehensible and oppressive. Nor can we face major competition effectively unbound by even the Federal Minimum Wage Standards.

We seek fair and timely H-2 criteria based on the realities of our industry and location, and we plead that Congress will pass laws which will protect the free market place from the produce of those the Simpson-Mazzoli Bill would have defined as criminal.

We are proud of our produce and could look forwards to a bright future if Governmental policies were less distorted regarding our harvest labor problem, and more fair in their enforcement of existing law and policy.

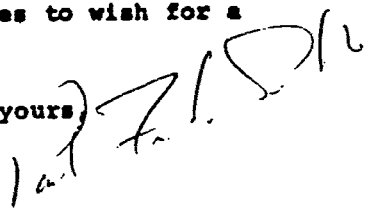
We need Simpson-Mazzoli, "right to farm" legislation, strict enforcement of import grading laws; and legislation for the enforcement of interstate retail labelling standards.

A fair and equitable governmental policy will

allow us the time to direct our energies to farming and production.

As always this farmer continues to wish for a guaranteed U.S. Weather forecast.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Paul F. Smith, Jr.", written in a cursive style. The signature is positioned to the right of the typed name.

Paul Fremont-Smith, Jr.
President

PF-S/hcs

Presque Isle, Maine 04769
October 5, 1983

Olympia J. Snowe - Congresswoman
Vice Chairman, Subcommittee on Agriculture
and Transportation, Joint Economic Committee
Congress of the United States...
Washington, D.C.

Dear Congresswoman,

It is a pleasure to notice the scheduled regional field meeting of The Economic Committee on October 14, 1983, in Bangor, Maine, on the topic "Toward the Next Generation of Farm Policy". I congratulate you on arranging this meeting for Maine people. I hope it will not be objectionable if I write to you some thoughts on the subject of the meeting.

Background information. - Recently I retired from a potato sales management position culminating 36 years of such work in Northern Maine. I am still involved in the production of potatoes as half owner of B & R Farms, Inc., in Presque Isle. My younger years were spent in Central and Southern Maine growing up on a small farm in Rome, Maine, attending public schools in the area and later graduating from UMO with a masters degree in Agricultural Economics. . So for many, many years I have participated in and observed the Maine and Northeast agricultural scene. It has not been a pleasant scene to watch, largely, in my opinion, due to the net effects of federal agricultural policy, federal transportation policy, federal international trade policy, federal credit policy, and federal policy toward irrigation dams and water. The net and cumulative effects of all these policies have been to practically ruin the agriculture of Maine and the Northeast. The thousands of abandoned farms of the past 50 years and the many more to be abandoned under existing federal policies are sad and mocking testimony to the net cumulative effect of federal policies on Maine and the Northeast.

Following are some of the most objectionable aspects of federal policy and some of the consequences which follow as I observe them:

1. The enormous "pork barrelish" and really scandalous feed grain and other subsidy programs and their resulting surpluses have caused many of Maine's and many other Northeast farms to go out of business. We don't mind being put out of business in fair and open competition, but we object to it being done by the translocation and unfair use of our federal tax dollars by the federal government.

2. As a result of the subsidized feed grain programs and their huge surpluses, the animal production phase of agriculture gravitates toward grain and surplus producing areas to take advantage of cheap subsidized feed with little or no transportation costs. . . Again it is a case of putting the Northeast out of business with its own tax dollars. Thus, we have witnessed the practical disappearance from Maine of animal agriculture for meat and eggs. . . But across the boundary in Eastern Canada where the largesse of agricultural policy is more evenly distributed, there is a busy animal agriculture beyond the dairy industry.
3. To the further detriment of Maine and the Northeast, the Federal government has for years been subsidizing and building with Northeast tax dollars, among others, tremendously expanded and essentially free waterways and barge routes to take the subsidized feed grains of the Mid-West to the "pork barreling" interests of the South to develop animal industries that once thrived in the Northeast. . . And the Federal hand in Western railroad building and rates over the years is well known.
4. Further debilitating and discouraging to regions not favored by price supported crops or by government developed and sustained irrigation projects or, worse-, by a combination of both, is the tendency for all agricultural production to gravitate toward these areas where a large part of normal price and/or weather risk has been removed by Federal government support activity. And again, tax money from the area being devastated is used, in part, to so remove the risk in the favored area. Thus, Maine's once thriving sweet corn industry has gone as has most of its other vegetable growing and processing except "perhaps" for potatoes. Potatoes are a non-supported crop -- yet an increasing percentage of the total United States crop (potatoes) is being grown in areas and on farms where normal price and weather risks on other crops have been largely removed by Federal activity. Thus, non-supported potatoes can be grown under such circumstances with relatively great disregard for the risk factors which, for example, Maine producers must endure. I believe it is an "economic sin" for a farmer who is guaranteed a basic living from a supported crop to be allowed to grow and sell a non-supported crop. This obvious economic immorality should finally receive proper consideration in a review of agriculture policy.
5. Although it is not specifically indicated that international trade will be part of your considerations, it will surely have to be. . . At present, there is

nothing more debilitating and preventive of proper economic activity in the United States, the Northeast, and Maine than the present United States International Trade Policy under GATT. It is ill-based, out of date, out-moded, poorly administered, terribly clumsy, and expensive in the extreme to small business to gain proper treatment or even consideration. As a result, it has not taken American businesses and entrepreneurs long to learn that:

- a. The United States economy is the "target economy and target market" of the rest of the world.
- b. The United States dollar is the "target currency" of the rest of the world.
- c. There is always a source of cheaper labor (cheap in the extreme) outside United States borders.
- d. There is practically always less taxation on production outside the United States economy. A greater proportion of taxation among some of our strongest competitors is on consumption.
- e. Export subsidies are widely used outside the United States economy.
- f. Currency exchange rates are widely manipulated by other governments to the disadvantage, in trade, of the United States dollar.
- g. Production subsidies in many forms both obvious and obscure are widely used in other countries.
- h. "Dumping" as defined in international trade language is widely practiced by countries exporting to the United States.
- i. "Border industry and agriculture" in the United States is particularly susceptible to foreign market penetration maneuvers and need quotas and "trigger mechanisms" to keep such activity fair and "above board".
- j. The reliability and profitability of the export market for United States agricultural commodities is largely a government and U.S.D.A. sponsored myth.
- k. The first thing any nation, developing or otherwise, is going to do if at all possible is to feed itself.

1. The United States, unless policy changes, will continue to squander billions of dollars promoting, entering, financing losing in failed or forgiven payments, losing by generating false market signals, - for the promised theoretical export markets that in the main and by obvious logic never develop on a proper basis on agricultural products.

5. Under the above-observable facts concerning United States international trade policy, it is not surprising that United States auto makers, steel makers, woods products industry, fisherman, textile and clothing manufacturers, shoe manufacturers, upstate New York vegetable growers, Maine potato farmers, and a host of other businesses consider that further investment, extra effort, more risk taking and entrepreneurship within United States boundaries under present United States international trade policies is non-rewarding. Worse, many of them are taking their investment money, energy, and jobs overseas in one way or another to produce for the United States market while we carry in real figures probably 12 million unemployed.

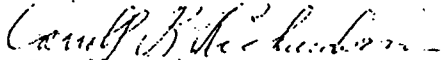
So as you and the Committee pursue the important work of formulating "The Next Generation of Farm Policy", I naturally hope that full consideration will be given to the tremendous shortcomings and horrendous regional imbalances and favoritism of the past 50 years. I would judge that the Northeast region would do better in the next 50 years if all government subsidy programs were ceased and proper controls on imports were instituted and made quickly workable and responsive. . . And I think the entire Country would be better off also in the mid and long term under such a policy. Thinking that this is probably not going to happen, - then I urge that full consideration be given to the "gravitational effect" of each subsidy item of agricultural policy. By this, again, is meant the tendency for all agricultural production to "gravitate" toward those areas where large or all shares of normal risk or production such as, price or weather factors have been mostly removed by federal government activity, support or sponsorship on a few important selected crops. . . I urge further consideration of the economic immorality of a producer of supported crops (by price, irrigation, or other factors) being allowed to produce and sell non-supported crops. I urge that disruptive credit policies be abandoned. . . New agricultural policy should bear in mind the increasing production of surplus farm products in Canada, Western Europe, and some other countries. The surpluses are mounting!

This whole matter is very pressing and personal to me. I have a 24 year old son who wants very much to enter the potato growing business in Northern Maine. He has the experience, desire,

energy, and determination, and can probably secure some financial backing. But what are his prospects in view of present federal agricultural, water and irrigation, credit, and international trade policies?? With some slight variations, this is the malaise of the entire United States economy. . . It is from this point of view that "The Next Generation of Farm Policy" should be developed.

Thank you for your attention. No response to this letter is required. I wish you and the Committee well in your deliberations.

Yours truly,



Carroll B. Richardson

RFD# 1 Box 255

Presque Isle, Maine 04769

Alton Tibbetts
RFD #1 Box 3580
Solon, ME 04979

October 8, 1983

Administrative Assistant
Joint Economic Commission

Dear Sir

I have been invited to submit my views and concerns on farm policy that may help in formulating future farm legislation, particularly the 1985 farm bill. I have spoken with a number of farmers in my area and they all share my views on the subject.

First of all, we will never have a farm bill that will help agriculture, in this country, as long as Congress feels that farmers must be punished for overproduction. We are the only nation that does this.

Congress should view farm surpluses as what they are. A very valuable natural resource and develop a program for utilizing them.

This can be done in a number of ways. Dairy products should be exchanged for raw materials and minerals, i.e. oil with the foreign countries. Grain should be converted into alcohol to heat government office buildings, schools, etc. The by-product (brewers grain) could be sold back to cattle, poultry, and hog farmers as a valuable food source, or sold to underdeveloped third world countries for livestock feed as they cannot afford our grain.

In plain English, why can't farm surpluses be turned into cash instead of just rotting in warehouses. We will never have a thriving agriculture until farmers can produce to their full capacity and have a viable means for turning the surplus into cash year after year. We have had eighty years of stopgap measures that do not work, like the P.I.K. program. We need

long term solutions and farmers need to feel free to produce without being strangled with surpluses, as they have in the past. Then we can have a strong agriculture and a strong Nation. We will have neither with Congress' present outlook toward farm surpluses. For every farmer that is forced out of business, twenty others lose their jobs as a result. That is a thought that might be worth remembering.

Sincerely yours

A handwritten signature in cursive script that reads "Alton Tibbetts".

A very concerned farmer
Alton Tibbetts



New England Congressional Caucus

53 D STREET, S.E. WASHINGTON, D.C. 20003. TEL (202) 543-3396/3357

February 4, 1982

CO-CHAIRMEN

Edward P. Boland
Sévio O. Conte

TREASURER

Stewart B. McKinney

MEMBERS

Connecticut
Barbara B. Kennedy
Sam Gepsonson
Bruce A. Morrison
Stewart B. McKinney
William R. Reichford
Nancy L. Johnson

Maine

John R. McKernan, Jr.
Olympia J. Snowe

Massachusetts

Sévio O. Conte
Edward P. Boland
Joseph D. Early
Barney Frank
James M. Shannon
Nicholas Mavroules
Edward J. Markey
Thomas P. O'Neill, Jr.
Joe Moakley
Brian J. Donnelly
Gerry E. Studds

New Hampshire

Norman E. D'Amours
Judith Gering

Rhode Island

Fernand J. St. Germain
Claudine Schneider

Vermont

James M. Jeffords

EXECUTIVE DIRECTOR

H. Bailey Spencer

MEMORANDUM

TO: New England Congressional Caucus
FROM: Bailey Spencer
SUBJECT: Food Supply and Agriculture in New England

The attached memo by Susan Rochford of the Caucus and the New England Congressional Institute covers a new issue for both organizations. Yet it is an issue which is rapidly gaining attention both nationally and regionally.

New England's 80-90% dependence on food imports and the potential impacts of water shortages, topsoil erosion, energy supply and costs and numerous other factors on the region's food supply are issues that are only beginning to emerge. The first suggestion that the Institute should work in this area came at the meeting last year of the Institute's Regional Board of Advisors where it was raised as an issue that over the next 5 to 10 years would become a major one.

Based on this discussion and after further research, the Institute decided to review the entire issue of the region's food supply, the state of agriculture in New England and provide a general description of what is going on in the region to preserve and strengthen agriculture.

The results of this research are presented in Susan's memo. Much of what she discovered is dramatic.

- New England is 80-90% dependent on outside sources for food.
- There is only a two week supply of food in New England at any given time.
- For every \$2 spent to grow food in the United States, another \$1 is spent to move it.
- New England consumers pay an average of 6-10% more for their food than do those in any other region.

The Institute has not yet decided whether this issue will or will not lead to the development of a full project. Susan would appreciate hearing your offices responses.



New England Congressional Caucus

53 D STREET, S.E., WASHINGTON, D.C. 20003. TEL. (202) 543-3396/3397

CO-CHAIRMEN

Edward P. Boland
Silvio O. Conte

TREASURER

Stewart B. McKinney

MEMBERS

Connecticut

Barbara B. Kennelly
Sam Gejdenson
Bruce A. Morrison
Stewart B. McKinney
William R. Ratchford
Nancy L. Johnson

Maine

John R. McKernan, Jr.
Olympia J. Snowe

Massachusetts

Silvio O. Conte
Edward P. Boland
Joseph D. Early
Barney Frank
James M. Shannon
Nicholas Mavroules
Edward J. Marley
Thomas P. O'Neill, Jr.
Joe Moakley
Brian J. Donnelly
Gerry E. Studds

New Hampshire

Norman E. D'Amours
Judd Gregg

Rhode Island

Fernand J. St Germain
Claudine Schneider

Vermont

James M. Jeffords

EXECUTIVE DIRECTOR

H. Bailey Spencer

January 29, 1982

MEMORANDUM

FROM: Susan Rochford
SUBJECT: Food Supply and Agriculture in New England

American agriculture has undergone a major transition since World War II. Once characterized by almost seven million diversified family farms, the introduction of advanced technology and the effects of federal policy have fostered a change to a system of significantly fewer, larger scale, and capital-intensive farms. U.S. agriculture has become "agribusiness."

The consolidation of agriculture has afforded the U.S. many benefits including high productivity and frequent surpluses. At the same time, agribusiness faces serious environmental and economic challenges. Soil erosion, water shortages, loss of prime farmland, inflated capital costs (interest rates and labor), heavy reliance on uncertain energy supplies and ever-increasing transportation costs, all undermine the future stability of the present agricultural system.

New England is heavily dependent on this system and is vulnerable to any disruptions it may experience. The extent of the region's dependence is revealed by the following:

- New England is 80-90% dependent on outside sources for food.
- 50 years ago we provided 70% of our own food.
- There is only a two-week supply of food in New England at any given time and this limited supply is totally dependent on steady, reliable transportation from the South, West, and foreign countries.

- For every \$2 spent to grow food in the United States, another \$1 is spent to move it.
- Food travels an average of 1300 miles from producer to consumer, sometimes taking an average of two weeks to reach its destination.
- New England consumers pay an average of 6-10% more for their food than do those in any other region of the continental United States.

This memo reviews the state of agriculture in the United States and New England; the implications of New England's dependency and vulnerability; and the recent initiatives by organizations and institutions in the region to address the issue of self-sufficiency.

PROFILE OF US AGRICULTURE

Over the past fifty-five years, the structure of American agriculture has been profoundly altered. New technology and federal policies have encouraged farm consolidation and emphasized food exports. The pre-World War II American agriculture sector, containing nearly 7 million small-scale, widely distributed and largely family-owned farms, has been dramatically transformed.

Agriculture in the U.S. has become "agribusiness." Farm operations are predominantly large-scale, often single-crop, and employ sophisticated technologies which facilitate intensive production. The following statistics aptly portray the current status of American agriculture:

- In the past five decades the number of farms has declined by 75%.
- 1% of farmland owners control 30% of the farmland.
- In 1978, 187,000 of the largest farms controlled 56% of all farm output.
- 49 firms account for 68% of all food processing and 44 companies control three-fourths of all wholesale and retail revenues.

Many regard this concentration of agriculture as highly favorable. The gains in productivity and efficiency achieved by agribusiness have afforded the United States many benefits, including ample domestic food supplies, a significantly improved balance of payments and a major source of foreign aid and influence. Agribusiness has enabled the United States to become the world's leading supplier of food and grain.

Amid these successes, however, is a growing awareness of a number of significant environmental and economic problems. Soil erosion, water supply, competition for land, inflated capital costs, energy and transportation costs all challenge the future of agribusiness. With the nation's food supply at stake, it is critical that these problems are fully understood and that appropriate action is taken. Given New England's 90% dependence on food imports, our region's vulnerability to these challenges is considerable.

FUTURE CHALLENGES

Soil Erosion

To achieve such high levels of productivity and to maintain profits, agribusiness frequently employs intensive planting methods such as single crop or row planting. These methods are usually accompanied by heavy doses of chemical fertilizers and pesticides. The application of these methods, combined with wind and rain, has resulted in severe nutrient depletion and erosion of valuable topsoil. In the past twelve months alone, the Soil Conservation Service estimates the loss of topsoil at 6.4 billion tons. The condition has been aggravated by farmers abandoning traditional conservation practices such as rotating, terracing and contour plowing of their crops.

Water Supply

The nation's water supply is a crucial factor in food supply forecasts. Some of our most fertile lands depend heavily on irrigation. According to the "Cornucopia Project", a recent study sponsored by Rodale Press, the Ogallala aquifer, the world's largest underground fresh water reservoir - from which at least 150,000 irrigation wells are tapped - will be depleted in 20 years at the current growth rate of irrigation farming. This diminishing water supply, recurring water shortages, and predictions of drought, have raised many questions regarding the use of this limited resource.

Land Use Competition

The nation's farmland [and rural water supply] is the object of intense competition between residential, commercial and industrial developers. Recent concern over the loss of farmland was great enough to prompt the USDA and the President's Council on Environmental Quality to sponsor the National Agriculture Lands Study, a comprehensive survey and analysis of U.S. agricultural land issues. The study determined that over the past few decades, agricultural land has been converted to non-agricultural uses at a rate of about 3 million acres a year.

"This land has been paved over, built on, or permanently flooded...for practical purposes, the loss of this resource is irreversible."

Initially, there was little concern over the conversion of farmland because research and technology has continuously afforded farmers higher productivity rates. In fact, over the past few decades the amount of land actually cultivated in the U.S. has not changed significantly. However, recent productivity forecasts reflecting water shortages, soil erosion and a steadily increasing food demand, have raised many questions about the nation's future farmland needs.

Inflation

Farmers, no less than consumers, have been hit by inflation. Prices have climbed steadily for farmland, labor, seed, fertilizer and pesticides. Fuel prices have skyrocketed. To meet these rising costs of production, and to keep up with rapid technological innovations, farmers are frequently forced to the credit markets. According to the Cornucopia Project, interest rates have contributed to a current farm debt of \$160 billion.

Energy

The present agricultural system is energy-intensive. The system consumes about 16.5% of the total energy used in the United States, of which petroleum is the major source. Farmers rely heavily on petroleum-based inputs for fertilizer, herbicides, and insecticides. Fuel is required for farm machinery, irrigation operations, processing and transportation of food. For these reasons the agricultural system is particularly sensitive to any energy supply disruptions or any energy price increases.

A recent Department of Energy study determined that an energy shortage or reduction of 10% would lead to an increase of 55% in raw commodity prices alone. Additional price increases would undoubtedly

be passed along in the remaining stages of food production and distribution.

Transportation

Agribusiness is heavily dependent on transportation for the distribution of farm products throughout the entire nation and is therefore vulnerable to any disruption. Quarantines on food transports (medfly infestations), major trucking or rail strikes, oil embargoes, or even sabotage could effectively cripple the supply/distribution of food in the country.

The U.S. agricultural system provides the nation with an abundant, continuous, and relatively inexpensive supply of food. However, if the problems outlined above develop into serious threats, the potential for supply interruptions and rapid price escalation would increase significantly. Being 80-90% dependent on this system for its food, New England would be severely affected.

Faced with this challenge, New England can respond in several ways. On a national level, New England can support efforts to address the problems of U.S. agriculture. An uncertain future for agribusiness translates to an uncertain food supply for New England.

On a regional level, there is much that New England can (and is already beginning to) do to help itself. While total regional self-sufficiency is not a practical or realistic goal, opportunities to reduce New England's vulnerability do exist. A review of agriculture in New England and an examination of current trends and activities in the region demonstrate these opportunities.

AGRICULTURE IN NEW ENGLAND

Although never entirely self-sufficient, it was only forty-five years ago that New England farms fulfilled almost three-fourths of the region's food needs. In 1935, New England had 150,000 farms; in 1974, only 23,270 remained. Only 1% of the nation's farmland lies in New England and most of these farms are small. Due to generally hilly terrain and rocky soil, New England is not well suited to large agribusiness type crops.

The decline of farming in New England may be attributed mainly to economics. The region's small farms could not compete with the efficiency of agribusiness, and it became less expensive to import our food than to produce and distribute it locally. Poultry, eggs, potatoes and dairy farms, traditionally the most successful agricultural businesses in the region, have suffered from outside competition and have found it increasingly difficult to invest in expensive new technology adopted by the rest of the industry. Land development pressures have also been particularly severe as New England's limited agricultural land base, being cleared, flat and well-drained, is attractive to local developers. The competition for land has been keen.

- 11,690,000 acres of prime farmland in New England have already been abandoned or converted.
- Unless there is a reversal in twenty years, there will be no prime farmland left in Rhode Island or New Hampshire. Prime farmland will decrease by 70% in Connecticut, 51% in Massachusetts, 43% in Vermont, and 10% in Maine.

TRENDS IN NEW ENGLAND AGRICULTURE

Despite the decline of farming and its relatively small role in the region's economy, agriculture in New England is still a \$1.5 billion business. In addition, several changes have occurred in New England agriculture since 1974, when the number of farms in the region fell to an all-time low. Based upon data from the 1974 and 1978 Census:

- The number of farms in New England is up an average of 32% since 1974.
- The number of smaller farms (under 50 acres) is up 74%.
- The size of smaller farms has decreased an average of 15%.
- Although conclusive data is not available, a trend towards part-time farming has been identified.
- Traditional industries such as poultry, eggs and dairy are on the decline, but there has been a considerable increase in truck farming of diversified produce and considerable growth in non-traditional livestock production. For example, there is a major sheep-raising experiment being conducted in Vermont.

These statistics reflect a veritable revival of small-scale farming. The increase in small farms and part-time farming may be associated with several trends. On one hand, many people are abandoning full-time employment in order to pursue farming on the side. On the other hand, many full-time farmers have been forced to desert full-time farming in order to supplement a flagging farm income. In addition, a number of new farmers have been motivated by a "back to the soil" spirit and a desire for self-sufficiency.

MAJOR CHALLENGES FACING NEW ENGLAND AGRICULTURE

Despite renewed interest in farming, New England agriculture faces major challenges: limited availability of farm land, inadequate processing and marketing systems, difficult market access, farm credit, labor shortages, research and education needs, and transportation needs.

As explained above, there is a considerable pressure on the diminishing New England agricultural land base. This fact is complicated by certain state tax codes which tax the sale or inheritance of farm land at the potential development value rather than at the present use value.

Food processing and marketing industries are underdeveloped in New England. These sectors of the agricultural system have been largely ignored in our region as the amount produced locally has not merited the establishment of such facilities. Only the largest agricultural businesses, such as dairy and cranberries, have local processing plants. Therefore, many small farms are far from the major distribution centers and have to route their products to central locations such as Boston.

Small-scale growers also have difficulty in gaining access to markets. Frequently the producer is unaware or isolated from receptive markets or the consumer is unaware that locally grown products

are available. Production is also inhibited by an extremely limited storage capacity, currently providing for only a two-week supply in the event of a sudden storm or temporary disruption.

Obtaining reasonable and adequate credit has also been a major challenge for all farm operations in recent years. The specific credit needs and demands of small farms has not been widely addressed at either the federal or local level.

An inadequate labor supply is another serious problem for New England farmers - particularly at harvest time. The current farm population is relatively low and includes a significant portion of part-time farmers who are unable to devote all of their time to farm operations. Consequently, farmers must often rely on an uncertain and sometimes illegal supply of migrant, foreign or teenage labor.

Research and education are vital to a prosperous agriculture sector in New England. Agricultural research in the United States has centered on "Green Revolution", large-scale farming technology. Much has yet to be learned about small-scale techniques: the appropriate crops, range of diversification, and energy components.

Education concerning New England agriculture should also expand to the consumer. The importance of a prosperous agricultural sector to regional economic health is not widely recognized by New England residents. Information regarding what products are available and where to obtain them is sporadic and limited.

Finally, food is transported into and throughout the region by either truck or rail. Both industries are currently undergoing difficult regional and national transitions and have experienced financial complications.

CURRENT NEW ENGLAND ACTIVITIES

The response to the challenges facing New England have been impressive. Most major issues have been addressed at one or more levels in the region. State legislatures, state agricultural departments and cooperative extension services, and independent organizations have been active. In addition, several conferences and publications have been very constructive in drawing appropriate attention to the small farm issues.

State legislatures have affected improvements primarily through changes in the tax code and farmland preservation legislation. All six New England states have already enacted some form of preservation legislation.

State agricultural departments serve in a variety of capacities. Marketing activities, for example, include arranging for local products to be distributed directly to state institutions. Agricultural promotion has included "logo" campaigns which distinguish locally grown products from those imported from outside the state or region. Overall state agricultural departments are responsible for the formation and implementation of the state's agricultural policy.

State cooperative extension services perform services complementary to the agricultural departments through their research and the dissemination and application of their knowledge for all interested

parties. Certain state extension services have also assumed less typical duties. For example, the University of Massachusetts Cooperative Extension Service has initiated a mobile market project and the University of Rhode Island has established a task force providing on-site assistance to farms throughout the state.

Although state institutions have played a substantial role in the revival of small and part-time farming in New England, much credit should also be given to the efforts of many grassroots organizations which have formed throughout the region in the past five years or so. For example, the farmland preservation movement in Massachusetts has been propelled by the Massachusetts Farmland and Conservation Trust. The development of a marketing network has been pursued by several independent organizations both regionally - New England Food Cooperative Federation and Warehouse - and statewide - Maine Consortium for Food Reliance and Massachusetts Food Action Coalition. These efforts have been supplemented by the publication of lists and directories to Farmer's Markets, "pick-your-own" operations and locations of local truck farmer stops.

Small-scale farming technologies, another aspect of agricultural research - but one which has received limited attention from the extension services - have been studied by several organizations in the region. Among the more prominent organizations are: The Coolidge Center for the Advancement of Agriculture; Small Farm, Tri-State; and the New England Small Farm Institute. The Institute, in addition to providing technical and "hands-on" training, has consponsored with several federal agencies, the New England Small Farmer Project. The Project serves as a support organization for other small farm organizations through the means of political action, media campaigns, financing and issue research. To a limited degree, the Project has studied the credit needs of small farmers. Another innovative organization, The New Alchemy Institute, is noted for its successful experiments with aquaculture and renewable energy.

Many more organizations, publications and conferences have addressed a broad range of agricultural policy questions. Each reflects a genuine concern for the food supply and vulnerability questions facing New England.

THE FEDERAL ROLE

Although the states have both independently and cooperatively pursued the revival of farming in New England, the role of the federal government has been very limited. Federal policies have focused primarily on Western and Midwestern food production, providing commodity price supports and sponsoring research favoring the large agribusiness-type operations. Federal farm payments are dispersed according to farm size - the largest third of all farms receiving 80% of all farm program payments. With such a small percentage of large farms, New England derives minimal benefits from these policies.

Federal economic development programs have concentrated on urban development, in some cases actually encouraging competition for scarce natural resources, i.e. land and water being diverted from agricultural uses for residential and industrial development.

In 1981, Congress passed two major pieces of legislation which will have some bearing upon the future of small, family farms. Title XIV of the 1981 Farm Bill includes measures to protect prime farmland. The Economic Recovery Act of 1981 provided for a graduated

reduction in gift and estate taxes which will allow more family farms to survive generational transitions. Beyond this, little more has been enacted which addresses the needs of America's small family farms.

The present agricultural system, although having many successes to its credit, faces serious challenges in the decades ahead. New England, being overwhelmingly dependent upon this system for its food supply, must share the concerns of agribusiness and monitor policies which affect its future. At the same time, New England should pursue available alternatives. Although total regional self-sufficiency is not a realistic goal, the development of New England's agricultural sector could alleviate our dependency considerably.

NEW ENGLAND GRAIN AND FEED COUNCIL

PHONE 207 - 622 - 3940

POST OFFICE BOX G, AUGUSTA, MAINE 04330

October 14, 1983

Statement of the New England Grain and Feed Council

before the

Regional Field Hearing

"Toward the Next Generation of Farm Policy"

conducted in

Bangor, Maine by the

Joint Economic Committee,

Congress of the United States

Prepared and Submitted by
William Bell, Executive
Director, in accordance with
vote of the Directors,
September 29, 1983

1. U.S. livestock producers must obtain prices for their products which offset feed and grain price increases as stimulated through the PIK program. The U.S. government must therefore work towards increased consumption of these livestock products, particularly eggs and broilers, through export assistance and commodity purchase programs.

2. The Staggers Rail deregulation Act must be interpreted and, if necessary, revised towards the goal of providing not only of strong rail systems serving New England, but also competing rail systems.

In addition, the ICC must be maintained and strengthened as an institution providing for prompt redress of grievances between shippers and carriers.

3. There must be greater consistency and national coordination in federal farm lending policies.

4. The residual authority of the U.S. government-- in this instance the U.S. Trade Representative-- to negotiate duties under Section 124 of the Trade Act of 1974 should be extended. In 1981, Rep. Gibbons introduced H.R. 4761, which would have provided this necessary extension; however, no action was taken. Extension of this authority would make possible the reduction of U.S. tariffs on Canadian feed ingredients, if so negotiated, enabling U.S. feed manufacturers to better compete with Canadians in offering dairy and poultry feeds at the lowest possible cost to U.S. farmers.

Statement of Richard R. Wood, Jr.
Dairy Director for Maine
National Farmers Organization
Before Joint Economic Subcommittee on Agriculture
and Transportation

Mr. Chairman, Vice-Chairperson Snowe, and committee members.

The National Farmers Organization is grateful for the opportunity to share with you in your deliberations, as you look "Toward the Next Generation of Farm Policy."

The National Farmers Organization is a nationwide farmer owned and operated organization of family farmers and ranchers who produce and market a wide spectrum of farm products. The main thrust of our efforts is in uniting production of various commodities into large enough blocks that we can effectively enhance farm prices through collective bargaining, as we constantly strive for the cost of production plus a reasonable profit.

It is important that all commodities achieve balanced benefits in the marketplace. We have seen how low grain prices, which temporarily benefit dairy farmers, soon result in build-ups of dairy supplies, as grain farmers, seeking income, acquire cows to utilize facilities from which the cows had disappeared fifteen or twenty years ago. It is equally important that we are nationwide, as an area of soft farm prices inevitably is used to weaken prices in an area where they have been improved.

As you look toward the next generation of farm policy, you as legislators may be asking yourselves, "Do we want improved farm prices? Aren't they inflationary? Don't they threaten the policy of low food prices that helps to keep us popular with our

constituents? Won't they cause more surpluses, with the attendant burden on the taxpayers for storing same?"

Let me take those questions one at a time.

Yes, you certainly do want enhanced farm prices. In 1952, when we abandoned parity, we had 5.7 million full time family farms with a debt load of 9.5 billion dollars. Today, after more than thirty years of incredible strides in increased efficiency, we are down to about 1.3 million commercial farms and a roughly equal number of part-time operations. The reward these people have for feeding this nation and a lot of others around the world is a debt load of 250 billion dollars. The debt is so pervasive that our entire agricultural infrastructure is in serious danger. Also, we see commercial family farms increasingly being absorbed into investor-owned tax loss operations.

Mark Kramer's good book, Three Farms, published about six years ago, gives you a very readable insight into this situation.

Another aspect of low farm prices is that they encourage overproduction and questionable land use practices by farmers in a desperate attempt to generate enough income to meet the commitments of their indebtedness and skyrocketing costs of operation.

Now let's look at the other side of this question.

If farmers and ranchers were to get something nearer to parity, were in fact to get the cost of production plus a reasonable profit, they wouldn't just put the increased income under the mattress. They'd put it to work. First they'd pay up all their accounts due (and past due), giving a great lift to the businesses they deal with. They would repair and up-grade their facilities, they would up-grade their machinery and equipment,

they would increase their deposits in local banks, making more money available at lower interest for investment in their neighborhoods. They might even spend a little on themselves and put their kids through college without grants-in-aid and scholarships. Their towns wouldn't even have to borrow pending the collection of late taxes. The mind boggles at the economic implications of increased farm income.

The State of Wisconsin each year puts out a summary of farm receipts, county by county, and for the state as a whole. A parallel column shows what those receipts would be at parity, and a third column shows the difference. In 1982 that difference between earnings and what they should have been, at parity, was in excess of 3.2 billion dollars.

The economists are all agreed that a farm dollar turns over at least seven times in the national economy in a year. Thus our nation's economy was denied more than 22 billion dollars because of low farm prices in Wisconsin alone. Now we all will allow that Wisconsin is a major agricultural state, but it's only one of fifty. Think of the people we as a nation would put back to work if farmers all across the nation received parity, or even something nearer to parity than they now get. Think of the increased taxable income and increased income tax returns. Think of the reduced costs for welfare and social programs. It's the kind of stuff of which balanced federal budgets are made, not to mention national well-being.

Wouldn't this be inflationary? Not only would there be more money on deposit in banks and available for loans. There would be much less need for the government to borrow to meet budget deficits. This would work to keep business brisk, but would

slow down inflationary pressure caused by high interest rates.

Wouldn't increased farm prices threaten the low food prices of which our politicians are so proud? Not really. Earl Butz, who was no hero of mine, did do his homework and showed that if the farm gate prices of all the items in "the Market Basket" that the Bureau of Labor Statistics writes about each month was raised by 33-1/3%, and all the others who handle it between the farmer and the consumer kept the same mark-up in cents per unit that they currently get, the increase in price to the consumer would be 1%. I started to relate that tidbit to a Bowdoin College Economics professor once, and he said, "Wait. Let me figure it." He applied his formula and came up with 2%. In any event, the increase would be minuscule compared to the benefits in increased employment.

Won't higher farm prices lead to a build-up of surpluses, with the attendant burdens on government and taxpayers alike? I acknowledge that better prices will encourage some to expand their operations. By far the greater number, however, have expanded because they've been driven to it by shrinking incomes and rising costs. With debt the factor that it is in most farmers' lives, and costs rising astronomically,* most farmers have little choice but to increase production. I invite any of you to travel with me and see how dairymen are responding to the federal government's \$1.00 per cwt deduction.

We've established that farmers need improved prices. I'm

*When we left parity in 1952, a dairy farmer could cull cut three big Holstein cows, and with the proceeds buy a John Deere B or Farmall H tractor, and around here B's and H's did most of the farm work. Last summer a friend had to pay the proceeds of two big Holstein cull cows to get the power-take-off shaft on his field chopper repaired.

not convinced that we want the government to provide those prices. It is far better for the farmers themselves to block their production and earn improved prices which they can enforce under the umbrella of the Capper-Volstead Act than for the government to set farm prices.

It is important, however, that when farmers are successful in achieving better prices, the government not use the weight of its rhetoric (as John Block recently did to cool down the grain market), the dumping of commodities, or the increasing of imports to break the farmers' prices. The government will have to sell from time to time, but it should not do so in a manner calculated to drive down domestic farm prices. Likewise, it will continue to import agricultural products, but it should not suddenly and greatly increase imports to break a rising market for domestic producers.

Enough of generalities. I will leave further comments on the tailoring of farm programs in general to those far more qualified than I am. I would like to share a few comments on the dairy program.

The U. S. Government's dairy program was designed to absorb spring flush milk and then tease it out into the market when supplies were short in the fall and winter. It functioned quite well at this for a good many years. Of late, however, it has become perverted. I should like to mention a few of these perversions and suggest preventive adjustments.

Traditionally the dairy industry acquired a spring flush milk at significant price reduction, processed it, paid the storage fees and interest, and made a profit selling butter and powder on

a short market in the fall, and cheese which had increased in value as it aged. In 1981, however, the prime rate was around 20% or 21% during spring flush. Somebody who had gotten through at least fourth grade figured that rather than pay that interest plus the storage costs, they'd sell it to the government, get paid for storing it, and buy it back for only 8% interest, when they needed it. Can you blame them? The only problem was that, in the minds of politicians and taxpayers, what should be thought of as "inventory" became "surplus."

The obvious remedy for this abuse is for the government to make the dairy industry buy back its product at a charge equal to what it would cost them in commercial circles. Then, if government provides the service the taxpayer isn't victimized, and more likely, the industry will go back to using commercial storage and finance, as it should.

Casein, a phosphoprotein that is a chief constituent of milk and the basis of cheese, is used in vast amounts in the American food industry. It is imported mostly from New Zealand and Australia, also from other sources. Though it is a milk product, it is not included under the dairy import quotas. It enters our borders as an industrial chemical, and as such competes ruthlessly with our own milk in all sorts of foods and artificial dairy products.

It would seem legitimate for that portion of casein that is imported for food purposes to either enter the country under dairy quotas, or for it to pay the \$1.00 per cwt of milk equivalent federal deduction to help pay the storage on American milk it displaces.

We are convinced that nobody really knows how much dairy product is stored by the federal government. It is known what the government is paying for storage costs, and it's a lot. There are invoices and computer entries that tell us how many pounds or tons of this and that are in storage, but is it there? If it is, fine! We'll go from there. But if it isn't, why should the farmers be paying for storing it.

We've already learned that a lot less grain was actually in storage than the government was paying for. If the whole story comes out it will be a major embarrassment to the Administration and the Department of Agriculture. It is being said that they have to wait for the new crop to have grain enough to meet the P-I-K commitments. Is it likely to be any different with dairy products?

It seems a sound principle that, before the Administration penalizes the producers for storing excessive amounts of a commodity, the General Accounting Office should actually inventory it, not just look at print-outs and invoices.

If the government is ever serious about needing to reduce milk supplies, it had better learn an obvious lesson (though it's easy to speculate that it doesn't really want reduced production, but rather wishes to stimulate more production in the interest of its cheap food policy). That lesson is that low prices stimulate increased production to a greater extent than they encourage reduced production. Furthermore, eliminating farmers doesn't reduce production. The survivors merely assume larger debt loads to buy out the fallen, and are forced to produce more to keep their cash flow positive. Fewer cows reduces pro-

duction. An indemnity on cull dairy cows of so much per head over the market price, combined with an orderly marketing effort such as NFO's cull cow program, is the quickest, cheapest, and most effective way to reduce milk supplies. Dairy beef prices have been manipulated to unrealistic lows for the last two years, and due to the drought south of U.S. Route 80, have taken a turn for still worse recently. Every farmer I visit says, "I've got five or six that I ought to cull, but they won't bring anything so I'm still milking them. I've got to have the money." And it's funny how often cows like that have heifer calves to continue the problem.

Too often sales to the Commodity Credit Corporation are made for less than noble reasons, and some of the larger dairy cooperatives are the worst offenders. In an effort to control supply, a coop will take on more and more members and blithely sell their production to the government. Why not? All dairy farmers across the country are shelling out \$1.00 per cwt to foot the bill. Yet if some of that milk is needed in the market, the coop charges potential buyers \$1.75 per cwt over Class I for the milk. Thus a coop uses the government purchases to underwrite its bid for monopoly control of a region's dairy industry.

It is tempting to offer a lowered support price as the answer to this problem, on the grounds that if the support is lower than the M & W* series, that will stop sales to the govern-

*Definition: M & W series. This is the average of the prices paid by a random sampling of 1/3 of all the manufacturing milk plants in Minnesota and Wisconsin (the center of milk production in the U.S.). These prices are collected and averaged in the month following that in which they are paid. With the addition of various amounts for transportation to the different regions, that average becomes the basis for the Class I price in each Federal Milk Marketing Order around the nation. For example, the M & W

ment. The flaw with this reasoning is that there is a two-month time lag between monitoring the sales that make up the M & W series and calculating and establishing the price based on those sales. Thus there would be two months in which the rhetoric of reduced supports could, and would, be used to manipulate the M & W series lower still. It would be very easy to end up with the same relationship between the M & W price and the support price as before, only at a still lower level. This would be disastrous.

The National Farmers Organization is currently involved in a friendly challenge with other dairy organizations to stair-step the M & W to a level high enough to discourage improper sales to the government. This may be the best hope for all of us. I pray the Administration will not interfere with rhetoric, dumping, or a new surge of imports to break the back of this effort. To do so would be nothing short of evil.

It is far too easy for the government to be a whole series of profit centers for those who manufacture cheese, powder, etc, without any added benefit for their milk producing farmers. It works like this. A plant operator will buy milk and process it into powdered milk. He sells it to the government for 94¢ a pound. Because of the difference between the M & W and the support price this assures a profit, but needs no sales force, no credit department, or no advertising expense. He gets paid to truck it to storage. Often he'll just pick it up on his fork lift and run it across the yard into the warehouse he built for storing

(footnote continued) price plus approximately \$2.35 is the Class I price for Federal Order 1, the Boston Order.

government supplies of dairy products. He gets paid for storing it. When the allotted time goes by, the powder goes out of date. He then buys it back for just over half of what he paid for it. Next he takes 3 pounds of whole milk powder, 1 pound of skim milk powder, adds 96 pounds of water, and makes 11-1/2 pounds of Mozzarella Cheese which he can sell in the marketplace for \$1.59 a pound. I don't blame the plant operator. He's just doing his duty by his stockholders. But it's not the way the dairy program was intended to be used, and it doesn't help the farmers a bit. In fact it hurts them, because they're being charged \$1.00 per cwt of all the milk they produce to finance this situation.

Two things will help improve this picture. An increase in the farm gate price of manufacturing milk earned, and locked in, by collective bargaining, and until that day arrives, and possibly hastening that day, making those firms who consistently take advantage of Commodity Credit Corporation programs pay a larger share of the cost.

Lastly, I exhort you to do nothing to change, limit, diminish, or do away with the Capper-Volstead Act. It is the Magna Carta of American agriculture. Without it, we are totally at the mercy of politicians, consumers, and especially the big commodity buyers. With it, we can slowly but proudly lift ourselves by our own boot-straps.

Thank you.

STATEMENT OF JOHN M. HUNTER, SPECIALIST IN AGRICULTURAL POLICY,
COOK COLLEGE, RUTGERS UNIVERSITY, NEW BRUNSWICK, N.J.

TOWARD THE NEXT GENERATION OF FARM POLICY 1/

Note: In developing thoughts for this paper I draw upon 30 years of private farm, and public agricultural (land grant) exposure and experience with farm policy from the perspective of an Extension Farm Management and Agricultural Policy Specialist. The views are my own and do not necessarily reflect those of my employer, the USDA or Rutgers University.

Comment on Past Farm Policy

It must be recognized that the past U.S. farm policies have been generally successful. Sometimes expensive but always well intended. In what other major nation is only 13 percent of the consumer expenditure used for food? None. Much gain will be achieved by reaching into the past to guide the future.

Agricultural exports have exceeded agricultural imports for many years. The non-agricultural sector has not enjoyed this favorable balance of trade.

General Philosophy for Future U.S. Farm Policy

U.S. farm policy should be considered in a world setting giving special attention to continued U.S. world agricultural leadership in both an economic and political context. Firm recognition must be given to the ideological differences between the free world, the communist nations, and the uncommitted or straddling "Third World" countries.

With regard to the communist nations the more dependent they are and remain on Western free world agriculture the better. Under these conditions they are the least able to be strong militarily. Sell them agricultural products not high technology.

U.S. agricultural production capacity and technology both should be used positively, consistently and constructively in the world ideological arena to benefit the free world as well as U.S. farmers and ourselves totally as a nation.

Therefore, U.S. policy programs should be directed toward maintaining U.S. production capacity without substantial, if any, underemployment of efficient agricultural resources to meet:

1. Domestic market needs.
2. Cash export markets.
3. Non-cash or soft money selected national recipients with the exclusion of these exports from "free" market supplies. Soft money revenues from recipient nations could be used to support other U.S. efforts in the same country such as economic development and military housekeeping.

1/ Prepared for the Regional Public Field Meeting of the Joint Economic Committee Subcommittee on Agriculture and Transportation, held in Bangor, Maine, October 14, 1983.

Our nation should compete vigorously in farm markets to keep our share of the basic commodity cash agricultural export. If necessary, we should adopt a two-price system where U.S. growers would receive a domestic price and an export price, using subsidies for exports as a device to assure a price to U.S. growers equal to cost of production. The export price should be sufficiently competitive to "clear the market" of a particular export commodity. U.S. exports should be coordinated with but not subordinated to other free world exporting nations of basic commodities.

Planning Horizon

Future farm policy should evolve into a long range consistent framework of a 10 year perspective of objective goals. Shorter term, not less than 5 years, should allow for review evaluation and required redirection. Reviews of a shorter period should only reflect emergency conditions and a long range plan should provide for this necessity under a triggering mechanism for adjustments depending upon the emergency type situation. Sound farm policy should not be a sequence of short term emergency responses to nature forces or political vagaries.

Domestic U.S. Farm Policy

Special Priority Emphasis

- . Avoid an obsolete depressed farm sector.
- . Near maximum farm production capacity on the efficient land.
- . Water - will be a serious limitation and a sound long range does not now exist.
- . Marine food resources should be considered part of the U.S. farm policy.
- . Social programs such as food stamps should be considered outside of farm policy.

Policy must be molded in an administrative framework. Foremost in developing any policy must be an adequate data base. Historically agriculture has done a good job in providing policymakers with data both national and state needed to make intelligent decisions. Recently the data base has eroded. Information in Agricultural Census developed by the Department of Commerce is an example. Other types of information such as those developed by Crop Reporting in the states has weakened in detail. A continuous and comprehensive and reliable reporting is essential. More detail, not less, is desirable.

The national, state and farm allotment or quota system has been a useful mechanism in the past to determine the applicability of policy goals. The future system should at least maintain this concept on a standby basis and be integrated into long term policy programs. Foreign allocations or quotas for export can be similarly developed and integrated into the national domestic quota. This will be particularly helpful in managing export strategy.

Price Supports

Price supports have been a useful tool in the past in farm policy. They are well understood by the farm community and have ready accountability in the market system. Frequently they have been perhaps too high and brought marginal acreage into production, or as in the case of dairy, brought less profitable dairy herds into existence or expanded operation using marginal land and less efficient cows. Support prices should not be so high that it puts the encouraged marginal high cost farms into non-emergency production situations.

Farm quotas have also been a useful tool until they have been in effect for so long without adjustments that their usefulness becomes distorted. Quotas that have been tied to the land have been accumulated by a few and brought criticism into the program. When support payments are based on such a distortion, public cry has been loud that a few were getting wealthy in a program which was not so intended. Quotas developed around a reasonable interpretation of the family production unit might prevent the cumulation of quotas by a few and in so doing support the doctrine of the responsive family farm conducted under efficient productive conditions.

Water Policy

Something should also be said about long range water policy when we discuss farm policy. The East, where water is somewhat abundant and cheaper, has been generally ignored while public funds have been used to overutilized limited water resources of the West, even though sometimes these programs were coupled with an electric generation capacity. As a farm policy, these objectives should be rethought.

Marine Policy

Fishermen have many production circumstances similar to farming. Many small units of production, highly competitive production and marketing, little control of marketing and unmanaged fishery, are some examples. Lack of extension education and applied research puts the American fisherman a generation behind his foreign competitor. A lackluster foreign policy involving our own fishery results in foreign fishermen and imports which compete directly with the landings of our domestic fishermen, as well as destruction of the fishery are evidence of a lack of long range policy. At this date even a short range policy doesn't exist.

Forest and Woodland Resources

Woodlands frequently come under the umbrella of agriculture and should be given some consideration on farm policy. Particularly in the East and even more so in the Northeast, these lands are in a rather low stage of management. What some foresters refer to as the third forest, growth exceeds utilization. In some states in the Northeast, 50 to 75 percent is covered with forest lands. It is doubtful that in proportion to the extent of the resource, management or utilization is adequate. Marketing is disorganized and the many small landowners who own this resource are at a substantial

disadvantage. The possibilities of greater utilization and marketing of this resource should at least be explored as a matter of farm policy. Modeling after the German experience would be useful.

Foreign U.S. Farm Policy

As it's already been noted earlier, agricultural exports for many years have enjoyed a favorable balance of payments. We have exported more than we have imported and this refers to cash imports. Erratic policies on the part of State Department have frequently had a severe negative impact on this favorable balance. The economic effect has gone directly back to the individual farm operation who is producing in anticipation of a logical and long term farm export policy.

The world needs our farm production. We should make it available within the realm of the reasonable economic parameters. However, it would seem politically and morally desirable to assist those nations who need our assistance to better raise more of their own farm products. Total population of the world is or will be large enough to take all that can be produced either here or abroad.

Education is needed in these undeveloped countries to approach their potential. In addition, is the need of the production means and the technology, but without education these go unused. As a long range policy in aid to needy nations, we should require that a comprehensive extension program should be established simultaneously with any aid that we offer. The example of Iceland bears out my point. Following World War II Iceland established an extension service similar to that in the United States. Now you will find that the Icelandic farmer, nearly 8,000 in number in a population of 200,000, is one of the most highly responsive farmers to technological change. We already know more, to be passed along with extension education, than most of the underdeveloped nations can use. Money spent on research for these nations will be wasted unless research information can be transmitted. The comprehensive extension education approach is essential.

Special Priorities for Foreign Policy

Water

As in the United States, water is fast becoming one of the most critical production inputs for agriculture. With the possible exception of Southeast Asia and parts of South America, there just is not the water available as needed. A long range program focused on the water needs for agriculture in the semi-arid areas is essential.

World Forests

Special attention in long range farm policy must be directed to previously forested lands of the world. Much of the Mediterranean area, areas of Africa, parts of Central America and the Middle East were extensively forested not many centuries ago. Cultural practices of the natives, particularly in the ranging of goats and sheep, have assisted in keeping the former forest lands in the continual denuded state. Again as with other aid to other developed nations, farm policy objectives suggest that comprehensive extension and development approaches will over time bring about change and give recovery of the forest lands a chance. It must be a matter of local national policy and conscience to achieve objectives.

Fence in the sheep and goats and the forests will have a chance to return.

STATEMENT OF POSITION

MAINE FARM BUREAU ASSOCIATION

PART I. Toward the Next Generation of Farm Policy

Farm Bureau favors a market-oriented agriculture. The primary objectives of a market-oriented farm policy should be to: allow farmers to take maximum advantage of market opportunities at home and abroad without government interference; encourage needed for adjustment in resource use; and reduce the need for future government intervention. Market-oriented farm policies should:

- 1). Maximize long-term opportunities for profit in agriculture;
- 2). Reduce existing incentives for over-production at home and abroad;
- 3). Insure price competitiveness for U.S. farm products in world markets;
- 4). Provide opportunities to reduce stocks through production adjustments and/or expanded demand; and
- 5). Assure consumers of adequate supplies of efficiently-produced products they wish to consume.

Concerning the dairy price support program, Farm Bureau favors a program that will bring supplies down to demand levels. The best vehicle for accomplishing this goal is the Agricultural Act of 1949, which had effectively served producers, consumers and industry from 1949 until the secretary of agriculture's authority was reduced in 1977 and later removed.

Under the 1949 Act, the secretary had the authority to adjust the support price upward or downward, or maintain the economic signals sent to producers so as to have reasonable balance between supply and demand. During 1949-1977, the secretary left the support price unchanged for periods of two or more years on six occasions, raised the support price twenty times and lowered the support price five times. Each of the five reductions in support price brought about a decrease in government purchases and maintaining the support price for periods of two years or more served as a disincentive to expand production.

The Conable amendment which ties support price with government purchases reinstates the basic principle of the 1949 Act:

- 1). It allows freedom of initiative for an individual dairy producer to make his own decisions.
- 2). It reduces dairy surpluses by reducing milk production and increasing consumption to achieve a reasonable balance between supply and demand.

- 3). It is simple to administer and easily understood by dairymen.
- 4). It provides the secretary with the flexibility to adjust price support levels with government purchases.

PART II:

Agriculture including the many support industries is an integral part in the economic health of our society. Many young people view farming both a way of life and a way of making a living. To keep it viable in the future, ways must be found to bring a qualified new generation into farming, keeping in mind the potential for commodity expansion. Barriers to entrance in farming are:

- A. Competing uses of land-Decreasing availability and increasing land prices are caused by a large percentage of good land already in production and farm land being promoted for non-agriculture uses.
- B. Public Education and Awareness-As the farming community becomes less than 3% of the total population, there is a need to educate the public the complexity of our present agricultural system and its effects upon their lives. Of special concern are animal welfare groups who seek to disrupt agriculture by claiming unhuman animal husbandry practices.
- C. Agricultural Education-There is a need to expand practical education of topics such as business management, production and marketing. Practical experience could be obtained through an apprenticeship education program to those who lack practical knowledge.
- D. Government Lending and Regulation-It has been recognized that the efforts of the government to help the agricultural community have kept the supply of commodities artificially high and kept the prices received by producers relatively low bringing about the need for support. Any government lending should look at the economic feasibility and whether it would add to surplus. Credit should be extended to only those who are qualified.



Reaping Government Largess

Regional and Ideological Rifts Divide the Agriculture Lobby As It Prepares for Severe Trial

"Farm bills satisfy everyone but those who live in the cities, those who live in the small towns and those who live in the country."

—Sen. Robert Dole, R-Kan.

Farm politics in Washington has much in common with Br'er Rabbit's briar patch. Outsiders see only complicated fights over arcane issues that elude understanding. But insiders — farm lobbyists and their allies in Congress — scamper through this thicket year after year, occasionally yelping about the pain of it all.

Even as they bemoan their problems, which are significant, farm lobbyists also manage to protect a multi-billion-dollar array of farm programs that is unlike anything provided for other industries. (Box, p. 1714)

Now, however, agriculture is approaching a political and fiscal crisis that will severely test the skills of the Washington farm establishment. The federal government's payments for farm price supports have soared to unprecedented levels. Editorial writers are attacking million-dollar federal subsidies to corporate farms. A drought has caused widespread crop losses for smaller farms already struggling against bankruptcy.

"Nobody really knows what to do about farm programs," Rep. Dan Glickman, D-Kan., told the House gloomily in August.

Congressional agriculture debates are routinely punctuated with complaints that farmers are a neglected minority, taken for granted by Washington and hobbled by internal bickering.

"We've had bipartisan benign neglect for the past decade," says Sen. Mark Andrews, R-N.D., a member of both the Senate Agriculture Commit-

tee and the Appropriations Subcommittee on Agriculture.

"We're weak. We're split. The only time we ever get anything is when we have righteousness on our side," said a commodity lobbyist whose record of success belies his words.

The lobbyist insisted that he and his brethren "pursue righteousness" daily.

The pursuit takes the form of frequent chats with key members and staff, regular appearances at congressional fund-raisers and timely comment on policy and budget decisions that affect farm incomes. The lobbyists regularly produce crowds of back-home farmers in Washington and reams of statistics and projections to support desired changes in law — or to hold off unwanted alterations.

(Lobbyist box, p. 1717)

Members who deal with them call the farm lobbyists shrewd, persistent and effective.

"These guys are some of the most experienced in the business. They know where the buttons are and when to push them," said Rep. Leon E. Panetta, D-Calif., who as a member of the Budget Committee deals with a wide range of issues and lobbyists. Panetta also chairs a House Agriculture subcommittee.

Agriculture's Troubles

The biggest problem for agriculture is the extraordinary \$22 billion cost of price support programs this year. That is about seven times the average \$3 billion annual cost of these programs, although last year produced a record high of \$12 billion.

Budget director David A. Stockman complained in May to the Joint Economic Committee, "We are giving away more money to the farmers of this country than anyone ever conceived of giving away before..."

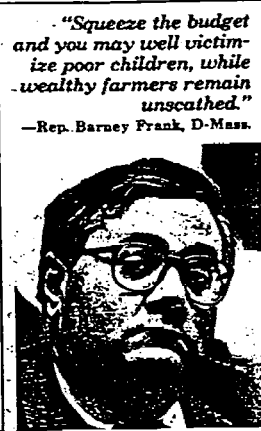
Stockman also observed, "We are spending more for farm subsidies than we are for welfare for the entire poverty population of this country."

According to Stockman's reckon-



"The agriculture industry has been subjected to 'bipartisan benign neglect for the past decade.'"

—Sen. Mark Andrews, R-N.D.



"Squeeze the budget and you may well victimize poor children, while wealthy farmers remain unscathed."

—Rep. Barney Frank, D-Mass.

—By Elizabeth Wehr

Copyright 1983 CONGRESSIONAL QUARTERS INC. Reproduction prohibited in whole or in part without the written consent.

Aug. 27, 1983—PAGE 1711

ing, all federal outlays to bolster the rural economy would total approximately \$38 billion this year.

The high cost of keeping a very small part of the nation — 3.4 percent of the population — down on the farm might be easier to defend if federal farm programs appeared to be working well. But the stability they are intended to achieve has proved elusive. In recent years the industry has been swamped with overproduction and crushed with high debt loads on individual farms. Net farm income has plunged to lows not seen for decades. And this summer's dry spell could be the start of a drastic reversal, as the drought ushers in falling supplies and rising food prices.

Moreover, the appealing image of farming as "forty-acres-and-a-mule" is being overtaken by stories of multi-million-dollar "agricultural factories" whose owners receive annual federal benefits that exceed many Americans' lifetime earnings.

Former Sen. Herman E. Talmadge, D-Ga. (1957-81), once told an aide that the only time he had seen a Georgia farm neighbor in denim overalls instead of a business suit was when he showed up in Talmadge's Washington office to protest inadequate federal price support levels. Talmadge chaired the Senate Agriculture Committee.

The changing image erodes sympathies for farmers, as when Rep. Barney Frank, D-Mass., observed, "Squeeze the budget and you may well victimize poor children, while wealthy farmers remain unscathed."

Already farm lobbyists are looking ahead, with considerable fear, to 1985 when the current omnibus farm law expires. "It's going to be the longest, hardest go-around we've had," predicts Don Wallace, a Washington consultant who represents sugar and cotton interests and the Alabama Farm Bureau.

Well before then, however, there will be tests of legislative skill. Amendments to kill or severely curb the federal tobacco, sugar and dairy programs already are drafted for an assortment of farm bills awaiting Congress' return from its August vacation.

Who's Who

The historic political base of the agriculture lobby is general-interest farm groups, such as the American Farm Bureau Federation, which began not as Washington representatives but as service organizations. An exception is the American Agriculture Movement (AAM), which began in 1978 when tractor-riding farmers descended on Washington, protesting federal farm programs and complaining of poor representation.

More typically, the National Farmers Organization began and continues as a bargaining agent for farmers, enabling them to contract directly with commodity buyers. County farm bureaus were once the conduits for federal extension service information, and present-day critics of the national organization say the Farm Bureau can claim the largest membership because people join to take advantage of good prices on farm bureau insurance, tires

and other farm-related goods and services.

The old generalist organizations are now being jostled by newer groups specializing in single commodities, such as wheat, and hybrid organizations, such as cooperatives or the National Cotton Council of America, that represent both growers and the middlemen that process and sell commodities.

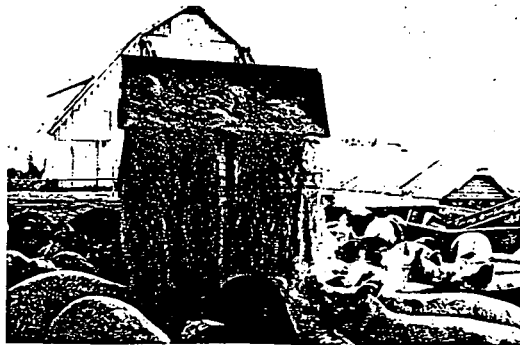
There also are swarms of Washington-based lawyers and consultants who occasionally involve themselves in specific issues, such as agricultural trade. Industries associated with agriculture — pesticide and farm machinery makers, for example — also invest much time and effort in agriculture policies.

Memberships in the lobby often overlap: It is not unusual for a leading spokesman for a specific commodity also to be a prominent member of a local or state farm bureau. The Alabama Farm Bureau, which broke away from the national group, has forged an unusual alliance with state AAM members.

Disagreement among farm groups is never far from the surface because the different segments of the increasingly specialized industry have conflicting needs and philosophies. The National Cattlemen's Association, for instance, is not happy with pending dairy legislation (HR 1875, S 1529) that would pay dairymen for cutting back production. Reduced production would be achieved by slaughtering dairy cows, dumping extra beef onto the market in competition with the cattlemen.

High market prices sought by feed grain farmers are anathema to poultry and livestock producers who must buy the grain. Southern dairymen operate under less favorable climate and feed conditions than their counterparts in the upper Midwest and California, and the Southerners favor a far different legislative cure for the high costs of the dairy program.

In general, Southern farmers are more likely to be comfortable with New Deal-style farm programs, such as those covering tobacco and peanuts, which offer high price supports and strictly limit the amount of a commodity that may be produced or sold by each farmer. Midwesterners more often see such federal controls as a liability, and their prime crops, corn and wheat, are eligible for considerably less federal support and are subject only to voluntary controls.



Iowa Swine at Mealtime

Such divisions appear among both specialized commodity groups and within umbrella groups like the Farm Bureau. Nationally, the bureau is identified with Midwestern disfavor for federal farm programs, but it also backs the strict regulatory program for tobacco favored by its Southeastern members. And certain state farm bureaus, such as Wisconsin's, strongly disagree with the national organization on dairy policy.

Recent Dust-ups

There have been highly visible episodes of dissension in recent years; of these the 1978-79 AAM invasions of Washington received the most public attention. In 1981 budget pressures created such bitter conflicts among commodity groups involved in omnibus farm legislation that Congress came close to killing target prices, a major crop price support, and the federal tobacco and peanut programs. The legislation finally passed the House by a scant two-vote margin, with a significant number of farm-state members voting against it. Rep. Bill Alexander, D-Ark., christened it "the last farm bill" and declared that the open warfare among commodity groups was "definitive proof that the New Deal coalition is dead."

Two years years later, Rep. Charlie Rose, D-N.C., was still warning that "agriculture is not strong enough on the floor of the House to have regional splits."

Although there are many farm bills considered by Congress every year, the major event occurs every four years when Congress writes "omnibus" farm legislation, reauthorizing and revising most major farm programs.

Until 1981, writing this omnibus bill was largely an additive process. Each group decided what it needed and supported other farm interests against outside attack. But in 1981 the budget resolution, for the first time, put a ceiling on the total amount of money to be divided up, and fights flared over certain commodities, such as peanuts or tobacco or sugar, which appeared to receive a disproportionate share of the total.

The uneasy sense of rivalry continues. One congressional Agriculture Committee aide likened the situation to a pond in which "the water level is going down and the fish are all flopping around and sticking each other and biting."

But Wayne Boutwell, a former

Background

Dairy industry split and reaction in House Agriculture Committee, Weekly Report p. 1018; compromise dairy legislation, p. 1056; Farm Bureau alternative dairy bill, p. 1206; Senate target price legislation, p. 1297; fiscal 1984 agriculture appropriations, p. 1375; cotton-PIK legislation, p. 1508; pre-recess statement in Senate over agriculture legislation, p. 1547; postponement of dairy assessment, p. 1636; specialty cotton legislation, p. 1672; 1981 omnibus farm bill, 1981 Almanac p. 535; 1978 protests, 1978 Almanac p. 436.

aide to Sen. Thad Cochran, R-Miss., and the new president of the National Council of Farmer Cooperatives, predicts that "adversity is probably going to bring them together. As long as things are good, people can go their separate ways."

There have been efforts to close ranks. This year, Washington representatives of dairy cooperatives resisted administration demands that they lobby for a freeze on one of the main price supports, target prices, in return for administration support for their compromise dairy legislation (HR 1875, S 1529).

Rep. Dick Durbin, D-Ill., said that Stockman's reported plan to splinter the farm lobby has become a "real rallying point" in House Agriculture Committee sessions. According to a 1981 *Atlantic* magazine article based on extensive interviews with Stockman, the budget director believed "that victories over farm lobbies could be won ... if he kept the issues separate — attacking each commodity program in turn and undermining urban support by cutting food and nutrition programs."

Said Durbin, "Stockman is allowed to every time we get into a tough political decision."

But also this year, regional splits within the dairy industry were so bad that prominent House Agriculture Committee members upsidetracked dairy lobbyists in a heated private session and openly spoke of the "exasperation in a tense public committee session in May. Then, when a compromise had gained the grudging support of most major dairy cooperatives, the

Farm Bureau abruptly unveiled an alternative plan (HR 3292) and began canvassing Congress for votes.

And in the days preceding the August recess, efforts to pass the dairy compromise were thwarted in the Senate by filibusters, threats of amendments, and additional filibusters relating to target prices, tobacco and sugar programs. Foes also hinted that they would attempt to modify the terms of the compromise.

"The farm groups are so split up that they do more to confuse than convince Congress of what ought to be done," said a frustrated Andrew.

"I can't imagine it getting any worse," said Mississippi's Cochran, chairman of the Senate Appropriations Subcommittee on Agriculture.

Still Harvesting Dollars

"... there is never a day that the farmer, too, doesn't get his share ... no session [of Congress] comes to an end without a huge grist of new laws to save him. ..."

—H. L. Mencken

Despite their claims of being a splintered, misunderstood minority, farmers hold their own in Washington, as the following phenomena suggest:

The Reagan administration, in a startling reversal of its free-market philosophy, is paying farmers in cash and surplus commodities for not growing wheat, corn, cotton and rice. It is even buying up surplus commodities from farmers — to give back to them as payment for not planting part of their customary acreage. The commodity exchanges are known as the Payment-in-Kind, or PIK, payments. The acreage reduction program, larger than anything envisioned in the heyday of New Deal farm programs, is meant to throttle the excessive production that had depressed farm prices for several years.

"It's incredible. I'm amazed. What a turnaround for the administration," remarked Carolyn Brickey, a lobbyist who has worked for the Ralph Nader-sponsored consumer group, Public Citizen, against legislation supported by sugar and dairy lobbies.

The federal government does not generally pay industries to maintain what appears to be surplus capacity, as Rep. John Hiler, R-Ind., suggested during debate earlier this year on a farm credit measure (HR 1190). In the 1970s, Hiler said, when "25 percent of the metal casting industry went out of

Federal 'Helping Hand' for Farmers . . .

According to E. "Kika" de la Garza, D-Texas, the chairman of the House Agriculture Committee, "Agriculture is not like any other business."

"It is a special business," de la Garza claims. "Farmers are special people who do a special thing for us. And I would think that a helping hand would certainly be in order."

The dollar-laden hand of the federal government has been helping farmers for more than a century. In 1862 the Agriculture Department (USDA) was created, the first Morrill Act land grants were authorized for the creation of public colleges and the Homestead Act promised free land to anyone who would settle it for five years.

Until the Depression, the government's primary role in agriculture was to develop and disperse information for farmers through the USDA, the land grant colleges and a network of county "extension" offices. That research and development base has been a major factor in U.S. agriculture's astonishing productivity — its proudest accomplishment and, often, its biggest problem.

Several pre-Depression farm laws foreshadowed two strategies — credit and marketing control — that typify most subsequent federal efforts to intervene in the farm economy.

In 1914 the Clayton Act made an exemption in federal antitrust law for farmers' marketing cooperatives, as well as for labor unions. Eight years later the Capper-Volstead Act permitted these cooperatives to incorporate themselves, and it spelled out permissible activities for the co-ops, such as processing, handling and marketing of crops. Collective marketing, farmers hoped, would leave them less at the mercy of weather-induced surpluses, buyers of their commodities, and sellers of machinery, seeds and chemicals.

Today, some farmer-owned cooperatives are billion-dollar manufacturing and service conglomerates. And they are competing aggressively with businesses that en-

joy neither the historical antitrust exemption nor the cooperatives' virtual freedom from income taxes. Cooperatives are not required to pay taxes on the profits that they return to their members.

"Agriculture is not like any other business. It is a special business. Farmers are special people who do a special thing for us. And I would think that a helping hand would certainly be in order."

— E. "Kika" de la Garza, D-Texas

In 1916, responding to reports that farmers lacked sources of capital, Congress authorized the Federal Land Bank System, the cornerstone of a now-independent national network of 37 banks and hundreds of local agencies with about \$81 billion in outstanding loans. Originally bankrolled by the government, the system now raises its

funds in national money markets. Because its bonds are traded in the government securities markets, it can obtain funds more cheaply than commercial banks and pass on the savings in the form of lower interest rates to farm and cooperative borrowers.

Federal farm programs always have had larger, national benefits beyond sustenance of farming families, claims USDA historian Wayne Rasmussen. The Homestead Act settlers, for instance, were intended by Congress to secure the empty Western territories against competing claims by European nations. Another example Rasmussen cites is farming's productivity, fostered by publicly financed research and information, which enhanced industrial development by freeing a large work force from the need to grow its own food.

Farm efficiency, much touted by farm lobbyists, means that a tiny minority of the nation's 2.3 million farms manages to feed 234 million Americans and millions of others throughout the world. The United States supplies 64 percent of the world's soybeans, 46 percent of its corn, 31 percent of its sorghum, 23 percent of its beef, 18 percent of its cotton and 17 percent of its wheat.

This minority of farmers is the base of the massive U.S. food and fiber industry, which accounts for 20 percent of the gross national product and is, according to USDA, the world's largest industry. The businesses that supply machinery, chemicals and other farm supplies, combined with farming itself and the industries that move food from the country to the dinner table, are worth about \$1 trillion in total assets and employ 23 million people, or 22 percent of the work force.

Hostility to Farm Aid

Yet, farmers feel embattled because of what they see as hostility by the non-farming community to controversial federal farm assistance programs.

"Damn it, we're 20 percent of the economy. But still it's us against everybody else," said Dick Fifield, director of national affairs for the Alabama Farm Bureau.

Federal price support programs, which began in the 1930s, have the elusive goal of matching supply with demand, while still sustaining the productive farming base in years when its full capacity is not needed.

One of the most difficult questions in agriculture is, How much productive capacity is enough? Sen. Richard G. Lugar, R-Ind., feels that now "there's a haunting feeling that the nation has been overproducing." Lugar, a free market advocate and an opponent of certain farm price supports, believes that logic leads to a conclusion that the nation needs fewer farmers.

But those who disagree with Lugar point out that the industry's greatest variable, weather, can abruptly transform surplus conditions into scarcity, as this summer's drought proves.

One of the oldest and most controversial methods of stabilizing commodity supplies is to pay farmers for not raising crops. The latest version is the Payment-in-Kind (PIK) acreage reduction program. (Pending dairy legislation — HR 1875, S 1529 — would pay dairymen, for the first time, to reduce production.)

... Holds Dollars, Credit and Protection

Such federal payments are intended to cut price-depressing surpluses by compensating farmers for lost revenues. But, because farmers generally retire their least productive land and farm the remainder intensively, these programs have not been markedly successful in reducing surpluses. For instance, the amount of land planted in wheat dropped from 79 million acres to 60 million acres between 1982 and 1983, thanks to the government's massive paid acreage reduction program. But wheat yields increased from 35.6 billion bushels per acre to 39.8 bushels in that time, and the total crop is expected to be 2.4 billion bushels, the second highest harvest on record.

Favorable Credit

Much federal farm aid is in the form of credit not generally available to other businesses and on more favorable terms than comparable commercial loans. Reagan administration efforts to shift more of this federal credit role to the private sector generally have not been agreed to by Congress.

In addition to the farm credit system, there is USDA's Farmers Home Administration (FmHA), a lending agency that serves farmers and rural communities with credit problems. FmHA loans supply farmers with start-up and operating money and provide communities with funds for water and sewage disposal systems, rural industrial development and community facilities.

Western farmers who irrigate their land from federal water projects must collectively repay a share of the project construction costs, financed by the federal government. But their repayment rates generally fall far short of the government's full costs, despite changes in federal law last year. (1982 Almanac p. 353)

Rural telephone and electrical systems are financed with funds supplied by — and repaid to — the Rural Electrification Administration (REA).

Farmers of major crops like wheat are eligible for two types of federal price supports. One is federal commodity loans, for which growers use their crops as collateral. Farmers may choose to keep the money and let the government keep the crops in years when low market prices would mean financial loss if the crop were sold to repay the loan. The other is reserve loans; in return for more favorable loan rates, farmers agree to keep the collateral crop off the market, "in reserve," unless relatively high prices prevail. The federal government will spend more than \$1 billion this year in extra payments to farmers for their costs of storage, such as construction of facilities.

(Farmers can also qualify for non-loan "deficiency payments" in years when market prices fall below the target prices established by federal law. The payments are intended to supplement farm income, and it is the automatic, annual increases in these target prices that the Reagan administration this year has sought, without success, to block.)

Another type of controversial farm law permits growers of certain specialized crops to enjoy near-monopoly power to establish minimum prices for their produce by enforcing limits on the amount that can be brought to

market, often through indirect mechanisms such as quality controls. A few programs, most notably the tobacco price support program, impose a strict licensing system that prohibits unlicensed farmers from even growing the crop for market. Nor can a would-be tobacco farmer generally get a license from the federal government; he must inherit it, buy land bearing a "license" or rent one from an owner.

Other areas of federal law also have given farmers special treatment. For much of World War II, when food

"Damn it, we're 20 percent of the economy. But still it's us against everybody else."

—Dick Fifield, Alabama Farm Bureau

was in short supply both at home and abroad, farmers were exempt from the draft. Farming was among the critical industries qualifying for full-need gasoline allotments during the early 1970s. Until the mid-1960s, farmers were not required to pay employees the minimum wage; and farm workers did not earn the same minimum wage as other workers until 1977. Because no commercial insurers wanted to take on the risks of crops that could be destroyed in a half-hour hail storm or an early frost or a drought, the federal government subsidizes crop insurance. There are millions of dollars worth of federal subsidies and credit guarantees for foreign buyers of American farm commodities.

In May, Office of Management and Budget (OMB) Director David A. Stockman estimated that the federal government would contribute nearly \$38 billion to the rural economy this year. Of that, \$21.1 billion was for price support loans, payments and similar programs run by the Commodity Credit Corporation (CCC), \$8.1 billion for Farmers Home Administration agricultural loans, \$4.8 billion in export loan guarantees and \$2.3 billion for agricultural research, direct services, export trade promotion and conservation assistance.

By mid-August, the CCC estimate had risen to \$21.8 billion. And one OMB spokesman cited an additional \$16.8 billion in "federal assistance of great benefit to farmers."

That total included \$1.5 billion for the "food for peace" program that finances and donates food shipments to needy nations, \$1.4 billion in revenue losses from tax provisions of benefit to farmers, \$5.9 billion for REA and about \$8 billion for the government commodities used to make PIK payments. The OMB spokesman conceded that characterizing the PIK stocks as outlays in the current fiscal year was "arguable," because the actual outlays had been made earlier, when the federal government made the price support loans for which the surplus stocks were collateral. The surplus crops became government property as farmers defaulted on the loans.

—By Elizabeth Wehr with research assistance from Barbara L. Miracle

business... there was no one standing on the floor of the House saying that we should provide extra assistance."

• Congress decamped for its August vacation without enacting the administration's top priority in farm legislation (HR 2733) — a freeze on target prices for wheat, feed grains, cotton and rice. The Senate Agriculture Committee saw fit to approve the freeze legislation, but it also promptly "spent" almost as much money on other initiatives as the expected \$485 million first-year budget savings from the freeze. The committee bill included a \$300 million export-promotion program and a provision sought by cotton farmers that could cost \$75 million to \$100 million.

This "out of one pocket, into the other" technique also showed up in August, when Congress enacted a bill (HR 3190) for specialty cotton growers in a few Southwestern states. That bill sharply cuts price support loans for the cotton, but also authorizes, for the first time, target price payments for the crop and payments for taking cotton crop land out of production in surplus years. In the target price program, farmers receive "deficiency"

Post was headlining million-dollar PIK payments to conglomerate farms in California as Congress completed the appropriations bill. More importantly, Stockman had objected strenuously to the cotton-PIK provision and administration officials had vowed that no farm legislation would emerge from the White House as long as the target price freeze was stalled.

• Farm lobbyists believe that the fiscal 1984 agriculture appropriations bill (HR 3223) will not be vetoed, despite Stockman's strong objections to its over-budget spending. A veto, it is said, would hurt such prominent farm-state Republican senators as Jesse Helms, N.C., Roger W. Jepsen, Iowa, and Cochran of Mississippi, all of whom are up for re-election in 1984.

• The magnitude of farm exports, expected to earn about \$35 billion this year, suggests that the export-promoting Foreign Agricultural Service (FAS) should be included in the administration's proposed Department of Trade. But the farm community likes FAS just where it is, in the Agriculture Department, and the prospect of farm lobby objections apparently scotched any thought of moving FAS.

two-thirds of the nation's food and reap about 70 percent of farm program benefits. For two years running, presidential budgets have suggested that low-cost federal loans and such fixtures of the rural countryside as the Rural Electrification Administration were inappropriate in an era of massive, corporate farming. But Congress has been cool to proposed cutbacks.

Commenting on the agriculture lobby, Panetta observed: "Some years, their deals fall apart. You don't know who's on first. But over the long haul, they haven't done too badly."

Farm Lobby Strengths

Farm lobbyists insist that they've fallen on very hard times, and the recess impasse in the Senate seems to support that view.

"Years ago, we had a coalition that looked after agriculture as a whole," says Frank Vacca, the representative of Mid-America Dairymen. Those were halcyon days, veteran lobbyists say, when congressional committees were closed, chairmen were powerful, and farm bills were written by the likes of Talmadge, Sen. James O. Eastland, D-Miss (1941-78), and Rep. W. R. Poage, D-Texas (1937-78), and passed without much question.

Those were also times — the 1950s and 1960s — when farm incomes were depressed by huge surpluses and many families were forced out of farming by the bleak economics of the industry.

Both Congress and agriculture have changed markedly since then. "You can't go in and talk to a chairman and two other people and write a bill today," says Mullins of the National Farmers Union.

"You've lost all the strong, Southern chairman for all practical purposes, except for Whitten," he added, referring to House Appropriations Committee Chairman Jamie L. Whitten, D-Miss. (As yearly confrontations over agriculture appropriations measures show, Whitten effectively fends off proposed reductions in federally financed agricultural research, extension, conservation, credit and other programs.)

The dispersion of power to subcommittee chairmen and the proliferation of staffs and agencies whose work impinges on farmers mean that "you do have to get around to so many more places now," according to Mecon Edwards of the National Cotton Council of America.

Agriculture groups have grown,



"Some years, their deals fall apart. You don't know who's on first. But over the long haul, they haven't done too badly."

—Rep. Leon E. Panetta, D-Calif.

payments when market prices for their crop drop below the target set by law. The payments represent the difference between the low market price and the higher target.

• When growers of "upland" cotton — the bulk of American cotton — asked Congress this summer to reverse a PIK policy, the desired language showed up in five separate pieces of legislation. It was signed into law July 30 as part of the fiscal 1983 supplemental appropriations bill (PL 98-63). Farm lobbyists argued that the PIK policy meant huge financial losses for cotton growers, yet *The Washington*

"Over at the White House, they just didn't want to take that on," according to Robert J. Mullins, director of legislative services in Washington for the National Farmers Union.

• The farm community continues to benefit from a permanent, multi-billion-dollar infrastructure created in past decades when farms were mostly small, hand-to-mouth operations. Now, of the nation's 2.3 million farms, about 500,000 are defined by the Agriculture Department as "large farms" with gross annual sales exceeding \$100,000. But just half that number, some 250,000 farms, produce about

Dairy Lobbyist: Counting Cows and Votes

Frank Vacca reckons the population of congressional districts in dairy cows. He easily ticks off the numbers: A mere 44 districts produce well over half the milk consumed by Americans. Some 30 percent of the House districts have "not a cow, not a drop of milk." The rest yield milk in relatively moderate amounts.

Those numbers mean that dairymen make up a minority whose needs require much explaining to an indifferent majority in Congress, according to Vacca, who represents the major Midwestern dairy cooperative, Mid-America Dairymen, in Washington. These days, he acknowledges, dairymen are in trouble. Their federal price support program is badly managed and badly misunderstood, in his view. And Vacca believes that the Reagan administration has deliberately focused its fire on dairymen because the industry is exceptionally well organized.

"They look at us as the head pin in a bowling alley. If they knock us down," Vacca warns, "the rest of agriculture will go down with us."

Under pressure from the Reagan administration, Congress has passed three increasingly punitive measures, in the past two years, in futile attempts to curb dairy production. Critics say the dairy program itself has become a perverse incentive for overproduction. Farmers annually produce 10 percent more dairy goods than the market can absorb. As a result, the federal program, which sets minimum market prices and purchases unsold surpluses, has been buying and storing more than 10 pounds out of every 100 pounds produced by dairymen, at a cost exceeding \$2 billion per year.

Meanwhile, the industry has been split over ways to resolve the problem, and when it finally, with great reluctance, came together to support a compromise bill, the measure stalled because of congressional and administration conflicts over other farm program changes.

The Education Process

As director of government re-

lations for Mid-America, Vacca works on legislative, regulatory and political strategy. "Our most difficult chore, as farm lobbyists," he says, is educating House members "so they don't reinvent the wheel."

Education means explaining to non-farm members that the dairy program has guaranteed their constituents a reliable supply of perishable food at what the industry regards as a reasonable price.

Education also means explaining that mammoth milk "factories" of thousands of cows are exceptional, and that most "corporate" farms are run by hard-working families whose members earn little more than the federal minimum wage. "It's not a lifestyle that many people want," Vacca remarks.

Vacca's Washington operation



Frank Vacca

is at odds with the industry's reputation for splashy spending — it consists of Vacca and an answering machine. His days begin early, with breakfast meetings, and end late, after a succession of evening fund-raisers. "What I like better," he says, "is when a member has an affair [a fund-raiser] back home, in the district, and we buy a ticket and send a farmer."

'Ice Cream Socials'

Vacca's time is divided equally between his office in Washington and the 12 Midwestern states where the co-op operates and its

Springfield, Mo., main office. Away from Washington, Vacca shuttles between headquarters and local and regional meetings, including formal policy-setting sessions and "ice cream socials." The latter are informal gatherings, often in a park or field, where co-op members share ice cream and political intelligence. As Mid-America's staff chief for its political action committee (PAC), Vacca spends "a lot of time recruiting our people, getting them involved in our PAC."

Dairymen must recognize that, because they are so few in number, "it's off politics," he says forcefully. His organization encourages contributions, which average about \$65 per member a year, to its PAC.

Like other dairy co-ops, Mid-America provides an essential service: It collects, processes and finds buyers for members' milk. It is the agent that pays dairymen for their product. The network of district and division organizations established to do the business of the co-op is also a natural conduit for the business of politics.

Vacca insists it is not dairy PAC money but this organizational strength — unique among farm groups — that accounts for the lobby's successes. "We've had the dairy program since 1949, and we didn't go into PACs, none of us, until 1969," he says. Now, he adds, "all we're doing is protecting what we can, as best we can."

Vacca grew up on politics, not dairying, near Boston. A career that began with volunteering in local campaigns of his father's friends led eventually to top positions with former Rep. Torbert MacDonald, D-Mass. (1955-1976), Jesse N. Unruh, former Democratic leader and Speaker of the California state Assembly, and Rep. Bob Traxler, D-Mich.

Vacca studied international relations at Georgetown University, worked as advance man in Robert Kennedy's 1968 presidential campaign and in Birch Bayh's brief 1976 campaign. He joined Mid-America later in 1976.

—By Elizabeth Wehr

COPYRIGHT 1983 CONGRESSIONAL QUARTERLY, INC.

Aug. 27, 1983—PAGE 1717

too. Washington-based lobbyists like Wallace say that they cannot exactly describe the growth, but today they run into many more people working on agriculture issues than 10 years ago. The National Association of Wheatgrowers' budget has grown tenfold since 1970-71, according to Carl Schwensen, its executive vice president. Schwensen declined to reveal his current budget figures.

The cadre of seasoned Washington representatives is bolstered by the farmers themselves, who often appear in substantial numbers to defend their interests. "They do bring the crowds to town. They're good for the hotel business," according to Deputy Agriculture Secretary Richard E. Lyng.

"They are not the least bit hesitant to put groups of people on airplanes to come and see us. That's very effective," reports Durbin, a freshman member of the House Agriculture Committee.

Durbin added that farm groups also can quickly generate constituent letters — "real" letters that leave a lasting impression rather than formula letters and post cards cranked out in volume by banking and other lobbies.

And Panetta indicated that farmers who contact members generally are listened to, because they most often are influential community leaders who run large, established farms.

Quality vs. Quantity

As congressional power was being dispersed to subcommittee chairmen and agencies proliferating in the 1970s, agriculture itself was going through a feverish expansion to meet rapidly growing export demands. With the expansion came "specialization, industrialization, and with that, the development of some very, very strong viewpoints," according to J. Steven Gabbert, executive vice president of the Rice Millers Association.

Members of Congress and their aides say that they now turn more readily to the specialized commodity groups for data and policy proposals than to general farm groups such as the National Farmers Organization.

"When it comes time to decide what the dairy support price will be, the Farm Bureau probably ends up having less to say about that than Dairymen, Inc.," said Cochran, referring to the dominant Southeastern dairy cooperative.

Meanwhile, however, agriculture had dramatically contracted — in number of farmers, and in congress-

sional representation. Rapid gains in productivity, particularly after World War II, meant that fewer people were needed to grow the nation's food and fiber. In 1930 nearly 23 percent of the U.S. population was engaged in agriculture; in 1940 the number was 20



Washington State Wheat Field

percent; in 1950, it was down to 12.2 percent; in 1970, 4.4 percent; and by 1982 it stood at 3.4 percent.

Rep. Edward R. Madigan, R-Ill., suggests that what farmers now lack in quantity, they make up in congressional quality.

"I think the agriculture lobby derives its strength today from being able to key in on well-placed members, rather than relying on a broad base," Madigan remarked. Madigan, ranking minority member of the House Agriculture Committee, has pushed the administration's target-price legislation without success this year.

In the House, members with active interests in agricultural issues include Whitten, also known as "the permanent secretary of agriculture," Majority Whip Thomas S. Foley, D-Wash., former chairman of the House Agriculture Committee, Alexander, chief deputy majority whip, Panetta, a respected member of the Budget Committee, and Rep. Tony Coelho, D-Calif., chairman of the Democratic Congressional Campaign Committee.

When the conservative American Farm Bureau Federation sought sponsors for its dairy proposal (HR 3292) this year, it won the backing of such influential House Republicans as Minority Leader Robert H. Michel, Ill.,

Minority Whip Trent Lott, Miss., and Rep. Barber B. Conable Jr., N.Y., the ranking minority member of the powerful Ways and Means Committee.

In the Senate, Robert Dole, R-Kan., chairman of the Senate Finance Committee and head of an Agriculture subcommittee, takes an aggressive role in shaping farm policies, although his notions of thrift have discomfited wheat and dairy producers.

A key asset of the farm establishment is its aggregate experience. Many farm lobbyists, such as Edwards of the National Cotton Council and Schwensen of the National Wheatgrowers, have been working on farm politics for 10 to 20 years. The basic price support programs began 50 years ago, and two generations of politicians and technicians have invested lifetimes in defending, readjusting and operating them.

Such allies as Whitten and Foley have been in Congress since 1941 and 1965, respectively. "There are some very able, experienced legislators and that gives [us] continuity that maybe some of the other industries do not have," Edwards said.

Its familiarity with Congress also gives the agriculture establishment a grasp of strategy that occasionally leaves opponents shaking their heads; the inclusion of cotton-PIK language in five different bills, including the "must-sign" supplemental appropriations measure, was the latest example of fancy legislative footwork.

This year the House Agriculture Committee, seeking to block floor amendments to freeze target prices, slash dairy price supports, or kill the tobacco program, has been sending out farm legislation in the form of single-subject bills and under closed procedures like the suspension calendar. In early August an exasperated Michel, confronted with a minor bill (S J Res 149) to postpone an unpopular federal assessment on dairymen, demanded that the panel "quit nickel-and-diming us with these agriculture bills... on a piecemeal basis."

Michel was objecting to the committee's refusal to permit House votes on the target price freeze and his dairy plan. "It kind of burns me that the whole process is being sidetracked," he said.

Even with their feuds, the farm groups have a long history of circling their wagons to fend off hostile attacks from outsiders. Members like Rose know how to pleasantly remind urban members of farm-state mem-

bers' votes for food stamps and other nutrition programs administered by the Agriculture Department.

And the farm establishment knows from experience that internal splits must — and can — be patched over. Sugar producers, for instance, lost their 40-year-old federal program in 1974 in part because internal dissension left them exposed to outside attacks. Sugar partially recovered, however, and by 1981 there was a new federal price support program included in the final version of the omnibus bill, despite a 213-190 House vote against the program.

Panetta and Edwards suggest that the crosscurrents within the farm lobby this year may be typical of the period between the four-year reauthorizations of omnibus farm bills. But, "every time you see a farm bill, you can see the coalition in its most vivid colors," Panetta said.

For Panetta, a major factor in the agriculture lobby's coalition-building is the inclusion of food stamps, special food programs designed to help the elderly and schoolchildren, and other federal food assistance programs in omnibus farm bills.

The broad reach of these programs means substantial benefits for the constituents of urban and suburban members who might otherwise find little to interest them in agriculture programs.

Another intangible asset of the farm community is its image, rooted in the nation's history, as special and different from other industries. Thomas Jefferson, for instance, wrote that "those who labor in the earth are the chosen people of God... His peculiar deposit for substantial and genuine virtue."

Farm advocates frequently cite the very basic fact that, as Agriculture Department historian Wayne Rasmussen says, "farmers are the only people to produce what everybody else has to have — food." And farmers remind members that they operate under an overriding risk from which manufacturing and other industries are comparatively insulated: weather.

"Production — the volume of production — is between the farmer

and the banker and God, and the farmer and the banker don't have much to do with it," Edwards said.

'Hard Row to Hoe'

Even with these advantages, Deputy Agriculture Secretary Lyng believes, the lobbyists have "a hard row to hoe, because of the deep differences in the agriculture community over the philosophy of what role the government is to play." At one end of the

particular had been unable to secure the Treasury-financed paid production cut program that some elements of the industry want. The PACs, Lyng said, "are not nearly as influential as you'd think from their size. You can't buy votes. I just don't believe you can buy votes."

The farm lobby must also overcome congressional impatience with farm problems that never seem to be resolved. Nearly 60 years ago, H. L.

Mencken was heaping abuse on farmers for continually demanding that Congress rescue them from bankruptcy.

Today, Andrews thinks, farm groups mistakenly continue to stress farm income as an overriding factor in agriculture policy decisions. Said Andrews, "Guys from the cities say, 'So what else is new?'"

The underlying difficulty, however, is that agriculture is so volatile that it may baffle creation of permanent federal policies. It was world-wide crop failures during the 1970s that pushed U.S. agriculture into a major expansion and diverted attention from an array of farm programs that are not much different from those now in effect.

Edwards believes that writing comprehensive farm law is as delicate an enterprise as drafting tax legislation, because the interests to be balanced can each be devastated — or elevated above the others — by even apparently minor changes in program terms.

Burton Eller, vice president for government affairs of the National Cattlemen's Association, says, "There's no popular farm program in the long run. You just fix it temporarily, but then things go awry."



spectrum, he noted, is the Farm Bureau with its hands-off, free-market philosophy, and at the other is the National Farmers Organization, with other organizations ranged between these two poles.

Lyng also suggested that farm-based political action committees (PACs), such as the wealthy fund-raising units in the dairy cooperatives, "had some impact for a while, but less so now as more people do it."

Lyng noted that the dairy lobby

COPYRIGHT 1983 CONGRESSIONAL QUARTERS INC.
Reproduction prohibited in whole or in part except by written consent.

Aug. 27, 1983—PAGE 1719

Exhibit 1

Toward the Next Generation of Dairy Policy

Statement to the
Joint Economic Committee of Congress

by

Andrew Novakovic and Robert Boynton
Department of Agricultural Economics
Cornell University
Ithaca, New York

October 1983

Preface-

This statement has been prepared for the Joint Economic Committee of the U.S. Congress. The authors are members of the faculty of the Department of Agricultural Economics at Cornell University and specialize in the area of dairy marketing economics and policy (see exhibit 1).

Introduction

This statement focuses on a general assessment of current dairy policy and a discussion of the needs associated with the next generation of dairy policy. The statement does not focus on the specific concerns or needs of the Northeast or New York, but it does include some regional perspectives.

Dairy policy and policy making (and, to a considerable extent, agricultural policy in general) has been preoccupied with the current problem of excess supply. Although the immediate problem is serious and demands attention, the solutions that have been proposed and the focal points of the policy debates have generally not been well oriented to long-run goals. Therefore, we feel it is highly appropriate that the Joint Economic Committee and others begin formalizing some strategies for the next generation of farm policies.

Current dairy and other agricultural policies have the same fundamental design as those that were originally inspired by the Great Depression. Obviously the economic climate and economic conditions have changed dramatically since then. It may well be appropriate to carefully think through the merits of these policies and programs and to try to ascertain whether or not they can be justified given current and expected future conditions. Nevertheless, we do not attempt to deal with that issue in this paper. Rather our statements are predicated on the general assumption that, although changes in some aspects of specific policies are needed, it would not be advisable to make sweeping changes in policies or to eliminate one or more of the various dairy programs. In the following discussion we attempt to identify and comment on the major policy issues as we see them.

Policy Issues

Farm Price Supports

Current dairy price support legislation dates back to the 1949 Agricultural Act; however, the concept of using public policy instruments to raise farm prices and incomes has roots in the 1920s and 1930s. The initial aim of New Deal dairy programs was to raise farm prices and incomes to "equitable" levels as soon as possible. Whether or not a shift in emphasis has been formally codified, it is generally agreed that the justification for current federal dairy pricing policies rests primarily on the perceived need for and presumed benefits from promoting stability in prices and marketing conditions. A federal program that provides an outlet for manufactured milk products at prices and under conditions that promote orderly and stable markets may well have long-run merits for the dairy industry and the general public. For such a program to maintain long-run public benefits, it must be

administered in a fashion consistent with long-run supply and demand and not be used to overtly enhance farm incomes.

This kind of program objective is feasible; however it is very difficult to achieve in the kind of highly politicized legislative environment that has existed for the last several years. Recent efforts to solve the dairy oversupply problem indicate that many people feel that the dairy price support program as it is now constructed has failed and that a new approach is needed. In our opinion, current problems were not caused by an inherent flaw in the design of the program; rather the program was misused and subjected to political maneuverings to which it should have been protected (see exhibit 2, pp.3-8). Of the many alternatives available, the current program may be the best type, given the type of long-run goals we stated earlier (see exhibits 3 and 4).

Dairy Import Quotas

Quotas are a practical necessity when a country supports domestic prices above world trade prices. As long as the U.S. keeps a price support program like the one it has, it would be well advised to keep quotas on dairy product imports. Current quota levels are probably reasonable. Bringing casein and lactose imports under quotas might be consistent with the overall U.S. dairy quota program but may be inconsistent with the principle of comparative advantage. At any rate, the impact of these and other imports on the cost of the price support program and the magnitude of excess supplies is generally over-emphasized.

Marketing Policy and Market Competition

Federal milk marketing orders, initiated in the 1930s, were originally intended to increase farm prices and to redress the oligopsonistic behavior of dairy processors. The former goal has been and should continue to be de-emphasized. The relevance of the latter goal may need to be re-examined, but we suspect that it remains a reasonable justification for marketing orders (see exhibit 5).

Although the basic legislation may not need much adjustment, the specific provisions of federal orders merit thoughtful review. For the most part this should be possible through normal administrative channels.

One issue that has received considerable public attention is the pricing of reconstituted milk. The importance of this topic is far less than the attention it has received would imply. Moreover, a position intermediate to that taken by USDA and the chief antagonists should be feasible (see exhibit 6). Nevertheless, before any changes in the pricing of reconstituted milk were made, we would endorse a more complete review of the strategy and philosophy behind federal order pricing in general. It is important to look at the big picture not just a small part of it.

Critics of federal orders and other dairy programs have often assumed that the alternative to these regulations and policies is an unfettered, competitive market. Unregulated dairy markets would not conform to perfectly competitive standards. As often applied in policy analysis, the

perfectly competitive market is not an appropriate norm. It is an unrealistically rigorous standard. However, we believe that regulations can be used to make an inherently noncompetitive market perform more like a competitive market. Regulations of this type deserve public support.

Cooperatives

Dairy farmer cooperative are an important and growing force in the U.S. dairy industry. In 1981 about 84 percent of all dairy farmers shipping milk under federal milk marketing orders were members of one of the 269 dairy cooperatives operating under federal orders nationwide. These associations ranged in size from very large organizations covering several states and many federal order markets to small, local cooperatives associated with a single processing plant. Dairy cooperatives are involved in a variety of activities including finding outlets for member milk, providing farmers assistance with production problems, coordinating hauling arrangements, providing market information, and with increasing frequency, owning and operating manufacturing and processing facilities for milk and dairy products. Many cooperatives are also involved in activities that affect non-members and private milk dealers, such as manufacturing milk not needed for fluid purposes (thereby balancing the market), negotiating milk prices in excess of federally-mandated minimum prices, and providing private milk processors with a milk supply to fit their production schedule. With few exceptions, dairy farmers rate cooperatives favorably relative to private milk buyers (see exhibit 7).

Dairy cooperatives and the federal milk marketing order system enjoy a symbiotic relationship. The order system relies on cooperative stewardship to keep order provisions up-to-date and workable. Cooperatives recommend order amendments and offer farmers information on the order system. Bloc voting by cooperatives on behalf of their full membership makes maintenance of the order system easier. Cooperatives derive benefits from the order program through order enforcement of classified pricing and fair rules of exchange between farmers and milk buyers. Neither federal orders nor cooperatives would be as strong without the existence of the other institution.

In the past 10 years or so, dairy cooperatives have been charged by some with the accumulation and abuse of political and market power. In the main, these charges are unfounded. Through their heavily endowed Political Action Committees, dairy cooperatives exercise considerable political power. This power is wielded under the rules applying to any and all groups attempting to influence Congressional and Executive decision. Dairy cooperatives appear to be operating legally and rationally, the transgressions of a very few in the late 1960s aside. One might question their aims, strategies, or successes, but they are operating within the prescribed system.

Market power by dairy cooperatives is a reality today just as it was throughout the 1970s. This market power, however, is tenuous in almost all cases and with few exceptions, its abuse is ephemeral. This is true for three primary reasons. The first reason is cooperatives' inability to control the total supply offered for sale. Without supply control, classic monopoly or oligopoly gains cannot be captured by sellers. Second, dairy cooperatives face tough competition from independent milk supplies and each

other. In almost every market, sufficient uncommitted milk supplies exist to help discipline cooperatives' price demands. Moreover, the dairy cooperative community does not behave as a unified group of dairy farmer associations working for the good of their collective membership, despite some rhetoric to the contrary. Inter-cooperative competition can be intense and helps to prevent the abuse of market power theoretically possessed by a cooperative. Four-firm concentration ratios for dairy cooperatives are above 0.50 in most U.S. markets but these ratios are not barometers of market power or its abuse. The final reason that apparent market power is seldom manifested is that large private bulk milk buyers, most notably, integrated chain stores, can and do exert a major influence over cooperative pricing decisions. These big private accounts often name the tune to which milk suppliers will dance.

Cooperative-negotiated prices in excess of federal marketing order minimums are perhaps the most frequently cited symptom of the abuse of market power. The research evidence suggests that there have been short periods of time in a limited number of markets when premium prices likely reflected undue price enhancement. For the reasons previously enumerated, however, these gains were short-lived. In the research literature price premiums have been linked most strongly with the costs of providing services to milk buyers and with the extra money needed to induce milk to move from surplus to deficit fluid markets.

It is our belief that dairy farmer cooperatives are an important component of the marketing system. They provide a viable alternative to the private milk buyer but appropriately, natural market pressures continue to exist for an independent, unaffiliated milk supply. Large processors and other cooperatives limit cooperatives' exercise of market power. Cooperatives bring some order and cohesiveness to the marketplace and establish a place for the willing dairy farmer in the market beyond the farm gate. Make no mistake! These organizations are not possessed of any special virtue whereby objectionable behavior is automatically spurned. Rather, the marketplace and the very nature of such voluntary organizations tend to yield such a result. It is clear to us, however, that it is unwise to rely solely on these "invisible" disciplinary forces. The authority of the Secretary of Agriculture under Section 2 of the Capper-Volstead Act to prohibit undue price enhancement should be wielded as a deterrent to cooperative excesses. Moreover, the laws and regulations administered by the Justice Department and the Federal Trade Commission should continue to be applied to cooperatives as appropriate. In this latter regard, however, it would seem reasonable to coordinate their activities and jurisdictions with that of USDA to ensure clear, consistent, and appropriate treatment of cooperatives.

Product Identity Standards

Product identity standards generally serve to assure consumers that certain products, especially those whose composition (identity) is difficult for consumers to ascertain, meet some minimum standards. Recently, proposals have been made to change the national standards of identity for fluid milk products, in particular to increase the standards for their nonfat solids content. There is nothing wrong with current standards in terms of

food safety or quality. Proponents of higher nonfat solids standards for beverage milk believe that it will result in greater sales of milk (or at least nonfat solids), which would help alleviate the current surplus problem. That higher solids standards would indeed result in more total milk sales is questionable. The implications of these proposals need far more careful study. We suspect that such proposals are not in the longer run interest of milk producers or the general public. Further discussion of this issue is provided in exhibit 8.

Generic Promotion

A considerable amount of research on New York State generic milk promotion programs has been done at Cornell (see exhibit 9). In general, the conclusions have been that generic promotion can result in greater sales than would otherwise occur and that dairy farmers receive a favorable return on these investments. Recently proposals have been made that could result in mandatory, 2-year nationwide assessments on farmers for the purpose of generic milk product promotion (contrasted to present state or regional programs on which farmers have voted their approval). Cornell researchers have attempted to estimate the impact of the latest such proposal (see exhibit 10). They concluded that an effective promotion campaign of the magnitude implied by the proposal might increase dairy sales from four to six billion pounds (approximately 3 to 5% of 1982-83 U.S. marketings). Perhaps these estimates should be viewed as optimistic; nevertheless the research indicates that such a program may well be worth considering. Given government involvement in generic promotion programs that consists of no more than providing 1) an opportunity for farmers to decide whether or not to collectively tax themselves for this purpose and 2) an administrative framework in which to operate, we can see little reason to oppose such programs.

New York and the Northeast

Although the dairy industry is by no means a homogeneous entity across the U.S., the problems and concerns in New York and the Northeast are remarkably similar to those expressed by dairy industry leaders elsewhere. Despite differences in average farm size, production per cow, costs of production, and Class I utilization among major milk-producing regions, their degree of reliance upon federal dairy programs is remarkably similar. While regional solutions to the current over-supply problem have been touted, we do not feel they would be economically or politically sound.

Despite claims to the contrary, New York and the Northeast have been contributing to the milk surplus problem. During 1981 and 1982, production increases here generally lagged behind those in other major milk-producing regions. Since late 1982, however, the rate of increase in the Northeast, and especially New York and Pennsylvania, has been well above the national average. While it's true that sales to the Commodity Credit Corporation (CCC) from New York and Northeast manufacturers are significantly less than sales from the upper Midwest or California (New York sells about 8% of its production to the CCC, which is about the state's share of total U.S. production), the Northeast receives direct and crucial benefits from this federal market-clearing program. This region can take some pride in the

fact that most of its manufactured dairy products find commercial outlets, but wholesale prices in those national product markets are directly supported by the government's purchase program. The market prices that Northeast dairy products receive are supported by CCC purchases from California and the upper Midwest. Moreover, through the linkage between the support program and the federal milk marketing order program, farm level milk prices (in fluid and manufacturing uses) in New York and the Northeast are bolstered by the national level of price support. If the support price is lowered \$1.00 per hundredweight, the Northeast farmer's blend milk price will fall by approximately the same amount. Clearly then, the dairy industry in the Northeast and New York is dependent on the price support program to undergird farm and wholesale prices.

There are some very economically-sound reasons why New York and other Northeastern states produce a significant share of the nation's milk. These include low costs of milk production, abundant land and water resources, a good transportation system, a restricted set of agricultural alternatives to milk production, and proximity to huge retail markets. The inevitable reduction in milk prices which began last April with the collection of the first 50-cent assessment, will do nothing to change the Northeast's comparative advantage in milk production. Analyses performed at Cornell University indicate that times will be hard for Northeast dairy farmers (see exhibits 11 and 12), but they will be hard for milk producers nationwide. In fact, producers in the South and the West, where costs of production--especially feed--are high relative to the Northeast may be squeezed first and hardest. In our judgment, New York and the Northeast will emerge from the impending nationwide adjustment as they went in, major milk-producing areas. The transition will not be easy. The absence of good alternative agricultural enterprises in many parts of the Northeast suggests that many dairy farmers in this region will find it less difficult to survive than to develop alternative uses of their resources. Unfortunately, there is no way out of our serious over-capacity problem except through reductions in cow numbers and dairy farmers. In the long run, our milk supply will be produced by fewer cows on fewer but bigger farms and will be processed in fewer but larger plants. This is true in the Northeast and nationwide.

There is one factor exacerbating New York dairy farmers' hard financial times which producers in many other parts of the country do not face. This is the generally more fragmented and less financially-sound set of dairy farmer cooperatives in New York relative to most other parts of the country. This has resulted in relatively greater marketing inefficiencies and higher marketing costs in this area. Dairy farmer members pick up the tab for such inefficiencies. Leaving such an association, however, is also costly for farmers because of the equity capital they have contributed over the years. These problems must be dealt with by the respective organizations, individually and collectively. There is really nothing more that government can or should do to assist these organizations. It is, however, important to appreciate these problems and recognize that they work to frustrate the ability of New York's cooperative milk marketing system to make adjustments.

Andrew Novakovic is an Assistant Professor in the Department of Agricultural Economics at Cornell University, Ithaca, New York. He holds a Ph.D. degree in agricultural economics from Purdue University.

Professor Novakovic has research, extension, and teaching responsibilities concentrating on dairy marketing problems and policies. He is specifically interested in marketing and pricing systems, marketing policy, the efficiency of markets, interregional competition, transportation, and quantitative methods useful in marketing analysis. His extension program stresses economic and policy outlook and draws upon his research results. In addition, he teaches the Department's undergraduate course in dairy marketing.

Andrew Novakovic resides at 384 Coddington Road, Ithaca, New York.

Robert Boynton is an Associate Professor in Cornell's Department of Agricultural Economics. He received his Ph.D. degree from Michigan State University.

Professor Boynton's chief responsibilities are research and extension in dairy marketing. His work focuses on many aspects of milk marketing policy, including the price support program, federal order regulation, trade practice regulation, and product identity standards for fluid milk. He is also interested in milk hauling costs and efficiencies, the costs of fluid and manufactured product processing and distribution, and economic problems associated with dairy marketing.

Robert Boynton resides at 203 Texas Lane, Ithaca, New York.

Preface

Andrew Novakovic is an Assistant Professor in the Department of Agricultural Economics at Cornell University.

This paper was the basis for remarks made at the 1982 Morrisville Dairy Days and on other occasions in Fall 1981.

Requests for additional copies of this paper should be directed to:

Dr. Andrew Novakovic
Department of Agricultural Economics
Cornell University
Warren Hall
Ithaca, New York 14853

Introduction

Insofar as dairy policy is concerned, the recent months have been as turbulent as any in the history of the dairy price support program. Faced with a record surplus of milk and unprecedented price support expenditures, the President and Congress have decided that dairy price supports must be reduced.

With the expiration of the 1977 Food and Agriculture Act on September 30, 1981, a new Farm Bill was expected on October 1; however, legislation was not passed until mid-December. Difficult decisions regarding price support policy contributed to the more than two-month delay in formulating and enacting agricultural policy for the next four years.

Barring any interim changes, dairy price support policy has been charted through September 1985. The purpose of this paper is to 1) discuss the new dairy support policy and 2) try to assess the implications of the current economic situation and price support policy for the dairy industry in 1982 and beyond. I will begin by differentiating price support policy from other federal dairy programs and reviewing the principal features of the price support program.

Federal Dairy Programs

Federal programs and regulations can, and often do, have a profound impact on the economic performance of the dairy industry, from farmers to consumers. There are four major programs which have direct impact on the dairy sector.

1. Food and Nutrition Programs. This category actually refers to a collection of programs, including School Lunch, Special Milk, and various domestic and international donation programs (e.g., P.L.-480). With the exception of the latter, the principal impact of these programs is that they tend to encourage the use of milk or milk products. Typically, these programs are viewed as components of food policy not agricultural policy, and consumers are assumed to be the primary benefactors, not producers. Hence, these programs have not been subject to much of the kind of criticisms that have been levied against other dairy programs and agricultural policy in general. Nevertheless, it should be recognized that these programs play a role in overall dairy policy, particularly one that tends to result in excess supplies of milk. That these programs are an important component of dairy policy is further evidenced by the strong support they receive from dairy producer groups.
2. Dairy Import Quotas. The importation of manufactured dairy products is restricted to limit the quantities of dairy products imported and thereby limit the possibility that U.S. efforts to support domestic prices would also support world dairy prices. When federal actions to increase domestic prices result in U.S. prices that are higher

than world prices, foreign countries will find it attractive to sell their dairy products in the U.S. Import quotas also prevent foreign countries from flooding U.S. dairy markets with cheaper dairy products, and thereby putting downward pressure on dairy product prices.

3. Federal Milk Marketing Orders. Milk marketing orders are primarily intended to create an orderly environment for the marketing of Grade A raw milk, especially that which is intended for the beverage milk market. Market orders do have an impact on prices, but their principal focus has been more on the distribution of prices than on the level of prices. Pressures to change or even eliminate the milk marketing order system have abated as interest in price supports waxed; however, these pressures will build again. Due to the general deregulation fervor in vogue these days and specific issues such as the pricing of reconstituted milk, the attention of policymakers is likely to refocus on milk marketing orders now that price support legislation has been passed and attentions to support wane for awhile.
4. Dairy Price Supports. The dairy price support program affects the level and stability of milk and milk product prices. At the time of its inception around World War II, dairy farm income enhancement was the primary objective. More recently, price stability has been the principal stated objective, although there clearly remain income enhancing effects.

Support of farm milk prices is achieved through government purchases of manufactured dairy products at prices that are designed to enable dairy manufacturers to pay a price equivalent to the support price, after taking a fair compensation for manufacturing costs. The support price announced at least annually by the Secretary of Agriculture is a price goal; it is the intent of the Secretary to create conditions that will lead to market prices that are no less than the support prices. The Secretary does this by guaranteeing to purchase an unlimited quantity of certain manufactured dairy products which meet certain well-defined grade, size, package, and product standards. Products are purchased at announced prices referred to as USDA or CCC purchase prices.^{1/} Purchase prices are based on the announced support price and USDA estimates of manufacturing costs; thus they are calculated so as to enable manufacturers to sell dairy products to the USDA, cover their processing costs, and pay a price for milk at least equivalent to the support price.^{2/}

^{1/}The CCC or Commodity Credit Corporation is the buying agency of USDA responsible for purchasing dairy and other agricultural products under various USDA programs.

^{2/}For further details on how the price support program works, see the Appendix.

Economic conditions in the dairy sector have led to massive USDA purchases of dairy products under the price support program at an unprecedented cost to the federal government. This and the general climate for deregulation have unquestionably focused public attention on dairy price supports.

What is the Situation and How Did We Get There?

The balance of U.S. milk supply and demand in recent years is illustrated in Table 1. Production and total supply has been trending upward. Consumption, as it is measured by farm use and commercial disappearance has been trending up but is leveling off. Milk surpluses, as measured by net government removals or the difference between the quantity of milk supplied and the quantity of milk used in commercial markets, have declined, increased, declined again, and rapidly increased in two cycles since 1972.

Comparing 1980 and 1981 levels, milk production was up three percent, imports were up 10 percent, the total milk supply was up 3.5 percent, commercial disappearance (consumption) was up one percent, ending commercial stocks were down 14 percent, and net government removals were up 49 percent. Milk production reached a new record high in 1981, and even though total commercial use was among its highest levels, net government removals topped the previous record of 10.7 billion pounds set in 1962. This represents a milk surplus of 9.9 percent of total milk production, which also exceeded the previous record for net government removals as a percentage of milk production set in 1962 and 1953.

The record quantity of milk purchased under price support programs combined with inflated prices resulted in unprecedented net expenditures on dairy products, as is shown in Figure 1. Net expenditures breached the \$1 billion barrier in 1980 and came close to \$2 billion in 1981.

Farm prices have exceeded or equaled support prices (for manufacturing grade milk) in all but six years since 1949. Three of those years are 1977, 1980 and 1981, as is illustrated in Figure 2. In recent years, market prices have failed to reach support levels because USDA's purchase prices for manufactured dairy products have not been sufficiently high to yield the desired market price at the farm level. At the same time, wholesale prices for supported products have basically equaled USDA purchase prices for the last two years, and retail prices for dairy products increased at a slower rate in 1981 than did prices for food or consumer prices in general.

These economic trends have played a role in shaping price support policy as well as having been affected by price supports. Beginning in late 1972, milk production began to decrease and through 1974 milk supply and demand became progressively tighter, as is shown in Table 1. Economists would normally interpret these conditions as signaling a rise in prices to stimulate production and reduce consumption. Many in the dairy industry expected support prices to be increased at this time. This,

Table 1. U.S. Milk Supply and Utilization, billion pounds 1975-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 ^a	1982 ^b
<u>Supply</u>											
Production	119.9	115.4	115.6	115.4	120.2	122.7	121.5	123.4	128.4	132.3	135.0
Farm Use	3.5	3.4	3.2	3.1	3.0	2.8	2.7	2.5	2.3	2.2	2.2
Marketings	116.4	112.0	112.4	112.3	117.2	119.8	118.8	120.9	126.1	130.1	132.8
Beginning Commercial Stocks	3.6	3.5	4.7	5.6	3.7	5.3	4.9	4.5	5.4	5.8	5.0
Imports	1.7	3.9	2.9	1.7	1.9	2.0	2.3	2.3	2.1	2.3	2.2
TOTAL SUPPLY	121.6	119.4	120.0	119.6	122.9	127.1	126.0	127.7	133.6	138.2	140.0
<u>Utilization</u>											
Commercial Disappearance	112.8	112.4	113.1	113.8	116.3	116.1	118.8	120.2	119.1	120.2	120.5
Ending Commercial Stocks	3.5	4.7	5.6	3.7	5.3	4.9	4.5	5.4	5.8	5.0	5.1
Net Government Removals	5.3	2.2	1.3	2.0	1.2	6.1	2.7	2.1	8.8	13.0	14.4
TOTAL USE	121.6	119.4	120.0	119.6	122.9	127.1	126.0	127.7	133.6	138.2	140.0

Source: Dairy Situation, U.S. Department of Agriculture, March 1975, March 1976, March and September 1981.

^aEstimated

^bProjected

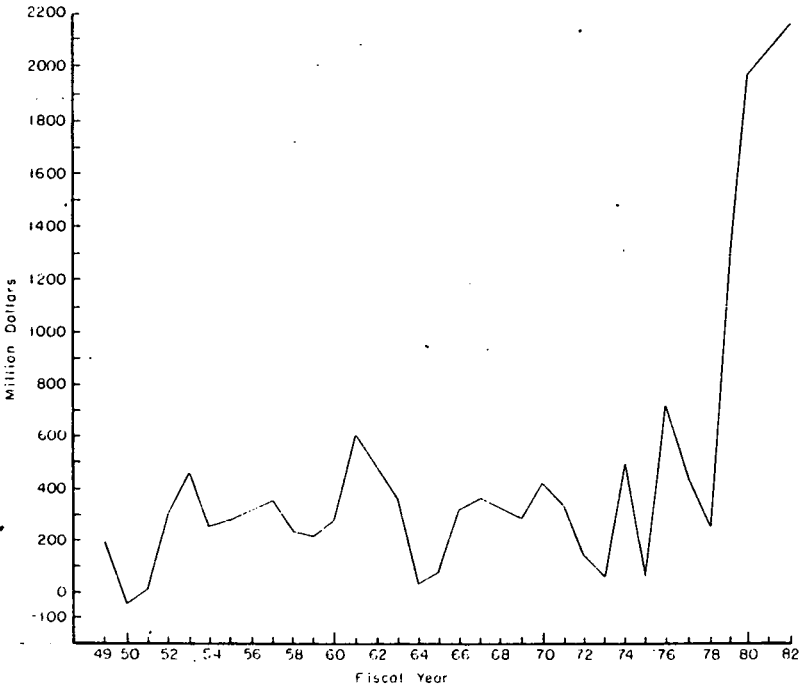


Figure 1. USDA Net Expenditures on Dairy Products.

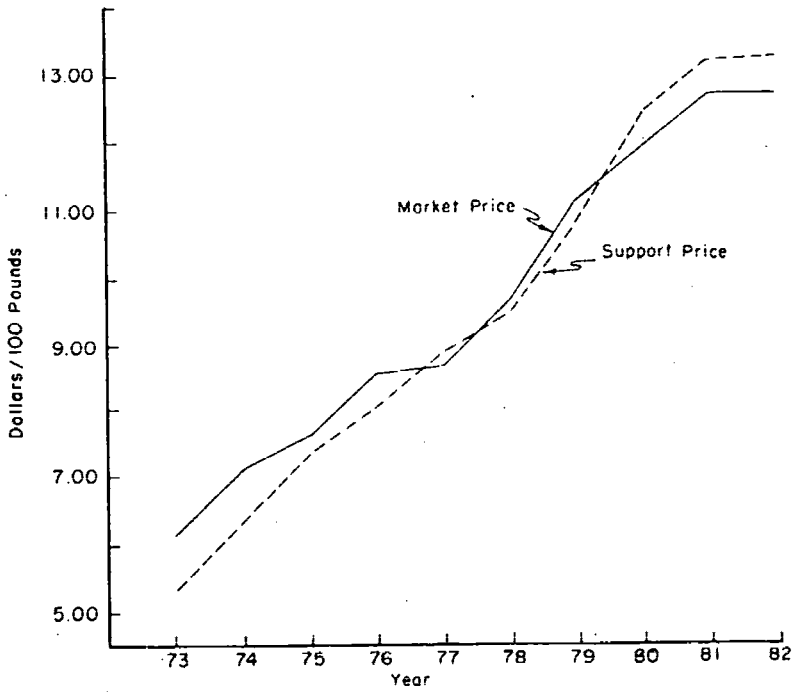


Figure 2. Manufacturing Milk Prices

however, happened to be when President Nixon was making every effort to control price rises and Secretary Butz was advocating a de-emphasis of agricultural support programs. Hence support prices were not raised but dairy import quotas were relaxed to permit foreign supplies to fill the gap. Although perceptions of the actual impact of this move on farm prices and incomes may have been exaggerated, this was nonetheless immensely unpopular with dairy farmers.

In 1975, Presidential candidate Carter sought to woo dairy farmer votes by promising a significant increase in the support price and thereby redressing the wrongs of the Republican administration. Unfortunately, by the time President Carter fulfilled his campaign pledge in 1976, increased farm prices were no longer warranted by existing conditions. The increase in the support price to over 82 percent of parity was based on market conditions two to three years earlier and came at a time of relatively good balance between supply and demand. High imports were no longer needed, commercial stocks had returned to normal levels, and supply was more or less in line with demand. Many economists predicted that President Carter's action would lead to over-production, large USDA purchases, and high government expenditures on dairy products. In the meantime, Congress, not wishing to be outdone by the President, passed legislation in 1977 that raised the price support minimum to 80 percent of parity and added a semiannual adjustment that required that the support price be adjusted in April for increases in the prices paid index (see Appendix).

At first in 1977, these predictions seemed to be fulfilled, but an unexpected drop in production and an unusually large increase in consumption, especially cheese consumption, in 1978 resulted in a fairly well balanced market that year. When the legislation setting the 80 percent of parity support price minimum had to be reviewed in 1979, market conditions looked favorable to a continuation of the 80 percent floor so Congress extended it through 1981. Many economists again protested the wisdom of this action, but by this time the failure of our previous forecasts to match reality had badly damaged our credibility.

The unexpected and fortuitous bubble in dairy product consumption in 1978 and 1979 burst in 1980 at the same time that milk production took a large jump (see Table 1). Consequently, net removals under the price support program burgeoned and the stage was set for what had been predicted three years earlier. Since then the over-supply of milk has been growing larger as gains in milk production have exceeded any gains in milk consumption, all at the considerable expense of taxpayers.

In 1980, the Administration changed again and the political strategy was reversed. President Reagan, fulfilling his campaign promises, vowed to bring the cost of the price support program under control. At no time did anyone seriously suggest a reduction in the support price but it became clear that increases in the support price would slow and, in fact, stop altogether for awhile.

As a first step, the semiannual adjustment scheduled for April 1981 was de-authorized; however, the new Farm Bill slated for 1981 became the focal point for discussions of the future of dairy price support policy.

After much debate between the House, Senate, White House, and other concerned parties, a dairy policy for the next four years finally emerged two months after the normal deadline when the Agriculture and Food Act was passed in December 1981.

The dairy price support policy charted in the new Farm Bill is unlike any previous dairy policy. On the surface it looks quite complicated, involving two so-called trigger mechanisms and the possibility of three different minimum levels for support prices.

Despite its overt complexity, the 1981 Agriculture and Food Act may result in the simplest program ever. The support price for 1981-82 has already been set at \$13.10 per cwt. (for manufacturing grade milk at average fat test). This was the support price set in October 1980. Under the new legislation, specific support prices must be adhered to for the remaining three years of the Bill in every year in which net government expenditures exceed \$1 billion. This is a virtual certainty in 1982 as most forecasters are projecting net expenditures of well over \$2 billion. Support prices, when net expenditures are high, i.e., more than \$1 billion, are as follows:

\$13.25 per cwt. on October 1, 1982
 \$14.00 per cwt. on October 1, 1983
 \$14.60 per cwt. on October 1, 1984.

These prices should be well below 70 percent of parity. If net expenditures are below the \$1 billion trigger but net purchases exceed a certain quantity, then the support price for that year can be held to a minimum of 70 percent of parity. If neither the expenditure nor purchases trigger levels are exceeded, then the support price will be no less than 75 percent of parity. The purchases trigger changes in each year. For fiscal year 1982 it is 4 billion pounds milk equivalent (M.E.); in 1983 it is 3.5 billion pounds M.E.; in 1984 it is 2.69 billion pounds M.E. The outlook for 1983 through 1985 is uncertain, but it would seem that dairy farmers will be fortunate to have supports at 70 percent of parity in those years.

The Outlook for the Dairy Industry in 1982

Projections for 1982 have already been revealed in Table 1 and Figures 1 and 2. The specific numbers are unlikely to be accurate, but the message they should convey is as follows. Milk production will increase almost as much in 1982 as it did in 1981, imports may be down slightly, commercial stocks may go up slightly, and only a modest increase in consumption is expected. This implies an 11 percent increase in net removals and a concomitant increase in USDA net expenditures to over \$2 billion. Annual increases in retail prices will be modest, about 3 to 5 percent. Wholesale prices will increase even less in 1982. Farm prices for milk will at best average the same in 1982 as in 1981 and for the first half of 1982 they are likely to be less than they were a year earlier.

On what basis are these projections made? The specific numbers involve a fair bit of guesswork, but the general direction is based on the following line of reasoning.

The relation between market prices and support prices from the fourth quarter of 1979 through 1981 is shown in Figure 3. Because USDA has held the support price steady since October 1980 and has not adjusted its make-allowance to reflect increases in manufacturing costs since October 1979, USDA purchase prices have become more and more out of line with the support price. Dairy manufacturers are forced to pay less for milk as their selling prices stay constant and their manufacturing costs increase with inflation. This situation can only worsen until the support price is increased next October or until the make-allowances are adjusted, which does not seem to be likely. The reduction in farm prices in the U.S. and New York is also indicated in Table 2, which shows that prices have already begun to decline.

Given this prognosis for farm prices, modest increases in wholesale and retail prices for all dairy products are expected only to reflect increases in processing and marketing costs. Wholesale prices for manufactured products may even lag behind USDA purchase prices (see Appendix). USDA has recently begun to more strictly enforce purchasing rules and have added delays and paperwork for manufacturers wishing to sell manufactured dairy products to the government. This may prompt manufacturers to cut prices to encourage commercial sales and thereby avoid the extra hassle and cost of selling to the USDA.

The modest rise in retail prices should encourage consumption, but the sluggish and recessionary economy will offset some of that effect as consumer incomes drop off.

The most difficult variable to forecast is production. With declining or, at best, constant milk prices, one might expect a decrease in production, but this may not occur in 1982 for three major reasons. One, the price of feed, the largest single input cost for a dairy farmer, is expected to decrease through the first half of 1982. Two, the farm and nonfarm options for dairy farmers who might like to get out of dairying will be poor. With high unemployment in the nonfarm sector, jobs off the farm will be almost impossible to find until the economic recovery begins. Dairymen investigating alternative farm enterprises will find that returns in other agricultural sectors are, by and large, no better and often worse than they are in dairying. Three, the number of cows may very well continue to increase, counter to the long-run trend. Replacements on farms continue to be at unusually high levels and low beef prices have and will continue to discourage culling.

Some of these factors are illustrated in Table 3 which has data for the U.S. and New York. Although milk prices have already begun to soften, this table readily demonstrates that feed prices are decreasing more swiftly. The prices received for corn and beef, which are feasible alternatives for dairymen in some parts of the country, are declining more rapidly than milk prices. Cull cow prices are also declining. There is nothing in these numbers that suggests anything but more economic incentives to produce milk. If one couples this with the

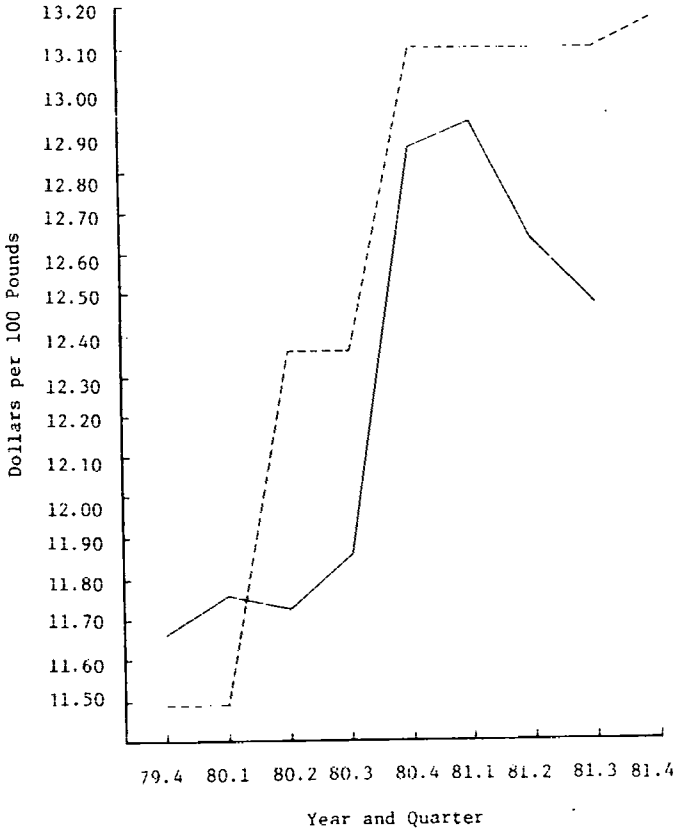


Figure 3. U.S. Average Market and Support Prices for Manufacturing Grade Milk (average fat test).

Table 2. Milk Prices, 1980 and 1981 (\$/cwt.)

Year or Quarter	1980	1981	% Change
<u>Price Received - All Milk, U.S.</u>			
I	12.80	13.97	9.2
II	12.60	13.50	7.2
III	12.87	13.53	5.2
IV	13.94	14.03 ^a	0.7
Year	13.00	13.76	5.9
<u>Price Received - All Milk, N.Y.</u>			
I	12.60	13.84	9.9
II	12.20	13.20	8.2
III	13.10	13.87	5.9
IV	14.04	14.17 ^a	0.9
Year	13.00	13.77	5.9
<u>Minnesota - Wisconsin Price (3.5% BF)</u>			
I	11.44	12.66	10.7
II	11.68	12.61	8.0
III	11.89	12.49	5.1
IV	12.52	12.53	0.0
Year	11.88	12.57	5.8
<u>Support Price (3.5% BF)</u>			
I	11.22	12.80	14.1
II	12.07	12.80	6.1
III	12.07	12.80	6.1
IV	12.80	12.87	0.6
Year	12.04	12.82	6.5

Sources: Agricultural Prices, Statistical Reporting Service and Dairy Market News, Agricultural Marketing Service, U.S. Department of Agriculture.

^apreliminary.

Table 3. Comparative Dairy Statistics, United States and New York, 1980 and 1981

Year or Quarter	United States			New York		
	1980	1981	% Change	1980	1981	% Change
<u>Milk Produced (M lbs.)</u>						
I	31,223	33,068	5.9	2,710	2,769	2.1
II	33,998	35,236	3.7	2,949	3,015	2.2
III	32,182	33,018	2.6	2,682	2,723	1.5
IV	31,022	31,500 ^a	1.5	2,611	2,666 ^a	2.1
Year	128,425	132,822	3.4	10,952	11,173	2.0
<u>Price Received - All Milk (\$/cwt.)</u>						
I	12.80	13.97	9.2	12.60	13.84	9.9
II	12.60	13.50	7.2	12.20	13.20	8.2
III	12.87	13.53	5.2	13.10	13.87	5.9
IV	13.94	14.03 ^a	0.7	14.04	14.17 ^a	0.9
Year	13.00	13.76	5.9	13.00	13.77	5.9
<u>Price Received - Corn (\$/bu.)</u>						
I	2.42	3.22	33.1	2.82	3.60	27.7
II	2.43	3.22	32.5	2.93	--	--
III	2.89	2.98	3.1	3.43	-- ^a	--
IV	3.10	2.35 ^a	-24.2	3.36	-- ^a	--
Year	2.71	2.94	8.5	3.50	--	--
<u>Price Received - Cows (\$/cwt.)</u>						
I	50.37	43.90	-12.9	49.14	43.17	-12.2
II	44.37	43.14	-2.8	45.37	43.24	-4.7
III	44.44	42.34	-4.8	45.54	41.77	-8.3
IV	43.47	36.57 ^a	-15.9	44.90	38.03 ^a	-15.3
Year	45.70	41.49	-9.2	46.30	41.55	-10.3
<u>Price Received - Steers and Heifers (\$/cwt.)</u>						
I	68.87	62.80	-8.9	58.77	51.10	-13.1
II	64.24	63.87	-0.6	55.30	51.74	-6.5
III	68.30	63.20	-7.5	55.50	54.40	-2.0
IV	66.00	58.60 ^a	-11.2	53.30	45.07 ^a	-15.4
Year	66.90	62.12	-7.2	55.72	50.58	-9.2

Table 3. (Continued)

Year or Quarter	United States			New York		
	1980	1981	% Change	1980	1981	% Change
	<u>Price Paid - 16% Dairy Ration (\$/cwt.)</u>					
I	8.22	10.00	21.7	8.34	10.20	22.3
II	8.27	9.90	19.7	8.40	9.95	18.5
III	8.97	9.44 ^a	5.3	9.07	9.40	3.7
IV	9.92	9.07 ^a	-8.6	10.12	9.19 ^a	-9.2
Year	8.85	9.60	8.5	8.98	9.69	7.9
	<u>Milk - Feed Price Ratio</u>					
I	1.56	1.41	-9.7	1.51	1.36	-10.0
II	1.53	1.37	-10.5	1.45	1.33	-8.3
III	1.43	1.44	0.7	1.45	1.48	2.1
IV	1.40	1.55 ^a	10.7	1.39	1.55 ^a	11.5
Year	1.47	1.44	-2.0	1.47	1.43	-2.7

SOURCES: Milk and Agricultural Prices, Statistical Reporting Service,
U.S. Department of Agriculture.

^aPreliminary.

likelihood that many dairy farmers will have to expand production to maintain cash flows needed to service debt, the situation only worsens.

How Do We Get Out of This Mess?

There are two simple solutions to the current problem, but they are not easily achieved. One, production can be reduced, and/or two, consumption can be increased. The latter is far more desirable, but decreases in production are more likely to be the solution.

How can consumption be stimulated? Relatively lower prices will help, but until the general economic situation improves, unemployment is reduced and consumer incomes improved, it will be difficult to count on consumers buying many more dairy products. An added difficulty is presented by the increasing use of imitation dairy products, in particular imitation cheese. Although imitation cheese is a long way from cutting into cheese markets the way margarine has displaced butter markets, imitation cheese use is expanding rapidly and is becoming an important factor in limiting the growth in cheese sales.

Milk and dairy product promotion will continue to encourage consumption and discourage switching to dairy product substitutes. The National Milk Producers Federation and many dairy leaders are currently exploring the possibility of a nationwide promotion program targeted on manufactured dairy products. This would supplement promotion programs which focus on fluid milk products that exist in many dairy producing states. Studies have indicated that dairy promotion can effectively stimulate consumption and return more to the producer than is spent on advertising; however, promotion activities cannot be expected to eliminate the current surplus. Dairy product development may hold the most opportunity for expanded consumption by improving current products and developing new products and uses for milk, including nonfood uses. Although many new developments are on the brink of being commercially feasible, product development is inherently a slow and long-run process. No short-term miracles to stimulate consumption are in sight.

Expanded dairy exports have been promoted by many, including Congress, but expanded exports will be difficult to achieve. U.S. dairy prices for exportable dairy products typically run 50 to 100 percent higher than the prices offered by foreign competitors. The U.S. could underwrite and subsidize exports, as so many other dairy exporters do, but this obviously limits the benefits of exporting. It may be desirable to subsidize exports to reduce a large, unmanageable surplus in the short run, which has been done, but export subsidies should not become a long-run policy. Because the U.S. does export very little dairy products now, it would take time to develop more export markets. Moreover, foreign markets are as glutted with milk as our's are; unless some way is found to profitably supply the world's hungry and impoverished masses, our exports in commercial channels will likely remain relatively small.

Although there is hope to increase consumption, increases will not be easy. Likewise, decreases in supply will be difficult. Decreases

in the supply of milk and dairy products can be achieved by reducing domestic production or further limiting dairy product imports. More restrictive quotas on most dairy imports are likely to be vetoed by foreign policy interests. Casein imports, which are currently unrestricted, have been reviewed several times recently; casein quotas are currently being considered. Although dairy producers have argued strongly for casein quotas, they have not found a sympathetic ear among those who are concerned with federal trade policy. President Reagan has not issued a decision on quotas yet and the outcome is uncertain. Like efforts to expand consumption, dairy quotas by themselves will not solve the problem of oversupply.

Dairy leaders are also discussing the feasibility of a so-called self help program under which milk producers would share in the cost of the price support program. Plans at this stage call for producer financing when net government purchases exceed a certain quantity, perhaps 3.5 billion pounds milk equivalent. This plan also would set up a national Dairy Board, controlled by dairy farmers, which would help administer dairy programs. Proponents of the plan also expect prices to be supported at no less than 75 percent of parity with semiannual adjustment. The large surplus likely to be generated under those prices in the near future would probably be disposed of through subsidized international or domestic food programs. Such a program would shift some of the financial burden of price supports to producers but many would still question the wisdom of generating large surpluses and the equity of requiring consumers to pay prices that are above market clearing levels.

Twenty years ago dairy leaders proposed a different type of self help plan that would have allotted production quotas to dairy farmers. Production quotas have never been particularly popular with farmers hence the form of the current proposal is not surprising. The self help plan proposed in 1982 would do little to discourage production; in fact, it might stimulate production. Lower milk prices over an extended period of time will eventually discourage production. Barring a concerted national effort by dairymen to adopt a stiff supply control program, decreases in production will most likely come by more dairy farmers retiring from dairying not by all dairymen milking fewer cows. As discouraging as the dairy outlook might be, most dairymen will continue to find dairying to be better than their other options, at least for most of 1982. Attrition will come slowly, and so will decreases in production.

To ease the burden of stagnant prices and decreasing net returns, dairymen should make every effort to encourage their cooperatives and other organizations to improve marketing efficiency. This will not reduce the oversupply of milk, but reducing marketing costs will increase net returns. This will be particularly important to dairy cooperatives which own processing facilities. Milk assembly and processing costs can be reduced through the efficient handling of larger volumes of milk. For many, this will mean more joint efforts, mergers and consolidations to attain efficient sizes in processing plants and higher densities on milk pick-up routes.

APPENDIX

How Does the Dairy Price Support Program Work?

To understand the implications of current support policy, one must have a basic understanding of how the price support program works.

Typically, the Secretary of Agriculture announces a support price for farm milk once a year on October 1. This support price is actually a price goal--a minimum, average price that USDA hopes to see realized in the marketplace. The USDA is free to specify a price goal within a range specified by Congress. This range is defined by a pricing guide called parity.

Parity implies a price that is equitable or on par with something. Under the price support program, parity prices are intended to result in farm incomes that are on par with farm incomes in the period 1910 to 1914. This period was chosen by Congress when the price support program was being developed because it was believed to be the most recent period when farmers received a fair or equitable return for their produce. Fairness in this case was probably based on perceptions of farm incomes relative to nonfarm incomes in 1910 to 1914, but in any case it is actually measured by the relationship between the prices farmers receive and the prices farmers pay. (Prices are much easier to measure than incomes.)

Given this concept of parity as a guide, Congress has written a precise mathematical definition of a parity price. The parity price for milk is determined by three variables: 1) the increase in the prices farmers pay since 1910 to 1914 as measured by the prices paid index, 2) the increase in the prices farmers receive since 1910 to 1914 as measured by the prices received index, and 3) the average prevailing market price for milk. The formula that is used could be written as follows:

$$\text{Parity Price} = \frac{\text{Prices Paid Index}}{\text{Prices Received Index}} \times \text{Market Price}$$

What this means is that the parity price will be as much higher (or lower) than the market price as increases in prices paid are higher (or lower) relative to increases in prices received. In other words, if prices paid have increased by a factor of 10 since 1910 to 1914 and price received have increased by a factor of 5 then prices paid have increased twice as fast as prices received. The ratio of the prices paid index to the prices received index equals two. Therefore, the parity price will be twice the market price. In a sense, this calculation adjusts the market for a kind of price inflation--the inflation of prices paid relative to prices received.

The parity price calculated according to this procedure is not the support price. The support price is a percentage of the parity price. Congress has typically required that the support price be set between 75 percent and 90 percent of the parity price. The so-called flexible parity approach is intended to give the Secretary discretion to choose a support price that is consistent with supply and demand while still providing minimum guarantees to farmers and processors as to the boundaries for the support price. The 75 to 90 percent range has historically encompassed prices that could be justified on the basis of market conditions.

The price support level is often chosen based on some particular percentage of parity. For the last several years Congress required support prices to be no less than 80 percent of the parity price. Because USDA did not wish to go higher than this, support prices have been set at 80 percent of parity at the beginning of each marketing year between 1978 and 1980.^{1/}

Although USDA's price support goal is often expressed as a percentage of parity, once a support price is announced USDA's commitment is to achieve that price not a particular parity level. For example, if USDA announces in October that it is setting the support price at 80% of parity and that price calculates to be \$10 per cwt., then USDA is committing itself to a price goal of \$10 per cwt., not 80% of parity. If 80% parity in March of the following year happens to be \$9 or \$11 per cwt., USDA's commitment remains to \$10 per cwt.

The mechanism for calculating support prices is complex and a considerable amount of legislation is devoted to defining the process. Nevertheless, the support price is merely a price goal; if USDA did nothing else than announce the support price, the price support would be totally ineffective and meaningless. USDA must take some further action if the price goal is to be achieved.

Contrary to what some believe, it is not illegal for someone to pay a dairy farmer or a dairy cooperative less than the support price. The USDA attempts to achieve its farm price goal by creating an extra demand for manufactured dairy products that is sufficient, in light of existing supply and demand, to elicit a market price for raw milk that is at least as high as the support price. The USDA buys American cheese, butter, and nonfat dry milk in its efforts to bolster the demand for milk.

USDA purchases these products at wholesale prices that are based on the support price and USDA's estimate of what it costs a manufacturer to make cheese, butter, or nonfat dry milk; the manufacturing cost used by USDA is often called the make-allowance. Thus the wholesale price

^{1/}Support prices are not always chosen because they are some particular percentage of parity. For example, in 1977 the support price was set at \$9 per cwt., which happened to be 82 percent of the parity price. Support prices under the Agriculture and Food Act of 1981 can be pegged a particular dollar amount, not a percentage of parity.

offered by the USDA for a specific manufactured dairy product is calculated to return enough money to the manufacturer to cover processing costs and pay at least the equivalent of the support price for raw milk. It is the USDA's purchase prices for cheese, butter, and nonfat dry milk, in relation to actual manufacturing costs, that determine the effective level of price supports for milk. When market prices for milk do not reach support levels it implies that the USDA purchase prices for cheese, butter, and/or nonfat dry milk are too low.

To summarize, there are three types of prices that are important to the price support program: the parity price for milk, the support price for milk, and purchase prices for manufactured dairy products. The parity price reflects the conceptual basis and objectives of the price support program; it serves as one step in the calculation of the support price. The support price is the farm price goal, and as such it receives the most attention. Nevertheless, the support price is by and large irrelevant in and of itself until it is used to calculate purchase prices. Purchase prices are probably the least well known and understood of the three, but they are the prices that actually make the program work. By directly supporting prices for manufactured dairy products through purchases of those products at the announced purchase prices, USDA makes it possible for market prices for farm milk to reach the support price goal.

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

AN OVERVIEW OF DAIRY POLICY OPTIONS

by

Andrew Novakovic

March 1982

No. 82-3

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

Preface

This paper was presented at the Dairy Economics Symposium held in Kansas City on March 22-23, 1982. Proceedings of the Symposium are available from the U.S. Department of Agriculture. Additional copies of this paper can be obtained by request from:

Dr. Andrew Novakovic
Department of Agricultural Economics
Cornell University
314 Warren Hall
Ithaca, NY 14853

AN OVERVIEW OF DAIRY POLICY OPTIONS

Andrew Novakovic
 Assistant Professor
 Department of Agricultural Economics
 Cornell University

It seems clear that there is little disagreement that the current surplus milk production and large USDA purchases of and expenditures on dairy products is a serious problem having important consequences for the price support program and the future of the dairy industry itself.

The basic issue for this conference and the issue facing all components of the dairy industry is what do we do about it? It is not my intention to tell you what should be done. Others will make specific proposals later. My purpose today is to:

- discuss some of the general alternatives,
- try to focus some of the advantages and disadvantages of these alternatives, and
- comment on why we have dairy programs in the first place and some of the conditions surrounding the current problem.

What are Some of the Alternatives?

Alternatives to the price support program have been discussed for the last 30 years. Many that we hear today have been kicking around for years. I don't want to dwell on a long list of alternatives, but I would like to point out the ones that come to mind and how I would characterize them. The alternatives range from fine-tuning efforts to radical departures from the current program. Many of these options do not relate to our current problems, but they are alternative ways of achieving price support policy objectives.

- I. Support farm prices by purchasing manufactured dairy products, as is currently done. The farm price goal is achieved by setting the purchase prices for dairy products at appropriate levels. Alternatives exist for the mechanisms used to establish the support price or purchase prices, such as:
 - A. Use parity as the pricing standard for the support price, but:
 1. update the base year for the prices paid and prices received indices from 1910-1914 to something more current. (1967 is often suggested; this is the base year used for the Consumer Price Index.)

2. the weights assigned to the components of the prices paid index could be changed to more accurately reflect the amount of each component used by dairy farmers, rather than the amounts of inputs used by all farmers as is currently the case. This is the so-called dairy parity approach.
3. the current parity formula uses the most recent monthly prices paid index and the most recent ten-year averages for the prices received index and the wholesale price of milk. Only the more current data on the prices received index and wholesale prices could be used to calculate a current parity price.

B. Replace parity as the pricing standard with:

1. cost of production, as calculated by USDA,
2. an economic formula that may take into account several factors such as dairy product prices, supply and demand balances, cost of production, and so on, or
3. prices determined by a public hearing, as is done with Class I prices in some State milk marketing orders.

C. Change other administrative procedures, such as:

1. tying changes of support prices to changes in or projections of price support purchases and/or expenditures. This is the so-called trigger mechanism. Quantity and dollar triggers are specified in the Agriculture and Food Act of 1981.
2. changing the date on which support prices must be announced or requiring more frequent revisions, such as the semiannual adjustment which was used from 1978 to 1980.
3. creating more formal procedures for calculating and updating purchase prices.

II. Support farm prices but not via dairy product purchases. There are a number of theoretical possibilities, many of which are fatuous. The two most likely options are:

- A. a direct payments plan that gives farmers a cash subsidy based on the quantity of milk sold. This is similar to the target price program used for grains.

- B. Use federal milk marketing orders to support farm prices. Federal orders establish minimum Class and blend prices. The level of these prices is tied to the Minnesota-Wisconsin (M-W) price, which is influenced by the price support program. If the price support program did not exist, minimum order prices could be set in some other fashion; in fact any of the pricing standards discussed above could be used. Without government purchases, supply and demand would have to be kept in balance through price adjustments in manufactured milk markets. If Class III prices continue to be based on unregulated Grade B milk prices, Class I differentials could be adjusted to compensate for changes in Class III prices in order to achieve a blend price consistent with price "support" objectives. Establishing minimum prices in lower use classes in some other manner could become a problem if Class III prices became out-of-line with Grade B milk prices.
- III. A direct income subsidy could be given. This would be a cash payment of fixed amount not based on an individual's milk sales, as opposed to the direct payment alternative discussed earlier. This would be more of the nature of an income subsidy than a price subsidy.
- IV. Production control programs can result in higher prices or they can be used to limit milk surplus problems in conjunction with some kind of price support program. There are several types of production control or supply management programs including:
- A. dairy product import restrictions, either tariffs, quotas, or other non-tariff barriers to trade,
 - B. culling incentives that subsidize, reward, or otherwise encourage culling beyond normal levels.
 - C. production or marketing quotas that establish price penalties for over-quota milk; these are often called base-excess plans, and
 - D. surplus pricing plans that work somewhat like a base-excess plan but without formal or complicated procedures for establishing a producer's base. In theory, a low, surplus-value price is paid for all milk estimated to be in excess of commercial needs with all producers sharing equally in the surplus price.
- V. Programs to stimulate demand can also be used to increase returns to producers; these demand side initiatives include:
- A. promotion programs for milk and milk products,
 - B. marketing research and product development,

- C. consumption subsidies that enable people to buy dairy products who could or would not otherwise consume dairy products. Consumption subsidies can focus on either or both of the following:
1. domestic markets, e.g. Special Milk, School Lunch, recent cheese distribution programs, military or other governmental use, or even broad price subsidies such as those commonly used for food in Second World countries, or
 2. export markets, e.g. P.L. 480, other international aid programs, or even price subsidies to exporters as are used by many exporting countries in world trade.
- D. change product identity standards to require higher concentrations of nonfat solids and/or butterfat in milk or dairy products.
- VI. The final alternative to any public regulatory policy is deregulation. In this case that means abandoning the price support program altogether and perhaps milk marketing orders as well.

Another aspect of these alternatives is how these programs would be administered. In general, I think there are 3 types of administrative organizations:

- I. Direct and exclusive Government control such as exists for the current price support program, import quotas, School Lunch, Special Milk and export assistance programs.
- II. Indirect or shared government control, implying that the affected parties have some choice in participating in a program offered by the government and/or some opportunities for direct input into decision-making processes or the administration of a program. The chief characteristic of this type of institution is that nongovernment control is involved but the institution could not exist or survive without governmental assistance or authorization. Examples of this type of administrative organization are milk marketing orders, marketing boards, and some promotion programs.
- III. Voluntary private control, such as is the case when a cooperative initiates promotion programs, base-excess plans, and the like for its members.

It is possible for virtually any of the support program alternatives to be administered in any of these three ways; however, the administrative organization chosen to implement a program can profoundly effect the overall effectiveness of a program and the distribution of the benefits and costs of the program.

How Do we Evaluate These Options?

The current immediate imperative is to balance supply and demand and thereby minimize government purchases and expenditures. A corollary theme today is that deregulation in general is good and perhaps we should pay more attention to nonproducer interests.

If these are our only criteria then the deregulation alternative looks appealing. But, I think it should be recognized that our immediate concerns do not reflect some of the good reasons why we have programs and that some of the historical problems used to justify government intervention in and regulation of the marketplace are still relevant concerns.

I think there were three principal problems that led to the development of most agricultural policies in the first half of this century:

1. low farm income relative to nonfarm income
2. production and marketing risks were borne mostly by farmers
3. inequality in bargaining power.

These problems could very well re-emerge in a deregulated environment and thus merit our attention.

As the gap between farm and nonfarm incomes narrowed over time, interest in income enhancement has waned and rightly so. I am optimistic that low farm incomes and serious inequities with nonfarm incomes will not become a major problem again, but we have not reached a stage where that prospect can be totally ignored.

In recent years, price stability has clearly replaced income enhancement as the dominant public objective of the price support program. Prices can be stabilized above, at, or below market clearing levels. The remaining vestiges of the income enhancement objective led to a support program philosophy that preferred prices stabilized slightly above market clearing levels. The definition of acceptable price levels is changing as concerns for incomes decreases and program costs increases.

The historical issues of risk-bearing and equality of bargaining power are related to the price stability objective. Dairy price supports have contributed to the solving or easing of these two problems by transferring most of the risk associated with seasonal or cyclical over production from producers to taxpayers. In so doing the bargaining position of cooperatives is strengthened; because manufacturing dairy products even in an oversupply situation is a viable, even good, alternative. Cooperatives have a manufacturing option when they deal and bargain with processors that they did not have prior to the 1930s.

Thus when we consider alternatives we must consider how well an alternative deals with the inherent problems of the market as well as its ability to satisfy our current short run desires. Although some would disagree, I think the fundamental problems of inequities in risk-bearing and bargaining power would re-emerge in a deregulated environment. I cannot say whether society would or should judge that as a fair risk for producers to take, but these are factors that should be considered.

Sorting Out the Options

It seems to me that the immediate need to reduce the over supply of milk has to be a dominant factor in selecting price support strategy. Nonetheless, my concern that some of the problems that led to the development of price supports would re-emerge and my feeling that those problems are real and probably merit some kind of government intervention, leads me to conclude that some type of program that addresses these fundamental problems is justified. Total deregulation is probably not desirable.

So what program is best for today? Among the alternatives I mentioned earlier, I think almost all could work. Many of the alternatives discussed in the past deal with problems that are not particularly relevant now, many never were relevant. For example, there has been much discussion about modifying the parity standard or replacing it altogether. Frankly, I don't think it makes that much difference, and that kind of "solution" misses the problem.

When it introduced the flexible parity concept in 1949, Congress recognized that no formula could establish support prices without help in the form of human judgement. Congress defined boundaries on the support price but left the specifics up to program administrators who are better able to respond to market situations in a timely fashion. As long as the principle of flexibility remains, and it should, I don't think it makes a great deal of difference what pricing standard is used. The boundaries set by Congress 32 years ago need to be changed and the current parity standard could be improved, but I do not think the current situation was caused because of the parity standard we use nor would our problem be solved by changing that price standard.

What of the options that do not involve product purchases? Direct payments in whatever form are expensive when applied to milk. For a given level of price or income support, the current program is cheaper.

Increased reliance on federal orders to support prices is certainly an option, but I am afraid that doing so would draw further critical attention to a program that is already controversial enough in today's political environment. Federal orders serve an important role in creating an orderly marketing environment and should not, in my opinion, be used to enhance or overly distort prices. It should also be recognized that doing so would not necessarily solve the current problem, it could simply transfer the cost of the problem from taxpayers to consumers and processors.

Various production control alternatives are often espoused in times of oversupply, but they repeatedly have failed to be endorsed. Cow culling is too expensive and impractical as a long run replacement of price supports. Tighter import quotas imply tricky and undesirable conflicts with our trade policy and would not be enough to offset more than 15 percent of the total oversupply now anyway.

Production or marketing quotas have not been popular with producers in the past and are not in vogue politically these days. Some have suggested that a base-excess plan having an excess price lower than direct costs of production would be more effective in reducing production in a timely manner than an equivalent drop in market prices. This may be true, but this advantage, if it exists, does not come cheaply. Base-excess plans (or surplus pricing plans) require complicated and elaborate systems for determining who gets paid what for how much milk. This is unavoidable in any plan that seeks to give clear incentives to contraction and disincentives to expansion. Thus a costly infrastructure is required for determining the rules of the game. Moreover, biblical wisdom and patience is required of those who must decide on how bases are apportioned and how allotments can be changed or traded.

Another important consideration is that the adjustment process that would take place with a base-excess plan is very different from what would occur with a simple price drop. With a base-excess plan, production is reduced everywhere with few farms going out of business because of the pricing system. With a simple price drop, production is more likely to be reduced by farms going out of business. Either plan can be tailored to achieve a comparable impact on total production, but they can have quite different implications for future production adjustments. It is much easier to increase production after a period of contraction with a base-plan. This is good if increased production is needed but not so good if a longer term, more permanent reduction is required.

One last caveat about base-excess plans is in order. Such plans may result in inequities between buyers, depending on how the plan is designed. If the plan is such that one group reaps most of the benefits of paying the lower excess price, there is clearly an inequity. This is not uncommon and ironically it is often world importers that benefit from lower prices at the expense of domestic consumers.

Consumption subsidies, whether domestic or external, are expensive, and when they apply to exports only, it is easy to see that they also are controversial.

Other demand side approaches are less controversial but have other limitations. Promotion programs alone are highly unlikely to solve the current problems. Research and product development suggest some hope for future increases in the use of milk but such efforts clearly pay off in the long run and do not address the immediate problem. Changing product identity standards may increase milk sales, but they restrict

the range of products available to consumers. This approach must be justified at the farm. In any case, efforts on the demand side should not be discouraged, but it is highly unlikely that they alone will solve the problem.

Finally there is the straightforward objective of reducing prices. Frankly, it is not clear to me that any plan is uniformly superior to another for an equivalent price reduction. No plan offers a magical or easy solution. Simple price reductions are the easiest administratively but may take a while to take effect and do not address program defects. Changes in parity, trigger mechanism and the like aren't likely to work any better in the short run and may or may not be any better or less mischievous in the future than the current program.

The problem of oversupply will not disappear overnight under any plan yet there are those who want a plan that will quickly reduce government expenditures. Frankly, I can see no easy way to avoid \$2 billion of government expenditures in 1982 and about the same amount in 1983 short of a budget ceiling or refusing to buy dairy products, which is tantamount to deregulation. Whatever specific form it took, deregulation would not solve the problem of oversupply in 1982; it would only transfer the cost of the problem from taxpayers to the dairy industry--mostly producers. Maybe taxpayers should be relieved of this burden, but deregulation would be a shortsighted solution.

Predictions for 1983 are difficult to make, but a simple price drop alone is not likely to make a large dent in production next year. Production adjustments will depend at least as much on corn prices, beef prices, and the strength of the overall economy. Without help on those fronts, milk prices would have to drop precipitously to eliminate overproduction by next year, and the havoc that would follow would be worse than another \$2 billion year for USDA dairy expenditures.

Three Final Comments

First, whatever change in policy is ultimately sought, careful consideration should be given to the adjustment process. For every proposal that is made someone should ask who will survive under this program and who won't. The answer is not always the same.

Second, I am fearful that the frenzy for action-now and short run solutions will result in a less desirable long run situation than a more gradual approach. This relates to the adjustment process and who will survive. What will the dairy industry look like 5 to 10 years from now after we fix it today? Another aspect of this problem of long and short run is that we should avoid locking ourselves into programs that are complicated, messy and may have adverse long run implications simply because they achieve short run objectives. The idea that we could do something in the short run and then phase it out as it becomes less useful is tempting but may be wishful thinking. Radical changes in the

current program should not be adopted unless they have clear long term advantages or the cost of eliminating short run changes once they have served their purpose is very low.

My third and final remark follows up on this theme; that is, don't panic. The dairy industry has faced similar problems before and survived. Overproduction problems in the fifties and early sixties were a little easier to handle, but we will survive this one also. This is not to say that we can go blithely along ignoring the problem; obviously a response is in order. But neither do I think it is time to plunge wildly into unknown and untested waters; we are not that desperate. This is a time for action but not rash action.

Although the dairy industry has survived similar trauma, the fact that these problems reoccur is also a lesson. It points to the failure of the system to finally solve such problems. In my opinion our current situation reflects a failure in the political process for allowing the situation to develop. It was not totally unforeseen and could have been avoided in a less politicized environment. Perhaps we ought to also spend some time thinking how we could improve the political process and program administration so as to avoid such problems in the future or at least reduce their severity.

1073

Exhibit 4

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

REFLECTIONS ON CRITERIA AND STRATEGIES
FOR CHOOSING AMONG
DAIRY PRICE SUPPORT PROPOSALS

by

Andrew Novakovic

March 1983

No. 83-6

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York, 14853

Preface

Andrew Novakovic is an Assistant Professor in the Department of Agricultural Economics at Cornell University. This paper is based on remarks made at the Northeast Dairy Conference held in Hartford, Connecticut on March 29 and 30, 1983.

Requests for copies of this paper can be sent to:

Dr. Andrew Novakovic
Department of Agricultural Economics
Cornell University
356 Warren Hall
Ithaca, NY 14853-0398

REFLECTIONS ON CRITERIA AND STRATEGIES
FOR CHOOSING AMONG DAIRY PRICE SUPPORT PROPOSALS

by

Andrew Novakovic

One year ago this month a special meeting of dairy industry leaders was held in Kansas City. The National Dairy Symposium was organized by the Secretary of Agriculture to give interested parties an opportunity to express their views on price support policy. I think many of us expected, or at least hoped, that this conference would result in a popular, coherent solution to dairy policy related problems. In the past 12 months we have heard many speeches and read many articles and papers on price support policy, but I think we would all agree that we have not yet found a solution to the problems that have hounded the dairy industry for the last three years. Moreover, USDA dairy market estimates for 1983 indicate that the most conspicuous problems of excess milk production and large government purchases are in fact worsening, and many analysts are now projecting that this pattern will continue through the end of 1983.

Those who work to shape or make dairy policy have found it difficult to reach agreement on the steps for solving these problems. It is becoming increasingly difficult to generate fresh ideas to restore the deadlocks that exist between and among the various groups representing the dairy industry and government. My goal today is to try to identify some factors that I think are impeding the policymaking process and to approach dairy policy options from, perhaps, a slightly different angle. I hope that this will help to stimulate additional thinking about how to evaluate and choose among the many proposals that have been made.

A Problem Does Exist

So much has been said on the problems associated with price support policy that many people have been numbed by the litany of events and statistics that describe the dairy situation. Some have even questioned whether or not a problem actually exists. I, and I am sure many of you, have even been asked whether or not the "so-called problem" was somehow contrived by "Washington" for some unknown, mischievous purpose. Such thinking is fanciful indeed. The fact that a problem exists is beyond question. Moreover, I think you as leaders in the dairy industry play a very important role in disseminating accurate information and in helping members of the industry gain and keep a realistic perspective.

What Is The Problem?

Recognizing that a problem exists only gets us over the first hurdle. The next and very important steps are to identify what the problem is and, if the problems are multiple, to rank the importance of each component. This seemingly simple step has been, in my opinion, one of two major obstacles to achieving a solution to our problems. I will discuss the second in a little while.

Although we can agree on the data that describe the problem, we do not seem to agree on what the problem is. It is clear that commercial use of dairy products is less than total marketings of milk. Some see this as a problem of low sales that should be expanded by domestic promotion or international sales. Others see this as a problem of excess production. Still others describe the problem as high USDA purchases of manufactured dairy products and the cost of these purchases. As in the story of the blind men and the elephant, we are all seeing the same beast but describing it in a different way.

Perhaps these are honest differences of opinion with no totally right or wrong positions, but the point is that we should recognize that remedies for one problem may do nothing to help another problem and may even make that other problem worse. Until we can reach some kind of consensus on what the specific problems are and their priority, it will be extremely difficult to agree on a solution.

I would like to briefly share with you some of my thoughts on what our problems are. In my view the principal and overriding problem, or at least the most serious economic problem, is excess production. Perhaps we should say that this is a symptom of a more fundamental problem, i.e., price supports were set at levels well above those that could be justified by market conditions and this problem was made worse by a weakening economy and declining or stable feed prices. While I think this problem is paramount, there are other important problems that deserve attention.

The dairy industry or at least some parts of it seem to have lost sight of the fundamental need to market its product. Product promotion and development will not close the gap between supply and demand, but it can only help and should be part of a long-run strategy. Moreover, it is going to be hard enough to develop domestic markets. Unless there are major changes in world trade prices, expanding export markets do not seem to offer much hope as a viable, long-run strategy.

One problem that I think is very important but that I have heard little about is the extreme distortions that have been introduced to wholesale markets for cheese, butter and nonfat dry milk in order to achieve the farm price support goal. If milk equivalent net removals look large when compared to total milk marketings, they look enormous on a product basis. When cheese, butter, and nonfat dry milk were basically residual products used to balance seasonal supply and demand, this type of situation might not seem terribly alarming. Cheese markets serve much more than a balancing function today. I think we should question whether it is a good idea to stifle sales and encourage the use of substitutes by artificially holding cheese prices above normal market levels. Butter and nonfat dry milk remain the residual uses of milk and as such are appropriate vehicles for the price support program; however, even in these markets I think we must question whether we have set purchase price levels so high that we have created more problems than we have solved. Many butter/powder plants that once operated primarily during the Spring flush are now open all year-round and actively compete with fluid milk plants and other plants producing products for commercial markets.

Many people have been suggesting that federal order transportation differentials are too low to encourage milk to move from manufacturing areas to fluid plants, some are even advocating that manufacturing plants be paid a bonus to cover their "give up" cost when they ship milk. It has always been cost effective for manufacturing plants to run at full capacity all year-round, yet year-round manufacturing was atypical of the traditional balancing plant until recently. Perhaps high purchase prices and an unlimited government market has contributed to the problem fluid handlers have had in competing with manufacturing plants for milk.

Another important problem in my view deals with what we have led farmers to expect from the price support program. Beginning a few years ago, high support prices, the promise of 80% parity, and semiannual adjustments led dairy farmers to expect regular and substantial increases in prices. They responded by increasing production. Now it appears that many farmers expect that policymakers are obligated to make the needed adjustment process painless. The attitude seems to be "you got us into this mess now you get us out."

The latter is perhaps as much a political problem as it is an economic problem. Probably the biggest political problem is the cost of the price support program. While I, as an economist, see an imbalance between supply and demand, most politicians are seeing dollar signs. Whether or not \$2 billion is "big" or "too high" varies with the eye of the beholder, but when the political powers agree that the cost of dairy programs are much too high, whether it's at \$2 billion or \$200 million, the dairy industry has a political problem. In arriving at solutions to the economic problems we probably cannot afford to ignore this political problem.

The final problem on my list also has economic and political dimensions. This is the problem of what to do with our massive stocks of cheese, butter, and nonfat dry milk. I think we must avoid, at almost all costs, letting this problem go to the point that we have no choice but to destroy spoiled dairy products. That would be much harder publicity to survive than the cost of the program. If we eventually use export markets to rid ourselves of this surplus, this will be the reason why.

To summarize, I think there are several important problems, but the chief economic problem is excess production caused by higher than necessary prices and the principal political problem is the cost of the price support program, with the time-bomb of massive stocks a close second.

The Nature of the Problem

Earlier I mentioned that I thought there were two major stumbling blocks to the resolution of the dairy policy debate. The first occurs in identifying and ranking problems. The second is in identifying the nature of the problems. The question I have in mind specifically is "Is this a long-run problem or is it likely to correct itself with relative ease in the short run?" I think this is a particularly important question to ask when we survey the prospects for bringing supply and demand back into balance.

Periods of overproduction are common in agriculture. Exceptional weather or unpredictable drops in world demand have frequently been responsible for excess supplies of food and feed grains. Such causes of overproduction are by definition abnormal. They are short run and tend to even themselves out over time. Nonetheless, it can be helpful to have temporary policies and programs to deal with the short-run disruptions that occur, to have a policy that is designed to be effective for a short period but for long enough to deal effectively with the problem.

Many people have been approaching the dairy problem and remedies for it as if it were similar to the cyclical overproduction problems common to grains and other crops. After all, it can be argued that low feed prices and a weak economy have been important problem-causing factors for dairy markets and they will improve eventually. But I think those who propose temporary programs that give individual farmers incentives to adjust their production are not being realistic. Paying farmers to not use all of their production capacity does not make that capacity go away. Unless there are fundamental changes in dairy markets, unless we reach a point where our current capacity to produce matches our desire to consume, a program built around marketing quotas does not solve the problem it only treats the symptom. Given the prospects for even more dramatic growth in production per cow and continued flat-to-modest growth in total consumption, the inherent overcapacity problem can only get worse. Once we enter a program to set aside capacity without eliminating it, I think we must admit to ourselves that we are only treating the short-run component of our problem and that we have yet to deal with the long-run problem.

Choosing a Strategy to Match the Problem

How, then, do we deal with these complex problems? After we have thoroughly identified, ranked, and defined our problems, I think we should consider our strategy for solving it. We can use one of four strategies.

First, we could create a remedy for the short-run problem and worry about the long-run problems later. In this category I would put proposals that promise to give producers temporary incentives to hold back their production until the program expires in a couple of years.

Second, we could create a solution to the long-run problem, wait for it to work, and ignore the short-run problem. In this category I would put proposals that say let's simply freeze the support price and wait for the problem to go away. That solution will work eventually, and it may work faster than many have predicted, but it does nothing in the short run. Our political problems are probably so severe that we can't afford to wait. This strategy may not be politically viable.

Third, we could adopt a long-run approach and try to make it solve the short-run problem as well by making the approach harsh or tightly disciplined enough to work in the short run. In this category I put proposals that call for large, fast drops in the support price. If holding supports constant will eventually work, then decreasing the support price should work faster, but trying to make this approach work very quickly by dropping the support price by a large sum may create more problems than it solves.

Finally, we could combine short-run and long-run solutions to address both aspects of the problem. This approach may be the most reasonable to take, but it is the most difficult to design. Many people who have proposed short-run solutions have argued that this is their ultimate strategy, but I think for this strategy to work well one needs to think through the long-run strategy before implementing the short-run solution. If we do not, we run the risk of creating a short-run solution that only makes the long-run problem harder to solve. This approach requires a well thought out plan for blending the short-run solution into a longer-run program.

Strategic Philosophies

In addition to matching long- and short-run problems with appropriate solutions, we must think about the kind of a solution we want. Almost every price support proposal that has been made in the last several years would work to one extent or another, but some would work in very different ways from another.

I think another large obstacle to resolving the policy debate has been differences in philosophical approach, in how to solve the problem. I think the proposals we have heard can be more or less categorized as one of two types. I call them the:

- 1) Let-the-chips-fall-where-they-may approach or philosophy, and
- 2) Share-the-burden-of-adjustment approach or philosophy.

For example, an across-the-board price approach exemplifies a let-the-chips-fall-where-they-may philosophy. It lets the market decide how production will be cut and it means that some farmers will go out of business. An approach based on marketing quotas and/or "voluntary incentives" reflects a share-the-burden-of-adjustment approach. Advocates of this approach feel that the let-the-chips-fall-where-they-may approach is too harsh and unfair. They prefer to have everyone cut back a little bit rather than put people out of business.

Neither approach is right or wrong, they are simply different. Each of us must decide which approach is right for us, given our values and beliefs.

Towards a Solution

It is your responsibility as leaders in the dairy industry to arrive at a solution; I hope my remarks have helped you rethink how to accomplish that. A solution of some type is inevitable, the question is do you want it now or later and do you want to have any influence on what the solution is. If the various parties in industry and government wish to reach a solution at the bargaining table, so to speak, then I think all must step back a few paces and think about why they have differences in policy approaches and whether the approach each has taken really does what he or she wanted it to do.

If we don't know what the problem is, how can we design a sensible program. If we can't agree on the problem, we can't agree on the solution. And, if we can't agree on the solution, someone else will make the decision without us. The way things look now I think someone may well be making a speech similar to this one at the 1984 Northeastern Dairy Conference. If we are to avoid that we must all unlock our horns, step back from the heat of the battle and reassess what we need to do and how we can best do it.

Exhibit 5

September 29, 1983

THE ROLE OF MILK MARKETING ORDERS

Robert D. Boynton and Andrew M. Novakovic
Department of Agricultural Economics
Cornell University

Prepared as a Resource Paper
for
"Farm and Food System in Transition"
Extension Education Project
Michigan State University

INTRODUCTION

Federal milk marketing orders are often described as one of the most difficult federal programs to understand. This is only partly true. Although the rules and regulations set forth under milk marketing orders are indeed complex, the basic objectives and functions of the orders are straightforward. The purpose of this paper is to 1) discuss these fundamental objectives, 2) explain the general methods that are used to achieve these objectives, 3) describe how policy objectives and procedures have evolved, and 4) explore the implications of current and alternative practices.

RATIONALE FOR MILK MARKETING ORDERS

The purpose of milk marketing orders has been expressed in various forms in the 50 years of their existence. Herbert L. Forest, who administered the federal milk marketing order program for many years, suggested that the following four purposes have guided the administration of milk orders: (1) to promote orderly marketing in fluid milk markets, (2) to stabilize milk prices and improve the income situation of dairy farmers, (3) to supervise the terms of trade in milk markets in such a manner as to

achieve more equality of bargaining between producers and milk processors, and (4) to assure consumers of adequate supplies of good quality milk at reasonable prices.

There are perhaps two distinct but intertwining problems associated with milk markets that are or have been cited as justification for marketing orders. One is the set of problems that result from the unique, inherent characteristics of milk, particularly milk's high degree of perishability. Second is the business conduct inspired by the oligopsonistic market structure of farm-level milk markets.

Raw or fluid milk that is not properly stored will quickly deteriorate, losing its market value in less than a day. Modern farming practices assume that milk will be stored at the farm no more than two days. This makes dairy farmers especially vulnerable to "take it or leave it" offers from milk handlers.

Pronounced seasonal and countercyclical patterns to milk supply and demand also complicate the situation. Production is greatest in the spring and summer months, while consumption is greatest in the fall months. Moreover, retail sales have developed a weekly pattern which has intensified over the last 15 years. With shopping the heaviest from Thursday through Saturday, stores want their biggest deliveries mid-week. All this is going on against an almost constant daily milk production pattern within any given week. These seasonal and weekly mismatches between production and consumption mean that the potential for disorder in the marketing process is great.

These characteristics frustrate the ability of farmers to bargain effectively with processors in what many believe is already an oligopsonistic (or buyers') market. Prior to marketing orders, when temporary or seasonal surpluses developed, farmers in many markets found themselves

virtually powerless to deal with processors in the price-setting process. Handlers, facing highly competitive conditions amongst themselves in wholesale markets, often engaged in "price wars" and passed their revenue losses back to farmers in the form of lower farm prices. Handlers were able to do this because farmers had few alternative buyers (oligopsony) and they felt compelled to either maintain the flow of their milk to market (because of the perishability of milk and the farmer's inability to store milk during periods of low prices or while searching for alternate and more desirable buyers) or cease production altogether.

By itself, an oligopsonistic market implies a level of price inefficiency, and from the farmer's perspective seasonal or periodic instability or the lowering of farm prices further aggravates the undesirability of this situation. It can also be argued that oligopsony at the farm level does not ultimately benefit consumers either. The question of whether or not retail prices reflect lower farm prices is arguable. It is certain that farm supply is adversely affected by the price risk farmers face. Without this risk, it could be argued, farmers would produce more milk for any given set of prices or they would be willing to meet a given level of demand at a lower (but more stable) price. Whether federal orders result in higher prices because they set minimum prices or in lower prices because supply is greater under a less risky environment is, however, also subject to debate.

Milk marketing orders were intended to mitigate or eliminate these marketing and bargaining problems by establishing minimum farm prices and regulating phases of the farm-to-wholesale marketing channel. Some of the specific methods federal milk marketing orders employ to do this are discussed in the next section.

MARKETING ORDER PROCEDURES

What and Who is Regulated

Milk sold by farmers is designated as either Grade A (fluid grade) or Grade B (manufacturing grade) milk. Only the marketing of Grade A milk is regulated by federal milk marketing orders. About 85 percent of the milk produced in the U.S. is Grade A milk and this share continues to rise steadily. Currently, 46 separate federal milk marketing orders govern the marketing and pricing of about 80 percent of the Grade A milk in the U.S. State milk marketing orders, similar to their federal counterparts, regulate most of the balance of the Grade A milk.

The person or economic agent whose marketing activity is actually regulated is the milk processor (or handler in marketing order jargon). The focus of the regulation is to require processors to pay farmers no less than a specified minimum price and to create a price structure that promotes pricing efficiency across geographic areas and among buyers and sellers. In the course of determining who should pay or receive what, orders have evolved a complex set of rules that govern or influence aspects of farm-to-plant pricing and marketing.

Some of the Mechanisms

Under all federal milk marketing orders, milk is classified according to its use. The price a processor pays for milk varies with the type of product into which the raw milk is made. A three-class system is most common but a few orders use only two classes. Milk used to make fluid milk products (e.g., whole milk, lowfat milk, chocolate milk, etc.) is referred to as Class I and is assigned the highest farmer price. Milk used to manufacture dairy products is put in the lower use classes.

Class II and III prices are more or less uniform nationally, reflecting the fact that the products in these classes are ultimately sold in national markets (the cost of transporting manufactured products between regions is relatively modest when computed per hundred pounds [cwt.] of raw milk input). Class I prices, however, vary significantly across regions and even across zones within an order area. This geographic price structure is intended to reflect the fact that Class I milk and fluid milk products are more costly to transport.

Under virtually all orders, producers are paid on the basis of a weighted average price for the entire market (called marketwide pooling). This price, which is also called the uniform or blend price, is determined as if all processors "pooled" the total dollars they were obligated to pay farmers for milk (as determined under the classified pricing system discussed above) and then an average price was calculated by dividing these total dollars by the quantity of milk processors purchased from all farmers.

Provisions of federal milk marketing orders also establish procedures for auditing handlers' records to ensure that all marketing order rules are being appropriately followed. A locally-based Market Administrator and his/her staff are responsible for carrying out the provisions of a milk marketing order. The administrative costs associated with a federal milk marketing order are covered by an assessment on the handlers regulated by it.

Having described those things federal milk marketing orders do, it would be well to list those things they do not do. Federal milk marketing orders do NOT: (1) control how much farmers can produce or restrict the amount they can sell, (2) guarantee farmers a market for their milk, (3) guarantee a fixed price into the future, (4) establish sanitary or quality standards, (5) set retail prices, and (6) set a ceiling on farm prices.

Procedures for Initiating and Amending Orders

Federal milk marketing orders are put into effect only after the Secretary of Agriculture determines that a need exists for a marketing order in a particular area and after dairy farmers in that area vote their approval. When asked to vote on a new or amended order, milk producers must accept or reject the entire proposed order. This prevents producers from picking and choosing only those specific provisions they favor and excluding the rest. Before the Secretary of Agriculture rules on the need for a milk marketing order or drafts its specific rules and regulations, he conducts a public hearing to receive input from all affected parties.

Processors participate in the hearing and review process, but they have no vote and must comply with the order if producers approve it. A handler may challenge an order or any provision of it by first appealing to the U.S. Department of Agriculture. If he or she is not satisfied with the administrative process, the handler may challenge the Secretary's decision in court. Commonly, any challenges are resolved through administrative procedures.

Consumers can influence the federal milk marketing order program in two ways. The first method is the most direct--consumers can offer facts or views at order hearings. Although they are welcome to do so, few consumers or their groups participate in the hearing or review process. The second manner in which consumers have an impact on order policy is less direct; the Secretary of Agriculture is charged with administering the program in such a way that it be in the broad public interest, including that of consumers. Consumer groups and others have charged that the Secretary better represents producer interests. However, various types of input to the USDA regarding the impacts of orders on consumers may have an effect on order administration. Finally, the federal courts are considering a ruling that under

certain conditions individual consumers can legally challenge federal order provisions in court. This would provide a third avenue for consumer input. Some consumers and policymakers feel that the current means for consumer input are inadequate. It is likely that they will exert pressure from time to time for greater, and perhaps formalized, consumer input into the administrative processes of federal milk marketing orders.

MILK MARKETING ORDERS AND THEIR IMPACTS

Milk marketing orders can be evaluated against a host of criteria but most fall under one of the following four categories: (1) efficiency, (2) equity or the fair distribution of costs and benefits among and within groups of milk market participants, (3) the contribution to an orderly marketing process, and (4) farmer protection from abuse arising from unequal bargaining power.

Efficiency

The efficiency concern involves the use of resources in the production and marketing of milk and dairy products. It has five main components. These are (1) price level and stability, (2) optimal location for milk production and marketing facilities, (3) eliminating waste in transportation, processing, and other marketing activities, (4) providing information for more sound business decisions, and (5) innovation. We will consider each briefly.

Stability. Federal milk marketing orders help promote stable prices through the enforcement of minimum prices by use classification. Stability is also enhanced by order-assisted balancing of market power between farmers and handlers. It should be recognized that the price support program and

dairy cooperatives also influence the level and stability of milk prices. In fact, their importance in setting price levels in recent years has superceded that of the order program. Despite federal orders or other programs, farmers are not guaranteed a comfortable or stable income level.

Location. The location of milk production in the U.S. is affected by costs of milk production and marketing, the level of milk prices, and the demand for milk products. An efficient geographical production pattern would call for milk to be produced in those areas of the country where it would be cheaper than having milk shipped in from other areas. Federal milk marketing orders were originally set up such that minimum prices between the major U.S. surplus production region and any other point reflected the approximate cost of transporting milk between these locations. This system tended to maintain the existing geographical production pattern as long as relative interregional costs of production and transportation were unchanged. But transportation costs have changed dramatically, especially in the 1970s, and milk marketing order transportation allowances have been essentially unchanged since 1967. Many in the dairy industry believe that federal order prices should be updated to reflect increased transportation costs. Others argue that changes in marketing costs and technologies necessitate a new strategy for setting prices. In the meantime, dairy cooperatives are exercising their flexibility to negotiate prices above federal order minimums.

Physical Waste. It should go without saying that it is inefficient to waste milk. Prior to federal milk marketing orders, milk strikes and spoiled milk due to lack of a market outlet sometimes occurred. Milk marketing orders have contributed to the near elimination of this problem by promoting a more stable and orderly environment.

Information. Information is a key ingredient in smoothly functioning milk markets. Without timely and accurate information neither sellers nor buyers can make appropriate decisions. If market information is poor, resources cannot be properly allocated. Moreover, bargaining power is enhanced by an information advantage over an exchange partner. Federal orders produce market information and distribute it to producers, processors, and the general public.

Innovation. For the most part, orders have had little impact on innovation and adoption of new products or technologies. For example, orders have neither impeded nor encouraged the increasing use of lowfat milk products, ultra high temperature pasteurized-sterilized milk products, whey protein concentrates, or butter-margarine mixtures. However, in some cases marketing orders are not neutral, as in the use of concentrated or dried milk in reconstituted beverage milk products. This is more fully discussed in a later section.

Contributions to an Orderly Marketing System

The encouragement of orderly marketing was a central objective and a motivating force in the development of the federal order program. This remains its most commonly cited justification. The term orderly marketing is so all-encompassing as to defy easy definition. It involves efficiency and equity and encompasses most of the other purposes given for milk marketing orders. It is a condition of milk markets in which the other objectives can flourish. Disorder arose largely from the severe economic distress of the 1930s and was aggravated by a large imbalance in bargaining power at the farm level. Milk markets today work calmly and smoothly, seem reasonably efficient, and do not exhibit many of the traumatic conditions evident 50

years ago. Federal orders seem to have contributed to a more orderly marketing environment.

Protecting Market Participants from Abuse

Apart from the abuse dairy farmers received prior to milk marketing orders in the form of lost markets or low prices, other types of abuse or unfair practices are alleviated by orders. Three of these are as follows: failure to pay producers for milk delivered, inaccurate reporting by handlers of the volume and butterfat test of farmers' milk and the uses to which it is put, and finally, the general lack of fairness inherent in situations where the bargaining power of buyers and sellers is unequal. The latter has been discussed in detail elsewhere.

Timely Payment. The federal milk marketing order program helps protect farmers from handlers' failure to pay for milk. Dairy farmers are paid for their product several weeks after it is delivered to the plant. For this reason, the solvency and integrity of the buyer is of concern to dairy farmers. While instances of outright dishonesty have been rare, processors have continued to receive milk from farmers after their ability to pay has been seriously impaired. While federal milk marketing orders neither require handlers to post a cash bond nor to pay in advance, they do specify partial and final payment dates each month. Farmers and farmer cooperatives are thus warned reasonably quickly via the marketing order mechanism if a handler will find it difficult to pay for milk. In some orders, a schedule of charges on delinquent payments is specified.

Accurate Reporting. Transfer and payment for milk offer many possibilities for inaccuracy in reporting milk receipts, butterfat tests, and utilization. Periodic audits of handler records by marketing order personnel ensure that milk marketing transactions are accurate and honest.

Equity Among Market Participants

Pricing equity has been an important goal of the order program. Orders bring equity among handlers through the minimum pricing provisions of classified pricing. All processors in a market pay at least the minimum class price for milk they purchase. This reduces incentives to engage in oligopsonistic practices of undercutting farm prices. Equity in returns to producers is served by pooling the proceeds from sales in the entire market and sharing them with all farmers shipping to regulated plants. Other equity issues involve the sharing of the costs and benefits of maintaining milk markets. These can be classed as one of two types of equity issues-- cooperative member vs. nonmember or noncooperative handler vs. cooperative association.

Dairy farmer cooperatives perform several market-serving functions, the benefits of which are not confined to members of cooperatives. These include negotiating prices in excess of order minimums, balancing milk supplies with consumption in various markets, and disposing of surplus milk (processing milk in excess of fluid needs into storable products). The costs of providing marketwide services in most cases are borne primarily by cooperative members. Federal orders have offered incomplete solutions to this class of equity concerns.

Noncooperative handler vs. cooperative handler equity concerns again involve supply balancing and surplus disposal among other services benefitting handlers. As cooperatives have taken on more of the milk assembly function from noncooperative handlers, cooperatives have not always succeeded in collecting service charges for these functions which they provide for processors. Federal orders have not offered complete solutions to this equity issue either.

A few issues related to how the benefits of milk marketing orders are distributed should be discussed under the heading of equity. Orders provide benefits to all sizes of dairy farmers. While the pricing provisions of orders may have encouraged the development of larger dairy herds, it can also be argued that if orders or some other device had not more nearly equalized the bargaining power between producers and handlers, the exit of the smaller dairy farmer would have been hastened.

Pricing provisions may also have favored smaller handlers, to the extent that minimum order prices were near the effective market prices. Without minimum prices, the larger processor may have been able to procure his/her milk supplies more cheaply.

Finally, milk marketing orders distribute income among market participants in a different pattern than would exist in their absence. That in itself is not alarming insofar as it was one of the primary objectives of the New Deal legislation. Nevertheless, it is reasonable to question whether the redistribution caused by marketing orders now could be significantly improved. This raises a difficult corollary question--how does one decide what is a better or good or equitable distribution of economic benefits?

The answer to this question is difficult, and it will vary with the value criteria that each of us would use. It is not surprising then that different observers and analysts of marketing orders have come to different conclusions regarding the pattern of benefits distributed under this marketing regulation. Some would say that marketing orders increase farm prices to the benefit of farmers and the detriment of all others. Others point to classified pricing and argue that higher prices for raw milk used in fluid products (Class I) is an obvious case of classical price discrimination.

This means that consumers of Class I products subsidize consumers of manufactured dairy products.

Research on these and similar questions has been inconclusive. Moreover, it may be impossible to unequivocally answer all these questions through empirical research; too many value judgments are involved. Given this, no attempt is made here to be conclusive or to reconcile conflicting arguments. Some observations are offered, however.

First, economists have criticized orders because they cause economic results that differ from what one would expect under perfect competition. The problem with some of these criticisms is that they imply that perfect competition would exist if marketing orders were abolished. This would most surely not be the case. The norms of perfect competition provide many good targets for the administrators of marketing order policies, but marketing orders should be judged against the imperfect competition that would prevail in their absence.

A second observation is that one must distinguish between faults in the system and faults in the administration of the system. For example, some would say that prices are too high because of federal orders. If that is true, it probably reflects more on the administration of the system than on the structure of the system.

Finally, milk marketing orders have been in existence for almost half a century. For some of their proponents, orders have become venerable because of their longevity. They have become natural. Marketing orders, as any other policy tool, are obviously not natural and if they are good it is not because they are old. It is because of their longevity that marketing orders and their specific provisions should be periodically examined and measured, as best they can, against a changing economic environment and changing technologies.

SOME CURRENT CONCERNS WITH FEDERAL MILK MARKETING ORDERS

The Need for a New Grade A Pricing Standard

Currently, all federal orders base minimum class prices on the M-W price, an average price paid for Grade B milk in Minnesota and Wisconsin. Grade B milk production is declining, and it currently represents only about 15 percent of total U.S. production. As this market continues to shrink, questions arise about the suitability of this price as a reliable barometer of milk values under federal orders. Eventually (perhaps by the end of the 1980s), the Minnesota-Wisconsin Grade B price series must be replaced as a standard for federal order prices. Some work has been done on the design of alternative standards.

Anti-Regulation Attitudes

During the 1970s and the early 1980s critics of the federal milk order program included officials of the Justice Department, Federal Trade Commission, organized consumer groups, and persons from academia. The public also appeared to hold a generally negative attitude toward economic regulations during these years. It is not clear what this legacy will mean for the federal milk order program in the 1980s. However, the program may continue to be a tempting target for criticism simply because of its classified pricing provisions. On the other hand, federal milk orders represent a type of regulatory program which carries a small Treasury cost. Such programs are likely to fare better than commodity programs which require large Treasury outlays.

Over-Order Payments

The difference between the effective market price for milk used in Class I products and the minimum order Class I price is called an over-order

payment. Prices over the order minimums became fairly common after 1965. During 1970-80, the national average of over-order payments ranged from 16.2 cents per hundredweight in 1972 to 61.6 cents in 1974 (as a basis for comparison, the Class I order minimum price ranged from \$7 to \$13 per hundredweight over this period).

Some view the presence of over-order prices as prima facie evidence of oligopolistic pricing by dairy cooperatives. A 1976-77 survey of U.S. milk processors detected little concern among this group about the existence or size of these payments. Those responsible for the order program maintain that the existence of over-order payments is perfectly legitimate and is justifiable when minimum order prices are too low. In fact, one senses that federal order personnel prefer letting market forces play a role in setting prices. Cooperatives have argued that (among other reasons) over-order payments are necessary and economically justified because they offset the costs of transportation and other services. The research evidence suggests that over-order payments are not strongly correlated with measures of cooperative market power, but they are strongly correlated with differences between minimum order prices across the country and current transportation costs.

Reconstituted Milk Pricing

In at least one case it is clear that federal orders have affected the adoption of new technology and the development of new products and markets. It has been suggested that improvements in production technologies for concentrating milk and/or milk components and recombining separated milk components into a fluid form would make it possible to produce a commercially acceptable reconstituted beverage milk product. In so doing, the costly transportation of milk in its fluid form within a market area could

be reduced. Others argue that shipping concentrate or powder from low-cost milk producing areas to higher-cost production areas for reconstitution would improve the operating efficiency of the entire milk production and marketing system. The possibility of "storing milk" from the heavy production season for use in the short season of the year also implies lower aggregate production costs.

There is no question that current federal order pricing provisions sharply reduce the economic incentive to reconstitute milk. Federal order pricing provisions could be revised in ways that would reduce the economic penalty imposed on handlers for producing reconstituted beverage milk. Moreover, such changes may benefit consumers, although that is not entirely clear. Changes in the pricing of reconstituted milk could require wholesale changes in marketing patterns that would redistribute income among processors, producers and consumers in uncertain ways. When the potential benefits and costs of a proposed change are highly uncertain, marketing orders, like most institutions, are slow to change.

Component Pricing

Milk has been priced according to its butterfat content for many years. Cheese manufacturers, breeders of high protein-producing dairy cows, and others have suggested that the price of milk should also vary with the level of other milk components, in particular the level of milk proteins. As with reconstituted milk pricing, the merits of multiple component pricing are debatable. Current federal order minimum pricing provisions do not permit multiple component pricing plans that include deductions for low protein milk, but otherwise individual handlers are free to adopt their own multiple component pricing plans outside of the order. In fact, many cheese

manufacturers are doing so at the present time. Marketing orders could be revised to accommodate component pricing, but USDA, fluid milk processors, many dairy farmers and others are reluctant to make changes when the benefits of such changes are uncertain and the incidence of the benefits on market participants is uneven.

Coordinating the Federal Milk Marketing Order Program
with the Milk Price Support Program

The federal milk price support program establishes a floor under all milk prices which is reflected in federal order minimum class prices. In recent years federal order changes have increased the direct and powerful link between the two federal programs. Since the two programs have become so inextricably linked it is imperative to closely coordinate their operations. This task will present new challenges. The programs must be harmoniously run in order to encourage production levels consistent with commercial consumption and efficient allocation of milk production resources among regions of the country.

ALTERNATIVE LEVELS OF REGULATION AND THEIR CONSEQUENCES

Four levels of economic regulation which are alternatives to current federal orders are presented. These are arranged in increasing order of public intervention. Some of the alternatives described would require legislative changes. Current federal order regulation is used as a reference point in tracing possible consequences of adopting each alternative. These consequences should be viewed as hypotheses rather than as unequivocal statements of fact.

Deregulation

Under this alternative all federal milk orders would be terminated. Prices and terms of trade would be determined by negotiation between processors and producers or their cooperatives or by new institutional arrangements. Some of the expected consequences of deregulation, contrasted with the current regulation, are discussed below.

1. Producer prices would decline in the short run, especially in view of the current excess production. Relative prices across regions in fluid and manufactured product markets would change when support prices are sufficiently high that they encourage production of milk in excess of fluid use and thereby reduce the need for interregional trade; the effective price differences among geographic areas would probably decline. Production would be expected to increase in the upper midwest and other low cost of production areas relative to areas having high production costs. On the other hand, when support prices are at a level where milk supply and demand are about equal, there would be greater differences in effective prices among geographic areas, reflecting increased interregional transportation. Prices in areas more distant from the low production cost areas would increase relative to prices there.
2. Consumer prices for fluid milk would decline in the short run, especially given the current excess production, with the level of prices in the longer run less predictable. This would depend on competition among processors. As in other imperfectly competitive industries, processors may be able to exploit the fact that price increases do not discourage consumption proportionally. However, this tendency may be mitigated in the fluid milk industry for three reasons: there is

- little brand loyalty, it is relatively easy for a firm to enter this industry, and the buyers faced by processors (supermarket chains) are in a strong bargaining position. There would be less difference between the prices of milk used in fluid and manufactured forms.
3. There would be slightly greater variation in quantity produced from one year to the next, but a seasonal pattern of production might develop which more nearly corresponded to the fluid consumption pattern.
 4. Equity problems among producers and among processors would undoubtedly escalate. There would be unequal sharing of fluid markets among producers, especially in times of excess supplies. It would also be more difficult to allocate the cost of providing marketwide services among producers or others who benefit from them. Processors would have less assurance of equal raw product costs.
 5. Economic power would be shifted away from producers, most likely to supermarket chains. The role of cooperatives would expand and added impetus would be given to cooperative consolidations.
 6. Efficiency might be adversely affected. Periodic disruptions to efficient flows of milk from farms to consumers would occur. If fewer marketwide services were performed on a centralized basis, there would be some increase in marketing costs. Pricing efficiency might be improved by greater exposure to market forces.
 7. Much information provided by orders would be lost or become less accurate, with adverse effects on decision making, proper functioning of markets, and research.
 8. Wider fluctuations in farm income and the increased risk of being dropped by buyers could result in an exit of some farmers who could survive financially under more stable prices.

9. New institutional arrangements for marketing milk would emerge. Whether performance would improve or diminish under these arrangements is unknown. Under most of them public involvement, influence, and access to information would be sharply reduced.

Orders without Minimum Prices and with Other Simplifications

Orders could be promulgated for the sole purpose of auditing receipts and uses of milk. The accounting for milk could be simplified over present procedures. All prices would be established by negotiation between producers and processors, and the order could be used to report prices. The consequences of this alternative would be similar to deregulation, but information loss would be reduced.

Orders could be reformulated in a number of ways which might simplify regulation. The consequences of simplifying pricing or pooling provisions or other such modifications would depend on the particular change. In general it is probably true that there would be an increase in equity problems with order simplification inasmuch as it is the promotion of equity which currently necessitates much of orders' complexity.

Orders with Effective Prices

A central issue regarding fluid milk regulation is whether the prices set administratively should be the effective prices or whether market forces should play a role in milk pricing. It is unlikely that order prices could be the effective prices at all times and places; moreover it is hard to imagine a central administration that could contrive such prices without creating artificial surpluses or shortages. Nevertheless, steps could be taken to narrow the differences that now exist.

The consequences of this alternative are not greatly different from current regulation. There might be greater assurance that market prices were more efficient, equitable, or fair, if the administrators were successful. The cost of order administration would increase as price setting criteria became more complex. All in all this does not seem like a practical or desirable alternative to the current system.

Orders to Reduce Equity Problems

As with attempts at administered effective prices, regulation which would cure all of the perceived equity problems may not be practical (the cure may be worse than the disease). It is difficult to assess the consequences of changes designed to "improve equity," as equity is hard to measure. These changes would make orders more complex.

SUMMARY

Federal milk marketing orders are an important component of the U.S. milk marketing system. They have existed for 50 years and have demonstrated their capacity to adjust to changing economic conditions. Changes in them will most surely continue and periodic study of the program's objectives and methods is appropriate. Although it is impossible to unequivocally state whether or not the milk marketing order system is operating in society's long-run best interest, one thing is clear--quick judgments as to the program's value are fraught with risk. One must thoroughly understand all components of the program before a complete and accurate evaluation can be made.

FOR THOSE DESIRING ADDITIONAL INFORMATION ON
FEDERAL MILK MARKETING ORDERS

Some of the information on federal milk marketing orders contained in this article came from the references listed below. Those wishing to gain a more detailed understanding of federal milk marketing orders should consult one or more of these references.

Babb, E. M., R. D. Boynton, W. D. Dobson, and A. M. Novakovic, "Milk Marketing Orders," in Federal Agricultural Marketing Programs: Issues and Options. W. J. Armbruster, D. R. Henderson, and R. D. Knutson, eds. The Interstate, Danville, IL., 1983.

Dairy Division, Federal Milk Marketing Statistics, AMS, USDA, Annual Summaries.

Dairy Division, Questions and Answers on Federal Milk Marketing Orders, AMS-559, AMS-USDA, December 1978.

Dairy Division, The Federal Milk Marketing Order Program, Marketing Bulletin 27 (revised), AMS-USDA, June 1981.

Jacobson, Robert E., Hal Harris, Fred Webster, and Paul Christ, Who Will Market Your Milk? Producer Alternatives. D-1058, Texas Agr. Ext. Ser., March 1978.

Manchester, Alden C., "Institutions of the Milk Marketing System: Development and Current Issues," in Proceedings of Conference on Milk Marketing, N.M.P.F., C.N.I., and U.S.D.A. sponsors, December 1976.

Spencer, Leland and Charles J. Blanford, An Economic History of Milk Marketing and Pricing, 1800-1933, Vol. 1, Columbus: Grid, Inc., 1977.

October 1982

A.E. Res. 82-32

**A FURTHER ANALYSIS OF
THE COMPARATIVE COST OF
RECONSTITUTING BEVERAGE MILK PRODUCTS**

by

Andrew Novakovic

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

Preface

Andrew Novakovic is an Assistant Professor in the Department of Agricultural Economics at Cornell University. He was assisted in this study by James Pratt, Research Associate. Robert Boynton provided helpful comments on an earlier draft of this report.

This report is an extension of an earlier study conducted with Richard Aplin. The related publications are:

Andrew Novakovic and Richard Aplin, Some Findings on The Comparative Cost of Reconstituting Beverage Milk Products: Reconstitution vs. Fresh Milk Processing, A.E. Res. 81-15, Department of Agricultural Economics, Cornell University, August 1981.

Andrew Novakovic and Richard Aplin, What is the Difference Between the Costs of Reconstitution vs. Fresh Milk Processing?, A.E. Ext. 81-19, Department of Agricultural Economics, Cornell University, September 1981.

Some of the highlights of this study are contained in:

Andrew Novakovic, An Analysis of the Impact of Deregulating the Pricing of Reconstituted Milk Under Federal Milk Marketing Orders, Staff Paper No. 82-6, Department of Agricultural Economics, Cornell University, March 1982.

Copies of any of these reports can be obtained from the author or:

Publications Office
Department of Agricultural Economics
Cornell University
442 Warren Hall
Ithaca, New York 14853-0398

Table of Contents

	Page
Introduction	1
Methodology and Assumptions	2
Analysis	6
The Possible Cost Advantage to Reconstitution	7
The Cost of Regulation	9
The Impact of Over-Order Prices	10
Seasonality in Cost Savings	11
Regulatory Alternatives for Equalizing the Costs of Fresh and Blended Milk Products	14
Breakeven Class I Prices	14
Changing the Compensatory Payment	18
A Caveat About Demand	23
Conclusions	24
References	26
Appendix A: The Implications of Using Heavy Cream	27
Appendix B: Model Assumptions and Basic Data	29

List of Tables and Figures

Table	Page
1 Characteristics of Representative Plants by Location . . .	5
2 Assumptions Describing the Test Cases	6
3 The Comparative Cost of Reconstituted Milk in Six Cities for 1980 and 1981	8
4 The Comparative Cost of Reconstituted Milk in Six Cities With and Without Current Federal Order Pricing Provisions for Reconstituted Milk for 1980 and 1981 . . .	10
5 The Comparative Cost of Reconstituted Milk in Five Cities With and Without Over-Order Prices for 1980 and 1981	12
6 Reductions in Class I Prices Required to Equate the Costs of Fresh and Blended Milk, Based on Annual Average Costs for 1980 and 1981	15
7 The Percentage Changes in Class I Prices Paid by Processors or in the Prices of Dry or Condensed Skim Milk that Would Equalize Fresh and Blended Milk Processing Costs Under Case 3 Conditions	19
8 Reductions in Compensatory Payments for Reconstituted Skim Milk that Equate the Costs of Fresh and Blended Milk Processing When Reconstituted Milk is Unregulated and Over-Order Prices Prevail	22
Appendix	
Table	
A1 The Comparative Cost of Reconstituted Milk in Six Cities Under Two Assumptions About the Use of Cream in Processing Plants for 1980 and 1981	28
B1 Basic Price Data and Other Economic Assumptions for Plants in Six Cities.	32
B2 Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Boston, 1980 and 1981	33
B3 Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Chicago, 1980 and 1981	34
B4 Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Dallas, 1980 and 1981	35

Appendix
Tables
(continued)

	Page
B5 Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Jacksonville, 1980 and 1981	36
B6 Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Knoxville, 1980 and 1981	37
B7 Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for New York, 1980 and 1981	38

Figure

1 Monthly Variations in the Comparative Cost of Reconstituting Milk by Cities in 1981	13
--	----

Introduction

This report updates and extends a previous study of the cost of reconstituting beverage milk products (2, 3).¹ The impetus for these studies is the recent policy debate over federal milk marketing order pricing provisions related to reconstituted milk products. This debate and the attendant policy issues are discussed in the aforementioned reports and elsewhere (4, 5).

The purpose of this study is to provide some additional depth to our previous analysis by improving the model and expanding the range of the price data. This responds to many, but not all, of the suggestions for further research made in the earlier report.

The general methodology used for this study is briefly reviewed, primarily emphasizing the modifications made to the earlier model. The remainder of the report focuses on results and their implications.

¹Reconstituted or partially reconstituted milk products can be made in several ways and can refer to various and quite different products. In this study, the term reconstituted milk denotes fluid milk products that are made from condensed, dried, or other manufactured milk products and contain no fresh milk. For example, mixtures of water and nonfat dry milk or water and condensed skim milk are referred to as reconstituted skim milk. Using our terminology, milk products made by mixing reconstituted skim milk and fresh milk products are called blended milk products. For example, reconstituted skim milk can be mixed with fresh cream or fresh whole milk to produce blended whole milk or blended lowfat milk. This terminology, which is also described by Novakovic and Story (3), is not used universally. Others may use the terms reconstituted and blended milk interchangeably or they may have different definitions of one or the other. Throughout this report we will use the terms as they have been defined above, although the numbers we report as the comparative cost of reconstituting milk refer to the comparative cost of producing blended milk products (not just the reconstituted skim milk component of the blend).

Methodology and Assumptions

Ultimately, policy analysts will wish to compare the cost of reconstituting milk products with the cost of processing comparable fresh milk products. Hence, this study uses the approach of directly measuring the difference between the cost of producing fresh milk products and the cost of producing partially reconstituted milk products. This difference is denoted as the comparative cost of producing reconstituted milk, and it refers to the added or incremental cost that would be incurred by a fresh fluid milk bottler who replaced part of his output with blended or partially reconstituted milk products. If the cost of reconstituting beverage milk products exceeds the cost of processing fresh beverage milk products, the comparative cost of reconstituting milk, i.e., the difference between the two, is positive. If fresh milk costs more to process than reconstituted milk, then the comparative cost of reconstituted milk is negative.

An economic-engineering framework is used to estimate the cost advantage of reconstituted milk over fresh milk.² The cost figure is intended to be comprehensive in that it includes all sources of costs that would be incurred from the point raw products are received, through processing, to the point finished products are loaded. These costs can be separated into four major components, as follows:

Processing Costs: processing costs are the costs incurred due to added labor, heat, and electricity needed in plants that reconstitute milk as compared to otherwise comparable plants that do not reconstitute milk.

²The cost model described by Novakovic and Aplin (2, pp.21-31) is essentially unchanged. Cream prices were adjusted when heavy cream was used instead of light cream. The model used to calculate quantities of milk and dairy products used or produced in plants deviates only slightly from the earlier model (2, Appendix A). Calculations were adjusted when heavy cream was used; in addition, the butterfat and solids-not-fat content of raw milk was assumed to be variable.

Capital Costs: most plants that replace part of their fresh product output with blended milk require additional equipment and expanded plant space. The cost of new investments in plant and equipment is based on the purchase prices of new capital goods, salvage values at the end of the operating lives of the new capital goods, and appropriate interest rates to determine the annualized values of capital goods over their operating life.

Raw Ingredients and Milk Costs: raw ingredients are defined herein as raw milk, water, nonfat dry milk, and condensed skim milk. Changes in the cost of acquiring raw ingredients are due to changes in the amounts of raw ingredients required and/or the prices of raw ingredients. The comparative cost of raw ingredients will vary with Federal Order pricing policy. Under current rules, plants must pay the Class I differential on all reconstituted milk used in Class I, thus adding to raw ingredients costs. Under the proposals advanced by the Community Nutrition Institute and others, this added charge is eliminated.

Revenue Losses: totally fresh milk plants generate a surplus of cream under the plant designs and assumptions of this study. Plants that blend milk products require some or all of the surplus cream as a high quality source of butterfat to blend with reconstituted skim milk. Consequently, revenues from the sale of excess cream drop. Another revenue loss that can be reflected in the comparative cost of reconstituting milk is the change in revenues that would result if the price of blended milk products was less than the price of fresh milk products, as some have suggested would happen.

The comparative cost of reconstituting milk as reported here includes adjustments for income taxes. Although most cost studies ignore taxes, income taxes are a necessary and relatively easily measured expense associated with any business operation. The absolute values of the before-tax comparative costs are greater than the numbers reported herein.

The cost figure reported here refers only to in-plant costs; costs associated with assembly and distribution are not measured (receiving costs are determined from the point at which the product enters the plant and loading costs are measured up to the point that trucks leave

the loading dock). It is hypothesized that the fluid milk bottler who replaces part of his fresh milk output with blended milk products might achieve reduced per-unit assembly costs and increased per-unit distribution costs. However, the potential reduction in assembly costs and the increase in distribution costs are probably very small, and they offset one another. It is hypothesized that they would have a negligible impact if they were included in our cost calculations.

In the earlier study by Novakovic and Aplin, the cost advantage of reconstituted milk was calculated for plants of two sizes located in six cities across the U.S. and under various assumptions about the relative amount of blended milk produced, the solids-not-fat content of blended milk products, the prices paid for variable factors, and other aspects of the processing or economic environment.

In this study, the assumptions about the processing environment are reduced to describe a representative plant for each of the six cities, that is, the type of plant and processing environment that would be most likely in each of the six geographic locations, given the range of the original assumed characteristics. Table 1 summarizes the characteristics of the representative plants for Boston, Chicago, Dallas, Jacksonville, Knoxville, and New York.

The plant size chosen for the representative plant in each city was primarily based on the size of the city. Although plant capacity in the U.S. averages not quite 30,000 gallons/day, the large majority of the beverage milk produced is processed in much larger plants. Hence, only the two smaller cities, which are less likely to be dominated by very large plants, are represented by the smaller plant size.

Table 1. Characteristics of Representative Plants by Location

City	Plant Size (gallons/day)	Raw Ingredient	Blended Volume
Boston	100,000	condensed skim	10%
Chicago	100,000	condensed skim	50%
Dallas	100,000	nonfat dry milk	50%
Jacksonville	30,000	nonfat dry milk	10%
Knoxville	30,000	nonfat dry milk	50%
New York	100,000	condensed skim	10%

Raw ingredients and blended milk volumes were chosen to maximize the cost advantage of reconstitution given the pre-selected plant size and the costs estimated in the earlier study.

In addition to these characteristics, all plants are assumed to standardize blended milk at the prevailing legal minimum of 8.25 percent solids-not-fat (SNF) instead of the U.S. average SNF content of fresh beverage milk of 8.7 percent. As is explained in the earlier report, the lower SNF standard reduces the comparative cost by about 2 cents per gallon of blended milk. This result is virtually constant across all combinations of other assumptions, hence, it is not explored further here.

Finally, all plants are assumed to separate and use heavy cream, not light cream as was assumed in the earlier report. The implications of using heavy cream are discussed in Appendix A.

Analysis

Comparative costs of reconstitution are estimated for each representative plant-location for four combinations of assumptions as shown in Table 2.³

Table 2. Assumptions Describing the Test Cases

Case	Class I Price	Reconstituted Pricing
1	order minimum prices	unregulated
2	order minimum prices	regulated
3	over-order prices	unregulated
4	over-order prices	regulated

The first case is the standard against which the others are compared.

Case 2 is identical to Case 1 except current pricing provisions affecting reconstituted milk are assumed to prevail. The difference between the comparative costs of reconstitution calculated for these two cases is a measure of the cost imposed by the regulated pricing system.

The third case is intended to assess the impact of over-order prices on the comparative cost of reconstituted milk. In our earlier study, it was assumed that the appropriate Class I price was the federal order minimum. With the exception of those in New York, processors typically pay Class I prices greater than federal order minimums. When minimum Class I prices are used in the analysis, the cost advantage of reconstitution for processors who actually pay higher prices for raw milk are underestimated. The over-order prices used are the Class I prices announced by the major cooperative in each city, as reported in

³A complete description of the assumptions underlying these cases and other data used in the analyses is provided in Appendix B.

the USDA publication Dairy Market News. As discussed later in this report, these price announcements may or may not correspond to the actual price paid, but it is felt that they are a reasonably good indicator of the magnitude of the prices processors actually pay for raw milk. To the extent that they are not accurate it is probable that actual prices are lower. Given that the over-order prices used in this study probably represent the highest prices likely to be paid by processors and the federal order minimum prices are (in general) the lowest prices paid by processors, the costs calculated under these price levels should bracket the actual cost advantage to reconstitution.

Given the caveat about the source of over-order prices, the fourth case is the best estimate of the comparative cost of reconstituting milk in the current regulatory environment. It assumes current pricing provisions prevail and it uses prices which represent the best information readily available on prices actually paid by processors.

The Possible Cost Advantage to Reconstitution

As has been explained elsewhere (1, 4, 5), federal milk marketing order pricing provisions currently require that processors pay the equivalent of the Class I differential on any reconstituted milk used in a Class I product. This penalty is intended to make the cost of reconstituted milk more or less equivalent to the cost of fresh milk; in practice it makes reconstituted milk more expensive than fresh milk.

The comparative cost of reconstituted milk for four cases is reported in Table 3. Cases 1 and 2 are based on federal order minimum prices; whereas cases 3 and 4 rely on over-order prices. Current pricing provisions are assumed to prevail under Cases 2 and 4 but are ignored under cases 1 and 3.

Table 3. The Comparative Cost of Reconstituted Milk in Six Cities for 1980 and 1981.

	Case 1	Case 3	Case 2	Case 4
	(unregulated) (minimum)	(over-order)	(regulated) (minimum)	(over-order)
<u>Boston</u>				
1980	-2.9	-3.6	7.1	6.4
1981	-4.9	-5.8	5.9	5.0
<u>Chicago</u>				
1980	1.7	-0.6	4.3	2.0
1981	-0.6	-2.6	2.6	0.6
<u>Dallas</u>				
1980	-0.3	-1.4	5.0	4.0
1981	-1.5	-2.8	4.3	3.0
<u>Jacksonville</u>				
1980	-0.7	-6.8	9.1	3.0
1981	-2.7	-9.51	8.0	1.2
<u>Knoxville</u>				
1980	0.6	-2.6	4.6	1.9
1981	-1.2	-3.5	3.9	1.7
<u>New York</u>				
1980	-1.8	N.A.	7.1	N.A.
1981	-3.9	N.A.	6.1	N.A.

The results in Table 3 lead to the same general conclusion as was reached in the previous study. Under current regulations (Cases 2 and 4), there are no incentives to reconstitute (the comparative cost of reconstituted milk is positive). When current pricing provisions are ignored, cost incentives to reconstitute exist virtually everywhere.

The previous study indicated that the latter was not universally true. This conclusion was based on federal order minimum prices. As shown by the Case 3 results, it is always advantageous to reconstitute when over-order prices are used. Even the Case 1 results generally agree with that conclusion, including those for Chicago where more recent prices indicate a trend favoring reconstitution. In fact this trend shows in each city.

Thus it appears unequivocal. Current federal order pricing provisions eliminate incentives that would otherwise exist to reconstitute milk. Processors could save as little as two or three cents per gallon on blended milk in Chicago, Dallas, and Knoxville; four to six cents per gallon in Boston and New York; and perhaps up to nine cents per gallon in Jacksonville.

The Cost of Regulation

It is possible to calculate the cost imposed by current regulations by comparing the regulated and unregulated cases, as is shown in Table 4. The difference between the costs calculated for Case 2 and Case 1 is solely attributable to federal order pricing provisions.⁴ Table 4 illustrates that the additional cost to reconstitution imposed by marketing orders increases with the Class I differential. The lowest cost penalty is imposed in Chicago and equals approximately three cents per gallon of blended milk. The highest penalties are imposed in

⁴The reader can verify that these differences are identical to those between the costs calculated for Cases 3 and 4.

Boston, Jacksonville, and New York, all of which equal about ten cents per gallon of blended milk. As one might surmise, this penalty is closely correlated with the Class I differential.

Table 4. The Comparative Cost of Reconstituted Milk in Six Cities With and Without Current Federal Order Pricing Provisions for Reconstituted Milk for 1980 and 1981.

City	Case 1 (unregulated)		Case 2 (regulated)		Case 2 - Case 1	
	1980	1981	1980	1981	1980	1981
	(cents per gallon of blended milk)					
Boston	-2.9	-4.9	7.1	5.9	10.0	10.8
Chicago	1.7	0.6	4.3	2.6	2.6	3.2
Dallas	-0.3	-1.5	5.0	4.3	5.3	5.8
Jacksonville	-0.7	-2.7	9.1	8.0	9.8	10.7
Knoxville	0.1	-1.2	4.6	3.9	5.1	4.8
New York	-1.8	-3.9	7.1	6.1	8.9	10.0

The Impact of Over-Order Prices

Since the mid-1960s, dairy cooperatives have routinely negotiated prices for raw milk that are higher than federal order minimum prices. These over-order prices are the prices actually paid by processors, which makes some attempt to take them into account highly relevant for this analysis. Although the compensatory payment imposed by marketing orders on reconstituted milk is based on the minimum Class I price, the existence of over-order prices makes reconstitution all the more attractive to the cost minimizing processor.

The actual prices paid by processors are not generally public information. The prices for Class I milk that are announced by major cooperatives and reported by the USDA in the Dairy Market News were used as approximations of the actual prices paid. Prices are announced for Boston, Chicago, and Dallas but not for the other locations. The announced premiums for Miami and Louisville were added to the minimum prices for Jacksonville and Knoxville, respectively, to approximate cooperative prices in those locations. It is felt that this is a reasonable approximation for these cities. The premiums that actually apply to these locations may be slightly lower, but probably not by enough to change the implications of the results. Cooperatives in New York State have not generally been successful in negotiating over-order prices on a routine basis; hence over-order prices were ignored for New York City.

The comparative costs of reconstitution when over-order prices prevail (Case 3) are compared to the Case 1 costs in Table 5. The differences between Case 3 and Case 1 costs are a measure of the additional incentives to reconstitute that exist when over-order prices are taken into account.⁵ The additional incentives due to over-order prices range from about one to seven cents per gallon of blended milk.

Seasonality in Cost Savings

Novakovic and Aplin reported some results for New York using prices from October 1980 and May 1981 that suggested that the greatest incentives for reconstituting milk occur in late Spring and the least

⁵The reader can verify that these differences are identical to those measured by comparing Cases 2 and 4.

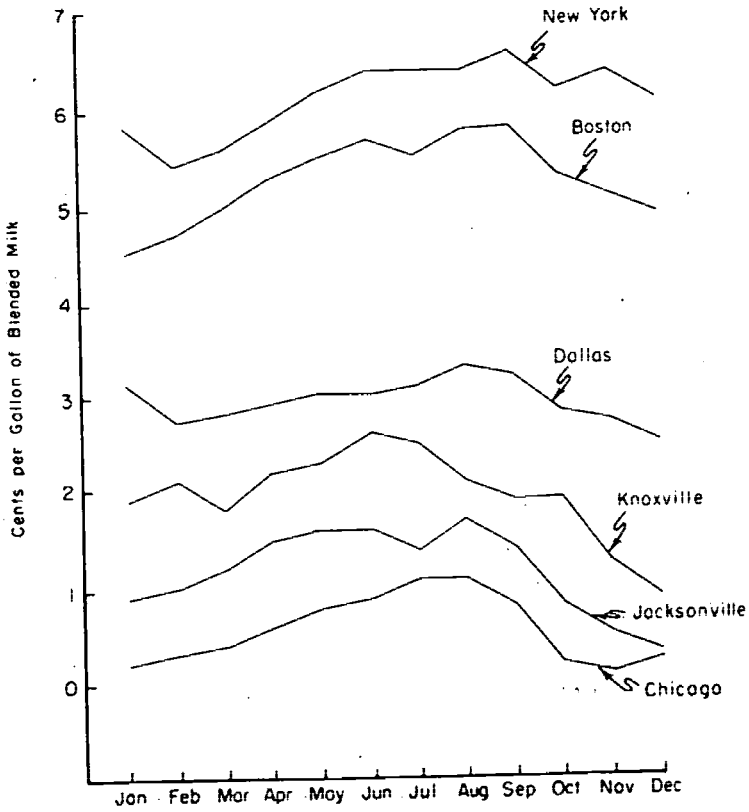
incentives occur in Autumn (2,3). Examples were shown in which the seasonality of the cost of reconstituting milk could be such that there were incentives to reconstitute in the Spring and no incentives in the Autumn.

Table 5. The Comparative Cost of Reconstituted Milk in Five Cities With and Without Over-Order Prices for 1980 and 1981.

City	Case 1 (minimum)		Case 3 (over-order)		Case 1 - Case 3	
	1980	1981	1980	1981	1980	1981
	(cents per gallon of blended milk)					
Boston	-2.9	-4.9	-3.6	-5.8	0.7	0.9
Chicago	1.7	-0.6	-0.6	-2.6	2.3	2.0
Dallas	-0.3	-1.5	-1.4	-2.8	1.1	1.3
Jacksonville	-0.7	-2.7	-6.8	-9.5	6.1	6.8
Knoxville	0.1	-1.2	-2.6	-3.5	2.7	2.3

A more complete analysis of the seasonality of the comparative cost of reconstitution was conducted for this study. Results for 1981 data are illustrated in Figure 1. Two important findings were made that alter or make moot the earlier, preliminary results. First, in the previous work it was assumed that the butterfat content of milk was constant in May and October. For this study, butterfat varied monthly according to the average reported for each federal order market corresponding to the six cities. The nonfat solids content of milk also varied proportionately with butterfat, using a relationship estimated from California data from January 1976 to October 1981 (see Appendix B). The variation in the butterfat and nonfat solids content of milk

FIGURE 1: MONTHLY VARIATIONS IN THE COMPARATIVE COST OF RECONSTITUTING MILK BY CITIES IN 1981



countered the seasonal variation in the difference between raw milk and concentrated milk prices. Taking this into account, the greatest incentives to reconstitute occur in the last and first quarters of the year and the least cost advantage to reconstituting occurs from July to September. This is almost opposite the findings of the earlier study.

The second and more important point is that there are no significant contradictions in the seasonal incentives. Situations in which there may be incentives to reconstitute in one season but not in another, as was suggested earlier, did not occur when the new data were thoroughly examined. Given this and the rather narrow seasonal range in comparative costs from a low range of 0.8 cents per gallon of blended milk in Dallas to a high range of 1.7 cents per gallon in Knoxville, it is concluded that the magnitude and timing of the seasonal differences in the cost advantages to reconstitution do not appear to be an important concern.

Regulatory Alternatives for Equalizing the Costs of Fresh and Blended Milk Products

To date the policy debate has focused on current regulations versus essentially eliminating all federal order pricing of reconstituted milk products. The following section explores two other intermediate alternatives intended to more nearly equalize fresh milk and reconstituted milk costs, which is the objective of current regulations. The author does not endorse any particular alternative nor does he wish to suggest that deregulation is less preferable than either of the following.

Table 6. Reductions in Class I Prices Required to Equate the Costs of Fresh and Blended Milk, Based on Annual Average Costs for 1980 and 1981.

City	Minimum Class I Price		Estimated Over-Order Class I Price		Breakeven Class I Price		Reduction in Minimum Price		Reduction in Over-Order Price	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
-----(\$/cwt.)-----										
Boston	14.59	15.50	14.79	15.74	13.79	14.16	.80	1.34	1.01	1.58
Chicago	12.93	13.84	13.83	14.64	13.57	13.58	0	.26	.26	1.06
Dallas	13.99	14.90	14.41	15.43	13.87	14.28	.12	.62	.54	1.15
Jacksonville	14.51	15.43	16.07	17.15	14.33	14.73	.18	.70	1.74	2.42
Knoxville	13.75	14.68	14.85	15.61	13.77	14.18	.0	.50	1.08	1.43
New York	14.28	15.26	N.A.	N.A.	13.80	14.24	.48	1.02	N.A.	N.A.

Breakeven Class I Prices

If the price paid for Class I milk is reduced, the advantage of reconstituting milk is reduced. (This is the central point of the studies by Hammond et al. and the USDA.) Table 6 reports the prices for Class I milk that would eliminate the incentives for fresh milk processors to convert part of their output mix to blended milk products even when reconstituted milk is deregulated. The differences between the breakeven prices and actual minimum Class I prices and estimated over-order prices are both reported. In 1981, the differences between breakeven prices and federal order minimum prices range from a relatively low 25 cents per cwt. in Chicago to over \$1 per cwt. in New York and Boston. Taking over-order prices into account, the differences increase to a low of about \$1 in Chicago (and New York) to a high of over \$2 in Jacksonville.

It is tempting to argue that reducing federal order minimum prices by one or the other figure would equalize the costs of fresh milk and blended milk processing; however, it is advisable to make such interpretations cautiously. First, reductions in prices through changes in federal order minimums would not eliminate the incentives to reconstitute unless the reductions also compensated for prevailing over-order premiums. In addition, one-time reductions in minimum Class I prices of the magnitudes suggested in Table 6 would not guarantee that fresh versus blended milk processing costs would always be more or less equalized. As shown in Table 6, there can be sizeable year-to-year variation in the differences between "breakeven prices" and Class I prices as currently derived. If one wanted to ensure that Class I prices stayed in line with the cost of blended milk it might be more

appropriate to adjust federal order Class I prices to changes in the price of nonfat dry milk.

This leads to another caveat. The breakeven analysis reported above assumes that Class I prices are reduced while all other prices are held constant. This assumption ignores some secondary impacts that would tend to increase the price of nonfat dry milk and condensed skim milk which in turn would raise the cost of reconstituted skim milk.

For example, the demand for nonfat dry milk would increase if a substantial volume of milk were reconstituted. If half of the fluid milk currently consumed were made from reconstituted milk, the production of nonfat dry milk would have to more than double. Initially, the increased demand could be met from existing stocks, but in less than a year production of nonfat dry milk would have to increase substantially. Some have argued that this would strain the available drying capacity. Given that powder plants are typically operated at far less than capacity except during the flush milk production season, this may not be a problem. More importantly, this tremendous increase in demand should have an upward impact on the price of nonfat dry milk. Given that the price of nonfat dry milk is currently supported well above market clearing levels, an increase in demand now may do little more than reduce or even eliminate government purchases, but that alone would be highly significant. In more normal times one could expect a significant increase in the price of nonfat dry milk.

In addition to this demand effect, it seems likely that there would be some supply effect, especially when one considers that most of the dry and condensed skim milk is produced by cooperatives. If minimum Class I differentials were reduced by half or more, as implied by

Table 6, there would be a significant impact on blend prices. Again, a reduction might be warranted given the current over supply of milk, but one would expect dairy farmers to take steps to protect their overall price. This could result in further compensating increases in the price of nonfat dry milk negotiated by dairy cooperatives for the purpose of maintaining overall price levels, much as over-order premiums on Class I milk are currently used by dairy cooperatives.

It is difficult to judge the magnitude or even the likelihood of some of these secondary repercussions. In Table 7, the percentage declines in the Class I prices paid by processors that would have equalized fresh and blended milk processing costs in 1980 and 1981 under Case 3 conditions (i.e., when reconstituted milk is deregulated and over-order prices prevail) are compared to the percentage increases in the prices of nonfat dry milk or condensed skim milk that would also have equalized these costs (i.e., make the comparative cost of reconstitution equal zero). These results illustrate that a one percent decrease in the Class I price has about the same impact on the comparative cost of reconstitution as a two percent increase in the price of dry or condensed skim milk. Perhaps more importantly, they show that rather modest increases in the price of concentrated milk would neutralize the advantages to reconstitution, ceteris paribus. Long run price increases of this magnitude seem plausible given the potential shift in demand for concentrated milk if deregulation occurred.

Again, these calculations are made assuming all other prices are held constant e.g., the nonfat dry milk price that would result in a zero comparative cost of reconstitution was calculated holding all other

prices constant. If reconstituted milk were actually deregulated, one might expect changes in Class I prices and concentrated milk product prices somewhere between the limits suggested in Table 7.

Changing the Compensatory Payment

An alternative to deregulation or reducing Class I prices would be to simply reduce the so-called compensatory payments charged on reconstituted milk. A reduction in the compensatory payment that would more nearly equalize the costs of blended and fresh beverage milk products would be more equitable than the current policy. It would change the price of beverage milk less than the other alternatives. The purpose of this section is to discuss how much of a reduction would be required to eliminate the cost incentives which now exist. Before that, it may be appropriate to digress briefly on the specifics of federal order provisions.

The pricing provisions that affect the cost of reconstituted milk have been explained elsewhere (1,4). There are two principal features: down-allocation and compensatory payments. Down-allocation refers to the procedure whereby reconstituted milk is assigned to the lowest use classes, regardless of the class in which it is actually used. Any reconstituted milk that is down-allocated implies that an equal volume of producer milk is up-allocated, such that the processor will be required to pay the Class I price for that volume of producer milk. If a processor uses more reconstituted milk than he has volume of Class III milk, such that all the reconstituted milk cannot be down-allocated, then the excess volume of reconstituted milk is charged a compensatory payment equal to the Class I differential. For all of the previous

Table 7. The Percentage Changes in Class I Prices Paid by Processors or in the Prices of Dry or Condensed Skim Milk that Would Equalize Fresh and Blended Milk Processing Costs Under Case 3 Conditions.

	Percentage Decrease in the Class I Price	Percentage Increase in Concentrated Skim Price
Boston		
1980	7	13
1981	10	20
Chicago		
1980	2	3
1981	7	14
Dallas		
1980	4	7
1981	7	14
Jacksonville		
1980	11	22
1981	14	29
Knoxville		
1980	7	14
1981	9	18
New York		
1980	3	6
1981	7	13

analyses (herein) in which reconstituted milk is regulated, it has simply been assumed that a compensatory payment is charged on all reconstituted milk. Since the effect of down-allocation is to simply shift producer milk from Class III to Class I and thereby force the processor to increase his price for this milk by the Class I differential, this assumption is valid. However, a policy change that would reduce the compensatory payment but keep the down-allocation provision

would imply that processors would pay the Class I differential on the volume of down-allocated milk but a lesser penalty on any additional reconstituted milk. In this case, the cost model would have to be modified. In the following discussion, the costs are calculated with the same model as before; hence it is best to interpret the results as deriving from a policy that reduced the compensatory payment, eliminated the down-allocation procedure, and assessed all reconstituted milk. If down-allocation were kept, the calculated compensatory payment could be higher.

With this caveat, compensatory payments that would equate the costs of fresh and blended milk processing were calculated for the conditions under Case 4 and are reported in Table 8. The differences between actual and breakeven compensatory payments range from 10 percent (Jacksonville, 1981) to 80 percent (New York, 1980). On average, the breakeven compensatory payment equals about 30 percent of the actual compensatory payment in New York, 40 percent in Boston and Dallas, 60 percent in Knoxville, and 75 percent in Jacksonville. Due to the constant price of nonfat dry milk in Chicago in 1980 and 1981, the breakeven compensatory payment there was very low in 1980 (24 percent of the actual) and much higher in 1981 (81 percent of the actual).

Table 8 also records a compensatory payment based on the difference between blend prices and Class III prices for the respective cities. This figure is shown for two reasons. One, it is used under federal orders to calculate compensatory payments for different categories or types of milk; hence, there is some precedence for a compensatory payment calculated in this way. Two, it is an easier figure to calculate than a "breakeven" price; hence federal order provisions could

easily be modified to change the compensatory payment charged on reconstituted milk in this fashion.⁶

As the figures in Table 8 show, a compensatory payment based on the difference between blend prices and Class III prices is much closer to the calculated breakeven compensatory payment than is the payment actually used, however it falls short of equalizing costs. Some would view this as an improvement over the current situation; however it might not be enough to satisfy the objectives of those seeking changes. It might be preferable to calculate breakeven compensatory payments as needed; however, it may be difficult to devise a procedure for calculating a breakeven payment (or price) that would be easy to compute on a timely basis.

A Caveat About Demand

An implicit assumption behind these analyses is that blended milk and fresh milk are perfect substitutes. As explained in the predecessor study, blended milk is assumed to be formulated so as to yield the most palatable substitute to fresh milk possible (2). Some have even argued that reconstituted milk, formulated in a variety of ways, would not exhibit visual or organoleptic differences discernible to the majority of milk drinkers. Conclusive evidence on this hypothesis has not been found. The point to be made is that if blended milk products are viewed as inferior to fresh milk products and this is reflected in a lower retail price for blended milk, then the incentives to reconstitute milk

⁶In this case, it would not be necessary to eliminate down-allocation provisions. Rather, they would be modified so that reconstituted milk would be allocated pro rata according to handler or market class utilizations.

that are reported here are essentially biased upward, and the reported reductions in Class I prices and/or compensatory payments or the increases in concentrated milk prices that would equalize fresh and blended milk processing costs are overstated.

Table 8. Reductions in Compensatory Payments for Reconstituted Skim Milk that Equate the Costs of Fresh and Blended Milk Processing When Reconstituted Milk is Unregulated and Over-Order Prices Prevail.

	Current Compensatory Payment	Breakeven Compensatory Payment	Compensatory Payment Based on Blend Prices
	-----(\$/cwt.)-----		
Boston			
1980	2.71	.97	1.65
1981	3.60	1.56	1.80
Chicago			
1980	1.05	.25	.45
1981	1.27	1.03	.50
Dallas			
1980	2.11	.53	1.63
1981	2.33	1.13	1.77
Jacksonville			
1980	2.48	1.72	2.25
1981	2.71	2.41	2.43
Knoxville			
1980	1.87	1.07	1.39
1981	2.11	1.41	1.53
New York			
1980	2.32	.46	1.01
1981	2.61	1.01	1.15

If the likely difference between the prices for blended and fresh milk products were known, their impact could be calculated with the model developed herein. Unfortunately, these differences are not known. In the previous study, decreases in blended milk prices relative to fresh milk prices were calculated that would offset the incentives to

reconstitute milk for selected situations (2). This analysis was not extended for this study, but the original analysis suggests that price differences up to ten cents per gallon would be required. It seems possible that if blended milk were priced five to ten cents per gallon less than fresh milk that this could provide sufficient incentive to entice consumers to purchase blended milk products even if they preferred fresh milk otherwise. On the other hand, this difference is not so large as to make it totally implausible that demand for blended milk would be so weak relative to fresh milk that even higher price differences would have to be offered before consumers would purchase blended milk, in which case it would no longer be profitable to reconstitute milk.

This discussion obviously does not resolve the question, but the reader/analyst should be aware of the potential implications of imperfect substitution in demand between fresh and blended milk products.

Conclusions

This study provides further evidence supporting the conclusion that current federal order pricing provisions impose significant penalties on the production of reconstituted milk. The cost of these regulations was estimated to range from 2.6 cents per gallon of blended milk in Chicago using 1980 price data to 10.8 cents per gallon of blended milk in Boston using 1981 price data. (The low in 1981 was 3.2 cents in Chicago.)

In addition, the incentives to reconstitute that were added by over-order premiums on Class I milk were also estimated. These added incentives range from about one to seven cents per gallon of blended milk.

If reconstituted milk prices were deregulated but over-order prices continued at previous levels, the only savings gained would be that associated with the cost of regulation. However, it is difficult to use these results to draw specific conclusions about the impact of deregulating reconstituted milk. A host of important questions remain unanswered. What would happen to over-order premiums on Class I milk? Would prices for concentrated milk products increase due to increased demand and/or due to price increases by cooperative manufacturers not totally associated with changes in demand? How well would consumers accept blended milk products, and what would their acceptance imply for retail prices of such products relative to fresh milk products?

This study also analyzed some of the implications of alternatives to the current policy other than total deregulation. These alternatives focused on methods to more nearly equalize the costs of fresh milk processing and producing blended milk products. Estimates of reduced Class I prices that would exactly equalize these costs were calculated for each plant-location using 1980 and 1981 data and assuming current regulations remained in force. Similarly, reduced compensatory payments associated with reconstituted milk were calculated that would equalize fresh and blended milk processing costs, assuming over-order prices were in effect.

The breakeven Class I prices were about \$1 to \$2 per cwt. lower than over-order prices in 1980 and 1981. Breakeven compensatory payments were about 50 cents to \$2.40 per cwt. lower than prevailing compensatory payments in 1980 and 1981. Although such breakeven prices can be calculated for a given set of data and assumptions, it might be difficult to incorporate such a procedure in federal orders and to

update the data as often as might be required for use in setting federal order prices or payments (monthly). Basing compensatory payments on the difference between blend prices and Class III prices might be a more easily administered procedure, but it was found that this fell short of the objective of equalizing fresh and blended milk costs for the 1980 and 1981 data analyzed.

References

1. Jerome W. Hammond, Boyd M. Buxton, and Cameron S. Thraen. Potential Impacts of Reconstituted Milk on Regional Prices, Utilization and Production, Station Bulletin 529, University of Minnesota, 1979.
2. Andrew Novakovic and Richard Aplin. Some Findings on the Comparative Cost of Reconstituting Beverage Milk Products: Reconstitution vs. Fresh Milk Processing, A.E. Res. 81-15, Department of Agricultural Economics, Cornell University, August 1981.
3. Andrew Novakovic and Richard Aplin. What Is the Difference Between the Costs of Reconstitution vs. Fresh Milk Processing? A.E. Ext. 81-19, Department of Agricultural Economics, Cornell University, September 1981.
4. Andrew Novakovic and Robert Story. Federal Milk Marketing Order Provisions Regarding Reconstituted Milk: The Issues and Some Possible Consequences of Change, A.E. Ext. 80-1, Department of Agricultural Economics, Cornell University, January 1980.
5. U.S. Department of Agriculture, Agricultural Marketing Service, "Handling of Milk in Federal Milk Marketing Areas: Request for Public Comments on Preliminary Impact Statement on Proposed Amendments to Tentative Marketing Agreements and Orders," Federal Register, Vol. 45, No. 223, November 17, 1980.

Appendix A

The Implications of Using Heavy Cream

This appendix examines the implications of the assumption regarding the use of cream separated at plants. The earlier study assumed milk was separated into light cream and skim milk and light cream was used in the reconstitution process; however, subsequent reviews suggested that the use of heavy cream would be more common. Thus, Case one-L is intended to measure the impact on the comparative cost of reconstitution of changing this assumption about the operating procedures of processing plants.

The comparative costs of reconstituted milk in the six test cities under Cases one and one-L are compared in Table A1. The results indicate that using heavy cream in the plant instead of light cream permits a very small additional cost advantage for reconstitution of 0.2 to 0.5 cents per gallon of blended milk. The additional savings attributed to the use of heavy cream appear to be invariant with price changes from 1980 to 1981, but they increase as the spread between Class I and Class II prices becomes greater.

Coupled with the fact that transportation costs for disposing of any surplus cream are lower for heavy cream, this suggests that the rational plant manager would use heavy cream in the plant instead of light cream but the difference between the two has little effect on the comparative cost of reconstituting milk.

Table A1. The Comparative Cost of Reconstituted Milk in Six Cities Under Two Assumptions About the Use of Cream in Processing Plants for 1980 and 1981.

City	Case 1 (Heavy Cream)		Case 1-L (Light Cream)		Case 1 - Case 1-L	
	1980	1981	1980	1981	1980	1981
	(cents per gallon of blended milk)					
Boston	-2.9	-4.9	-2.5	-4.4	-0.4	-0.5
Chicago	1.7	-0.6	1.9	-0.4	-0.2	-0.2
Dallas	-0.3	-1.5	-0.1	-1.3	-0.2	-0.2
Jacksonville	-0.7	-2.7	-0.4	-2.3	-0.3	-0.4
Knoxville	0.1	-1.2	0.3	-1.0	-0.2	-0.2
New York	-1.8	-3.9	-1.5	-3.5	-0.3	-0.4

Appendix B

Model Assumptions and Basic Data

Various assumptions were made about the characteristics and dimensions of the production process and the economic environment. Some of these assumptions define model parameters and are variable. Other assumptions help to define model structure and are held constant; these include the following:

1. Plants are operating normally in their market, exhibit typical current technology, produce with average to high efficiency, and generate a profit.
2. Bottling plants are assumed to produce beverage milk products and byproducts normally associated with bottling plants, including chocolate milk and drinks, cream, buttermilk, and fruit juices and drinks. Byproduct volume equals 20 percent of a plant's total capacity and this volume remains constant.
3. The typical plant has sufficient plant and equipment to reconstitute all byproducts plus an additional volume of reconstituted milk equal to at least 10 percent of the total beverage milk output but not as much as 50 percent of the beverage milk output.
4. The beverage milk product mix of the typical plant includes whole milk, lowfat milk and skim milk. Based on sales figures and average fat content of packaged milk products sold by handlers regulated under Federal Milk Marketing Orders in 1979, it is assumed that 60 percent of the typical plant's volume is whole milk, 24 percent is 2% BF milk, and 16 percent is 1% BF milk and skim milk, such that the average fat content of all beverage milk products is 2.605 percent.
5. Beverage milk products are standardized by mixing raw milk and skim milk. Skim milk and heavy cream can be separated from raw milk at yields of 81.65 pounds of skim milk and 18.35 pounds of light cream or 91.05 pounds of skim milk and 8.95 pounds of heavy cream per 100 pounds of raw milk. Light cream is 20 percent BF and 7.2 percent SNF. Heavy cream is 40 percent BF and 5.4 percent SNF. Skim milk is 0.1 percent BF and 8.94 percent SNF.
6. Total output of each product type (whole, 2%, 1%, and skim milk) is assumed constant across plants having the same capacity. Plants that reconstitute milk replace fresh milk volume with blended milk volume.

7. Beverage milk is packaged in gallon plastic containers and half-gallon, quart, and half-pint paper containers. Blended milk products are not mingled with fresh milk products, and there are separate and appropriately labeled bottles and cartons for each product type.
8. Butterfat for blended milk is assumed to be obtained solely from fresh cream or raw milk. Although it is technically possible to reconstitute whole or lowfat milk products from other sources of butterfat, such as butter or anhydrous butterfat, products made from non-cream sources are not as likely to have desirable organoleptic qualities and be competitive with fresh milk as blended milk made with cream.
9. Blended milk products are made from reconstituted skim milk and only as much cream and raw milk as are needed to supply the butterfat required for the final blended product. If the cream separated in conjunction with the quantity of skim milk used in fresh products (see item 5 above) does not provide enough butterfat for the blended milk volume, then raw milk is added to the blend until the 2.605 percent BF level is reached. Given 1) the SNF level desired in the blended milk, 2) the SNF content of the cream and raw milk used, and 3) the SNF content of dry or condensed skim milk, the quantity of dry or condensed skim milk required to provide sufficient SNF is calculated. Water is added to dry or condensed skim milk, making reconstituted skim milk, in sufficient quantity to provide the necessary total volume for the final product.
10. Nonfat dry milk used for reconstituting beverage milk must be Grade A and of the low heat type, and it is assumed to be 97.5 percent solids-not-fat (SNF).
11. Condensed skim milk used for reconstituting is assumed to be 32 percent SNF. This is considered to be the highest concentration of solids that can be shipped in fluid form without causing unloading problems, such as solids precipitating out of solution and caking in the bottom of truck tanks.
12. The water used to reconstitute milk can affect the flavor of the reconstituted product. It is assumed that the typical plant already has sufficient equipment for filtering and removing odors from water, if the normal water supply so requires.
13. The butterfat content of raw milk is based on averages reported for the relevant federal order markets. The solids-not-fat content varies with butterfat content according to the following relationship estimated from California data.
$$\text{SNF} = .0702355 + 0.435 \times \text{BF}$$
14. Nonfat dry milk and condensed skim milk are purchased at prevailing market prices in truckload quantities of 45,000 pounds and 5,292 gallons, respectively. These load sizes comply with typical road limits. Given the current state of technology for handling bulk powder, it is assumed nonfat dry milk is shipped in 50-pound paper bags.

The comparative cost of reconstitution in the various cities is calculated for a given set of price data and other economic assumptions, in addition to the other modeling assumptions. The assumed input price data and other economic factors are given in Table B1. Raw milk prices and nonfat dry milk or condensed skim milk prices, as appropriate, are given in Tables B2 through B7.

Other factors describing the model, the procedure used to calculate quantities of milk and milk products used or needed, and the method used to calculate costs are as described elsewhere by Novakovic and Aplin (2).

Table B1. Basic Price Data and Other Economic Assumptions for Plants in Six Cities.

	Boston	Chicago	Dallas	Jacksonville	Knoxville	New York
Price of Labor (\$/hour)	10.45	12.52	8.59	7.02	9.71	16.50
Price of Heat (\$/MBH)	1.86	1.86	1.86	1.86	1.86	1.86
Price of Electricity (c/KWH)	7.0	3.32	3.81	8.03	4.73	9.0
Price of Water (c/gallon)	0.4	0.4	0.4	0.4	0.4	0.4
Price of Nonfat Dry Milk (c/lb.)	96.1	94.75	96.73	96.73	96.73	96.1
Price of 32% Condensed Skim Milk (c/lb. of wet solids)	95.0	92.0	102.0	103.0	98.0	93.6
Difference Between Wholesale Prices of Fresh and Blended Beverage Milk (\$/gallon)	0.0	0.0	0.0	0.0	0.0	0.0
Operating Life of New Physical Capital (years)	15	15	15	15	15	15
Discount Rate (nominal) (percent)	14	14	14	14	14	14
Number of Plant Operating Days Per Year	312	312	312	312	312	312
Marginal Tax Rate (percent)	54.3	50.0	46.0	51.0	52.0	52.5
Operating Life Assumed for Tax Purposes (years)	5	5	5	5	5	5

^a Factor prices are from JAI Engineers.

Table B2. Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Boston, 1980 and 1981.

	Minimum Class I Price (\$/cwt.)	Over-Order Class I Price (\$/cwt.)	Class II Price (\$/cwt.)	Wholesale Price of Condensed Skim Milk (c/lb. SNF)	Butterfat Content of Milk (%)
1980					
January	14.19	14.41	11.40	85.23	3.68
February	14.26	14.48	11.37	85.17	3.68
March	14.29	14.48	11.54	86.60	3.70
April	14.27	14.46	11.59	89.49	3.63
May	14.51	14.70	11.54	90.01	3.60
June	14.60	14.79	11.57	89.95	3.51
July	14.58	14.77	11.76	90.35	3.49
August	14.60	14.79	11.96	90.35	3.47
September	14.65	14.85	12.13	90.50	3.54
October	14.78	14.98	12.48	93.33	3.69
November	14.99	15.19	12.58	94.33	3.75
December	15.34	15.58	12.67	94.61	3.73
Average	14.59	14.79	11.88	89.99	3.62
1981					
January	15.44	15.68	12.67	94.86	3.75
February	15.53	15.77	12.68	95.00	3.67
March	15.56	15.80	12.62	95.00	3.66
April	15.58	15.82	12.55	95.00	3.63
May	15.59	15.83	12.49	95.00	3.62
June	15.56	15.80	12.48	95.00	3.53
July	15.53	15.77	12.56	95.11	3.50
August	15.51	15.75	12.57	96.00	3.51
September	15.45	15.69	12.52	96.00	3.58
October	15.39	15.63	12.58	96.10	3.71
November	15.38	15.62	12.58	95.50	3.72
December	15.44	15.68	12.62	95.50	3.74
Average	15.50	15.74	12.58	94.42	3.64

Table 83. Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Chicago, 1980 and 1981.

	Minimum Class I Price (\$/cwt.)	Over-Order Class I Price (\$/cwt.)	Class II Price (\$/cwt.)	Class III Price (\$/cwt.)	Wholesale Price of Condensed Skim Milk (¢/lb. SNF)	Butterfat Content of Milk (%)
1980						
January	12.53	13.44	11.47	11.37	93.0	3.79
February	12.60	13.44	11.45	11.35	93.0	3.79
March	12.63	13.44	11.69	11.59	93.0	3.78
April	12.61	13.59	11.78	11.68	93.0	3.74
May	12.85	13.89	11.76	11.66	93.0	3.66
June	12.94	13.89	11.78	11.68	93.0	3.58
July	12.92	13.89	11.83	11.73	93.0	3.50
August	12.94	13.89	11.96	11.86	93.0	3.54
September	12.99	13.89	12.17	12.07	93.0	3.67
October	13.12	13.89	12.52	12.42	93.0	3.81
November	13.33	14.31	12.65	12.52	93.0	3.85
December	13.68	14.34	12.70	12.61	93.0	3.82
Average	12.93	13.83	11.98	11.88	93.0	3.71
1981						
January	13.78	14.60	12.75	12.64	93.0	3.77
February	13.87	14.64	12.80	12.66	93.0	3.74
March	13.90	14.64	12.90	12.67	93.0	3.72
April	13.92	14.64	12.90	12.64	93.0	3.68
May	13.93	14.64	12.77	12.61	93.0	3.65
June	13.90	14.64	12.74	12.59	93.0	3.55
July	13.87	14.64	12.76	12.53	93.0	3.50
August	13.85	14.64	12.76	12.47	93.0	3.53
September	13.79	14.64	12.76	12.46	93.0	3.66
October	13.73	14.64	12.75	12.52	93.0	3.81
November	13.72	14.64	12.66	12.52	93.0	3.83
December	13.78	14.64	12.62	12.56	93.0	3.81
Average	13.84	14.64	12.76	12.57	92.0	3.69

Table B4. Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Dallas, 1980 and 1981.

	Minimum Class I Price (\$/cwt.)	Over-Order Class I Price (\$/cwt.)	Class II Price (\$/cwt.)	Class III Price (\$/cwt.)	Wholesale Price of Nonfat Dry Milk (c/lb.)	Butterfat Content of Milk (%)
1980						
January	13.59	14.02	11.47	11.37	87.33	3.69
February	13.66	14.09	11.78	11.35	87.27	3.70
March	13.69	14.12	11.69	11.59	88.08	3.57
April	13.67	14.09	11.78	11.68	90.02	3.48
May	13.91	14.32	11.76	11.66	90.64	3.43
June	14.00	14.42	11.78	11.68	91.52	3.41
July	13.98	14.39	11.83	11.73	91.38	3.36
August	14.00	14.41	11.96	11.86	92.57	3.39
September	14.05	14.46	12.17	12.07	93.75	3.47
October	14.18	14.59	12.52	12.42	97.15	3.61
November	14.39	14.80	12.65	12.52	97.47	3.71
December	14.74	15.15	12.70	12.61	97.50	3.72
Average	13.99	14.41	11.98	11.88	92.06	3.55
1981						
January	14.84	15.25	12.75	12.64	97.44	3.66
February	14.93	15.45	12.80	12.66	97.02	3.64
March	14.96	15.45	12.90	12.67	96.73	3.53
April	14.98	15.45	12.90	12.64	96.50	3.42
May	14.99	15.45	12.77	12.61	96.50	3.44
June	14.96	15.45	12.74	12.59	96.50	3.42
July	14.93	15.45	12.76	12.53	96.83	3.39
August	14.91	15.45	12.76	12.47	97.25	3.40
September	14.85	15.45	12.76	12.46	97.25	3.49
October	14.79	15.45	12.75	12.52	97.30	3.62
November	14.78	15.45	12.66	12.52	97.25	3.70
December	14.84	15.45	12.62	12.56	96.32	3.69
Average	14.90	15.43	12.76	12.57	96.91	3.53

Table B5. Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Jacksonville, 1980 and 1981.

	Minimum Class I Price (\$/cwt.)	Over-Order Class I Price (\$/cwt.)	Class II Price (\$/cwt.)	Wholesale Price of Nonfat Dry Milk (c/lb.)	Butterfat Content of Milk (%)
1980					
January	14.12	15.75	11.52	87.33	3.51
February	14.19	15.75	11.50	87.27	3.45
March	14.22	15.75	11.74	88.08	3.37
April	14.20	15.75	11.83	90.02	3.36
May	14.44	15.45	11.81	90.64	3.34
June	14.53	15.75	11.83	91.52	3.37
July	14.51	15.75	11.88	91.38	3.38
August	14.53	16.20	12.01	92.57	3.43
September	14.58	16.20	12.22	93.75	3.45
October	14.71	16.45	12.57	97.15	3.52
November	14.92	16.75	12.67	97.47	3.62
December	15.27	17.00	12.76	97.50	3.62
Average	14.51	16.07	12.03	92.06	3.45
1981					
January	15.37	17.10	12.79	97.44	3.56
February	15.46	17.10	12.81	97.02	3.59
March	15.49	17.10	12.82	96.73	3.47
April	15.51	17.10	12.79	96.50	3.39
May	15.52	17.10	12.79	96.50	3.37
June	15.49	17.10	12.74	96.50	3.35
July	15.46	17.20	12.68	96.83	3.42
August	15.44	17.20	12.62	97.25	3.42
September	15.38	17.20	12.61	97.25	3.49
October	15.32	17.20	12.67	97.30	3.52
November	15.31	17.20	12.67	97.25	3.64
December	15.37	17.20	12.71	96.32	3.63
Average	15.43	17.15	12.72	96.91	3.49

Table B6. Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for Knoxville, 1980 and 1981.

	Minimum Class I Price (\$/cwt.)	Over-Order Class I Price (\$/cwt.)	Class II Price (\$/cwt.)	Class III Price (\$/cwt.)	Wholesale Price of Nonfat Dry Milk (¢/lb.)	Butterfat Content of Milk (%)
1980						
January	13.37	14.50	11.47	11.37	87.33	3.86
February	13.44	14.50	11.45	11.35	87.27	3.88
March	13.47	14.50	11.69	11.59	88.08	3.82
April	13.45	14.50	11.78	11.68	90.02	3.67
May	13.69	14.80	11.76	11.66	90.64	3.57
June	13.78	14.80	11.78	11.68	91.52	3.55
July	13.76	14.80	11.83	11.73	91.38	3.56
August	13.78	14.95	11.96	11.86	92.57	3.50
September	13.83	14.95	12.17	12.07	93.75	3.58
October	13.96	14.95	12.52	12.42	97.15	3.74
November	14.17	15.25	12.65	12.52	97.47	3.83
December	14.52	15.60	12.70	12.61	97.50	3.89
Average	13.75	14.85	11.98	11.88	92.06	3.70
1981						
January	14.62	15.70	12.75	12.64	97.44	3.92
February	14.71	15.70	12.80	12.66	97.02	3.88
March	14.74	15.70	12.90	12.67	96.73	3.77
April	14.76	15.70	12.90	12.64	96.50	3.65
May	14.77	15.70	12.77	12.61	96.50	3.59
June	14.74	15.55	12.74	12.59	96.50	3.56
July	14.71	15.55	12.76	12.53	96.83	3.51
August	14.69	15.55	12.76	12.47	97.25	3.52
September	14.63	15.55	12.76	12.46	97.25	3.57
October	14.57	15.55	12.75	12.52	97.30	3.71
November	14.56	15.55	12.66	12.52	97.25	3.77
December	14.62	15.55	12.62	12.56	96.32	3.83
Average	14.68	15.61	12.76	12.57	96.91	3.69

Table B7. Raw Milk and Concentrated Milk Prices and the Butterfat Content of Milk for New York, 1980 and 1981.

	Minimum Class I Price (\$/cwt.)	Class II Price (\$/cwt.)	Wholesale Price of Condensed Skim Milk (c/lb. SNF)	Butterfat Content of Milk (%)
1980				
January	13.88	11.48	85.14	3.65
February	13.95	11.45	85.23	3.67
March	13.98	11.62	85.30	3.68
April	13.96	11.67	89.02	3.64
May	14.20	11.62	90.13	3.58
June	14.29	11.65	90.44	3.52
July	14.27	11.84	90.98	3.50
August	14.29	12.04	92.14	3.50
September	14.34	12.21	93.09	3.55
October	14.47	12.56	96.63	3.69
November	14.68	12.66	97.00	3.76
December	15.03	12.75	97.00	3.73
Average	14.28	11.96	91.46	3.62
1981				
January	15.13	12.61	97.00	3.72
February	15.22	12.76	96.54	3.67
March	15.25	12.70	96.10	3.66
April	15.27	12.63	95.88	3.64
May	15.28	12.57	95.88	3.61
June	15.25	12.56	95.88	3.54
July	15.22	12.64	95.96	3.49
August	15.20	12.65	96.25	3.51
September	15.37	12.60	96.38	3.58
October	15.31	12.66	96.35	3.69
November	15.30	12.66	96.25	3.69
December	15.36	12.70	96.32	3.69
Average	15.26	12.65	96.23	3.62

March 1982
Station Bulletin
No. 367

7

**GRADE A DAIRY FARMERS'
PERCEPTIONS OF
MILK BUYER
PERFORMANCE:
THE FINDINGS OF
A NATIONAL SURVEY**



**Department of Agricultural Economics
Agricultural Experiment Station
Purdue University
West Lafayette, Indiana**

Grade A Dairy Farmers' Perceptions of Milk Buyer Performance:
The Findings of A National Survey*

Robert D. Boynton and Emerson M. Babb

*This research was supported in part by a cooperative agreement with the Agricultural Cooperatives Service, U.S. Department of Agriculture. Lydia Neely and Man-Ling Liao were responsible for much of the data analyses. The Dairy Division of the U.S. Department of Agriculture, individual market administrators, and the California Department of Agriculture cooperated in obtaining the farmer samples used in this research. Constructive suggestions on an earlier draft were made by Christopher A. Hurt, Charles Kraenzle, John Schmelzer, Lee F. Schrader, Thomas H. Stafford, and Joseph N. Uhl.

Any opinions, conclusions, or recommendations expressed in this bulletin are those of the authors and do not necessarily represent the views of the U.S. Department of Agriculture, Purdue University, or the reviewers of the manuscript.

Summary

A mail survey was sent to 3800 Grade A dairy farmers throughout the U.S. in early 1981. The purpose of the survey was to assess farmers' perceptions of milk buyer performance and to compare the assessments given of cooperative and private handlers. A response rate of 44 percent was achieved and a sample of mail survey nonrespondents was queried by telephone in an effort to identify any nonresponse bias in the mail surveys. Appropriate adjustments for nonresponse bias were made in the population estimates generated by the mail questionnaires.

Responding farmers, representing 29 federal milk marketing orders and the California state marketing order, gave favorable ratings to their milk buyers in all six aspects examined -- guarantee of market and payment, accurate weights and tests, level of milk price, reduction in farmers' costs, field services, and voice in marketing decisions. Performance evaluations did differ across regions; northeast buyers received the lowest ratings while south central and upper midwest buyers were most favorably evaluated. Cooperatives were rated as good as or better than proprietary handlers on 17 of 19 statements related to the areas mentioned above. Only on the price paid for milk and the ability to improve income by shifting to another buyer did farmers feel proprietary buyers were outperforming cooperatives. Farmers did feel that cooperatives, not proprietary handlers, were most often the leader in establishing price level in the market. Farmer characteristics, size of buyer, and whether their cooperative operated a plant proved to have little effect on farmers' evaluation of their buyer. In several performance areas the share of producers in an order belonging to a cooperative had a positive effect on the evaluation given cooperatives.

Farmers indicated that the most important service or function that a buyer could provide was the guarantee of a market and payment, followed by the assurance of accurate weights and tests, and increased milk prices. All those switching buyers in the last five years listed "higher price" as their primary switching motive. But for several other (secondary) motivating factors, those switching to cooperatives gave different rankings than those switching to proprietary buyers. Finally, farmers were unsure about the expected financial returns from dairying in the 1980s but thought that the early years of the decade would not be a good time to expand herd size.

Introduction

Performance evaluation of a commodity marketing system can take a variety of forms. It can be approached in an overall system or social context or alternatively, from the viewpoint of a particular system participant. Regardless of which of these approaches is chosen, there is another dimension to performance evaluation. It can be objectively measured, for example by utilizing cost data for efficiency measures, or subjectively assessed through the perceptions of a system participant. All four types of performance evaluation are valid approaches and the researcher's task is to select those appropriate for the objective at hand. In the research reported here, milk handler performance is evaluated from the farmers' viewpoint by farmers themselves.

This research is a part of a continuing program of research on the comparative performance of cooperative and proprietary firms¹ in several agricultural industries. As a part of such a research program, this project was designed to provide specific information on the comparative performance of cooperative and proprietary fluid milk buyers from the dairy farmer's viewpoint. The results from the entire set of projects comprising the research program are designed to be relevant and timely contributions to the formation of public policy toward farmer cooperatives. In addition, the findings of specific projects such as this one may be useful to industry participants directly. A caveat is in order at this point, however. The results reported here should not be construed as a suitable answer to the question of whether one type of firm or the other is better. Such a conclusion can never be made by an economist qua economist regardless of the comprehensive nature of the evidence and in this case would only be made by the foolhardy given the limited scope of the performance evaluation performed here.

The objectives of this project are two: to compare the performance of the two types of buyers as viewed by farmers and to provide a farmer-based assessment of buyer performance in general across the U.S. The results of the research will be organized to facilitate the treatment of both objectives.

The Problem

While much is known about services provided to Grade A dairy farmers (Babb, 1980; Boynton and McBride; Carley, *et al.*), little is known about how recipients evaluate such services. Babb (1981) conducted a performance evaluation of this sort; however, it dealt exclusively with Wisconsin Grade B milk producers. Deiter, Gruebele, and Williams studied the provision of marketwide and farmer services by 40 north central cooperatives in 1973. Their research included indirect measures of farmer satisfaction with existing cooperative services but besides being limited to only one region of the country, their research did not

¹ The term "proprietary firm" is used in this bulletin to refer to all milk buyers which are not cooperatives.

compare farmers' perceptions of cooperative and proprietary buyer performance. Cook surveyed members of three large regional dairy cooperatives in 1976-77 to learn about their loyalty to the cooperative and their appraisal of cooperative services. Although his study has the same limitations as that of Deiter, Gruebele, and Williams, it does provide some measures of dairy farmers' perceptions of cooperative milk buyers. The present study reports on the evaluation of milk buyers by a nationwide sample of Grade A dairy farmers in the spring of 1981. The sample was divided among those selling to a proprietary handler and those farmers marketing their milk through a cooperative. It is believed to provide the most comprehensive and up-to-date evaluation currently available by farmers of fluid buyers across the U.S. This study should be of use to fluid buyers in improving their service to dairy farmers and to policy-makers interested in the nature and quality of the role played by farmer cooperatives in the dairy industry.

Data Collection Procedures

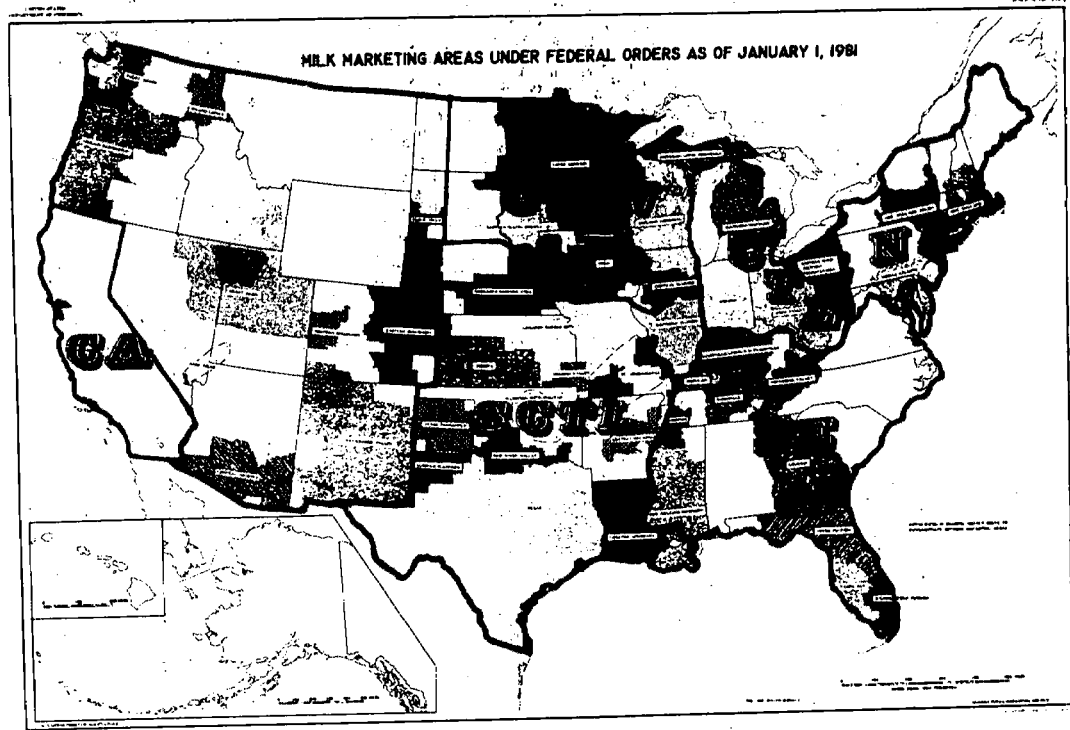
A mail survey was designed which addressed the following four areas:

- 1) characteristics of respondent
- 2) evaluations of buyer performance, expressed as the level of agreement or disagreement with a set of 21 statements dealing with fluid milk buyer activities and the future of the industry
- 3) the importance of six buyer services/functions for farmers
- 4) reasons for switching type of buyer within the last five years (if such a switch occurred).

The survey was designed to be completed within ten minutes. Three versions of the same basic survey were prepared differing in format but not the questions asked. One version was designed for cooperative members and another for those selling to proprietary buyers in federal order markets (nonmembers). In California where pre-assignment of producers to the cooperative or proprietary buyer group was not possible, the survey was structured to elicit this information from each respondent. Only those farmers who were not members of dairy cooperative associations evaluated proprietary handlers. Cooperative members evaluated their association even if they shipped their milk directly to a proprietary plant. Appendix A contains a copy of the proprietary handler version of the questionnaire.

U.S. dairy farmers were stratified by region of the country and whether they belonged to a dairy cooperative or not (type of buyer). The strata were disproportionately sampled in a random manner. Subsequently, sample data were appropriately adjusted to yield unbiased population estimates. Farmers in 29 federal milk marketing orders and California were surveyed. The orders, grouped in seven regions (Figure 1), were chosen to represent all parts of the U.S., orders with and without

Figure 1. Regional Groupings of Federal Milk Marketing Order Areas



dominant cooperatives, and orders with varying shares of cooperative membership. The sample size in each region was calculated to yield desired confidence intervals for regional population estimates of survey variables. Appendix B lists the specific orders surveyed, the region to which they are assigned, and the number of producers in the order. Sample sizes from each order are too small to allow accurate estimates of survey variables for any specific order. The overall sampling rate was 3.3 percent, with 1650 surveys mailed to farmers selling to proprietary handlers and 2150 sent to cooperative members.

Surveys were mailed in March 1981 with a second mailing a month later to those who had not yet responded. Response rates are shown in Table 1, by type of buyer. Response rates were quite uniform across all regions. Klein has pointed out the importance of testing for nonresponse bias in surveys and where present he suggests adjustment of population estimates in accordance with measured bias. In an effort to ascertain whether nonrespondents' characteristics or evaluations differed from those of respondents, a random sample of those not responding to either mailing were called and asked to answer an abridged set of questions (Appendix C). Those telephoned in August 1981 represented all seven regions and both buyer types. The sampling rate for the nonrespondents was 9.7 percent (197 chosen calls), with only 59.4 percent of them completed (117 calls). Of those completed calls, 83.8 percent (98 calls) resulted in useable surveys. The others were either unwilling or unable to participate. Where the nonrespondent (telephone) sample differed significantly (at the five percent level) from the mail sample on a particular question, the estimate derived from the mail survey was adjusted by the telephone-derived estimate using appropriate statistical techniques.² If there was no evidence of nonresponse bias on a particular question, the set of responses from both surveys were simply pooled in order to make use of all information collected. In all

² The abridged survey covered only six of the 21 statements on the mail questionnaire, only two of the four farmer characteristics, and only limited information on reasons for switching type of milk buyer. When t tests revealed significant mail-telephone respondent differences, the population estimate, \bar{X}_p , was calculated according to the following formula:

$$\bar{X}_p = \frac{W_m \bar{X}_m + W_t \bar{X}_t}{W_m + W_t},$$

where $W_m(W_t)$ is the weight given to the mean of the mail (telephone) respondents and $\bar{X}_m(\bar{X}_t)$ is the mail (telephone) survey mean. Based on responses to the two surveys, mail respondents were assigned a weight of 53% for the total survey and telephone respondents represented the remaining 47%. Thus, $W_m = 0.53$ and $W_t = 0.47$.

Table 1. Useable Responses and Response Rates
on Mail Surveys

	Respondents Selling To		TOTAL
	Cooperative	Proprietary	
Responses from first mailing	603	391	994
Responses from second mailing	368	250	618
Total responses	971	641	1612
Response rate ^{a/}	47.1	40.5	44.2

a/ The sample size was reduced (ex post) by 4.1 percent to account for farmers who were not appropriate members of the population. The two most common reasons for such an exclusion were that the farmer had gone out of business or was recently deceased.

cases, the population estimates presented in subsequent tables are the most accurate obtainable with the data collected for this study.

Characteristics of Responding Dairymen

Farmers were asked four questions about their dairy enterprise (Table 2). The average U.S. dairy farmer had sold to his current buyer for over 12 years (range of less than one year to 68 years), had operated a dairy farm for almost 21 years (range of less than one year to 75 years), derived about 86 percent of his income from dairying (range of five to 100, with 12 percent of the sample obtaining less than half their income from dairying), and milked 66 cows (range of two to 3000, with half the sampled farms having 55 cows or less).

Cooperative members had smaller herds and had been with their cooperative association longer than non-members had been with their proprietary handler (Table 2). Otherwise, no differences by type of buyer were found. Some regional differences also appeared (Table 2). Farmers in the south central, central, upper midwest, and southeast derived higher income shares from dairying than those in the northeast. Farms were largest in California and those in the southeast and west were bigger than in the central, upper midwest, northeast, or south central regions.

An especially high proportion of farmers (36.7 percent) wrote general comments in space provided at the end of the survey. The share of farmers making comments was virtually identical for cooperative members (35.7 percent) and those selling to proprietary handlers (38.1 percent). The comments were categorized into eight groups. Particularly noteworthy was the extremely low incidence of comments on low milk prices or dairy income. Only three percent of the cooperative member comments dealt with this and only two percent of the comments among those dealing with proprietary handlers. The largest share of the comments expressed respondents' preference for cooperatives (49 percent of cooperative member comments) or proprietary handlers (44 percent of the comments on the proprietary handler survey). The other categories received small shares of the comments and the frequency of their mention was similar among the two buyer types.

Results³

The results are presented in four sections. Section one reports on farmers' ranking of important buyer functions and services. Section two covers the analysis of 19 performance-related statements to which farmers expressed their level of (dis)agreement. These statements are examined for differences in performance evaluation between (1) cooperative members and those selling to proprietary handlers nationwide, (2)

³ The analyses that follow utilize parametric statistics (except in Table 3) despite the predominance of ordinal level data from the survey. Both parametric and non-parametric statistics were employed with basically identical results and the former were chosen for presentation here.

Table 2. Characteristics of Sampled Grade A Dairy Farmers

(A) Cooperative, Private, and Overall Samples^{a/}

	Respondents Selling To		TOTAL
	Co-op	Proprietary	
* Years sold to current buyer ^{b/}	12.7	9.3	12.1
Years operating a dairy farm	21.0	20.4	20.9
Percentage income from dairying	85.3	87.1	85.6
* No. of cows milked ^{b/}	62	85	66

(B) Regional Samples^{c/}

	NE	SE	W	Ca	Ctl	UMW	Sctl	Regional Differences
* Yrs. sold to current buyer ^{b/}	13.0	9.9	14.1	13.5	12.8	11.4	11.2	
* Yrs. operating dairy farm	22.6	21.0	21.5	24.3	22.0	19.0	19.2	
* Percentage income from dairy	92.5	83.3	86.9	92.3	82.9	83.2	79.6	Sctl,Ctl,UMW,SE < NE
* No. of cows milked ^{b/}	59	104	137	370	46	47	60	Ctl,UMW,NE,Sctl,SE,W < Ca; Ctl,UMW,NE,Sctl < SE,W

^{a/} An asterisk (*) indicates a significant difference between types of buyers at the 5% level based on a t test.

^{b/} Includes telephone respondents; no significant difference found between mail and telephone samples overall or by regions.

^{c/} An asterisk (*) indicates a significant difference between regions at the 5% level based on an ANOVA model. Regional comparisons made using Scheffe contrasts.

farmers in each of the seven regions, and (3) cooperative members and those selling to proprietary handlers in each region. The effect of other factors on performance evaluations will also be analyzed. Section three explores the extent of switching between types of buyers and the reasons given for such behavior. Buyer switching will be examined for the existence of different patterns between (1) those selling to cooperative and proprietary handlers nationwide and (2) farmers in each of the seven regions. The final section presents farmers' assessment of the outlook for the dairy industry during the 1980s.

Importance of Buyer Functions and Services

Farmers were asked to rank the importance of six buyer functions or services to them. This information was designed to put the performance evaluations which follow in appropriate perspective, that is, to juxtapose the performance evaluation with the importance assigned to that service or function. To the extent that more important services or functions are being executed especially well relative to the less important ones, the greater the likelihood that producers would be satisfied with overall buyer performance.

The guarantee of market and payment for milk delivered was ranked the most important role for a buyer (Table 3). The assurance of accurate milk weights and tests was ranked second, increased milk price, third, and the provision of a voice in marketing decisions was ranked last. These placements are consistent with, although not strictly comparable to, those reported by Cook. There are three important characteristics of these ranks to note. First, they were ranked similarly by cooperative members and those that sold to proprietary handlers. The median ranks were significantly different between the two types of buyers on four of the six items, however, the rank order was identical. Secondly, the rank order was unchanged from that shown here in all of the seven regions. These results suggest that what farmers want their buyers to do for them is quite stable across type of buyer and sections of the country. Finally, the correlations of these ranks with the farmer characteristics reported in Table 2 were examined. Only 42 percent of the possible correlations were significant (at the 5 percent probability level) and all were extremely small; in fact, only one was greater than 0.10 in absolute value. Farmers who had operated a dairy farm longer ranked the provision of field services more important ($r = -.097$); those deriving a larger share of their income from dairying, however, ranked field services less important ($r = .107$). Increased milk price was ranked less important by both farmers who had operated a dairy farm for a long time ($r = .086$) and farmers who had sold to their current buyer for a long time ($r = .105$).

Farmers' Perceptions of Buyer Performance

Farmers indicated their level of agreement or disagreement with 19 statements related to the six services/functions previously ranked for their importance. These statements, designed to elicit farmers' perceptions of their buyer's performance, comprised the core of the survey.

Table 3. Importance of Buyer Functions and Services
as Ranked by Farmers Selling to Cooperative
and Proprietary/Buyers, Nationwide

Function or Service	Median Evaluation ^{a/}		
	Co-op	Proprietary	Total
* Guarantee market and payment for milk	1.4	1.5	1.4
* Assure accurate weights and tests	2.3	2.0	2.2
Increase milk price	3.1	3.1	3.1
Reduce marketing costs	4.3	4.2	4.3
* Provide field services	4.8	4.3	4.7
* Provide a voice to farmers in marketing decisions	4.8	5.4	4.9

a/ Ranked in order of importance, with "1" being most important and "6", least important. Ties were permitted. An asterisk (*) indicates that the differences between rankings for cooperative and proprietary buyers were statistically significant at the one percent level of probability, based on the Mann-Whitney U test.

All evaluation scores are based on a five-point scale. The direction of the scale (high to low) has been reversed for some statements to maintain uniformity in interpretation. As a result, the lower the score (minimum of one) the better the performance perception for all statements. A score greater than three indicates unsatisfactory performance.

Overall, farmers rated their buyers' performance high; on only one of the 19 statements did they give them an unsatisfactory rating (statement no. 13, Table 4). This is an important finding and is consistent with an evaluation of cheese plants by Wisconsin Grade B farmers (Babb, 1981). There were differences across regions for 17 of the 19 statements, although Scheffe contrasts conservatively identified only 11 (Table 4). Northeast buyers received the lowest performance ratings (but still satisfactory) as they were rated below at least one other region on 9 of the statements. Central buyers were rated below at least one other region on three statements. In contrast, south central buyers' performance was judged superior to at least one other region on eight statements and upper midwest buyers were rated higher on nine statements.

When the evaluations of cooperative members and those selling to proprietary handlers were compared, the performance of cooperative buyers exceeded that of proprietary handlers on 11 of the 19 statements (Table 5). Proprietary handlers were rated above cooperatives on only two statements: the potential to increase income by shifting to another buyer was perceived by non-members to be lower than by members (no. 5) and unlike the Grade B farmer study (Babb, 1981), proprietary handlers were believed to pay higher prices than cooperatives (no. 6). The finding of higher prices paid by proprietary handlers is not inconsistent with cooperative price leadership (no. 8). Cooperatives can be the leader in establishing marketwide prices but their members can fail to net this price due to assorted cooperative deductions. These results likely reflect what cooperatives believe to be the costs their members incur for serving marketwide needs through their cooperative, including price determination and surplus disposal. That there was no significant difference on the accuracy of weights and tests may surprise some readers in light of the belief that this is a function that cooperatives have more incentive to perform accurately. Apparently in these producers' eyes, there is currently no difference. This result is consistent with that of the Grade B dairy farmer survey in which there was no difference among cheese manufacturers on this function (Babb, 1981, p. 6). The results in Table 5 can be summarized succinctly: cooperatives' performance was judged to be as good as or better than that of proprietary handlers on 17 of the 19 statements. These performance findings suggest that all six functions/ services are being performed satisfactorily by both types of buyers in all regions. As a result, juxtaposing the evaluations with the importance rankings is really unnecessary.

Differences in performance between types of buyer were greatest for improving the farmer's economic position (no. 7), price leadership (no. 8), good marketing information (no. 10), fringe benefits (no. 12), and voice in marketing decisions (no. 15). Four of these five statements

Table 4. Farmers' Perceptions of Buyer Performance
Nationally and by Regions

PERFORMANCE STATEMENTS ^{a/}	Mean Evaluation Score ^{b/}								Regional Differences ^{d/}
	TOTAL	NE	SE	W	Ca	Ctl	UMW	Sctl	
GUARANTEE OF MKT/PAYMENT									
* 1. My buyer may not be able to handle all the milk I produce in next 12 mos.	2.0	2.2	2.2	1.9	2.8	2.3	1.7	1.8	UMW < SE;UMW,Sctl < NE,Ctl; UMW,Sctl, W < Ca
* 2. If the plant I deliver to went out of business, I might not receive full payment	2.4	2.6	2.4	2.9	2.7	2.3	2.2	2.2	Sctl,UMW < W
ACCURATE WEIGHTS/TESTS									
* 3. I'm confident my weights and tests are correct	1.8	1.8	1.8	1.7	1.5	2.1	1.6	1.9	Ca,UMW,W,SE,NE < Ctl
* 4. I have confidence in my buyer	1.7	1.9	1.6	1.8	1.5	1.8	1.6	1.7	
INCREASED MILK PRICES									
* 5. I could improve my income by shifting to another buyer	2.0	2.3	1.9	1.8	1.7	2.0	2.1	1.8	
* 6. The price I receive is the highest paid in my area	2.6	2.9	2.6	2.1	2.1	2.5	2.6	2.3	Ca,W,Sctl,Ctl < NE
* 7. My buyer attempts to improve the economic position of dairy farmers	2.2	2.5	2.0	2.3	2.5	2.1	2.1	2.0	
* 8. My buyer is the leader in establishing milk prices in my area	2.3	2.8	2.0	2.3	n.a.	2.2	2.2	2.0	SE,Sctl,Ctl,UMW,W < NE
BETTER SERVICES									
* 9. My buyer provides good field services	2.0	2.0	2.1	2.1	2.1	1.9	1.9	2.0	
*10. My buyer provides poor marketing information	2.2	2.5	2.2	2.3	2.5	2.1	2.1	2.0	Sctl,Ctl,UMW < NE
11. My buyer provides assistance on any inspection or quality problems I encounter	1.8	1.9	1.8	2.0	1.9	1.8	1.8	1.8	
*12. My buyer provides valuable fringe benefits in addition to my milk price	2.7	3.0	2.5	2.9	3.2	2.5	2.4	2.5	UMW < W,NE,Ca

Table 4. Farmers' Perceptions of Buyer Performance, Nationally and by Regions (Cont.)

PERFORMANCE STATEMENTS ^{a/}	Mean Evaluation Score ^{b/}								Regional Differences ^{d/}
	TOTAL	NE	SE	W	Ca	Ct1	UMW	SCt1	
REDUCE COSTS									
*13. My buyer helps me reduce production costs	3.1	3.5	3.0	3.3	3.4	3.1	2.9	2.9	SCt1,UMW,SE,Ct1 < NE
14. My buyer keeps milk hauling costs down	2.5	2.6	2.4	2.4	2.3	2.6	2.4	2.5	
VOICE IN DECISIONS									
*15. I do not have a voice in plant and marketing decisions that effect me	2.9	3.1	3.0	2.6	2.9	3.2	2.5	2.9	UMW < SE,NE,Ct1; UMW,W < Ct1
*16. My buyer agrees with my views about milk support prices	2.4	2.6	2.3	2.3	2.5	2.4	2.3	2.2	SCt1 < NE
*17. I can not easily communicate my problems or complaints to my buyer	2.2	2.4	2.1	2.2	2.3	2.2	2.1	2.1	SCt1,UMW < NE
*18. My problems or complaints receive prompt attention	2.2	2.4	2.0	2.4	2.2	2.1	2.1	2.2	
*19. I have a poor relationship with my buyer	1.9	2.1	1.9	1.9	1.9	1.9	1.9	1.8	
*AVERAGE OVERALL EVALUATION ^{c/}	2.1	2.2	2.1	2.0	2.0	2.2	1.9	2.0	UMW,SCt1 < Ct1,NE

a/ An asterisk (*) indicates a significant difference by region at the 5% probability level based on an ANOVA model.

b/ Evaluations are based on a five-point scale, where 1=strongly agree, 2=agree, 3=neutral, 4=disagree, and 5=strongly disagree except for statements 1,2,5,10,15,17, and 19 where the order is reversed to maintain comparability in interpretation. For all statements the lower the score the better the buyer was evaluated.

c/ Based only on statements 1,3,4,5,9 and 15. These are the six statements included in the nonrespondent survey and as such any nonrespondent bias has been removed from them. A simple average was used.

d/ Specific regional differences determined by Scheffe contrasts. This technique is quite conservative and may not yield any significant differences despite the finding of a specific regional effect via the ANOVA model. Notice that to say one region is less than another (<) is to say that the former exhibits better performance.

Table 5. Farmers' Perceptions of Buyer Performance
Cooperative and Proprietary Handler National Samples

PERFORMANCE STATEMENTS ^{a/}	MEAN	
	EVALUATION SCORE ^{b/}	
	Farmers Selling to Co-op	Proprietary
GUARANTEE OF MKT/PAYMENT		
1. My buyer may not be able to handle all the milk I produce in next 12 mos.	*2.0	2.3
2. If the plant I deliver to went out of business, I might not receive full payment	*2.3	2.6
ACCURATE WEIGHTS/TESTS		
3. I'm confident my weights and tests are correct	1.8	1.8
4. I have confidence in my buyer	1.7	1.7
INCREASED MILK PRICES		
5. I could improve my income by shifting to another buyer	*2.1	1.8
6. The price I receive is the highest paid in my area	*2.7	2.3
7. My buyer attempts to improve the economic position of dairy farmers	*2.1	2.8
8. My buyer is the leader in establishing milk prices in my area	*2.2	2.9
BETTER SERVICES		
9. My buyer provides good field services	1.9	2.0
10. My buyer provides poor marketing information	*2.1	2.7
11. My buyer provides assistance on any inspection or quality problems I encounter	1.8	1.9
12. My buyer provides valuable fringe benefits in addition to my milk price	*2.5	3.4
REDUCE COSTS		
13. My buyer helps me reduce production costs	*3.1	3.4
14. My buyer keeps milk hauling costs down	2.5	2.5

Table 5. Farmers' Perceptions of Buyer Performance, Cooperative and Proprietary Handler National Samples (Cont.)

PERFORMANCE STATEMENTS ^{a/}	MEAN EVALUATION SCORE ^{b/}	
	Farmers Selling to Co-op	Proprietary
VOICE IN DECISION		
15. I do not have a voice in plant and marketing decisions that affect me	*2.8	3.7
16. My buyer agrees with my views about milk support prices	*2.3	2.7
17. I cannot easily communicate my problems or complaint to my buyer	*2.2	2.3
18. My problems or complaints receive prompt attention	2.2	2.2
19. I have a poor relationship with my buyer	*1.9	2.1
AVERAGE OVERALL EVALUATION ^{c/}	*2.0	2.2

a/ An asterisk indicates a significant difference between types of buyers at the 5% probability level based on a t test.

b/ Evaluations are based on a five-point scale, where 1=strongly agree, 2=agree, 3=neutral, 4=disagree, and 5=strongly disagree except for statements 1,2,5,10, 15,17, and 19 where the order is reversed to maintain comparability in interpretation. For all statements the lower the score the better the buyer was evaluated.

c/ Based only on statements 1,3,4,5,9 and 15. These are the six statements included in the nonrespondent survey and as such any nonrespondent bias has been removed from them. A simple average was used.

also headed the list of greatest differences among cooperative and proprietary cheese manufacturers in Babb's 1981 study. The exception is price leadership for which responses did not differ significantly between types of Grade B milk buyers. The differences found between buyer types in both studies are consistent (in general) with the conventional wisdom as embodied in the expectations of public officials and university economists except for price level (statement no. 6) (Lang, et al., p. 9).

Performance comparisons between buyer types in each region are shown in Table 6. Cooperatives' performance was rated as good as proprietary handlers in 67 percent of the cases (questions) and better than proprietary handlers in 29 percent of the cases across the seven regions. Proprietary buyers were judged superior to cooperatives in only four percent of the cases. Cooperatives' higher performance rating was especially evident on statements 7, 8, and 12, relating to farmers' economic position, price leadership, and fringe benefits. Cooperatives' favorable evaluations can be compared across regions by calculating the net number of statements on which cooperatives' performance in that region exceeds that of proprietary handlers. Following this procedure, cooperatives in the west were rated favorably on more statements (net) than in the other six regions. Northeastern cooperatives were judged by farmers relatively less favorably than cooperatives in the other six regions. On the average overall evaluation, cooperatives' performance was judged significantly better only in the southeast and west.

Other factors were analyzed for their possible relationship to farmers' performance evaluations. The factors examined were (1) years sold to current buyer, (2) years operating a dairy farm, (3) percentage of income from dairying, (4) number of cows milked, (5) the share of farmers in an order belonging to cooperatives and (6) to the largest cooperative, (7) buyer size, and (8) for cooperative members only, whether their organization operated a milk plant(s).

Correlations between farmer characteristics (items 1-4) and each evaluation statement were computed and tested for statistical significance. Of the 76 Pearson zero-order correlation coefficients (19 statements by four characteristics) only 26 (34 percent) were statistically significant (at 5 percent probability level) and all were quite small (less than 0.20 in absolute value). The percentage of income derived from dairying was unrelated to all but one statement (no. 11, negative correlation). The other three characteristics were correlated with several evaluation statements. Rather than discussing each statement individually, correlations within the six functions/services groups will be focussed upon. The years operating a dairy farm (YRSOPR) were negatively correlated to guarantee of payment performance level, that is, as producers' years in dairying rose, their evaluation of their buyers' guarantee of payment fell. The accuracy of weights and tests was positively related to YRSOPR, herd size (NCOWS), and years sold to current buyer (YRSOLD). Larger farms, older farmers, and those who have been with their current buyer for a long period of time evaluated the accuracy of their buyer's testing higher. Price and income statements

Table 6. Farmers' Perceptions of Buyer Performance,
Region by Type of Buyer

PERFORMANCE STATEMENTS ^{a/}	NE	SE	W	Ca	Ctl	UMW	SCtl
GUARANTEE OF MKT/PAYMENT							
1. My buyer may not be able to handle all the milk I produce in next 12 mos.			C				
2. If the plant I deliver to went out of business, I might not receive full payment				P	C		
ACCURATE WEIGHTS/TESTS							
3. I'm confident my weights and tests are correct				P			
4. I have confidence in my buyer	P						
INCREASED MILK PRICES							
5. I could improve my income by shifting to another buyer	P						
6. The price I receive is the highest paid in my area	P						
7. My buyer attempts to improve the economic position of dairy farmers	C	C	C	C	C	C	C
8. My buyer is the leader in establishing milk prices in my area	C	C	C	n.a.	C	C	C
BETTER SERVICES							
9. My buyer provides good field services			C				
10. My buyer provides poor marketing information	C		C		C		C
11. My buyer provides assistance on any inspection or quality problems I encounter							
12. My buyer provides valuable fringe benefits in addition to my milk price	C	C	C	C	C	C	C
REDUCE COSTS							
13. My buyer helps me reduce production costs			C	C			
14. My buyer keeps milk hauling costs down				C			

Table 6. Farmers' Perceptions of Buyer Performance,
Region by Type of Buyer (Cont.)

PERFORMANCE STATEMENTS ^{a/}	NE	SE	W	Ca	Ctl	UMW	Sctl
VOICE IN DECISIONS							
15. I do not have a voice in plant and marketing decisions that affect me	C		C	C		C	C
16. My buyer agrees with my views about milk support prices			C	C			
17. I cannot easily communicate my problems or complaints to my buyer							
18. My problems or complaints receive prompt attention				C			
19. I have a poor relationship with my buyer							
AVERAGE OVERALL EVALUATION ^{b/}		C	C				

a/ The letter "C" indicates that farmers selling to cooperatives rated buyer performance significantly better in that region than did those selling to private handlers (5% probability level, t test). The letter "P" indicates superior performance by private handlers. No entry in a cell indicates that there was no significant difference by type of buyer.

b/ Based only on statements 1,3,4,5,9 and 15. These are the six statements included in the non-respondent survey and as such any non-respondent bias has been removed from them. A simple average was used.

were also positively related to YRSOPR, YRSOLD, and especially NCOWS. Larger farms, older farmers, and those with their current buyer for many years felt better about their buyer's influence on their price and income levels. Smaller farmers evaluated the field services provided by their buyers higher than did larger farmers. YRSOPR and YRSOLD, however, were positively related to farmers' evaluation of field services. NCOWS, YRSOPR, and YRSOLD were positively related to farmers' views on buyer-assisted cost reductions. Farmers with larger herds, older farmers, and those who had been with their buyer for many years felt he was doing a better job in reducing costs for them. In general, as his herd size, years dairying, and the length of time a producer was with a buyer increased, the more effective voice he felt he had with his buyer.

The share of producers in an order belonging to cooperatives and the share belonging to the largest cooperative were examined for their relationship to farmers' perceptions of buyer performance. The question that seems particularly interesting in this regard is, "Does the performance of a particular type of buyer deteriorate as that type of buyer's market share rises?" For cooperatives, the results of correlation analysis indicated, no. In all six performance areas, cooperative performance was judged better in orders where their share of the market was highest. There was no evidence of the opposite relationship.⁴ Among those selling to proprietary buyers, no significant performance-market share relationships were found. That is, as cooperatives' share of an order's producers rose, proprietary buyers were neither evaluated more nor less favorably.

A related question is "Do farmers whose only choice of buyer is a cooperative, evaluate performance differently than farmers with a choice of buyer types?" To address this question, farmers were assigned to one of two groups, those in an order where cooperatives represented 99-100 percent of all farmers and those in an order where cooperative members accounted for less than 99 percent of all producers (that is, where farmers likely had a choice between buyer types). Those in the former group represented only 5.9 percent of the farmers who completed the survey. The performance evaluations by those farmers with no choice but to market through a cooperative were significantly higher (at the five percent probability level) on five of the 19 statements (nos. 1, 5, 7, 8, and 10). For the remaining 14 statements no significant differences were found. These results are consistent with earlier analyses showing that cooperative members' gave significantly higher evaluations that did farmers selling to proprietary handlers on four of these five statements (nos. 1, 7, 8, and 10). That those with no choice rated their buyers' performance better on statement 5 may be due to the absence of a

⁴ Eighteen of 19 correlation coefficients (evaluation statements with all cooperatives' share) were significant at the 5 percent level and all were negative implying that performance scores improved as share rose. Eleven of 19 were significant and negative with the largest cooperative's share. Correlation coefficients were all below 0.35 (absolute value).

proprietary handler alternative. These farmers may have felt that a higher income was not available to them since they had no proprietary alternative -- especially since previous results showed that overall, farmers felt proprietary firms paid higher prices. Other explanations for these results could be that farmers in orders with only cooperative handlers had no basis for comparison, reducing the precision of their evaluation or that those with no alternative were predisposed to validate the desirability of their situation.

The size of the buyer was also analyzed for its relationship to farmers' performance evaluations using a one-way ANOVA model. Buyers were classified in size categories based on prior knowledge of the scope of their operations. Proprietary handlers were designated as a (1) single plant handler, (2) multiplant regional, or (3) multiplant national handler. Cooperatives were classified in size groups as a (1) small, single order cooperative, (2) large, single order cooperative, (3) regional cooperative, or (4) general farm organization engaged in milk marketing. For farmers selling to a proprietary handler, buyer size had virtually no effect on performance evaluation. The sole exception proved particularly interesting. Farmers selling to single-plant proprietary handlers believed more strongly than did those selling to multi-plant, regional proprietary handlers, that their buyer helped keep milk hauling costs down (statement no. 14). For cooperative members, the size of their organization was significant at the five percent level in accounting for variation in about half of the member performance evaluations. Scheffe contrasts, however, established significant differences between specific size categories in only five of these cases. Members of general farm organizations engaged in Grade A milk marketing believed more strongly than members of at least one other size group that their weights/tests were more accurate (no. 3), their buyer kept hauling costs down (no. 14), their views on price supports were similar to those of their buyer (no. 16), and their complaints received prompt attention (no. 18). Additionally, regional cooperative members believed their organizations provided more valuable fringe benefits than either small or large, single order cooperatives (statement no. 12). In summary, size of buyer, be they cooperative or private, had little systematic effect on farmers' evaluations of buyer performance.

The final factor analyzed in the context of farmers' performance evaluation related only to cooperative members, namely whether their organization operated a milk plant in the area. Performance evaluations differed between these two groups of cooperative members on only three statements. Members of cooperatives without a plant had more confidence that their organization would pay for milk delivered if the plant they delivered to went out of business (statement no. 2). Apparently members feel more confident in the cooperative collecting from another buyer who shuts down a plant than from the cooperative itself when it closes its own plant. Members of cooperatives without a plant also felt more confident that their buyer was providing them with the highest income available in their market (no. 5). Perhaps these farmers believed other cooperatives in their market with milk plants could not offer them a greater income because of members' financial commitments to plant

ownership and operation. Cooperatives with a plant(s), however, were believed to be stronger price leaders in their market than cooperatives without plants (no. 8).

Reasons for Switching Type of Buyer

Farmers were asked whether they had switched type of buyer in the last five years. Eleven percent of farmers formerly members of a cooperative had switched to a proprietary handler while 14 percent of those formerly selling to a proprietary handler had switched to a dairy cooperative (Table 7). These shares are quite similar, but when the regions were examined some major differences were found. The tendency to leave cooperatives was especially great in the southeast (21 percent) and upper midwest (22 percent), while the tendency to leave a proprietary buyer was ten and nine percent in those regions, respectively. The propensity to leave a cooperative was well below the average in the west and California (4 percent in both regions); in these two regions the tendency to leave a proprietary buyer was above average.

Those who had switched were asked to choose from a set of reasons, the three (in order) most responsible for their action. The importance of a reason across any particular respondent group was calculated as a composite score between zero and 100.⁵ These scores can be used to rank the importance of the entire set of reasons.

Switching type of buyer to get a higher price was the major reason cited by those who switched across the country and by those in five of the seven regions (Table 8). The second most important reason nationally for switching type of buyer was to reduce the risk of loss of market or payment for milk. Switching because of a policy disagreement with the previous buyer was the third most important factor in encouraging farmer switching nationwide. Although the rank order of the switching reasons frequently differed across regions, no significant regional differences in the composite scores for any of the reasons were found.

⁵ The composite score for a particular switching factor, f , is given by

$$CS_f = \frac{1}{N} \sum_{i=1}^N \left[\frac{100}{R_{fi} + F} \right], \text{ for } R_{fi} \neq 0$$

where N is the number of respondents who switched, R_{fi} is the rank assigned by respondent i to switching factor f (either rank 1, 2, or 3), and F is the total number of switching factors from which the respondent could choose. In this formula, the most important factor receives a weight of 1.0, the second factor 0.50, and the third factor 0.33. This formula results in a composite score between zero and 100 for any given factor and a sum of composite scores over all switching factors of 100.

Table 7. Extent of Switching Between Types of Buyers
in the Last 5 years, Percentages by Region

	TOTAL	NE	SE	W	Ca	Ct1	UMW	SCt1
Percent switching <u>from a cooperative</u> ^{a/}	14	17	21	4	4	16	22	9
Percent switching <u>from a proprietary</u> ^{b/}	11	10	10	15	16	6	9	14

a/ Calculated as the number of sampled farmers who reported switching from a cooperative as a percentage of the number of current co-op members plus those who switched from a co-op.

b/ Calculated as the number of sampled farmers who reported switching from a proprietary buyer as a percentage of the number who currently use a proprietary buyer plus those who switched from a proprietary buyer.

Table 9 presents the switching motives separately for those who switched to cooperatives and proprietary handlers. The hierarchy of reasons given by both groups of producers differed in important ways from the ranking given by the complete sample of switching producers. The number one reason for both groups was the same as that of all switchers, to seek a higher milk price. Those switching to a cooperative ranked risk reduction and gaining more voice in buyer decisions significantly more important than did those switching to a proprietary handler. On the other hand, a policy disagreement was ranked a more important switching motivator by those switching to a proprietary buyer than to a cooperative.

Switching motives by type of buyer were not examined within the regions because sample sizes were too small to give reliable estimates of their importance. An additional analysis of these switching data was undertaken, however. The hierarchy of reasons for switching buyers was noticeably different than the rankings assigned by all farmers to the importance of buyer functions/services previously presented. Namely, guarantee of market/payment was the number one function/service a buyer could provide (Table 3) yet it was in second position as a switching motive overall and in fourth position by those switching to a proprietary buyer. The assurance of accurate weights/tests and increased milk price were also ranked very differently in the two instances. In order to test whether those who switched did so for reasons consistent with their ranking of important buyer functions/services, analyses were conducted which compared the ranks of important buyer function/services of those who had switched to those who had not. Results for both the cooperative and proprietary buyer group showed that the importance rankings were virtually identical between the switchers and the nonswitchers. This suggests that farmers will switch buyers because of dissatisfaction with their buyer's performance in areas of secondary importance to them.

Farmers Perceptions of the Future of Their Industry

Grade A dairy farmers were asked to indicate their level of agreement or disagreement with two statements dealing with the future of the industry. These were interspersed with the evaluation statements previously analyzed. Dairy farmers nationwide, regardless of their regional designation or type of buyer believed that the period 1981-1983 would be a poor time to expand herd size (Table 10). Farmers tended toward neutrality on the question of whether dairy farm incomes would be favorable in the 1980s. Cooperative members and those in the central and south central regions were significantly more optimistic than those selling to proprietary buyers and those in the northeast, respectively. There were no significant differences by type of buyer in any of the seven regions.

Conclusions and Implications

This research furnishes a reliable and broad-based set of information about how Grade A dairy farmers view the performance of their buyers. It also offers insights into farmers' perception of the industry in the 1980s, the importance of function/services provided by buyers,

Table 8. Farmers' Reasons for Switching Type of Buyer in Last 5 years, Overall and Regionally

REASONS FOR SWITCHING	Importance of Reasons for Switching ^{a/}							
	TOTAL	NE	SE	W	Ca	CtI	UMW	SCTI
Get higher price	* 1 (24)	3	1	1	3.5	1	1	1
To reduce risk of mkt./payment loss	* 2 (16)	1	2.5	3	2	6	4	3.5
Because of policy disagreement	3 (15)	2	2.5	4	3.5	2	2.5	7.5
To get lower hauling costs	4 (13)	5	5	5	5	3	2.5	3.5
Because plant closed	5 (12)	4	4	8	1	4	6	6
To get more accurate wts./tests	6 (7)	6	6	2	9	6	8	2
To get more voice in decisions	7 (5)	7	7	6.5	6	6	7	7.5
To get better field services	8 (4)	9	8	6.5	7.5	8.5	5	5
Because co-op merged ^{b/}	9 (1)	8	9	9	7.5	8.5	9	9

a/ Ranks are presented where 1=the most important and 9=the least important. Ranks are averaged in the case of ties. The figure in parentheses below the ranks for the total group who switched are the composite scores. An asterisk (*) indicates that the composite scores differed significantly among regions based on an ANOVA model (5% probability level). A high composite score indicates high importance assigned to that reason. Scheffe contrasts were used to identify specific differences in composite scores among regions; none were found, however.

b/ This reason not given to farmers who had switched from a proprietary to a cooperative buyer.

Table 9. Farmers' Reasons for Switching Type of Buyer in Last 5 Years, Farmers Currently Selling to Cooperative and Proprietary Handlers

REASONS FOR SWITCHING	Importance of Reasons for Switching ^{a/} to	
	A Cooperative	A Proprietary Handler
Get higher price	1 (22)	1 (27)
To reduce risk of mkt./payment loss	* 2 (20)	4 (11)
Because of policy disagreement	* 5.5 (9)	2 (24)
To get lower hauling costs	4 (13)	3 (13)
Because plant closed	3 (15)	5 (8)
To get more accurate wts./tests	7 (7)	6.5 (7)
To get more voice in decisions	* 5.5 (9)	9 (1)
To get better field services	8 (5)	8 (2)
Because co-op merged ^{b/}	n.a.	6.5 (7)

^{a/} Ranks are presented where 1=most important and 9=least important reason. Ranks are averaged in the case of ties. Figures in parentheses below each rank are the composite scores. An asterisk (*) indicates that the composite scores differed significantly between farmers selling to cooperatives and private handlers based on a t test (5% probability level).

^{b/} This reason not given to farmers who had switched from a proprietary to a cooperative buyer.

and reasons why farmers switch from one type of buyer to another. The unique contributions of this research are the cooperative-proprietary handler performance comparisons and the nationwide coverage of the issues examined. The major conclusion from this work is that in the farmer's view, cooperatives are performing as well as or better than proprietary handlers in all aspects except prices paid for milk and satisfaction with income gained from the current buyer. With the exception of these two aspects, the results are consistent with those from a survey of Wisconsin Grade B producers (Babb, 1981) and the expectations of university and government/industry leaders (Lang, et al.). This clearly reflects favorably on cooperatives. Recall, however, the caveat expressed earlier: this performance evaluation is not comprehensive in the range of dimensions examined or in the viewpoints taken (farmers only). These results should not be used as a bottom line answer to which type of firm is performing better.

That farmers throughout the country expressed satisfaction with their buyers, regardless of their type, is another important conclusion. It is likely, however, that this general feeling of satisfaction is related to dairy farmers' favorable price/income situation at the time the survey was completed. While this should not invalidate the comparisons by type of buyer, it may have biased the overall evaluation of buyer performance in a favorable direction. A similar survey conducted in the Spring of 1982 might register lower performance scores without any change in buyers' behavior over time. The finding of overall satisfaction with Grade A milk buyers is especially relevant to those concerned with the vertical coordination process at the producer-first handler level. These results suggest that farmers are satisfied with the exchange roles performed by cooperatives and proprietary handlers, although not equally satisfied in all regions of the country.

Buyers in all regions can make use of the judgement of producers on specific performance areas to improve their level of service. Policy-makers and others concerned with the structure and performance of Grade A milk markets will be interested in the relationships between cooperatives' market share and their service to farmers analyzed in this research. There was no evidence found that cooperatives' performance as viewed by farmers fell as cooperatives' share of an order's producers rose. Further, buyer size was found to have little effect on how their performance was judged. Since buyer performance is essentially size-neutral there is no reason to favor any particular size of buyer in the interest of farmers. This study contributed much to understanding motives for switching buyers. Regardless of the type of buyer the farmer switched to, the most important reason for doing so was to get a higher price. Risk reduction was a more important motivator to those switching to a cooperative, while a policy disagreement was a more important reason given for switching to a proprietary buyer. It was also learned that farmers switch buyers for the promise of improved performance in areas of secondary importance to them. Through information of this type buyers can better understand farmers and strive to improve the services they provide them.

Table 10. Farmers' Perceptions of the Future of the Dairy Industry, Nationally, Regionally, and by Type of Buyer

Future-Oriented Statements ^{b/}	SCORES ^{a/}										Regional Differences
	TOTAL	Those Selling to			Regions						
		Co-ops	Proprietary		NE	SE	W	Ca	Ctl	UMW	
The next 2-3 years would be a good time to expand herd size	3.9	3.9	4.0	4.0	4.0	4.0	4.0	3.9	3.9	3.9	
* Dairy farmers' income position is likely to be favorable in the 1980s	3.0	3.0	3.2	3.2	2.9	3.0	3.1	2.8	3.0	2.9	Ctl, SCtl < NE

^{a/} Based on a five-point scale, where 1=strongly agree, 2=agree, 3=neutral, 4=disagree, and 5=strongly disagree.

^{b/} An asterisk (*) indicates that scores differ both between buyer types and among regions, based a t test and one-way ANOVA model, respectively (5% probability level). Specific significant regional differences determined by Scheffe contrasts (5% probability level).

REFERENCES

- Babb, E.M., Grade B Dairy Farmers' Perceptions of Milk Buyer Performance Sta. Bul. 324, Ind. Agr. Exp. Sta., April 1981.
- Babb, E.M., Milk Marketing Services Provided by Cooperative and Proprietary Firms, Sta. Bul. 279, Ind. Agr. Exp. Sta., May 1980.
- Boynton, R.D. and G. McBride, Relationships Between Cooperative and Proprietary Handlers in U.S. Grade A Milk Markets, Res. Rep. 393, Mich. Agr. Exp. Sta., June 1980.
- Carley, D., et al., Milk Market Services and Class I Price Alignment Considerations, Rep. to Great Lakes-Southern Milk, Inc., Mich. St. Univ., Dept. Agr. Econ., August 1971.
- Cook, M.L., "Member Profiles and Cooperative Loyalty," Economic Issues, Wisc. Agr. Exp. Sta., July 1980.
- Deiter, R.E., J.W. Gruebele, and S.W. Williams, Services of Dairy Marketing Cooperatives in the North Central Region, N. Cent. Reg. Res. Pub. No. 266 and Ill. Agr. Exp. Sta. Bul. 771, March 1981.
- Klein, M.L., "Nonresponse Bias in Economic Surveys: An Example Based on Michigan Potato Producers," No. Central Journal of Agricultural Economics, Vol. 3, No. 2, July 1981, pp. 95-100.
- Lang, M.C., et al., Performance Dimensions for Cooperatives and Proprietary Firms: Perceptions and Research Priorities, Sta. Bul. 281, Ind. Agr. Exp. Sta., May 1980.

APPENDIX A

Mail Survey Sent to Those
Selling to Proprietary Buyers
Respondent: number 2-

CONFIDENTIAL

- Name of the company which purchases your milk _____ (1-6)
- How many years have you sold milk to this company? _____ (7-9)
- Number of cows milked this morning _____ (10-12)
- What percentage of your family income is from dairying? _____ % (13-16)
- How many years have you operated a dairy farm? _____ (17-19)
- _____ (20-22)

The following statements will be used to determine your satisfaction with your current buyer. Please read each statement carefully and place a check (✓) in the blank which most nearly corresponds with your opinion. The following symbols are used:

- SA = strongly agree
- A = agree
- N = neutral--neither agree nor disagree
- D = disagree
- SD = strongly disagree
- DK = don't know or have no opinion

	(1)	(2)	(3)	(4)	(5)	(6)
	SA	A	N	D	SD	DK
1. I am confident that my weights and tests are correct.	_____	_____	_____	_____	_____	_____ (23)
2. My buyer may not be able to handle all of the milk I produce in the next 12 months.	_____	_____	_____	_____	_____	_____ (24)
3. My buyer provides good field services.	_____	_____	_____	_____	_____	_____ (25)
4. My buyer provides poor marketing information.	_____	_____	_____	_____	_____	_____ (26)
5. The price I receive is the highest paid in my area.	_____	_____	_____	_____	_____	_____ (27)
6. My buyer helps me reduce production costs.	_____	_____	_____	_____	_____	_____ (28)
7. The next 2-3 years would be a good time to expand herd size.	_____	_____	_____	_____	_____	_____ (29)
8. My buyer attempts to improve the economic position of dairy farmers.	_____	_____	_____	_____	_____	_____ (30)
9. If the plant to which I deliver went out of business, I might not receive full payment for milk delivered.	_____	_____	_____	_____	_____	_____ (31)
10. Dairy farmers' income position is likely to be favorable in the decade of the 1980's.	_____	_____	_____	_____	_____	_____ (32)
11. I do not have a voice in plant and marketing decisions that affect me.	_____	_____	_____	_____	_____	_____ (33)
12. My buyer provides assistance on any inspection or quality problems I encounter.	_____	_____	_____	_____	_____	_____ (34)
13. My buyer keeps milk hauling costs down.	_____	_____	_____	_____	_____	_____ (35)
14. My buyer agrees with my views about milk support prices.	_____	_____	_____	_____	_____	_____ (36)
15. I could improve my income by shifting to another buyer.	_____	_____	_____	_____	_____	_____ (37)

(over)

	(1)	(2)	(3)	(4)	(5)	(6)
	SA	A	N	D	SD	DK
16. I cannot easily communicate my problems or complaints to my buyer.						(28)
17. My problems or complaints receive prompt attention.						(32)
18. My buyer provides valuable fringe benefits in addition to my milk price.						(40)
19. My buyer is the leader in establishing milk prices in my area.						(41)
20. I have a poor relationship with my buyer.						(47)
21. I have confidence in my buyer.						(42)

II. Milk buyers can provide services, functions, and opportunities important to dairy farmers. Rank the importance to you of the following 6 activities of milk buyers. The most important function to you should receive a "1", the next most important a "2", and so on, up to "6".

___ assure accurate weights & tests	(44)	___ increase milk price	(47)
___ guarantee market and payment for milk	(45)	___ provide you a voice in marketing decisions	(48)
___ provide field services	(46)	___ reduce marketing costs	(49)

III. In the last 5 years have you ever marketed your milk through a cooperative?

YES (1) NO (2) (50)

If YES, rank the 3 most important reasons why you switched from the cooperative to your present buyer, where 1 = most important reason, 2 = next most important reason, 3 = third most important reason.

I switched ...

___ to get a higher price	(51)	___ to get more voice in marketing decisions	(56)
___ to get more accurate weights & tests	(52)	___ because of a policy disagreement	(57)
___ to get lower hauling costs	(53)	___ because the plant closed	(58)
___ to get better field services	(54)	___ because the cooperative merged	(59)
___ to reduce risk of loss of market or risk of nonpayment	(55)		

Please add other comments you wish to make about milk marketing in your area: (60)

Please return in the envelope provided to:
 Robert D. Boynton
 Department of Agricultural Economics
 Purdue University
 W. Lafayette, Indiana 47907

APPENDIX B

ORDERS INCLUDED IN THE STUDY,
Number of Producers and Regional Classification

ORDER		Number of PRODUCERS
No.	Name	
NORTHEAST (NE)		
1	New England	7,328
2	N. York - N. Jersey	17,588
4	Middle Atlantic	7,378
SOUTHEAST (SE)		
6	Uppper Florida	272
7	Georgia	1,194
11	Tennessee Valley	1,790
46	Louis. - Lex. - Evansville	2,149
94	N. Orleans - Mississippi	1,769
98	Nashville	890
WEST (W)		
75	Black Hills	89
124	Oregon - Wash.	968
125	Puget Sound	1,179
131	Central Arizona	158
136	Great Basin	697
137	E. Colorado	904
CALIFORNIA (Ca)		
	California (state order)	2,400
CENTRAL (Ct1)		
33	Ohio Valley	5,480
36	E. Ohio - W. Pa.	6,462
40	S. Michigan	6,398
49	Indiana	2,915
UPPER MIDWEST (UMW)		
20	Chicago Regional	17,277
68	Upper Midwest	14,232
79	Iowa	3,597
SOUTH CENTRAL (SCt1)		
32	S. Illinois	1,523
62	St. Louis - Ozarks	3,098
64	Gr. Kansas City/Neosho Val.	1,633
65	Neb. - W. Iowa	1,625
106	Okla. Metro	1,354
108	Central Ark./Ft. Smith	702
126	Texas	2,826
SOURCE: Dairy Division, USDA-AMS. <u>Federal Milk Order Market Statistics</u> for <u>January 1981</u> . FMOS 253, April 1981, pp. 45-50.		

APPENDIX C
Nonrespondent, Telephone Survey

Region _____ Random No. _____

This is _____ of Purdue University's Department of Agricultural Economics. We would like your response to a few questions about how satisfied you are with your current milk buyer. Your replies will be kept confidential. We will be comparing your responses to those of farmers in other regions of the United States. Do you have a few minutes to participate?

Do you agree or disagree, or are you neutral toward the following questions?

1. Your weights and test are correct? Do you agree, disagree, or are you neutral?
Do you _____ strongly or moderately. SA A N D SD DK
2. Your buyer may not be able to handle all of the milk you produce in the next 12 months.
Do you agree, disagree, or are you neutral?
Do you _____ strongly or moderately. SA A N D SD DK
3. Your buyer provides good field services. Do you agree, disagree, or are you neutral?
Do you _____ strongly or moderately. SA A N D SD DK
4. You do not have a voice in plant and marketing decisions that affect you.
Do you agree, disagree, or are you neutral?
Do you _____ strongly or moderately. SA A N D SD DK
5. You could improve your income by shifting to another buyer?
Do you agree, disagree or are you neutral? Do you _____ strongly or moderately. SA A N D SD DK
6. You have confidence in your buyer. Do you agree, disagree, or are you neutral? Do you _____ strongly or moderately. SA A N D SD DK

- A. What is the name of your current buyer? _____
- B. Is your present buyer a private firm or a cooperative? P C
If cooperative: Does your cooperative operate any plants in your area? Yes No
- C. Have you switched buyers in the last 5 years? Yes No
If yes: Was your previous buyer a cooperative or private firm? P C
If yes: What was the most important reason for your switching buyers?
_____ to get a higher price _____ to get more voice in marketing decisions
_____ to get more accurate weights & tests _____ because of a policy disagreement
_____ to get lower hauling costs _____ because the plant closed
_____ to get better field services _____ because the cooperative merged
_____ to reduce risk of loss of market or risk of nonpayment _____
- D. How many years have you sold to your present buyer? _____
- E. How many cows did you milk this morning? _____

Thank you for your time and participation.

IF ASKED PREVIOUSLY MAILED QUESTIONNAIRE* Yes, I am calling in a follow up to that questionnaire. It is important that we here at Purdue find out if there is anything we should know about milk marketing from the farmers who did not respond by mail.

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

THE SOLIDS STANDARDS ISSUE

Robert D. Boynton

Presented at the Cornell University Conference
"Increasing Milk and Milk Product Consumption:
Issues for the 80's"

March 15, 1983
Hotel Syracuse
Syracuse, NY

April, 1983

No. 83-5

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York, 14853

PREFACE

The author would like to thank several people who contributed to the development of this presentation. Walter Spivey of the California Bureau of Milk Stabilization provided necessary data. C.B. Sheldon of the California Milk Advisory Board furnished data on the state's advertising expenditures. Leland Lockhart and William Rolf of California's Bureau of Milk and Dairy Foods Control offered useful information on California's standards enforcement and milk quality programs. Jay Goold of the League of California Milk Producers and William VanDam of Clover-Stornetta Farms, Inc. shared their insights on the issue of higher solids standards for fluid milk products. David Bandler of Cornell University's Food Science Department and William F. McDonald of United Dairy Industry Association provided information on the research literature dealing with consumer preference for high solids fluid products.

Anyone desiring a copy of this paper or having questions on the material contained herein should contact:

Robert D. Boynton
Associate Professor
Department of Agricultural Economics
Cornell University
359 Warren Hall
Ithaca, NY 14853-0398
(607) 256-7600

TABLE OF CONTENTS

	<u>Page</u>
Fluid Product Standards.....	1
The California Experience With High Solids.....	3
Consumption.....	3
Advertising.....	6
Milk Quality.....	7
Demographics.....	7
The Effect of Higher Solids on Sales.....	7
The Enforceability of Higher Solids Standards.....	10
Should the Federal Government Mandate Higher Standards.....	10
Solids Standards and Multiple Component Pricing.....	11
Concluding Comments.....	12
References.....	13

THE SOLIDS STANDARDS ISSUE

Robert D. Boynton

The issue is whether or not federal minimum solids standards for fluid milk products should be raised, or more specifically, whether or not to increase the minimum solids-not-fat (SNF) and total solids standards established by the Food and Drug Administration (FDA) for fluid milk products in interstate trade. Despite the fact that the Hayakawa Amendment specifying increased solids standards was not acted on in the last session of the Congress, the issue of increased solids standards is not dead. There appears to be considerable interest among dairy farmer cooperatives, some consumer organizations, and some members of Congress in increasing the minimum solids standards for fluid milk products.

I would like to address six questions related to the solids standards issue. First, what are the proposed standards changes? That is, what did the Hayakawa Amendment call for, and what did the National Milk Producers Federation (NMPF) offer as amendments to the Hayakawa plan. Second, have California's high solids standards led to increased consumption of fluid milk products in that state? Third, will more milk be sold in the United States if standards are raised? Fourth, are higher standards for fluid milk products enforceable? Fifth, should/must the federal government mandate higher standards? Lastly, what is the relationship between higher solids standards and multiple component pricing?

FLUID PRODUCT STANDARDS

Let's briefly consider the whole milk, lowfat and skim milk standards (Table 1). The current standards specified by the FDA call for 8.25% SNF in whole milk. Notice that California has an 8.6% standard and an overall or total solids standard of 12.2%. The Hayakawa Amendment, without changing the fat or SNF component, specified that total solids had to match the California level. In response, NMPF suggested that the SNF standard be increased to 8.75% and total solids to 12.0%. The concern that the NMPF had with the Hayakawa standards was that they were too wide open. First, the California Senator's plan allowed the total solids standards to be met by increases in either, or both, solids components. Second and perhaps most important, the Hayakawa Amendment did not specify the source of those added solids. NMPF's proposed amendment to the Hayakawa plan made sure that the higher solids would come in the form of higher SNF and that the source of those solids could not be lactose or other less nutritious solids or imported casein. Hayakawa apparently accepted NMPF's modifications.

Table 2 shows the lowfat milk standards. Again, notice that a major difference between the current standards and the ones NMPF proposed is in the SNF component--raising it from a minimum of 8.25% to a minimum of 10%. This matches

TABLE 1. MINIMUM WHOLE MILK STANDARDS

	F.D.A.	CALIF.	HAYAKAWA (proposed)	N.M.P.F. (proposed)
FAT	3.25	3.4	3.25	3.25
SNF	8.25	8.6	8.25	8.75
TOTAL SOLIDS	[11.5]	12.2	12.2	[12.0]

TABLE 2. MINIMUM LOWFAT MILK STANDARDS

	F.D.A.	CALIF.	HAYAKAWA (proposed)	N.M.P.F. (proposed)
FAT				
Low	0.5	1.9	0.5-1.0	0.5-1.0
High	2.0	2.1	1.0-2.0	1.0-2.0
SNF	8.25	10.0	8.25	10.0
TOTAL SOLIDS				
Low	[8.75]	[11.9]	11.0	11.0
High	[10.25]	[12.1]	12.0	12.0

TABLE 3. MINIMUM* SKIM OR NONFAT MILK STANDARDS

	F.D.A.	CALIF.	HAYAKAWA (proposed)	N.M.P.F. (proposed)
FAT	≤ 0.5	≤ 0.25	≤ 0.5	≤ 0.25
SNF	8.25	9.0	8.25	9.0
TOTAL SOLIDS	[8.25]	[9.0]	9.25	9.25

* except as noted

the current California standards. The skim or nonfat milk standards are shown in Table 3. NMPF proposed to raise the SNF standard to 9.0% from the current FDA minimum of 8.25%.

THE CALIFORNIA EXPERIENCE WITH HIGH SOLIDS

What can be learned from the California experience with higher solids standards? It seems as though every time this issue comes up, regardless of what side of the issue one is on, California is cited as the basis for making a decision on the wisdom of raising the solids standards nationwide. In this section of the paper California's consumption characteristics will be examined first. Then I will suggest that any favorable consumption trends one sees in California could be explained by several factors besides the state's high solids standards.

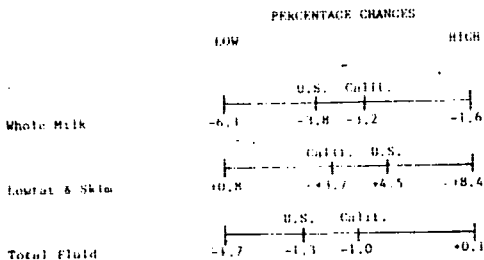
Consumption

Let's first consider per capita consumption trends in California. Figure 1 shows per capita consumption of fluid milk products in 1980--for the U.S., California, and for the particular region with the highest per capita consumption in 1980 (composed of aggregations of federal milk marketing order areas). For all 5 fluid product categories, California's per capita consumption exceeded the U.S. average. However, there was always at least one other region of the country that achieved higher per capita consumption in 1980 than California.

In Figure 2, for these same five fluid products, the ten year change in per capita consumption of fluid milk products in pounds is shown. Again, the U.S. average, the California performance, and that region of the country that had the most favorable change in per capita consumption in that ten year period are arrayed. Notice that California's performance exceeded the U.S. average, however, once again there is always one region of the country that registered better per capita consumption changes than did California.

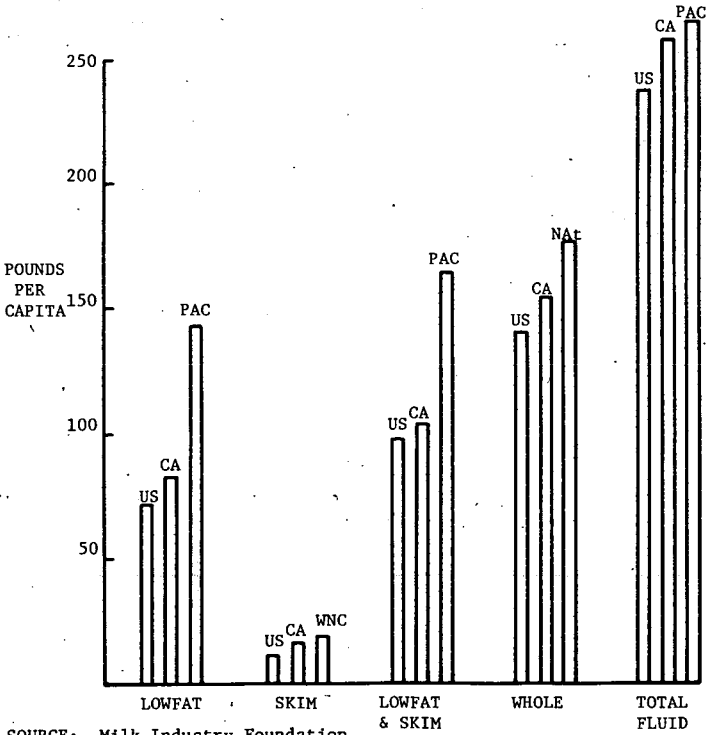
Taking one final look at consumption patterns in California, Figure 3 shows annual percentage changes in per capita consumption for the five year period 1975 to 1980 and looks at three classes of fluid products: whole milk, lowfat and skim, and all fluid products. On a percentage basis, once again California's

FIGURE 3. AVERAGE ANNUAL CHANGE IN PER CAPITA CONSUMPTION BY REGIONS, 1975-1980



SOURCE: Milk Industry Foundation

FIGURE 1. 1980 PER CAPITA FLUID MILK PRODUCT CONSUMPTION*



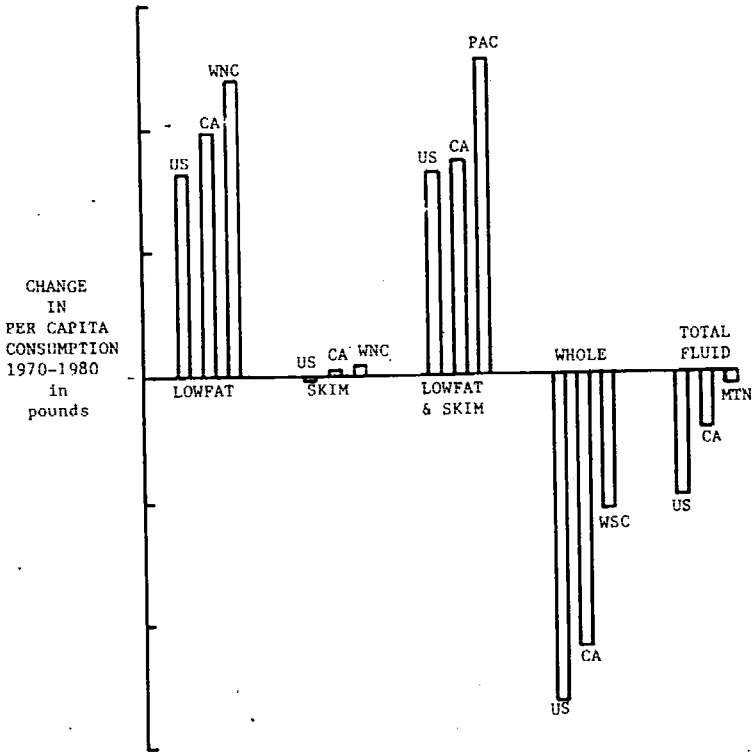
SOURCE: Milk Industry Foundation

* US = United States federal order average

CA = California average

PAC = Pacific federal order region; WNC = West North Central federal order region; NAT = North Atlantic federal order region

FIGURE 2. 10-YEAR CHANGE IN PER CAPITA CONSUMPTION OF FLUID MILK PRODUCTS*



SOURCE: Milk Industry Foundation

* US = United States federal order average
 CA = California average
 WNC = West North Central federal order region; PAC - Pacific federal order region;
 WSC = West South Central federal order region; MTN = Mountain federal order region

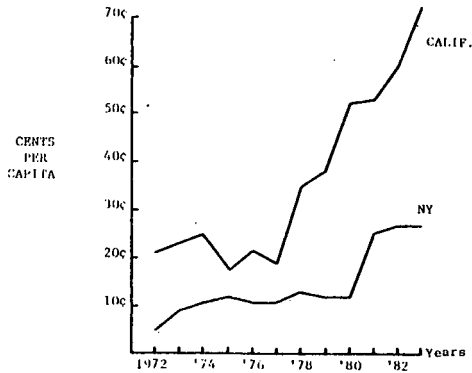
whole milk consumption performance lies somewhere between the U.S. average and the performance of the best region of the country. But, for lowfat and skim, California's 3.7% rate of gain on an annual basis was not as good as the U.S. average of 4.5% and was less than half the rate of gain achieved in the best region of the country. For total fluid product consumption, again California is slightly better than the U.S. average, but still in decline and still below the performance of the best region of the country.

Regardless of one's assessment of California's consumption performance, caution must be exercised in attributing performance to any particular factor. I would submit that there are at least three factors other than higher solids that might explain their consumption performance*--California's high rate of advertising, their strong milk quality program particularly at the farm level, and the state's favorable demographic characteristics in the last ten or fifteen years relative to other parts of the country. Each of these will be examined briefly in turn.

Advertising

Figure 4 depicts per capita expenditures on in-state advertising and promotion for the period 1972-1983 for California and New York state. Notice that on

FIGURE 4. PER CAPITA EXPENDITURES ON IN-STATE ADVERTISING & PROMOTION 1972-1983



SOURCES: California Milk Advisory Board, Stavins and Forker, NYS Promotion Order Budget, 1980-83, Population estimates from Shabbazian and Brooks (California) and Dairy Industry Services (NY).

* Some students of the dairy industry claim that consumer prices for fluid milk products have been low relative to other parts of the country, further favoring high per capita consumption in that state. No comprehensive, reliable data were available to allow me to objectively evaluate this claim, however.

a per capita basis, California farmers' contribution to advertising exceeded New York's in every year with the discrepancy between the two states growing wider over the period. In 1983, California producers will spend on the average, 73¢ per person in the state on in-state advertising and promotion compared to New York State's 27¢ per capita. Since per capita media costs vary greatly from city to city the results achieved with a given per capita advertising level will also vary. Consequently, per capita advertising expenditures do not directly correlate with advertising effectiveness. Despite this potential difference between the two states, it seems likely that California has achieved greater advertising coverage than has New York over this 12-year period. This could easily explain all or part of any favorable consumption trends in California.

Milk Quality

Since 1969 California has required a recording thermometer on all Grade A bulk tanks. That recording thermometer is used by the tank truck driver to downgrade any milk not cooled quickly enough or kept at the required level. California's rule states that within two hours of completion of the first milking or four hours after the start of the first milking (whichever occurs first) the milk in the tank has to be below 50°F and at no time after that can the temperature of the milk rise above 50°F [Lockhart]. This and other quality control efforts in California plus their favorable climate and processors' long-time concern for milk quality have led quality experts to conclude that California's milk quality is among the highest in the nation. One might attribute all or part of any desirable consumption trends one sees in California to high levels of milk quality.

Demographics

Finally, demographics might also explain some of California's consumption performance. In general, California has a younger population than many of the other regions of the country. Also the percentage of its population which is nonwhite is lower than most other regions.*

THE EFFECT OF HIGHER SOLIDS ON SALES

If standards were raised in the manner suggested by NMPF to closely match those in California, would more milk be sold? Some would more specifically ask, would more SNF be sold? The first question that always comes up in this regard is the issue of taste. Will fluid milk products taste better and if so will consumers be willing to pay more for the improved products. Unfortunately, very little well-designed, objective research on consumers' taste preferences for high solids milk exists. Most of what is available has been done on either a very limited basis or was done many years ago. It would appear that consumers can detect taste differences when SNF test varies by one point or more and they prefer the higher solids product. In a 1963 Arizona study, 55% of surveyed consumers said they would be willing to pay up to 2¢ more per half gallon for this high solids milk [Hillman, Stall and Angus]. Total milk sales volume for the test and control distributors in the market experiment were unaffected. This maintenance of sales levels in the face of higher prices for the fortified

* While California has enjoyed a racial mix favorable to milk consumption, large numbers of Southeast Asian immigrants since 1980 will reduce the state's demographic advantage.

product in some stores lends some support to the improved taste hypothesis. Given the age of the study, its limited scope, and most importantly, its design (both high solids and regular solids products were available for purchase in each store), I am reluctant to assume that total fluid volume would remain unchanged in the face of nationwide, comprehensive fluid product price increases. I choose the conservative approach of assuming that no taste effect would obtain and that consumption of fluid products would respond according to the applicable demand elasticities and product price changes. To the extent that a taste effect would obtain, the analysis which follows represents pessimistic sales projections.

Let's first look at some estimates of cost and price changes for three fluid milk products as a result of increasing the solids standards. Cost estimates vary, but within a fairly narrow range we can estimate that whole milk would probably increase in ingredient cost about 1¢-2¢ a gallon, lowfat about 10¢-12¢, and skim milk about 2¢-4¢ (Table 4) [see Ballard and Vitaliano; Goold; Jacobson; Stammer]. Translating these ingredient cost changes into price changes proves to be difficult for at least two reasons. First, there are cost changes arising from the higher standards other than from changes in ingredient costs. There would be changes in labor costs and equipment costs and these are a bit more difficult to factor in [see Ballard and Vitaliano]. But perhaps the factor making the prediction of price changes most difficult is the pricing strategies used by retailers for fluid milk products. If one looks at the current price differentials between these three products in most retail grocery stores, one will find that the price differences are much less than would be suggested by differences in ingredient costs. That is, based on ingredient costs, lowfat and skim milk would be priced considerably less than they currently are relative to whole milk. Consequently, some have suggested that, faced with a mandatory increase in solids, wholesalers and retailers would simply maintain the current price differentials among these three products [Stammer]. If they did this, price changes for all three products would be minimal, equal to about what the whole milk price change would be. In the process, the processing and/or retail sectors would have to absorb most of the extra ingredient cost. Others have suggested pricing mix changes which result in a spreading of the ingredient (and other) cost changes over all three products.

What I have tried to do here is to look at some reasonably conservative price changes and some fairly dramatic price changes to hopefully bracket those that might occur. The own-price elasticities of demand used here for these three fluid milk products are those estimated by Boehm and Babb in a 1975 study. The short-run elasticities in the last column of Table 4 are typical of those found in other studies of fluid milk demand. The long-run elasticities are quite large and atypical for what we usually think to be the case with fluid milk products. I have chosen to use those long-run elasticities as an extreme measure of the price effect.

Table 5 shows the changes in total fluid sales volume, butterfat sales, and SNF movement as a result of these four combinations of minimum and maximum price changes and long-run and short-run elasticities. In the first column of Table 5 are the projected decreases in total fluid sales volume. Assuming the biggest price increase and using the long-run elasticity, fluid sales are expected to fall almost 8% over the 1981 levels; at the other end of the spectrum examined,

TABLE 4. ESTIMATED COST AND PRICE INCREASES FOR FLUID MILK PRODUCTS

	INGREDIENT COST CHANGE ESTIMATES -----per gallon-----	PRICE CHANGE ESTIMATES	OWN-PRICE ELASTICITIES	
			Long Run	Short Run
WHOLE	+1 - +2c	+2 - +8c	-1.7	-.38
LOWFAT (2%)	+10 - +12c	+8 - +12c	-1.33	-.55
SKIM	+2 - +4c	+4 - +8c	-1.82	-.12

TABLE 5. ESTIMATED CHANGES IN U.S. SALES OF FLUID PRODUCTS, BUTTERFAT AND SNF, COMPARED TO 1981 LEVELS ^{a/}

	CHANGE IN TOTAL FLUID SALES VOLUME (percentage)	CHANGE IN BUTTERFAT SALES ^{b/} (million lbs.)	CHANGE IN SNF SALES (million lbs.)
NO CHANGE IN 1981 SALES	-0-	-0-	+296.5
SALES DROP (MIN. PRICE CHANGE)			
LR	-3.5%	-27.7	+137.5
SR	-1.2%	-8.3	+241.9
SALES DROP (MAX. PRICE CHANGE)			
LR	-7.9%	-80.1	-49.7
SR	-2.3%	-21.2	+191.2

^{a/} California excluded

^{b/} Lowfat milk assumed to contain 1.068% butterfat on average and skim milk to be 0.304% fat. These figures were average tests of final products in 15-market Federal Milk Market Administrator Service Unit No. 1 study.

a fairly modest but still significant sales loss of 1.2% occurs with the smallest price change and the short-run elasticity. The long-run butterfat sales drop from the maximum price change would be about 80 million pounds compared to 1981, while in the short run with the minimum price change, the estimated loss in butterfat sales is just over 8 million pounds. These losses in butterfat sales result not from changes in the butterfat standards (because virtually no changes in the current FDA fat standards were proposed) but rather because total fluid milk consumption would go down.

Proponents of higher minimum solids standards argue that some of the nonfat dry milk powder building up at a rapid rate in government warehouses could be used to fortify fluid milk products. As the data in the last column of Table 5 suggest, under most conditions more nonfat dry milk could be used commercially if the solids standards were raised, but at the expense of fluid and butterfat sales. The magnitude of the extra movement of SNF could be considerable but not of a magnitude sufficient to quickly reduce the current government stockpile. To put this in perspective, the largest change in SNF sales shown in Table 5 is just under 300 million pounds or a little less than a quarter of the current government stockpile. (This would be expected to obtain if the price effect was exactly offset by the taste effect, resulting in no change in sales from the 1981 level.) When no taste effect is assumed, the extra SNF sales are, of course, even less. Notice that in the case of the largest price increase and using long-run elasticities, sales of total non-fat solids actually decline rather than increase over the 1981 situation.

THE ENFORCEABILITY OF HIGHER SOLIDS STANDARDS

In 1982, the solids content of fluid milk products was studied in fifteen federal order areas in the central U.S. [Fed. Milk]. Among other things, it was discovered that 53% of the whole milk sampled did not meet the minimum butterfat requirement. Also, the SNF test of final fluid products was less than the test of producer milk in all of the nonfortified products tested. Finally, it was found that from 23% to 86% of the studied handlers in these 15 markets produced fortified products which did not meet their own fortification claims (based on comparisons with the test of the producer milk used). It would appear that there is some reason for concern regarding compliance and enforcement.

Apparently California has tighter control. Staff in their state agency responsible for standards enforcement believe they are getting about 85-90% compliance on fluid milk products [Lockhart]. They likely do a number of things a bit better than they are done in the rest of the country. On an unannounced basis, products are sampled and tested from every plant in the state at least four times every six months. The penalties for violations are apparently fairly effective. In my opinion, if mandatory higher standards are an idea whose time has come, the enforceability issue should not hold up the implementation of higher standards. It would appear that enforceability can be improved to the point where compliance is not a serious problem. Undoubtedly, this will be a more costly process than the current one.

SHOULD THE FEDERAL GOVERNMENT MANDATE HIGHER STANDARDS

I would like to address this issue apart from the question of any economic gains or losses. That is, regardless of the changes in sales of nonfat dry milk, butterfat, or total fluid products, does it make sense for the government

to mandate higher standards. There are at least three points to make in this regard. First, in some ways this is a philosophical question which turns on the issue of free markets and government intervention. Do we want to rely on the market to determine the product mix available or is it necessary for the government to mandate the type of products that are offered for sale? Related to this of course, is the freedom issue. Should consumers be free to choose from a variety of products or should fairly high minimum standards be mandated so that some consumers are not able to exercise their option to buy a lower solids product if they wish? Obviously, there is no simple answer to this question, but it is important to recognize that for some the issue turns on this question.

The second issue here is nutrition. Does it make sense to mandate better nutrition? To some it does but to others it does not. Unless the change in tastes is strong, it would appear that less fluid milk products would be sold. For some, the increase in price will cause them to stop purchasing fluid milk products. Will the aggregate level of nutrition in this case really be heightened by higher solids?

The third point--and it is related to the other two--is the question of market failure. That is, has the market failed to give consumers the kinds of products they really want? I would only offer this observation. In the period from 1969-1981, the percentage of fortified lowfat and skim milk products sold in federal order markets fell from 76% to 20% [MIF, p.35]. That is, the market was offering fortified lowfat and skim products but consumers support for them waned. This suggests to me that the market had a chance (and still does) to support high solid products but perhaps consumers do not prefer those products or at least do not prefer them enough to pay the required premium.

I am aware that there might be reasons to think that the market would have some difficulty supporting high solids milk, namely milk's homogeneous nature and the concomitant problems of informing consumers of product differences (establishing unique fluid product identities) in what is, in most localities, a very competitive environment. Notwithstanding these potentialities, the market did support high solids products well at one time, but these products lost ground due to the rising cost of fortification ingredients. To me this does not suggest market failure.

To this point the discussion has been at a very aggregate or general level. It might be well therefore, to point out that in all likelihood there is a market for high solids fluid products. Properly segmented and developed, fortified products could likely be effectively (read, profitably) marketed to that consumer segment desiring rich or gourmet-type products (as Borden's is apparently attempting to do now with their lowfat line). Creative marketing can be expected to turn up such opportunities and such aggressiveness is badly needed in fluid milk markets.

SOLIDS STANDARDS AND MULTIPLE COMPONENT PRICING

It seems to me that if either multiple component pricing or increased solids standards are to be mandated, they probably both should be. California raised their solids standards in 1962 and then in 1965 installed multiple component pricing for Class I milk. Multiple component pricing for the other classes came somewhat later. If either of these changes are made without the other, equity problems are likely to emerge and disorderly market conditions probably

are inevitable. If higher SNF are mandated, the nonfat solids standards should be set at or above the average test of producer milk, so that most handlers do not have to incur ingredient costs which are not recoverable in the wholesale/retail market.

It seems to me that if we leave this issue of solids and multiple component pricing to the marketplace, more and more cheese plants will implement multiple component pricing (butterfat and protein, for example) with the gains being divided between the parties. In fluid product markets, multiple component pricing is unlikely to develop voluntarily. Any handlers who successfully market high solids products will not likely share their gains with producers via multiple component pricing, however, farmers would benefit whenever handlers used nonfat dry milk powder or condensed skim milk to produce fortified products.

Fluid milk processors are understandably concerned about increasing the solids standards. Three reasons are frequently mentioned. First they are concerned about the inequities that would arise if standards were raised without multiple component pricing. For example, one handler whose farmers deliver him milk that is very high in SNF might not have to purchase any additional SNF to meet the minimum standards. Another handler who does not receive high solids producer milk would have to purchase additional solids in the form of condensed skim or nonfat dry milk powder. A second concern is that some processors, as a result of retail pricing strategies and consumer preferences, might be forced to absorb some of the extra ingredient costs from fortification, as was suggested earlier. Third, a number of the fluid processors are concerned about a drop in fluid sales volume upon imposition of higher standards. It seems that a well-designed multiple component pricing plan could relieve the equity concern of processors, however, the other two concerns would likely remain.

CONCLUDING COMMENTS

I have attempted to address a number of questions related to the solids standards issue. I believe it is a very important issue and one which will come up again, if not this year, then in the next few years. I think there are a number of things the industry should think about before pushing for higher solids standards. I would hope that the industry would not be persuaded to adopt higher standards because of the government's current stockpile of nonfat dry milk powder. This is not a quick way out of that problem. Moreover, what these changes might do in the long run to fluid markets must be carefully considered. Finally, I think caution is in order regarding any assumptions about the improved acceptance of higher solids products by consumers.

REFERENCES

- Ballard, Daniel A. and Peter Vitaliano. "The Impact on Product Cost of Increasing the Minimum Standards for Nonfat Solids in Fluid Milk Products," Selected paper at 1982 annual meeting of Southern Agricultural Economic Association, Orlando, Florida, February 1982.
- Boehm, W.T. and E.M. Babb. Household Consumption of Beverage Milk Products. Purdue University Agricultural Experiment Station Bulletin No. 75, March 1975.
- California Milk Advisory Board. Advertising and promotion data supplied at author's request by C.B. Sheldon, Program Director, Manufactured Products, March 1, 1983.
- Dairy Industry Services. New York State Dairy Statistics, 1981 Annual Summary, Department of Agriculture and Markets, Albany, New York.
- Federal Milk Market Administrator Service Unit No. 1. Composition of Fluid Milk Products in Selected Federal Order Markets, Overland Park, Kansas, June 1982.
- Goold, J. Minimum Component Standards Project for Fluid Milk, League of California Milk Producers, Sacramento, California, 1982.
- Hillman, J.S., J.W. Stall, and R.C. Angus. Consumer Preference and Acceptance for Milk Varying in Fat and Solids-Not-Fat, Technical Bulletin 153, Agricultural Experiment Station, University of Arizona, May 1963.
- Jacobson, Robert E. "Case For and Against Higher SNF Standards for Fluid Products," presented at 50th Dairy and Food Industry Conference, The Ohio State University, February 16, 1983.
- Lockhart, Leland. Bureau of Milk and Dairy Foods Control, California Department of Food and Agriculture, personal interview, March 1983.
- Milk Industry Foundation. Changing Patterns of Fluid Milk Sales, Washington, D.C., November 1982.
- Shahbazian, V.L. and Elton Brooks. California Dairy Industry Statistics - 1981, Bureau of Milk Stabilization, California Department of Food and Agriculture, Sacramento, California.
- Stammer, Richard. Staff paper on solids standards, Agri-Mark, North Andover, Massachusetts, November 23, 1982.
- Stavins, Robert N. and Olan D. Forker. Dairy Promotion in New York State 1963-1979, A.E. Res. 79-17, Cornell University, September 1979.

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

DAIRY PROMOTION RESEARCH AT CORNELL:

WHAT HAVE WE LEARNED?

by

Henry W. Kinnucan*

September 1980

81-18

*Research Associate, Department of Agricultural Economics, Cornell University.

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

INTRODUCTION

Since the passage of the Dairy Promotion Order in May of 1972, New York State dairy farmers have been contributing some 4 million dollars annually (about \$267 per producer) for the purpose of promoting the consumption of dairy products. To monitor the effectiveness of this expenditure and to provide pertinent information to Advisory Board members responsible for managing these funds, the Department of Agricultural Economics at Cornell has conducted a number of studies since 1972. The purpose of this paper is to combine and classify the knowledge gained from these studies into a single unified resource. Hopefully, as a byproduct of this effort, gaps or weaknesses in our knowledge will become apparent and this, in turn, will provide direction for future research.

It should be noted at the outset that the research cited in this review does not represent the entire Order 2 funded research effort at Cornell, but only those studies conducted by the Agricultural Economics Department (hereafter referred to simply as "Department"). For instance, dairy-supported research conducted by the Food Science Department is not included in this review. As such, this review represents only a partial cataloging of the knowledge gained at Cornell from research conducted under the auspices of New York State dairy farmers.

The paper discusses Department research from four main vantage points according to what we have learned about: (1) beverage consumption levels in New York State, (2) the factors affecting milk consumption, (3) the economic effectiveness of generic milk advertising, and (4) the relationship between nutrition education and milk consumption. For the sake of comparing present

and future findings, Departmental research results are supplemented by relevant information from other studies.

Beverage Consumption Levels

The popularity of milk as a beverage has been steadily decreasing in the United States. In 1954 average annual per capita sales of milk beverages^{1/} was 285 pounds (USDA 1980). By 1978 this figure had declined to 250 pounds--representing a 12 percent drop in milk consumption nationally. The problem of decreasing consumer preferences for milk is particularly acute in New York State: annual per capita sales have declined 29 percent--from 328 pounds in 1950 to 233 pounds in 1978^{2/}. In the 1972-78 period alone (a period representing intensified milk promotion efforts) per capita milk sales in New York State declined nine percent (USDA 1979).

These trends pose a serious threat to the viability of the Dairy Industry nationally and in particular to the economic survival of New York State dairy farmers. Therefore the need to monitor, explain and predict beverage consumption behavior is becoming more urgent.

Apparently, one reason why consumers are drinking less milk is that they are drinking more soft drinks: average daily per capita consumption of soft drinks by Americans in 1976 was 10.8 ounces--up 209 percent from the 1950 level (Table 1). In 1950 the average American consumed nearly three times

¹Milk beverages are defined to include: plain whole milk, lowfat milk, skim milk, flavored milks and drinks, and buttermilk.

²These figures were made available from correspondence with Lyle Newcomb, Milk Marketing Specialist with the NYS Department of Agriculture and Markets. The 1950 figure is computed on a milk-equivalent basis whereas the 1978 figure represents product pounds, hence the figures are not strictly comparable. However, the error should be small since whole milk sales in 1950 accounted for 92 percent of fluid sales in that year.

Table 1 Average Daily Per Capita Consumption of Major Beverages in the United States, 1950 and 1976.

Beverage	1950	1976	Percent Change
	(oz.)	(oz.)	
Coffee and Tea	15.0	13.8	-8.0
Soft Drinks	3.5	10.8	208.6
Beer and Wine	N.A.	10.6 ^{1/}	N.A.
Milk	10.2	8.4	-17.6

N.A. - not available

^{1/}A 1976 figure expressed in terms of the drinking population of 14-year olds and older

SOURCE: Brewster, Letitia and Michael F. Jacobson. The Changing American Diet. Washington, D.C.: Center for Science in the Public Interest, 1978.

as much milk as soft drinks. By 1976 soft drink consumption outpaced milk consumption by 29 percent.

Department surveys conducted in the spring and fall of 1973 (see Appendix Table A.2 for details regarding the data) revealed a pattern of beverage consumption in major New York State markets similar to the national pattern: coffee and tea is the most heavily consumed beverage (about 14 ounces daily) with soft drinks second at 10.1 ounces daily. Milk consumption, 7.8 ounces daily, accounted for less than 16 percent of total liquid intake and was 23 percent lower than soft drink consumption^{3/}.

The 1973 survey data also revealed that milk consumption in New York City (6.4 ounces daily) was 38 percent less than in the upstate markets of

^{3/}Note that these figures are not comparable to the national figures because they correspond to the 12-64 age group only.

Albany and Syracuse (Table 2). This finding confirmed information contained in market sales data for that year which indicated that per capita daily milk sales in New York City is some 33 percent lower than in the upstate markets.

Table 2 Per Capita Beverage Consumption in Three New York State Markets by Individuals, Age 12 to 64, 1973.

Beverage	Consumption	
	Ounces Per Day	Percent of Total
Coffee and Tea	14.1	28.2
Soft Drinks	10.1	20.2
Water	8.0	16.0
Milk	7.8	15.6
Beer and Wine	4.8	9.6
Fruit Drinks	4.1	8.2
Liquor	1.1	2.2
TOTAL	50.0	100.0

SOURCE: Forker, O. D., and D. A. Eiler. Testimony Presented at Public Hearing on New York State Dairy Promotion Order in Albany, New York on October 23, 1974. Department of Agricultural Economics, A.E. Staff Paper No. 75-8, Cornell University, May 1975. 19 pp.

Thus the data show an increasing preference for soft drinks, at the apparent expense of coffee, tea and milk consumption. Per capita milk sales in New York State have been declining at almost three times the national rate and this decline has continued despite intensified milk promotion efforts. Upstate consumers drink more milk than New York City residents. In 1973, 12 to 64-year olds in the Albany-Syracuse-New York City markets drank about as much milk as water.

While total per capita fluid milk sales have been declining, within the category of "fluid milk", frequently overlooked (or ignored) important

changes in the structure of the demand for milk have taken place. The per capita consumption of whole milk in the United States has declined 43 percent since 1954 while per capita consumption of lowfat and skim milk has increased by 1,062 percent during the period 1954-78 (USDA 1980). Whereas lowfat and skim milk accounted for just 2 percent of fluid milk sales in 1954, its share had increased to 31 percent by 1978. Data for New York State indicate a similar trend.^{4/} These trends, if they continue, have important implications for the future pricing and promotional policies of milk.

Factors Affecting Milk Consumption

Since 1972 the Department has conducted six separate beverage consumption surveys in New York State (see Appendix Table A.2 for more information regarding these surveys). One survey, taken in November, 1972, provided information on adult attitudes towards selected beverages. Another, taken in September-October, 1974, focused on teenage beverage consumption habits and the influence of peers, parents and advertising awareness on these habits. Two surveys, conducted in the spring and fall of 1973, yielded base-line data on beverage consumption levels of individuals, age 12 to 64, living in the Albany, New York City, and Syracuse marketing areas.^{5/}

⁴See for instance milk consumption statistics published in various issues of New York Dairy Statistics (35).

⁵Unfortunately corresponding surveys taken in 1974 yielded unusable data.

This chapter discusses how these data have served to expand our knowledge regarding the following factors affecting milk consumption: age, sex, race, location, household size, income, prices, attitudes, social influences, and advertising awareness. Where Departmental survey information is weak, supplemental information from outside surveys will be used. This review should provide some hints regarding the relative importance of these factors in explaining the demand for milk. This, in turn, can be used to (1) help explain the observed per capita secular decline in milk consumption, (2) provide a basis for predicting future milk consumption trends, (3) suggest ways to enhance milk consumption by focusing attention on the key variables responsible for changes in milk consumption, and (4) provide direction for future research efforts.

Age. Since the average age of the American population is rising, the effect of growing older on milk consumption has important implications for the long-run demand prospects for milk.

An age breakdown of the 1973 Department Survey data reveals that milk consumption in New York drops sharply with age: from 17.2 ounces daily for adolescents to 7.8 ounces daily for young adults to 4.7 ounces daily for middle age and older individuals (Table 3).

Table 3 Per Capita Daily Beverage Consumption by Age Groups, New York State, 1973.

Beverage	Age Group					
	12 to 17		18 to 34		35 to 64	
	Ounces Per Day	Percent	Ounces Per Day	Percent	Ounces Per Day	Percent
Coffee and Tea	2.8	5.5	13.3	24.8	18.6	39.7
Soft Drinks	15.4	30.4	12.5	23.2	6.3	13.5
Water	9.0	17.8	7.7	14.3	7.9	16.9
Milk	17.2	34.0	7.8	14.5	4.7	10.0
Beer and Wine	.5	1.0	7.0	13.0	4.4	9.4
Fruit Drinks	5.5	10.9	4.3	8.0	3.5	7.5
Liquor	.2	.4	1.2	2.2	1.4	3.0
TOTAL	50.6	100.0	53.8	100.0	46.8	100.0

SOURCE: Forker, O. D. Results from an Advertising Program in New York.
Department of Agricultural Economics, AE-4406, University of Illinois.
July 1976.

Beverages directly competitive with milk appear to change with age, also. Coffee and tea, which is only 5.5 percent of liquid intake for 12 to 17 year olds, accounts for nearly 40 percent of total beverage consumption by 35 to 64-year olds. On the other hand, soft drink consumption has nearly the reverse pattern: falling from 30.4 to 13.5 percent market share as age increases from the 12 to 17-year old group to the 35 to 64 age category.

The apparent inverse relationship between age and milk consumption suggested by the tabular analysis received statistical verification in the Thompson and Eiler study (1973). Compared with the effect of income, sex, race, consumption of alternative beverages and milk advertising awareness, they found the natural log of age to be the most statistically significant variable in estimating the probability of milk consumption in each of the three markets analyzed. Age was not found to be a statistically significant variable in explaining milk consumption among teenagers, however (Cook, Eiler, and Forker 1975).

Unfortunately, statistical analysis conducted by the Department yields no information on how the quantity of milk changes with age, holding other relevant factors constant. Quantifying this relationship is necessary to gain a clearer understanding of how an aging population is likely to affect milk demand.

Sex. The 1973 Department surveys show that males drink more milk than females. Looking at New York City white respondents only, males in the 18 to 34 age group consume 68 percent more milk than females (Table 4). This is so in spite of the fact that the Recommended Daily Dietary Allowances for Calcium is the same for both sexes in this age group (National Academy of Sciences 1968) and milk and cheese supplies about 66 percent of the calcium in American diets. Nationally, females in the 18 to 34-year old age group consumed only 72 percent of the RDA of calcium in 1965 (compared to 118 percent for males). This suggests that nutritional arguments could serve as a component of milk demand expansion programs.

Table 4. Per Capita Daily Milk Consumption by Whites in Three New York State Markets, by Age and Sex, 1973.

Age	New York City		Albany		Syracuse	
	Male	Female	Male	Female	Male	Female
	----- ounces per day -----					
12 - 17	16.8	11.7	23.6	16.3	25.6	19.7
18 - 34	7.9	4.7	12.2	8.3	12.0	8.4
35 - 64	4.3	3.4	7.2	4.7	7.8	4.8

SOURCE: Cook, C. B., D. A. Eller and O. D. Forker. Beverage Consumption and Advertising Awareness in Selected New York State Markets 1973. Department of Agricultural Economics, A.E. Res. 74-10, Cornell University, September 1974.

Multivariate regression analysis found sex to be the most statistically significant variable in explaining teenage milk consumption (Cook, Eiler, Forker 1975). The analysis showed that sex difference in New York City is much greater than suggested by the data in Table 4; holding other factors such as age, family social position, soft drink and milk advertising awareness, race, day of week, location of residence, number of siblings, peer and parent influence constant, daily milk consumption by teenage males was 9.3 ounces higher than teenage females. The corresponding figure for Albany was 8.5 ounces--very close to the sex difference of 8.3 ounces given in Table 4--suggesting that in Albany factors other than sex difference either do not affect teenage milk consumption or are self-canceling.^{6/}

Sex differences in milk consumption among teenagers is not justifiable on nutrition grounds; males in the 12-17 age category consumed about 90 percent of the RDA of calcium in 1965; females about 69 percent (National Academy of Sciences 1968). Here again the nutrition angle of dairy product promotion may need greater emphasis..

Race. The Health and Nutrition Examination Survey (HANES) revealed that some 73 percent of black females and 35 percent of black males between the ages of 18 and 44 in the United States received less than the RDA of calcium in 1971 (HEW 1974). Corresponding figures for the white population is 56 percent and 17 percent respectively. It is not surprising, therefore, that the 1973 Department surveys showed blacks in general consuming less milk than whites. The differences are particularly sharp among NYC black teenagers, where males consumed 21 percent less and females 26 percent less milk than their white counterparts (Table 5).

⁶Regression results for the Syracuse market were not given.

Table 5 Mean Per Capita Milk Consumption by Race, Sex, and Age Group -- New York City, 1973.

Age	Males		Females	
	Black	White	Black	White
	- - - - -oz./day- - - - -			
12 - 17	13.2	16.8	8.6	11.7
18 - 34	6.9	7.9	4.5	4.7
35 - 65	5.3	4.3	2.7	3.4

SOURCE: Cook, C. B., D. A. Eiler and O. D. Forker. Beverage Consumption and Advertising Awareness in Selected New York State Markets 1973. Department of Agricultural Economics, A.E. Res. 74-10, Cornell University, September 1974.

That milk is a less popular drink among blacks than whites is illustrated by the fact that in general there are more milk drinkers among whites--the only exception is for blacks in the 35 to 65 age category where about 38 percent of blacks consume milk compared to 31 percent of whites (Table 6).

Table 6 Percent of Respondents Consuming Milk by Race, Sex, and Age -- New York City, 1973.

Age	Males		Females	
	Black	White	Black	White
	- - - - - Percent - - - - -			
12 - 17	67.6	83.6	66.6	72.2
18 - 34	42.5	47.7	30.7	37.2
35 - 65	37.9	30.7	25.3	30.2

SOURCE: Cook, C. B., D. A. Eiler and O. D. Forker. Beverage Consumption and Advertising Awareness in Selected New York State Markets 1973. Department of Agricultural Economics, A.E. Res. 74-10, Cornell University, September 1974.

More detailed analyses with this and other New York State data revealed that race differences were generally not statistically significant where other factors such as income were controlled (Cook, Eiler, Forker 1975). This finding

is at variance with other studies which show race exerting a strong influence on milk consumption. For instance, Boehm and Babb (1975), using national panel data, found black households consuming 23.5 gallons of fluid milk less than white households during May 1972-January 1974 even after controlling for factors such as income, occupation, family composition, region, education and city size. Furthermore, the race variable had a t-value of 9.75.

Thus there is evidence that significant race differences do exist in the consumption of milk. Coupling this fact with the race differences in calcium intake provides information that could be valuable to marketing agencies interested in the promotion of milk.

Location. As indicated earlier, one of the more interesting findings of the Department surveys is the low level of milk consumption in the New York City market relative to the upstate markets of Albany and Syracuse. The 1973 Surveys indicated that the average daily milk consumption by individuals age 12 to 64 in New York City was 6.4 ounces--40 percent less than the corresponding figure of 10.7 ounces in Syracuse and 35 percent less than the 9.8 ounces consumed daily in Albany (Forker 1976). Market sales data, which are somewhat higher than individual consumption figures, show that in the five-year period since the expanded milk promotion efforts began in 1972, per capita sales of milk have declined by 2.3 percent in New York City, despite the fact that some 5 million dollars in direct media advertising have been poured into this market (table 7).

Table 7 Adjusted Per Capita Daily Milk Sales: Selected New York State Markets, 1971-1977.

Year	Market		
	New York City	Albany	Syracuse
	----- ounces per day -----		
1971	8.54	11.12	13.66
1972	8.72	12.06	13.66
1973	8.80	12.46	13.84
1974 ^{1/}	N.A.	N.A.	N.A.
1975	8.82	9.40	16.27
1976	8.52	9.24	15.92
1977 ^{2/}	8.48	9.40	16.06

^{1/}Milk strike year.

^{2/}Based on first six months of the year only.

SOURCE: Thompson, S.R., D.A. Eiler and O.D. Forker. "An Econometric Analysis of Sales Response to Generic Fluid Milk Advertising in New York State," *Search* 6(3): (1976) 1-24., and

Thompson, S.R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Dept. Agr. Econ. A.E. Res. 78-17, Cornell University, September, 1978.

Of course it is possible that the decline would have been more rapid without the advertising effort, but the 16.5 percent increase in per capita milk consumption in Syracuse, where the advertising investment is considerably less, weakens the credibility of this argument. Whether actual consumption changes have occurred as suggested by the market data needs to be confirmed with independent survey data.

Income. Department research indicates that income and social position have little or no effect on milk consumption. Estimated income elasticities for the major milk markets in New York are quite small and in most cases not statistically significantly different from zero (Table 8).

Table 8 Income Elasticity Estimates for Milk in Selected New York State Markets Based in Time Series Market Data

Data Period	Market (SMSA)			
	New York City	Albany	Syracuse	Rochester
1/71 - 3/74 ^{1/}	.15 (.44)	2.87 (7.87)	.13 (.74)	N.A.
1/75 - 6/77 ^{2/}	.14 (.61)	.47 (.47)	.52 (.47)	N.A.
1/75 - 12/78 ^{3/}	N.A.	N.A.	N.A.	.34 (1.98)

NOTE: Figure in parenthesis is the t-statistic.

N.A. - Not available.

1/ SOURCE: Thompson, S. R., D. A. Eiler and O. D. Forker. "An Econometric Analysis of Sales Response to Generic Fluid Milk Advertising in New York State". SEARCH, 6(3): (1976) 1-24.

2/ SOURCE: Thompson, S. R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Department of Agricultural Economics, A. E. Res. 78-17, Cornell University, September 1978.

3/ SOURCE: Thompson, S. R. The Response of Milk Sales to Generic Advertising and Producer Returns in the Rochester, New York Market. Department of Agricultural Economics, A. E. Staff Paper No. 79-26, June 1979.

However, these estimates may be misleading due to multicollinearity problems usually associated with using time series market data. Unfortunately, comparable estimates using survey data are not available.

Income elasticity estimates based on nationwide panel data yield some interesting results: whereas the demand for milk beverages as a group is highly unresponsive to income changes ($\eta_{c,y} = .05$), there is considerable variation in response for the different milk beverages (Table 9)^{7/}.

Table 9 Estimated Income Elasticities
for Selected Milk Beverages, US.^{1/}

Beverage	Income Elasticity
Total Fluid Milk	.0522*
Regular Whole Milk	-.0667*
2% Butterfat	.1594*
1% Butterfat	.0845
Skim Milk	.3176*
Buttermilk	-.1729*

^{1/} Estimates based on panel data: May 1972-January 1974.

* Estimated income elasticity statistically different from zero at the 10 percent probability level.

SOURCE: Boehm, William T. and Emerson M. Babb. Household Consumption of Beverage Milk Products. Exper. Stat. Bull. No. 75, Purdue University, West Lafayette, Indiana, March 1975.

^{7/} Estimates presented in this table probably understate the magnitude of the actual income response because the entry/exit phenomenon is ignored in the analysis (see Thransen, Hammond and Buxton 1977). Therefore the estimates may be viewed as setting a lower bound on the true values.

For instance, a 10 percent increase in income reduces whole milk consumption by .6 percent and increases skim milk consumption by 3.2 percent, ceteris paribus. The negative income elasticities for whole milk and buttermilk suggest that consumers view these beverages as "inferior" goods. Indeed, since 1954, per capita consumption of whole milk in the US has declined 41 percent and buttermilk 44 percent (USDA 1980). During this same period the consumption of lowfat and skim milk has increased 28,935 percent and 82 percent, respectively (USDA 1980). Note that 1% milk was the only milk beverage where income was not a statistically significant determinant of consumption.

An estimated income elasticity for total fluid milk of .05 means that secular per capita income increases cannot be expected to expand the demand for milk by very much.

Prices: Accurate knowledge of the sensitivity of consumer demand to milk price changes is extremely important to policy makers interested in achieving the twin goals of increased milk consumption and increased dairy farm income via price policy. If the demand for milk is known to be highly price inelastic, then producer revenues can be increased by increasing milk prices without worrying about a fall-off in consumer demand, other things being equal. During the 1972-1977 period nominal whole milk prices increased by nearly 36 percent in the New York metropolitan area and per capita sales of milk in the New York City market decreased 3.4 percent. This suggests that milk demand is relatively price inelastic. However, when the 1972 and 1977 milk prices are deflated by the Consumer Price Index, one observes that in real terms, milk prices actually decreased 3.1 percent during this period. What role then do prices play in the consumer demand for milk?

Department research conducted so far provides only a partial answer to this important question. Evidence from the time series data for selected

New York State markets reveals that the milk own-price response is generally not statistically significant except in the Rochester market where the estimated own-price elasticity is $-.36$. (Table 10).^{9/}

Table 10 Direct and Cross-Price Elasticities of Fluid Milk in Selected New York State Markets Estimated from Time Series Data

Data Period	Market (SMSA)							
	New York City		Albany		Syracuse		Rochester	
	Own Price	Cross ^{4/} Price	Own Price	Cross ^{4/} Price	Own Price	Cross ^{4/} Price	Own Price	Cross ^{4/} Price
1/71-3/74 ^{1/}	-.20 (7.45)	N.A.	-.002 (.02)	N.A.	.04 (.99)	N.A.	N.A.	N.A.
1/75-6/77 ^{2/}	-.33 (1.13)	.27 3.87	-.07 (.36)	.09 (1.19)	-.02 (.09)	.10 (2.33)	N.A.	N.A.
1/75-12/78 ^{3/}	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	-.36 (2.47)	.20 ^{5/} (N.A.)

Figures in parenthesis are t-statistics.

^{1/} SOURCE: Thompson, S. R., D. A. Eiler and O. D. Forker. "An Econometric Analysis of Sales Response to Generic Fluid Milk Advertising in New York State." SEARCH, 6(3): (1976) 1-24.

^{2/} SOURCE: Thompson, S. R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Department of Agricultural Economics, A. E. Res. 78-17, Cornell University, September 1978.

^{3/} SOURCE: Thompson, S. R. The Response of Milk Sales to Generic Advertising and Producer Returns in the Rochester, New York Market. Department of Agricultural Economics, A. E. Staff Paper No. 79-26, June 1979.

^{4/} The cross-price elasticity estimate is for cola drinks.

^{5/} In the analysis this value was imposed on the data rather than estimated to improve the precision of the own-price elasticity estimate.

⁹ The estimated own-price elasticity is highly statistically significant in New York City market when the 1/71-3/74 data is used but this may be due to the omission of cola prices as a relevant explanatory variable. In addition, these estimates are not efficient since the data was not adjusted to remove the effects of serial correlation.

What little evidence there is on substitutes suggests that significant cross-price relationships may exist: for instance, a ten-percent increase in cola prices is estimated to increase daily per capita milk sales by 2.7 percent in the New York City market, *ceteris paribus*. This is a very significant finding and more effort needs to be directed toward discovering the effects that changes in the prices of other beverages will have on the demand for milk. During the June 1976 to June 1977 period, coffee prices doubled (from \$2.07 per pound to \$4.14) in the New York City area (BLS 1976-77). What impact did this phenomenon have on milk consumption? Further, Thompson and Eiler (1973) found that the consumption of fruit drinks or juices increased the probability of milk consumption. Are these beverages really complementary to milk?

On the national level, estimates based upon panel data reveal that consumers are quite sensitive to milk price changes in the "long run." Boehm and Babb put the long-run own-price elasticity of regular whole milk at -1.70 compared to their estimate of $-.38$ for the short-run response. (Table 11).^{10/}

¹⁰ These estimates are probably downward biased in absolute value since prices of competing beverages were not included in the model.

Table 11 Short- and Long-Run Price Elasticities for Selected Beverage Milk Products Estimated from Panel Data, US, 1972-1974.

Beverage	Short-Run Elasticity	Long-Run Elasticity
Total Fluid Milk	-.14	-1.63*
Regular Whole Milk	-.38*	-1.70*
2% Butterfat	-.55*	-1.33*
1% Butterfat	-1.18*	-.83*
Skim Milk	-.12	-1.82*
Buttermilk	-1.78*	-1.52*

*statistically significant ($p \leq .10$)

SOURCE: Boehm, William T. and Emerson M. Babb. Household Consumption of Beverage Milk Products. Exper. Stat. Bull No. 75, Purdue University, West Lafayette, Indiana, March 1975.

In addition, they discovered elasticities varying according to type of milk. For instance, the demand for both 2% and 1% milk was less elastic than whole milk in the long run, whereas the opposite was true for the short run.

One implication of the widely differing magnitude between the short-run and long-run responses is that significant lags occur in consumer adjustment to changes in milk prices. This means that using a single milk price variable, either contemporaneous or lagged one period, may be an inadequate treatment of the milk price effect on milk sales. This possibility warrants further investigation.

A more serious implication of the highly elastic estimated long-run milk price response is that, over time, a ten-percent increase in milk prices will result in a greater than ten-percent decline in milk consumption, ceteris paribus. This places greater pressure to be effective on the ceteris paribus factors that positively influence the demand for milk, such as advertising.

Cross-price elasticities for products within the fluid beverage milk group provide some insight on how the composition of milk demand may change in response to changes on the relative prices of these products. For instance, Boehm and Babb estimate that a 10-percent increase in the price of whole milk leads to an immediate (short-run) 8.5 percent increase in the consumption of 2% milk, ceteris paribus (Table 12). It appears that consumers are more willing to switch from whole milk to 2% than vice-versa: A 10-percent increase in the price of 2% milk increases whole milk consumption by an estimated two percent in the short run, ceteris paribus.

Table 12 Cross-Price Elasticities of Selected Beverage Milk Products
Estimated from Panel Data, US, 1972-1974.

Quantity Demanded of:	One Percent Change in Price of:			
	Regular Whole Milk	2% Milk	1% Milk	Skim Milk
Regular Whole Milk	-.38*	.20*	.29*	--
2% Milk	.85*	-.55*	.05*	--
1% Milk	-1.16*	3.06	-1.18*	--
Skim Milk	-.28	-.04	--	-.12

*statistically significantly different from zero ($p \leq .10$)

SOURCE: Boehm, William T. and Emerson M. Babb. Household Consumption of Beverage Milk Products. Exper. Stat. Bull No. 75, Purdue University, West Lafayette, Indiana, March 1975.

The apparent ease with which consumers will switch from whole to 2% milk is good news for nutritionists who would like to see Americans reduce their saturated fat intake. Long-run cross-price effects as well as the cross-price effects for a greater range of beverages needs to be determined, however. In addition, the effects of milk price changes on the consumption of other beverages needs to be determined.

Attitudes. Knowledge of the existence of systematic differences in attitudes between milk consumers and nonconsumers would increase our understanding of current trends in milk consumption and point to sources of possible misinformation. A survey of adult consumers (over the age of 18) in seven New York State markets conducted by the Department in the fall of 1972 yielded information on 16 attitude variables pertaining to the nutritional, health, image and cost aspects of beverage consumption (see Appendix Table A.2 for more details regarding the data). Chi-square tests were performed with the data to see if statistically significant differences existed in the distribution of responses both across markets and among consumers and nonconsumers of milk (Eiler, Thompson 1974). The results are summarized by the investigators as follows (p. 19):

"virtually no significant differences were observed between the nutritional attitudes of adult milk consumers and adult nonconsumers in any of the seven markets"

".... the lack of effective discrimination between consumers and nonconsumers based solely on their attitudes towards the cholesterol content of milk ... the same conclusion is apparent with respect to consumer-nonconsumer attitudes towards the appropriateness of milk in the diet of one who is concerned with heart disease."

and finally, as somewhat of an understatement:

"Adult attitudes towards the nutritional composition of the various beverages are not always consistent with the actual nutritional content. This was revealed through the relative comparison of the nutritional attitude scales of the three alternative milks to their corresponding actual nutritional levels."

This last finding is perhaps the most interesting and is highlighted by a comparison of the data presented in Tables 13 and 14. These data show that adults are highly ignorant of the nutritional content of the various milk

beverages, in general believing that skim and lowfat milk is less nutritious than whole milk.^{11/}

Table 13 Percentage of Adults in New York State Markets Fully Agreeing^{1/} with Selected Statements Regarding the Nutritional Content of Certain Milk Beverages, 1972

Statement	Beverage		
	Whole Milk	Lowfat Milk	Skim Milk
	(%)		
Very high in protein	47.4	27.8	25.6
Very high in calcium	63.1	29.5	30.7
Very high in vitamins	43.1	20.2	21.3

^{1/}"Fully Agreeing" means that the respondent selected the leftmost circle for questions posed as follows: "whole milk is: very high in protein 0000000 very low in protein.

SOURCE: Eiler, D. A., and S.R. Thompson. "Adult Attitudes Toward Major Beverages in Seven New York Metropolitan Markets," SEARCH, 4(10) (April, 1974) 1-47.

Table 14 Nutritional Content of Selected Beverages (100 grams edible portion)

Nutrient	Beverages		
	Whole Milk	Lowfat Milk	Skim Milk
Protein (gm)	3.5	4.2	3.6
Calcium (mg)	118	143	121
Vitamin A (int'l units)	140	80	trace
Thiamin (mg)	.03	.04	.04
Riboflavin (mg)	.17	.21	.18
Niacin (mg)	.1	.1	.1
Absorbic Acid (mg)	1.0	1.0	1.0

SOURCE: Eiler, D. A., and S.R. Thompson. "Adult Attitudes Toward Major Beverages in Seven New York Metropolitan Markets," SEARCH, 4(10) (April, 1974) 1-47.

^{11/}The low nutritional scoring of lowfat and skim milk vis-a-vis whole milk by adult consumers may be due to the highly suggestive nature of the term "whole" in whole milk.

Note that while 63.1 percent of the white adults were sure that whole milk was high in calcium, only 29.5 percent thought this statement was true for low-fat milk. The fact is that lowfat milk is 21 percent higher in calcium than whole milk. Minorities, such as blacks and Hispanics, exhibited an even greater degree of ignorance concerning the nutritional qualities of the various beverages. For instance, 40 percent of blacks and Hispanics thought that orange juice was high in protein compared to 22 percent of whites who felt this way.

This general lack of nutritional knowledge on the part of adults leaves open the possibility that as consumers become better informed nutritionally milk will come to be viewed more favorably. Beer, coffee and soft drinks are almost devoid of nutrients.

While the analysis conducted with the 1972 Adult Attitude Survey revealed no systematic difference between consumers and nonconsumers with regard to nutritional beliefs, this does not warrant a closed book on the subject. Consumers are becoming increasingly nutrition conscious and today nutrition is likely to be a more important factor in food consumption decisions than it was in 1972. The relationship between nutritional attitudes (and knowledge) and milk consumption bears another look. One potentially fruitful line of research might be to compare beverage consumption levels of consumers who had received accurate nutrition information regarding these beverages with those who had not. Since milk is superior nutritionally to most substitute beverages, the hypothesis would be that those possessing the most accurate nutritional information, other things being equal, would have the highest levels of milk consumption.

Social Influences. Factors other than the demographic and economic characteristics of individuals affect behavior. Levy, Iverson, and Walberg (1979) point to the home environment, mass media and peer group influences as

agents of change in nutrition behavior. Department research yields some evidence with respect to the last of these factors. In particular, the relationship between parental and peer influence and teenage beverage consumption was investigated using data collected in the fall of 1974 (see Appendix Table A.2 for more details regarding the data).

Teenagers were asked (1) whether their parents were authoritarian, democratic, or permissive, (2) whether it was parents' or peers' opinions and ideas they respected most, and (3) whether they enjoyed their parents' or friends' company more. The marginal affect of these factors on the quantity of milk consumed by teenagers was, in general, not statistically significantly different from zero (Cook, Eiler, Forker 1975). There was some weak evidence that certain of these factors may effect teenage soft drink consumption, to wit; teenagers with democratic parents drank 3.2 ounces less soft drinks per day than teenagers with permissive parents in Albany and teenagers who respected parents' ideas and opinions consumed 2.9 ounces less soft drinks per day than teenagers who respected friends' ideas and opinions (Cook, Eiler, Forker 1975). These were the only statistically significant findings with respect to these variables. This data revealed that the sex of the respondent was much more important than social influences in explaining beverage consumption habits of teenagers.

Advertising awareness. The Department analyzed three separate data sets in an attempt to quantify the relationship between awareness to milk advertising and milk consumption. The first of these data sets, collected in the fall of 1973 (see Appendix Table A.2), was analyzed using a Probit Model which examined the effect of milk advertising awareness on the probability of milk consumption, holding constant other variables such as age, income, sex, ethnicity and consumption of other beverages (Thompson, Eiler 1973).

The estimated marginal advertising effect, along with the associated t-statistics are presented in Table 15.^{12/}

Table 15 The Estimated Marginal Effect of Advertising Awareness on the Probability of Milk Consumption in Selected New York State Markets by Consumers, Age 12-64, Spring 1973.

Market	Aware	Partial Regression Coefficient $\frac{1}{\text{Aware} \cdot \ln \text{Age}}$
Albany	.53 (.58)	-.10 (-.38)
New York City	1.04 (1.48)	-.24 (-1.24)
Syracuse	.52 (1.50)	-.36 (-1.25)

^{1/} Estimated from a Probit model, therefore not strictly interpretable as probability values. Numbers in parentheses are t-statistics.

SOURCE: Thompson, S. R., and D. A. Eiler. "A Multivariate Probit Analysis of Advertising Awareness on Milk Use." Canadian Journal of Agricultural Economics, 23(1) (February 1975) 65-73.

To test the (null) hypothesis that the effectiveness of advertising is independent of age, the interactive variable aware X ln age was included in the model. The estimated coefficients suggest that milk advertising awareness increases the probability of milk consumption and that this effect decreases with age. However, the estimated coefficients are not statistically significantly different from zero at the usual levels of statistical significance.

^{12/} These coefficients, since they are estimated using a Probit model, are not strictly interpretable as the change in the probability of milk consumption given a one unit change in the independent variable. However, they are indicative of the direction, magnitude, and statistical significance that the independent variable has on the probability of milk consumption.

A follow-up survey was conducted in the fall of 1973. A comparison of the milk consumption levels of consumers aware and not aware of milk advertising were made for both surveys and statistically significant differences were found in all markets (Table 16).

Table 16 Comparison of Per Capita Consumption of Milk by Respondents Aware and Unaware of Milk Ads^{1/} in New York City, Albany and Syracuse SMSA's, April and September, 1973.

Market ^{2/}	April 1973		September 1973	
	Not aware	Aware	Not aware	Aware
	(ounces)		(ounces)	
New York City	4.5	8.6	4.3	8.9
Albany	7.4	13.5	7.3	14.6
Syracuse	7.4	15.4	7.7	14.6

^{1/} Aware means the respondent recalled hearing the ad and correctly identified the product as milk.

^{2/} Differences in all markets are statistically significant at the 5% level.

SOURCE: Cook, C. B., D. A. Eiler and O. D. Forker. Beverage Consumption and Advertising Awareness in Selected New York State Markets 1973. Department of Agricultural Economics, A. E. Res. 74-10, Cornell University, September 1974.

Unfortunately, the analyses did not go beyond comparison of simple means, therefore one does not know whether the higher average milk consumption levels for respondents aware of milk advertising is strictly attributable to advertising or to some other factor highly correlated with advertising awareness. The Probit analysis discussed earlier suggested that the probability of milk consumption was not significantly affected by advertising awareness when other factors were held constant. A simple comparison of sample means suggests that the quantity of milk consumed is significantly affected by advertising awareness. Whether the same result would occur when other factors such as age, sex and race are held constant needs to be examined.

A further comparison of the April and September surveys revealed an interesting finding; consumer awareness of advertising did not vary significantly between the two surveys. This occurred despite the fact that advertising levels for milk varied significantly during this period. In the Albany and Syracuse markets, per capita milk advertising expenditure was about .5 cents for the three months preceeding the April survey then dropped to near zero for the April to August period preceeding the September survey. The finding that the level of milk advertising awareness in September was no different than in April suggests that the retention rate for the message is at least five months in these markets. The time series estimates give a rate of decay for the Albany and Syracuse markets of one month (Thompson 1978). These conflicting results point to the need for further research regarding the rate at which milk advertising awareness decays following exposure.

Data collected in the Fall of 1974 on teenage beverage consumption was also analyzed in a limited way to ascertain how teenage milk consumption is influenced by the awareness to milk and soft drink ads (Cook, Eiler, Forker 1975). Regression results were reported for the New York City and Albany markets only and are presented in Table 17.

Table 17 The Estimated Marginal Effect of Milk and Soft Drink Advertising Awareness on the Quantity of Milk Consumed by Teenagers, Albany, New York City, Fall 1974

Market	Partial Regression Coefficient of: $\frac{1}{}$	
	Aware of Milk Ad	Aware of Soft Drink Ad
Albany	-.11 (-.04)	-1.68 (-1.11)
New York City	2.30 (1.65)	-1.80 (-1.67)

$\frac{1}{}$ Variables held constant are: age, social position, sex, race, weekday, region of New York City, number of siblings, peer and parental influence. Numbers in parenthesis are t-statistics.

SOURCE: Cook, C. B., D. A. Eiler and O. D. Forker. A Study of Selected Family and Social Influences on Teenage Beverage Consumption in Three New York Markets Fall 1974. Department of Agricultural Economics, A. E. Res. 75-6, Cornell University, June 1975.

The results show that soft drink ads decrease the quantity of milk consumed by teenagers, but the effect is not highly statistically significant. Further, it appears that teenage awareness to milk ads has only a mildly stimulative effect on milk consumption in the New York City market and definitely no effect in the Albany market.

In summary, the evidence from these three independent data sets constitute weak support for the statement that milk advertising increases the per capita consumption of milk in certain markets. This reinforces findings from the time series data (to be discussed in detail later) which show milk advertising to be highly effective in the New York City market and somewhat less effective in the Rochester, Syracuse and Albany markets.

The Economic Effectiveness of Milk Advertising

Various aspects of the question "Is it profitable for dairy farmers to engage in generic advertising of milk?" was examined using monthly market data for four separate time intervals (see Appendix Table A.1). Some of the general findings were: (1) The existence of marked intermarket differences in the net producer returns from increased levels of advertising, (2) economic effectiveness of advertising is highly sensitive to the magnitude of the Class I - Class II price spread, (3) current levels of advertising were nearly one-half the level necessary to maximize profit, (4) carry-over effects lasting as long as five months, and (5) the existence of a highly inelastic long-run milk response to advertising. These findings are discussed in more detail in the following pages.

Intermarket differences in producer returns. Returns to the advertising effort were estimated by comparing the value of the increased sales of fluid milk due to advertising to the media cost of the advertising program. The estimated net return on a per capita basis for the New York City, Albany, Syracuse and Rochester markets are presented in Table 18 for the various data sets analyzed. The estimates indicate that advertising in New York City yields the greatest return. This is not surprising since per capita consumption of milk is lower in New York City than the Upstate markets and therefore has the greatest potential for being increased. Evidently the Syracuse and Rochester markets offer greater returns to advertising investment than the Albany market. It was estimated that annual per capita fluid milk sales were increased by 4.9 percent, 1.3 percent and 1.9 percent, respectively, in New York City, Albany and Syracuse due to the advertising effort.

Table 18 Estimated Producer's Per Capita Net Return from Generic Milk Advertising, Selected New York State Markets, Various Data Periods.

Data Period	Market (SMSA)			
	New York City	Albany	Syracuse	Rochester
	(cents)	(cents)	(cents)	(cents)
1/71 - 3/74 ^{1/}	10.7	2.8	-3.1	N.A.
1/75 - 6/77 ^{2/}	14.4	2.3	6.0	N.A.
1/75 - 12/78 ^{3/}	N.A.	N.A.	N.A.	6.3

^{1/} SOURCE: Thompson, S.R., and D.A. Eiler. "Producer Returns from Increased Milk Advertising." American Journal of Agricultural Economics, 57(3) (August 1975) 505-508.

^{2/} SOURCE: Thompson, S. R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Department of Agricultural Economics, A. E. Res. 78-17, Cornell University, September 1978.

^{3/} SOURCE: Thompson, S.R. The Response of Milk Sales to Generic Advertising and Producer Returns in the Rochester, New York Market. Department of Agricultural Economics, A. E. Staff Paper No. 79-26, June 1979.

Partly as a result of these intermarket differences, the following recommendation was made: "Regardless of the desired rate of return or budget size, decisions of optimal market allocation among the three markets would involve an approximate budget allocation of 96 percent to New York City, 1.5 percent to Albany, and 2.5 percent to Syracuse" (Thompson 1979).

Advertising effectiveness and the Class I - Class II price differential.

Since advertising has the effect of shifting milk from Class II to Class I utilization, the greater the Class I - Class II price differential, the greater the economic effectiveness (as measured by the increase in the blend price) of the advertising program. One implication of this fact is that the level of advertising necessary to achieve a specified rate of marginal

return increases as the Class I - Class II price differential increases. This is illustrated in Table 19 for plausible ranges of the price differential, assuming a 40-percent Class I utilization rate. Note that for each 20 cent increment in the Class I - Class II price differential below the \$2.40 level, the optimal level of advertising expenditures decreases by about eight percent. Thus if the calculated optimum is \$4.25 million when the price differential is \$2.40 (the recommended total advertising investment in the Federal Order No. 2 milk marketing area in 1976 based on the Thompson study (Thompson 1978)). This amount would be reduced to 3.57 million if the price differential declined to \$2.00.

The sensitivity of the optimum level of advertising expenditures to the magnitude of the Class I - Class II price differential has further implications for the timing of the advertising investment. If reliable predictions of the monthly magnitude of this price spread could be obtained, say for the next twelve months, then advertising expenditures could be planned so that their greatest impact would occur during the months with the greatest Class I - Class II price differential.^{13/} Research designed to indicate the optimum temporal allocation of advertising expenditures needs to be done.

¹³Intrayear variations in the Class I - Class II price differential can be substantial (see Appendix Table A-3).

Table 19 The Optimum Level of Milk Advertising Expenditures as a Function of the Class I - Class II Price Differential.

If the Class I - Class II Price Differential is:	Then the Optimum Level of Advertising Expenditure $\frac{1}{/}$ would be Changed by the following percentage
(\$/cwt)	(%)
3.20	30.6
2.80	15.4
2.40	0.0
2.00	-15.9
1.80	-23.8
1.60	-32.1
1.40	-40.1
1.20	-48.5

$\frac{1}{/}$ The optimum would correspond to the level necessary to receive a 10% marginal return on the advertising investment when the Class I - Class II price differential is \$2.40 per cwt and the Class I utilization rate is .40.

SOURCE: Thompson, S. R., D. A. Eiler and O. D. Forker. "An Econometric Analysis of Sales Response to Generic Fluid Milk Advertising in New York State." SEARCH, 6(3): (1976) 1-24.

Optimum level of advertising investment. Given an opportunity cost of 10 percent, Thompson (1978) estimated that the optimum level of advertising investment for 1976 in the Federal Order No. 2 milk marketing area to be about 4.25 million dollars. The actual investment in milk advertising during that year was \$2.018 million--less than one-half the optimum level. Marginal rates of return from the suboptimal level of investment were estimated to be as high as 45 percent in New York City, 25 percent in Albany and 60 percent in Syracuse. From economic theory we know that profits are maximized when the marginal rates of return are equalized across markets and investment alternatives. Assuming that alternatives to advertising investment would yield dairy producers a ten-percent marginal rate of return means that the optimum advertising expenditures (in 1970 dollars) in 1976 should have been \$2,036,932 in New York City, \$26,829 in Albany and \$52,851 in Syracuse (Thompson 1978).

The optimum level of advertising expenditures is highly sensitive not only to the magnitude of the Class I - Class II price differential, as previously noted, but also to the desired marginal rate of return on the investment. Thompson's estimates indicate that for each five percentage point increase in the desired marginal rate of return, optimum media advertising investment declines by 8.8 percent (Thompson 1976). Thus if alternative investments could yield dairy farmers a 15-percent (rather than a 10-percent) marginal rate of return, then the optimum level of advertising investment for 1976 would have been \$3.9 million rather than the \$4.25 million given.

Milk advertising carry over effects. The studies conducted by Thompson et al. indicate significant intermarket differences in the longevity of the advertising effect as well as time pattern of the effect. In the New York City market the most recent estimates suggest that milk advertising is effective for four months following the initial expenditure with the largest impact occurring two months after the expenditures (Table 20).

Table 20 Estimated Carry-Over Effects of Generic Milk Advertising Using a Linearly-Additive Sales Response Function for Different Data Periods, Markets, Estimating Procedures, and Whether Cola Price is Included in the Model.

Data Period	Market	Estimating Procedure	Included Cola Price?	Estimated Coefficient and Corresponding t-statistic						
				a_t	a_{t-1}	a_{t-2}	a_{t-3}	a_{t-4}	a_{t-5}	$\frac{\sum_{i=0}^{t-1} a_i}{t-1}$
1/71-3/74 ^{1/}	New York City	OLS	No	13.77 (1.80)*	16.91 (3.52)	17.88 (4.16)	16.68 (3.66)	13.29 (3.17)	7.73 (2.85)	86.27 (4.16)
1/75-3/77 ^{2/}	"	"	Yes	15.43 (1.07)	22.17 (1.68)	24.00 (1.67)	20.91 (1.56)	12.91 (1.48)	0	95.42 (1.71)
1/75-3/77 ^{2/}	"	GLS	"	15.21 (1.35)	19.99 (2.18)	20.86 (2.14)	17.82 (1.95)	10.87 (1.80)	0	84.76 (2.23)
1/71-3/74 ^{1/}	Albany	OLS	No	15.86 (.86)	11.59 (1.35)	7.87 (.92)	4.70 (.48)	2.07 (.29)	0	42.08 (1.34)
1/71-3/74 ^{1/}	Syracuse	"	"	5.73 (.45)	3.59 (.67)	1.92 (.27)	.73 (.12)	0	0	11.96 (.67)

*Numbers in parentheses are t-values.

^{1/} SOURCE: Thompson, S. R., and D. A. Eiler. "Producer Returns from Increased Milk Advertising." American Journal of Agricultural Economics, 57(3) (August 1975) 505-508.

^{2/} SOURCE: Thompson, S. R. The Response of Milk Sales to Generic Advertising and Producer Returns in the New York City Market Revisited. Dept. Agr. Econ., A. E. Staff Paper No. 78-8, Cornell University, January, 1978.

Table 21 Estimated Carry Over Effects Using a Double-Log Sales Response Function for Different Data Periods, Markets, Estimating Procedures and Whether Cola Price is Included in the Model.

Data Period	Market	Estimating Procedure	Included Cola Price?	Estimated Coefficient and Corresponding t-statistic							
				^a t	^a t-1	^a t-2	^a t-3	^a t-4	^a t-5	^a t-6	^a t-1
1/71-3/74 ^{1/}	New York City	OLS	No	.00402 (2.06)*	.00258 (2.70)	.00288 (3.00)	.00383 (5.04)	.00439 (5.20)	.00346 (3.99)	.02116 (4.84)	
1/75-6/77 ^{2/}	"	GLS	Yes	.00180 (.30)	.00622 (1.81)	.00825 (2.92)	.00784 (2.90)	.00514 (2.70)	0	.02931 (2.34)	
1/71-3/74 ^{1/}	Albany	OLS	No	.00018 (.07)	.00105 (.85)	.00147 (1.11)	.00143 (.95)	.00094 (.85)	0	.00506 (1.09)	
1/75-6/77 ^{2/}	"	GLS	Yes	.00443 (1.41)	0	0	0	0	0	.00443 (1.41)	
1/71-3/74 ^{1/}	Syracuse	OLS	No	.00051 (.28)	.00066 (.79)	.00062 (.57)	.00040 (.43)	0	0	.00219 (.79)	
1/75-6/77 ^{2/}	"	GLS	Yes	.0050 (1.79)	0	0	0	0	0	.0050 (1.79)	
1/75-12/78 ^{3/}	Rochester	OLS ^{4/}	Yes	.0007 (.28)	.0003 (.10)	.0016 (.67)	.0036 (.71)	.0047 (1.99)	.0040 (1.77)	.0149 (1.75)	

*Numbers in parentheses are t-values.

^{1/} SOURCE: Thompson, S. R., D. A. Eiler and O. D. Forker. "An Econometric Analysis of Sales Response to Generic Fluid Milk Advertising in New York State." SEARCH, 6(3): (1976) 1-24.

^{2/} SOURCE: Thompson, S. R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Department of Agricultural Economics, A. E. Res. 78-17, Cornell University, September 1978.

^{3/} SOURCE: Thompson, S. R. The Response of Milk Sales to Generic Advertising and Producer Returns in the Rochester, New York Market. Department of Agricultural Economics, A. E. Staff Paper No. 79-26, June 1979.

^{4/} The data exhibited no serial correlation based on the Durban-Watson Statistic (D.W. = 2.00)

Carryover effects in the Albany and Syracuse markets are nil. In fact the statistical results indicate that milk advertising in general has had no statistically significant effect on milk sales in these markets. This is not surprising when two facts are considered: per capita milk consumption in the upstate markets is about 48-percent higher than in the New York City market, and advertising expenditures on a per capita basis were about double in New York City than in the upstate markets.

Comparison of the results in Tables 20 and 21 suggests that the estimated magnitude and pattern of milk advertising effects may be sensitive to the following factors: the time period the data corresponds to, whether or not the data is corrected for serial correlation, and whether or not cola price is included in the model. Definitive statements regarding the effect of these factors are generally not possible due to the simultaneous changing of more than one factor. However, estimates for the New York City market using the January 1975 - March 1977 data suggest that a GLS estimating procedure reduces the magnitude of the estimated advertising effect and increases its statistical significance; but does not effect the estimated pattern of the response.

However, the reader should be cautioned not to place too much faith in the estimated milk advertising carryover effects until further verification using alternative econometric procedures is done. The estimates presented in Tables 20 and 21 are derived by imposing the Almon polynomial lag function on the data. Maddala (1977) has warned that the Almon procedure can produce severely distorted estimates of the true lag distribution.

He recommends that those estimating an Almon type model should also use and report results from an unconstrained OLS method. In addition, where the length of the lag is unknown, Maddala suggests using the Hannan Inefficient estimating procedure and reporting these results along with the OLS and Almon model results.

Further evidence supporting Maddala's concern over the use of the Almon procedure is provided in a Monte Carlo study conducted by Cargill and Mayer (1974). There they investigated the relative performance of OLS, Hannan, and Almon estimating procedures in estimating distributed lags. The results of their extensive analyses are summarized by the authors as follows (p. 1,038):

"By a wide margin OLS out-performs the other estimators tested, regardless of whether the criterion is efficiency, small sample bias, or robustness under departures from the assumptions of the classical linear model. Of particular importance is the robustness of OLS under misspecification... when the independent series and residual process are highly autocorrelated, OLS continues to be a clear best choice. This is an important result since a major justification for using more sophisticated lag estimators is based on the problem of correlation between successively lagged x terms when OLS is used. These results certainly indicate that this problem may be overemphasized.

In addition, the results suggest that not only does the Almon procedure perform poorly in terms of tracking the true lag pattern, it also produces misleading information (in terms of statistical significance) of the length of the lag. In fact the pattern of the Almon estimates is very similar^{14/} to that of advertising lag pattern estimated for the New York City market (Table 20); the initial period effect is fairly large, climbs substantially in the next period, then remains fairly constant for a number of periods before beginning

¹⁴The actual estimates for the Monte Carlo study are presented in Appendix Table A.4.

its decline. This raises the question of whether the estimates presented in Tables 20 and 21 are more a feature of the estimating procedure than of the actual advertising response.

As a result of their study, Cargill and Meyer offer the following comment regarding the Almon method of estimating distributed lag functions (p. 1,043).

- "One case in which the Almon method might be desirable would be when there are insufficient observations to estimate a distributed lag by OLS and there is no a priori knowledge about the form of the lag. While this may be a plausible rationale for using Almon in small samples, it may be more advisable to simply abandon the attempt to extract detailed information from a limited sample."

Given the importance of knowing the precise timing of maximum impact of the advertising expenditure (e.g., to plan advertising expenditures so that the maximum impact would occur in the months with the largest Class I - Class II price differential) it is imperative to investigate to what extent the Almon procedure may be producing a misleading picture of the true structure of the milk advertising carryover effect in New York State.

- Milk advertising elasticities. Milk advertising elasticities provide a clue as to the extent to which increased advertising levels can be expected to increase the consumption of milk, holding other factors constant. Estimates of the long-run milk advertising elasticity for New York State markets suggest that demand is highly unresponsive to increased levels of advertising expenditure. For instance, elasticity estimates indicate that if advertising expenditures were increased by one hundred percent in all markets, relative prices, income, and other factors unchanged, per capita milk consumption would increase by only 2.9 percent in New York City, .4 percent in Albany, .5 percent in Syracuse, and 1.5 percent in

Rochester (figures calculated on the basis of the elasticity estimates presented in Table 22 using the latest data period). Of course, with estimated milk long-run own-price elasticities for milk as high as -1.70 (see Table 11), this means that relatively small milk price increases would be sufficient to negate increases in milk advertising investment.

Table 22 Estimated Long-Run Milk Advertising Elasticities for Selected New York State Markets and Alternative Data Periods.

Market	Data Period	Long-Run Advertising Elasticity	T-Statistic
New York City	1/71 - 3/74	.021	4.84
	1/75 - 6/77	.029	2.34
Albany	1/71 - 3/74	.005	1.09
	1/75 - 6/77	.004	1.41
Syracuse	1/71 - 3/74	.002	.79
	1/75 - 6/77	.005	1.79
Rochester	1/75 - 12/78	.015	1.75

SOURCE: Table 21

Whether demand is as unresponsive to advertising as the estimates suggest needs further investigation. The estimates presented in Table 22 are produced by double-log sales response functions which implicitly assume that the advertising elasticity is constant with respect to the level of advertising expenditure. It seems more plausible that the advertising elasticity would increase with the level of the advertising effort: as consumers are exposed more frequently to the advertising message, they become more susceptible to change. Indeed, advertising elasticity estimates from the additive version of the sales response function (which implicitly assumes a more elastic advertising response to higher advertising expenditures) are

nearly twice those derived from the constant elasticity models (e.g., $\eta_{s \cdot a} = .047$ for New York City using 1/75 - 3/77 data (Thompson 1978). Of course, this still indicates a disappointingly small response. It may be that the Almon procedure is producing downward biased estimates of the true long-run consumption response to milk advertising. This possibility warrants investigation.

Nutrition Education

About 20 percent of the funds that Order 2 dairy farmers contribute for milk promotion goes to the National Dairy Council which in turn uses the funds to conduct a nutrition education and research program. The implicit assumption is that a nutritionally enlightened public will consume more dairy products. The research conducted by the Department does not directly address the question of whether this assumption is valid but rather looks at the extent to which school children are being exposed to nutrition learning experiences in the classroom, the information sources teachers use, and the interest among teachers in attending nutrition workshops. Information on these questions was obtained from a survey of 2160 elementary school teachers taken in early 1976 (see Appendix Table A.2). The findings from this survey are discussed in this section.

Exposure of school children to nutrition education. The survey indicated that 75 percent of the teachers responding had taught nutrition or foods in their classrooms during the last school year. Nearly half of the teachers who did not teach nutrition said that their students were taught nutrition by the school nurse or some other teachers. This suggests

that some 87 percent of school children in grades K-6 living in New York City, upstate New York and northern New Jersey areas are being exposed to some form of nutrition education in the classroom.

Furthermore, the survey indicated that the average time teachers spent on nutrition or foods—9.7 hours during the 1974-75 school year--compares favorably with the time recommendations for certain nonintegrated nutrition education units. Thus it appears that in terms of coverage and intensity school children are receiving adequate exposure to nutrition education. The question of quality remains, however, as the specific content of the nutrition/foods classroom work was not examined.

Sources teachers use for nutrition education materials. The survey indicated that teachers most frequently consulted the following sources for nutrition information: school nurse, textbooks and magazines, and the Dairy Council. Approximately one-third of the teachers used Dairy Council materials.

Teacher interest in nutrition workshops. According to the survey, elementary teacher interest in nutrition workshops is low: only six percent of teachers said they wanted a nutrition/foods workshop. This compares to an expressed interest by nearly 20 percent of the teachers for workshops in such subject areas as language arts, math and science. These figures may reflect the increasing administrative pressure on teachers to place more emphasis on reading and math in the elementary school curriculum. The teachers indicated that if the subject "nutrition" was made into an easily accessible, sequentially graded curriculum which could be integrated into the basic curriculum of reading, math and social studies, it would help

alleviate some of the obstacles to incorporating nutrition in the grade school curriculum.

Does nutrition education lead to increased consumption of dairy products? This question is of paramount importance since dollars for nutrition education compete directly with dollars for media advertising, and studies clearly indicate that milk advertising (in New York City at least) is effective and should be increased.

Department studies provide no direct evidence on the hypothesized link between nutrition education, improved diets and increased milk consumption. However, evidence from outside studies can be brought to bear on this question. A review of a limited number of such studies by Eiler, Cook and Kaminaka (1976) lead them to conclude (p. 8.1), "while studies have demonstrated improvements in nutrition knowledge, they have shown no consistently demonstrable relationship between a child's exposure to nutrition education and his (sic) dietary behavior or milk consumption."

A review of the more recent literature by Levy, Iverson and Walberg (1979) lead them to conclude (p. 15), "... education does have the potential to affect and change nutrition behavior." However, a look at the results of the quantitative studies Levy, Iverson and Walberg reviewed as well as the results of an earlier study by McKenzie, Mattinson and Yudkin (1967) and the most recent study by McDonald, Brun and Esserman (1980) all suggest that nutrition education has had no effect on enhancing consumer attitudes toward milk or increasing the consumption of milk (Table 23).

Table 23 The Effect of Nutrition Education on Knowledge, Attitudes, and Food Consumption Behavior: Evidence from Studies Designed to Yield Quantitative Results.

Investigator	Study Group	the Effect on:		
		Knowledge	Attitudes	Behavior
McDonald, Brun, Esserman (1980)	917 children in grades K-6	+	^{1/}	^{2/}
Axelson and Delcampo (1978)	400 randomly selected high school students in Florida	+	*	*
Garet and Vaden (1978)	1010 6th graders from schools in a Midwestern city	*	0	0
Casper, Hayslip, and Force (1977)	45 fifth grade Mexican- American students	+	*	0
Boone and White (1976)	1368 8-12 year old stu- dents	+	*	?
Picardi and Porter (1976)	(?) high school students	+	?	?
Roth (1976)	1447 fifth-eighth graders in five Southwestern states	+	*	+
Head (1974)	4,700 students from North Carolina in grades 5, 7, and 10	+	*	?
Bell (1973)	1,500 fifth graders in Texas	+	*	^{3/}
Baker (1972)	256 4th and 5th graders in Iowa	+	0	0
Boysen and Ahrens (1972)	59 Maryland second graders	+	0	0
McKenzie, Mattinson, and Yudkin (1967)	4,600 students aged 11-19	*	*	^{4/}
Percentage of Test Results that showed a: ^{5/}				
Positive effect		100%	0%	27%
No effect		0%	60%	45%
Inconclusive results		0%	40%	27%

Symbols have the following meaning:

- * = no information was available on this question
- + = statistically significant (P = .05) positive effect
- 0 = statistically insignificant (P = .05) effect
- ? = results inconclusive or mixed

^{1/} Evidence was mixed: the test group showed a reduced preference for milk and increased avoidance of meat, poultry, fish and eggs, but a reduced avoidance of fruits and vegetables.

^{2/} The behavioral change was limited to an increased consumption of fruits and vegetables by the test group. Blacks in the test group had consumed more milk and dairy products than the control group.

^{3/} Increased vegetable consumption only.

^{4/} Nutrition information had no effect on milk consumption even though the milk was free to the students.

^{5/} Studies with an asterisk are excluded from the calculation.

Although 27 percent of the studies showed nutrition education has some positive effect on dietary behavior, this related almost entirely to enhanced consumption of fruits and vegetables. In fact, the McKenzie, Mattinson and Yudkin study found that school children failed to increase their consumption of milk despite an intensive campaign using posters, pamphlets, 30-minute lectures and films to persuade them to do so; and in spite of the fact that milk was free to the students.

Of course, the fact that studies to date have failed to show a convincing link between nutrition education and milk consumption should not lead to the hasty conclusion that nutrition education by the Dairy Council should be abandoned. As Eiler, Cook and Kaminaka (1976) have pointed out, the possibility of a long time lag between the initial exposure to nutrition information and subsequent behavioral response makes the response difficult to measure. In addition, while nutrition education alone may not affect milk consumption, it may positively predispose consumers toward milk and thus make milk advertising more effective. The possibility that nutrition education exposure interacts with media advertising to produce a larger sales response than would occur in the absence of nutrition education needs further investigation.

More evidence on the hypothesized link between nutrition education and dairy product consumption should appear as studies to monitor the increasing Federal involvement in nutrition education are completed. Since 1976 the funding levels of the major publicly supported nutrition education programs in New York State have increased nearly 90 percent to about \$7 million in 1980 (Table 24).

Table 24 Funding Levels of the Major Publicly Supported and Dairy Supported Nutrition Education Programs in New York State, Fiscal Years 1/ 1976-81.

Year	Publicly Supported Programs				State Total	Dairy Supported Programs ^{6/}	Dairy Proportion of Total (Percent)
	EFNEP ^{2/}	NET ^{3/}	WIC ^{4/}	Other ^{5/}			
1976	2,864	**	**	836	3,700	810	22.0
1977	2,864	**	**	784	3,648	907	24.9
1978	2,864	2,085	**	808	5,757	960	16.7
1979	2,864	2,012	1,100	873	6,849	1,004	14.7
1980	2,864*	1,512*	1,775*	875*	7,026*	1,004*	14.3*
1981	3,066	1,154*	1,775*	900*	6,895*	1,100*	16.0*

*Preliminary estimate.

**Program nonexistent in these years.

1/ Fiscal years run from October 1 - September 30; e.g., FY 76 = Oct. 1, 1975 - September 30, 1976.

2/ EFNEP is the Expanded Food and Nutrition Education Program. The Science and Education Administration (SEA) of the USDA administers EFNEP. State funding is through the Land Grant University System (Cornell in the case of New York). TARGET GROUPS are LOW-INCOME FAMILIES with children. SOURCE: correspondence with Chuck Graves of the budget office in SEA and with Ray Blanchard; fiscal officer of the Cooperative Extension Service at Cornell University.

3/ NET is the Nutrition Education and Training program. The Food and Nutrition Service (FNS) of the USDA administers NET. State funding is through the NYS Department of Education. The TARGET GROUP is SCHOOL CHILDREN. SOURCE: correspondence with Marge Reedy of the NYS Department of Education.

4/ WIC is the supplemental food program for Women, Infants and Children. FNS of the USDA administers WIC. State funding is through the NYS Department of Health. These figures represent the portion of WIC funds devoted to nutrition education. Before 1980 there was no requirement to spend WIC funds on nutrition education. As of FY 1980 State recipients of WIC funds must spend at least one-sixth of the administrative budget for nutrition education. SOURCE: correspondence with Virginia Sargent of the NYS Department of Health.

5/ This "other" category refers to nutrition education funds from the following sources: Smith-Lever funds; Urban Gardening funds; State Appropriations, and County Appropriations. The 1976-79 figures were provided by Ray Blanchard of the Cooperative Extension Service at Cornell. The 1980-81 figures are extrapolations based on data from the earlier years.

6/ The fiscal year for the expenditure of Dairy Council funds is May 1 - April 30; e.g., FY 1976 = May 1976 - April 1977. The figures were taken from tables provided by Lyle Newcomb at the August 21, 1980 meeting of the Dairy Promotion Order Advisory Board.

In fiscal year 1981, the USDA alone will spend some \$150 million on nutrition education. This kind of effort will surely stimulate studies designed to determine the cost effectiveness of these programs and from these studies needed information on the relationships between nutrition knowledge and dietary behavior should be forthcoming.

Conclusions

Since 1972 some \$32 million dollars have been invested in milk promotion in the Federal Order 2 marketing area. Between 1972 and 1977, the real price of milk in New York declined 3 percent while cola prices increased 21 percent and coffee prices increased 178 percent in real terms. Why, then, has per capita milk consumption decreased 14 percent in New York since 1972? Research conducted so far at Cornell provides some clues: milk consumption decreases steadily with age and the average age of the United States population is increasing; blacks and other minorities tend to drink less milk than white and their numbers are increasing relative to whites; milk advertising levels are low, both in absolute and relative terms. Other factors, such as attitudes and social influences were found to be not very relevant. Yet clearly more research needs to be done if a better understanding of why consumers are turning away from a highly nutritious, good tasting beverage is to be gained. To what extent is the relationship between age and milk consumption reversible? How would consumers respond to accurate information about the nutritional content of milk vis-a-vis the other beverages commonly consumed, such as soft drinks and coffee? Is the lower level of milk consumption by minorities due to misinformation about the product? Why are consumers increasingly turning to low fat milk and away from whole milk? How much can advertising be expected to increase the demand for milk? These are just a few of the questions that need to be investigated further.

APPENDIX

Table A.1 Time Series Data Used in Various Studies to Determine the Economic Effectiveness of Milk Advertising in New York State

Data Period	No. of Observations	Markets Studied	Publications ^{1/}
January, 1971 - March, 1974	39	Albany, New York City, Syracuse	13, 26, 15, 28, 31, 32
January, 1975 - March, 1977	27	New York City	24
January, 1975 - June, 1977	30	Albany, Binghamton, New York City, Syracuse	22, 23
January, 1975 - December, 1978	48	Rochester	25

^{1/} Refer to the bibliography for the publication corresponding to each number.

Table A.2 Cross-Section Data Used in Various Studies Concerned with Evaluating the New York State Milk Promotion Efforts.

Date of Data Collection	Survey Objectives ^{1/}	Survey Subjects	Survey Size	Survey Method	Publications ^{2/}	Comments
November, 1972	Measure attitudes related to beverage consumption	Adults 18 years and older	1477	In-Home Interview	1 8 11	
April - May, 1973	Determine beverage consumption levels, socioeconomic characteristics and awareness to beverage advertising	12 to 65 year olds	3011	Telephone-Survey 24-hour recall	13 28 29	Blacks and Hispanics were underrepresented by almost 50%, this data was also combined with later data for further analysis. See comments in the next data set description.
September - October 1973 ^{3/}	Essentially the same as the Spring 1973 survey.	12 to 65 year olds	5481	Telephone-Survey 24 hour recall	5 6 13	The data was combined with the April - May 1973 data for purposes of analysis.
September - October, 1974	Measure teenage beverage consumption, parental and peer influences, and beverage advertising awareness	12 to 17 year olds	5481	Telephone-Survey 24 hour recall	6 10	
January - February, 1976	Measure time teachers spend on nutrition, use of nutrition sources, and workshop attendance	Elementary Public School teachers in New York and New Jersey	2160	Mailed Questionnaire (Response rate = 47 percent)	9	

^{1/} Lists are meant to be suggestive of the main intent of collecting the data rather than exhaustive.

^{2/} Publication lists are not necessarily exhaustive.

^{3/} The Department conducted two other surveys in 1974 (similar to the 1973 surveys) but the data was not analyzed to the extent that publications were possible.

Table A.3 Monthly Class I - Class II Price Differentials in the New York - New Jersey Federal Milk Marketing Order, 1974 - 1979.

Month	1974	1975	Year			
			1976	1977	1978	1979
	-----(\$/cwt)-----					
January	3.09	2.33	2.31	2.41	2.10	2.10
February	3.37	2.33	3.21	2.47	2.10	2.04
March	3.13	2.44	2.75	2.33	2.12	2.26
April	2.90	2.20	2.30	2.05	2.10	2.23
May	3.74	2.36	2.82	2.21	2.21	2.29
June	3.93	2.34	2.63	2.51	2.34	2.23
July	3.01	2.03	1.96	2.34	2.14	2.02
August	2.22	1.71	1.63	2.26	1.73	1.82
September	1.94	1.42	2.59	2.25	1.62	1.74
October	1.91	1.94	3.07	2.24	1.69	2.03
November	2.27	1.77	2.54	2.14	1.65	2.24
December	2.75	1.96	2.35	2.06	1.77	2.10
Annual Average	2.86	2.07	2.51	2.28	1.96	2.11
Coefficient of Variability (%)	23.1	15.4	17.6	6.6	12.8	8.1
Range	1.91-3.93	1.42-2.44	1.63-3.21	2.06-2.51	1.62-2.34	1.74-2.29

SOURCE: Thompson, S. R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Department of Agricultural Economics, A. E. Res. 78-17, Cornell University, September 1978.

Table A.4 Simulation Results from a Monte Carlo Study Designed to Evaluate the OLS, Hannan, and Almon Lag Estimating Procedure.

Lag	True Value	Parameter Estimate (Mean Value) ^{1/}		
		OLS	Hannan	Almon
0	.5000	.4976	1.0674*	.9765
1	1.0000	.9840	1.4769*	2.1450
2	2.0000	2.0033	2.5909	3.2603
3	4.0000	3.9952	4.2311	4.1347
4	8.0000	7.9806	7.0903	4.6384
5	6.0000	6.0061	4.6618	4.6990
6	4.0000	4.0133	2.6558	4.3015
7	2.0000	2.0070	1.0110*	3.4888
8	1.0000	.9900	.3408*	2.3611
9	.5000	.5115*	.0905*	1.0764
10	0.0000	.0077*	-.0997*	-.1498*
11	0.0000	.0096*	-.0814*	-1.0445
12	0.0000	.0093*	-.0926*	-1.2764
13	0.0000	-.0144*	-.0349*	-4.589*
14	0.0000	-.0134*	.0021*	1.8553

* = less than 75% of the estimated parameters were statistically significantly different from zero.

^{1/} Results are based on 100 replications with each replication containing 100 observations.

SOURCE: Tables I, II and IV in Cargill and Meyer (4).

REFERENCES

1. Aronson, J. E., D. A. Eiler, and O. D. Forker. Attitudes Toward and Consumption of Milk and Other Beverages in Selected New York State Markets, Fall 1972: Base-line Data for Evaluating Milk Promotion. Department of Agricultural Economics, A.E. Res. 73-21, Cornell University, November 1973.
2. Boehm, William T. and Emerson M. Babb. Household Consumption of Beverage Milk Products. Exper. Stat. Bull. No. 75, Purdue University, West Lafayette, Indiana, March 1975.
3. Brewster, Letitia and Michael F. Jacobson. The Changing American Diet. Washington, D.C.: Center for Science in the Public Interest, 1978.
4. Cargill, T. and R. A. Meyer. "Some Time and Frequency Domain Distributed Lag Estimates: A Comparative Monte Carlo Study," Econometrica, 42(6) (Nov., 1974) 1031-44.
5. Cook, C. B., D. A. Eiler and O. D. Forker. Beverage Consumption and Advertising Awareness in Selected New York State Markets 1973. Department of Agricultural Economics, A. E. Res. 74-10, Cornell University, September 1974.
6. Cook, C. B., D. A. Eiler and O. D. Forker. "Beverage Consumption Patterns in New York State." Journal of the American Dietetic Association, 67(3) (September, 1975) 222-227.
7. Cook, C. B., D. A. Eiler and O. D. Forker. A Study of Selected Family and Social Influences on Teenage Beverage Consumption in Three New York Markets Fall 1974. Department of Agricultural Economics, A. E. Res. 75-6, Cornell University, June 1975.
8. Eiler, D. A., and S. R. Thompson. "Adult Attitudes Toward Major Beverages in Seven New York Metropolitan Markets." SEARCH, 4(10) (April, 1974) 1-47.
9. Eiler, D. A., C. B. Cook and E. C. Kaminaka. An Examination of Dairy Farmer Funded Nutrition Education Programs in New York State. Department of Agricultural Economics, A. E. Staff Paper No. 76-26, Cornell University, July 1976.
10. Eiler, D. A., and C. B. Cook. "Teenage Consumers' Beverage Habits." New York's Food and Life Sciences, 10(2) (November, 1977) 10-11.
11. Eiler, D. A., and O. D. Forker. "Testing for Differences in Consumer Attitudes Toward Milk in New York State." Journal of the Northeastern Agricultural Economics Council, 2(2) (October, 1973) 33-50.

12. Forker, O. D. Results from an Advertising Program in New York. Department of Agricultural Economics, AE-4406, University of Illinois. July 1976.
13. Forker, O. D., and D. A. Eiler. Testimony Presented at Public Hearing on New York State Dairy Promotion Order in Albany, New York on October 23, 1974. Department of Agricultural Economics, A.E. Staff Paper No. 75-8, Cornell University, May 1975. 19 pp.
14. Levy, Susan R., Barbara K. Iverson, and Herbert J. Walberg. "Nutrition-Education Research: A Review," University of Illinois at Chicago Circle, Chicago, Illinois, paper presented at the annual meeting of American Public Health Association, New York, November 1979.
15. Maddala, G. S. Econometrics. New York: McGraw-Hill Book Co., 1977.
16. Market Administrator Bulletin. New York-New Jersey Milk Marketing Area. 39(17) Annual Report, 1979.
17. McDonald, W. F., J. K. Brun, J. Esserman. "Effectiveness of a School Nutrition Education Program as Demonstrated by In-Home Interviews of Students and Mothers," mimeograph, Child Research Service, Inc. 1980.
18. McKenzie, J. C., J. Mattinson and J. Yudkin. "Milk in Schools: An Experiment in Nutrition Education," Journal of Nutrition, 21 (1967) 811-817.
19. National Academy of Sciences. Recommended Dietary Allowances. (7th Revised ed.) Publication No. 1694. Washington, D.C., 1968.
20. Rosenberger, Ann T., "Nutritional Implications of Government Involvement in the Pricing of Fluid Milk," (unpublished) Master's Thesis, Cornell University, 1978.
21. Thompson, S. R. An Analysis of the Effectiveness of Generic Fluid Milk Advertising Investment in New York State. Department of Agricultural Economics, A. E. Res. 78-17, Cornell University, September 1978.
22. Thompson, S. R. "Economic Evaluation of Milk Advertising," Journal of Dairy Science, 62(6) (June 1979) 1026-1031.
23. Thompson, S. R. The Response of Milk Sales to Generic Advertising and Producer Returns in the New York City Market Revisited. Dept. Agr. Econ., A. E. Staff Paper No. 78-8, Cornell University, January, 1978.
24. Thompson, S. R. The Response of Milk Sales to Generic Advertising and Producer Returns in the Rochester, New York Market. Department of Agricultural Economics, A. E. Staff Paper No. 79-26, June 1979.
25. Thompson, S. R. "Sales Response to Generic Promotion Efforts and Some Implications of Milk Advertising on Economic Surplus," Journal of the Northeastern Agricultural Economics Council, 3(2) (October 1974) 78-90.

26. Thompson, S. R. and D. A. Eiler. An Econometric Analysis of the Response of Milk Sales to Advertising in Selected New York State Markets. Department of Agricultural Economics, A. E. Staff Paper No. 74-23, Cornell University, September 1974.
27. Thompson, S. R. and D. A. Eiler. "Determinants of Milk Advertising Effectiveness." American Journal of Agricultural Economics, 59(2) (May, 1977) 330-335.
28. Thompson, S. R., and D. A. Eiler. Factors Affecting Fluid Milk Use in Selected New York State Markets and Their Implication for Generic Promotion Decisions - An Application of Multivariate Probit Analysis. Department of Agricultural Economics, A. E. Res. 73-16, Cornell University, October 1973.
29. Thompson, S. R., and D. A. Eiler. "A Multivariate Probit Analysis of Advertising Awareness on Milk Use." Canadian Journal of Agricultural Economics, 23(1) (February 1975) 65-73.
30. Thompson, S. R., and D. A. Eiler. "Producer Returns from Increased Milk Advertising." American Journal of Agricultural Economics, 57(3) (August 1975) 505-508.
31. Thompson, S. R., D. A. Eiler and O. D. Forker. "An Econometric Analysis of Sales Response to Generic Fluid Milk Advertising in New York State." SEARCH, 6(3): (1976) 1-24.
32. Thraen, C., J. Hammond and B. M. Buxton. An Analysis of Household Consumption of Dairy Products, Agr. Exper. Stat. Bull. 515, University of Minnesota, 1977.
33. U. S. Department of Agriculture. ARS. Composition of Foods. Agr. Handbook No. 8, 1963.
34. U.S.D.A. ERS. Dairy Situation. No. 381, July 1980.
35. U.S.D.A. ERS. New York Dairy Statistics. September 1979.
36. U. S. Department of Health, Education, and Welfare. First Health and Nutrition Examination Survey, United States, 1971-72. 1974.
37. U. S. Department of Labor. Bureau of Labor Statistics. Estimated Retail Food Prices by Cities. Various issues, 1976-77.



DAIRY MARKETING NOTES

Cornell University

Department of Agricultural Economics

Summer 1983

Volume 2

WILL A NATIONAL DAIRY PROMOTION PROGRAM REDUCE DAIRY SURPLUSES?

Henry W. Kinnucan and Olan D. Forker

A 15c per hundredweight producer assessment has been proposed as part of a strategy to solve the dairy surplus¹ problem. Such an assessment would result in a \$700 million annual nationwide dairy promotion program of which \$160 million would be new money (producers would receive a credit of about \$50 million for their present generic promotion contributions). While the impact of such a program cannot be exactly predicted, enough research has been conducted on generic promotion of milk and milk products to provide some useful insight regarding the kind of results that might occur.

The likely impacts of this potential new advertising initiative were analyzed using the early U.S. Department of Agriculture fluid milk and manufactured product promotion studies. The answer is a bit surprising. The findings suggest that the plan could be more successful than is commonly thought.

The results of two U.S. Department of Agriculture studies were used. In the first, conducted during 1963-65, 15c per person was spent on fluid milk promotion in six markets.* This resulted in a 4.5 percent increase in fluid milk sales over baseline levels. An impact of this magnitude, if achieved nationwide during that period, would have removed 2.38 billion pounds of milk equivalent--about two percent of production at that time.

The second study, conducted in eight U.S. cities in 1972-73, indicated the most profitable promotion programs at expenditure levels of 6c per capita for cheese and 9c per capita for butter.** The sales increases found in this study, 18.1 percent for cheese and 4.3 percent for butter, would have resulted in increased sales of 3.7 billion pounds during that period if a similarly effective program were applied nationwide.

These results can be used today to answer questions about the potential effectiveness of a new promotion and advertising initiative. The fluid milk results seem reasonable because similar increases have been observed in recent Cornell University studies in several New York state markets. More uncertainty surrounds the cheese and butter results because other studies pertaining to these products are not available. But, for the purpose of this exercise, it is the best information available.

There has been substantial inflation in advertising costs since the studies were conducted so an appropriate adjustment must be made. If a nationwide advertising program for milk, butter, and cheese had been funded in 1982, at the same real levels deemed most profitable in the early U.S. Department of Agriculture studies, an annual expenditure of 90.3c per capita would have been required. By comparison, a nationwide 15c per hundredweight producer assessment would yield almost exactly that optimal amount, about 70 percent of which would be new funds. To account for the infusion of only about 70 percent of the funds required to reach the "optimal" expenditure level, the sales impacts suggested by the U.S. Department of Agriculture studies were adjusted downward proportionally.

If a nationwide promotion program for fluid milk, butter, and cheese were conducted today at the expenditure level noted above, what would be the results? If you assume the same absolute level of sales increase achieved in the U.S. Department of Agriculture studies, the milk equivalent increase in sales (surplus removal) would be 4.3 billion pounds, an amount equivalent to 40 percent of the dairy surplus of 1982. If one assumes the same percentage sales increase predicted by the early government studies, the increase in milk equivalent

(continued on page 2)

The authors are Research Associate and Professor, respectively, in the Department of Agricultural Economics, Cornell University.

* Clement, W. E., P. L. Henderson, and C. P. Eley. "The Effect of Different Levels of Promotional Expenditures on Sales of Fluid Milk." USDA-ERS, ERS-259, October 1965.

** Henderson, P. L. "Butter and Cheese: Sales Associated with Three Levels of Promotion." USDA-ERS, Agr. Econ. Report No. 322, January 1976.

WILL A NATIONAL (continued from page 1)

sales would be 6.2 billion pounds, an amount equivalent to 57 percent of the 1982 dairy surplus. Some caveats must be noted, however. These estimates are based on the assumptions that all the new money raised would be spent on generic media advertising with the appropriate product allocation and further, that the results of studies in a few selected markets are applicable to all U.S. markets. Recent Cornell University studies on fluid milk sales response to advertising call the latter assumption into question. They suggest that greater sales impacts are obtainable in large markets compared to small or rural markets.

Notwithstanding these caveats, the calculations reported here suggest that a self-help promotion program could play an important role in reducing the milk surplus. They further suggest that government programs designed to shift the

demand curve might be more effective than policies that affect only the farm level milk price. This seems to make especially good sense for products such as milk, which empirical studies suggest have highly inelastic supply and demand curves—particularly when farm prices are declining. Using a farm-level elasticity of demand for milk of -0.17 and a supply elasticity of 0.18, a one-dollar cut in the minimum support price of milk during 1982 (from \$13.10 to \$12.10 per hundredweight at average test) would have reduced surpluses by approximately 3.42 billion pounds (3.59 billion pounds as a result of greater commercial utilization plus 1.83 billion pounds as a result of lower production). By comparison, the analysis presented here suggests that a national dairy producer promotion program funded by producers at 15¢ per hundredweight would be 1.7 to 1.8 times more effective than a 5¢ cut in support prices in reducing surpluses.

RECENT PUBLICATIONS

AN ANALYSIS OF RECONSTITUTED FLUID MILK PRICING POLICY

G. D. Whipple
American Journal of Agri. Economics, Vol. 65,
No. 2, pp.207-13, May 1983.
A regional analysis of how production, consumption, and prices might change if milk components used to produce a reconstituted fluid product were priced at the lowest class price under federal and state orders.

CONTACT: Glen D. Whipple, Department of Agricultural Economics and Rural Sociology, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901; (615) 974-7459.

AN ANALYSIS OF THE LEVEL AND DISPERSION OF RETAIL FLUID MILK PRICES IN 26 UPSTATE AND 8 NEW YORK CITY MARKETS

H. Kimman
Cornell Univ., Dept. of Agri. Economics, A.E.
Res. 83-1, Jan. 1983.
Data collected by the NYS Department of Agri. and Markets is analyzed for the 1970-80 period. The effects of time, location, container size, store type, market size, and market income on retail whole milk prices are studied.

CONTACT: Glen D. Forker at "Dairy Marketing Notes" address or phone (607) 256-4576.

ECONOMIC AND CONSUMER ACCEPTABILITY OF A RECONSTITUTED MILK PRODUCT

G. D. Whipple, P. M. Davidson, and
O. G. Sanders
Journal of Dairy Science, Vol. 66, No. 3,
pp.781-84, 1983.

Sensory panels and consumer home placement tests were used to evaluate the consumer acceptance of several reconstituted milk samples. Cross-price elasticity estimates between fresh and reconstituted fluid products were also obtained.

CONTACT: Glen D. Whipple, Department of Agricultural Economics and Rural Sociology, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901; (615) 974-7459.

CHANGES IN CURRENT MILK PRODUCTION FROM SELECTED BASE PERIODS: A FARM-LEVEL ANALYSIS, FIRST QUARTER, 1982-83 MARKETING YEAR, NEW YORK-NEW JERSEY MILK MARKETING AREA

New York-New Jersey Milk Marketing Order
Staff Paper 83-4, New York, NY, Apr. 1983.
CONTACT: Robert D. Wellington, Office of the Market Administrator, 768 Third Ave., New York, NY 10017; (212) 309-1609.

**COOPERATIVE
EXTENSION**

Cornell University
State University of New York
U.S. Department of Agriculture

Department of Agricultural Economics
Warren Hall
Ithaca, N.Y. 14853

Telephone (607) 256-7602

DAIRY MARKETING NOTES is published quarterly by milk marketing staff of the Department of Agricultural Economics as part of their Cooperative Extension program. The newsletter's purpose is to provide topical information on milk marketing issues to individuals and organizations involved in the dairy industry.

If you get duplicate copies, need an address correction, or wish to be added to or removed from the mailing list, please notify the Editor at the above address.

Robert D. Boynton

Robert D. Boynton
EXTENSION FACILITY
Editor, Dairy Marketing Notes

January 1983
Revised April

A.E. Ext. 83-2

THE CASH FLOW IMPACT OF THE NEW MILK PRICE ASSESSMENTS ON
SELECTED GROUPS OF NEW YORK DAIRY FARMS

Robert D. Boynton

Robert A. Milligan

Department of Agricultural Economics
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

PREFACE TO THE REVISED EDITION

This is a revised edition of A.E. Extension 83-2 published in January 1983. It differs from that original version only by the addition of an Appendix, beginning on page 25. This new material updates the cash flow impacts of the assessment program in light of the (apparent) effective imposition of the non-refundable 50¢ per hundredweight deduction on April 16, 1983. The revisions assume that this deduction remains in effect for the balance of the calendar year and further, that the additional 50¢ per hundredweight refundable assessment is not imposed during the year. At this time, no analysis of the refundable phase of the assessment program is planned. However, this decision will be reconsidered if policy changes so warrant.

Anyone desiring a copy of this revised publication should request A.E. Extension 83-2 REVISED by contacting the senior author at the address given below. Those already having a copy of the original A.E. Extension 83- should request only the Appendix.

Robert D. Boynton
 Department of Agricultural Economics
 Cornell University
 359 Warren Hall
 Ithaca, N.Y. 14853
 (607) 256-7602

 Robert D. Boynton is an Associate Professor of Marketing and Robert A. Milligan is an Associate Professor of Farm Management, both in the Department of Agricultural Economics.

The authors wish to thank Andrew M. Novakovic and Loren W. Tauer for their assistance in delineating the appropriate farm types analyzed and Andrew M. Novakovic and Wayne Knoblauch for their careful review of this manuscript. Norman W. Rollins expeditiously accomplished the necessary computer runs. Robin T. Greenhall prepared the tables and typed the manuscript. Joseph K. Baldwin drafted the figures appearing in this publication.

Table of Contents

	<u>Page</u>
Summary	iii
Introduction.....	1
Data and Income Measures Used.....	2
Cash Position Prior to Either Assessment.....	7
The Effects of Business Organization and Operator Age.....	7
The Separate Effects of Debt per Cow, Milk Sold per Cow, and Herd Size.....	7
The Combined Effects of Debt per Cow, Milk Sold per Cow, and Herd Size.....	10
Cash Position Under the Two Assessments.....	13
The Effects of Business Organization and Operator Age.....	15
The Separate Effect of Debt per Cow, Milk Sold per Cow, and Herd Size.....	15
The Combined Effects of Debt per Cow, Milk Sold per Cow, and Herd Size.....	18
Conclusions.....	22
References.....	24
APPENDIX	
The Impact on Annual Cash Positions of the Assessment Imposed on April 16, 1983.....	25

SUMMARY

Using 1981 production, revenue, and cost data from Cornell University's sample of 553 New York dairy farms, the cash flow impact of the new national two phase price assessment program was analyzed. Cash available for family withdrawal (net cash farm income plus interest paid less scheduled debt payments) was used as the annual measure of cash flow. Farms were subdivided by type of business organization, age of primary operator, debt per cow, milk sold per cow, and herd size in order to examine their cash position with and without the assessments.

Research shows that many New York dairymen experienced tight cash situations prior to the assessment program (through 1981 and 1982). For them the deductions may only serve to make a bad situation worse. While these analyses suggest serious cash shortages for most dairymen upon imposition of the assessments, many of them will undoubtedly be able to find ways to stay in business: increased productivity, cost control, family living expense reduction, increased reliance on off-farm income, assets sold or savings drawn out, and debt re-structured.

Debt per cow was found to have the greatest effect on available cash. Output per cow was also important. As herd size increased, the farm's cash position was magnified; the cash available to profitable operations was enhanced while the cash shortages experienced by stressed farms were exacerbated. In general, younger farmers had tighter cash situations. Finally, these analyses suggested that the assessments had the greatest absolute and percentage effects on the cash positions of the larger herds. How this program might ultimately affect the structure of New York dairy farming, however, cannot be determined from this research.

THE CASH FLOW IMPACT OF THE
NEW MILK PRICE ASSESSMENTS ON
SELECTED GROUPS OF NEW YORK DAIRY FARMS

INTRODUCTION

On December 1, 1982 dairy farmers throughout the U.S. became subject to a 50 cent deduction from their milk price on all milk marketed. Before any deductions were actually withheld from farmers' checks, however, a preliminary injunction blocked the collection of any assessments. At this writing it is not known what the future of the assessment program will be. New or modified administrative procedures may be required for its reinstatement, the assessment program could be permanently blocked, or new legislation might be sought. If the program is reinstated, the Secretary of Agriculture is authorized to withhold an additional 50 cents per hundredweight beginning April 1, 1983. This second assessment must be refunded to farmers who voluntarily reduce their production by a specified amount.^{1/} The purposes of this two phase assessment program, authorized through the 1985 marketing year (ending September 30, 1985), are to (1) generate revenues to help offset the cost to the federal government of buying surplus cheese, butter, and nonfat dry milk powder and (2) discourage surplus milk production.

The objective of this report is to show how the new assessment program would have affected various types of New York dairy farms had the deductions been imposed in 1981. Since price relationships without the assessments are expected to be similar in 1983, these analyses provide useful information concerning the impact of the assessments on 1983 cash flows. These analyses

^{1/} Those desiring more information on the milk price assessment program are referred to Boynton and Novakovic.

should be of interest to dairy farmers in evaluating their own situation as well as cooperatives, agricultural lenders, dairy policymakers, and all those individuals and organizations concerned with the financial health of dairymen. This information is designed to address questions about what kind of dairy farms will be affected the most by the assessments. Specific questions frequently asked include:

- * Will smaller farms be hit the hardest?
- * Are younger dairymen going to be squeezed out of the business?
- * Does production per cow or debt per cow have more effect on a farm's cash flow position?
- * What share of New York dairy farms are likely to be in a cash flow bind in 1983?

The results which are presented here rely exclusively on cost and revenue information from the dairy farm business summaries processed by staff of the Department of Agricultural Economics at Cornell University. Data from 553 farms for calendar year 1981 are used with no attempt made to project cost, price, or production levels to 1983. Five farm characteristics are examined for their effect on cash flow on these sampled farms before and after the milk price assessments. These characteristics are type of business organization, age of primary farm operator, herd size, production per cow, and debt carried per cow.

DATA AND INCOME MEASURES USED

The 553 dairy farms voluntarily participating in the 1981 Dairy Farm Business Summary Project are not randomly selected. Rather, these farms, representing 49 counties, are a cross section of dairy farms in the state; these farms are somewhat above average in size, production level, indebtedness, and perhaps management. Dairy farm renters (own no farm land or buildings), dairy-cash crop farmers, and part-time dairy operators have been excluded from this

data base. Additional information on the characteristics of the participating farms and the data collection and compilation procedures utilized can be found in the 1981 state summary of these data (Smith).

The business summaries compiled annually by Cornell University's Department of Agricultural Economics contain a complete profitability analysis, including labor and management income and return on equity capital. For present purposes, however, only cash income and cash operating expenses are studied. Changes in inventory values, unpaid labor, depreciation, and interest on equity capital are excluded from all analyses.

A key income statement item for present purposes is "net cash farm income" (NCFI). It is a measure of the cash available from the year's farm operations for family living, debt payments, capital expenditures, and capital retention. Additional cash may be available to a family if it liquidates past savings or earns off-farm income. Net cash farm income does not consider changes in inventories or capital usage; however, it is the best available basis upon which to examine the short-run financial status of a group of dairy farms.

Since NCFI is crucial here, it is important to recall specifically what it represents.

Revenue

Milk sales
 Dairy cattle and other livestock sales
 Crop sales
 Miscellaneous receipts (government payments, etc.)

LESS

Expenses

Hired labor
 Purchased feed
 Machinery costs
 Herd health and breeding costs
 Replacement livestock costs
 Milk marketing costs
 Crop production expenses (other than machinery and labor)
 Taxes and insurance
 Land rental

(expenses continued on next page)

Expenses (continued)

Land, building, and fence repair
 Utility costs
 Interest expense
 Miscellaneous cash costs

EQUALS Net Cash Farm Income (NCFI)

NCFI as reported here is for 1981. When the milk assessments are deducted from milk sales receipts, it is as if the milk assessment program existed in 1981. While costs and milk yields obviously changed in 1982 and surely will again in 1983, use of 1981 figures was deemed appropriate for several reasons. First, cash flow impacts are under study and they can be adequately demonstrated with 1981 data. Secondly, any attempt to incorporate 1983 conditions would involve forecasts, which would surely be debatable and may distract the reader's attention from the objective of this report. Finally, on balance the 1983 cost-revenue situation may not be substantially changed from 1981. In 1982, milk prices were down slightly over 1981 and most projections for 1983 call for extremely small reductions (pre-assessments). Production per cow and herd size will both be up modestly in 1982 and 1983. The small gains in milk sales revenue which these changes portend will be matched with a much slower rise in costs of production in 1982 and 1983 (feed costs may even be down in 1983) than in years previous. On balance then, the 1983 pre-assessment NCFI situation on New York farms might not have been substantially different than in 1981.

Net cash farm income does not tell the full cash flow story, however. In this report, the bottom line on a farm's cash flow position over the course of a year is given by the "cash available for family withdrawal" (CAFW). CAFW reflects the amount of cash available to pay the living expenses of farm owner-operators after debt payments (principal and interest) have been paid. Specifically, CAFW equals NCFI plus interest paid less planned annual principal and interest payments. CAFW is expressed on a per farm basis and a per operator basis in the following tables. Since many farms in the survey supported more

than one owner-operator (family), expressing CAFW on a per operator basis allowed this cash flow measure to be more appropriately compared to a single farm family's living expenses.

"Cash available for family withdrawal" (CAFW) has some unavoidable limitations as a cash flow measure. First, capital retention (savings) and cash payments for capital items (down payments) are ignored (assumed by necessity to be zero). Second, scheduled debt payments are farmers' intentions to repay long, intermediate, and short-term loans (in this case, in 1982) and as such are probably optimistic over-estimates. If intentions are not realized, the measures of available cash used here are biased downward. Finally, a small or negative CAFW does not mean a farm will be forced out of business. Drawing down savings, selling assets, restructuring debt, or earning off-farm income can all help forestall a cash shortfall in the farm business.

Three business and herd characteristics are considered in the cash flow analyses which follow. Table 1 presents the categories into which the 553 farms were divided for debt per cow (DPC), milk sold per cow (MSC), and herd size (HS). Three all-inclusive categories were defined for each characteristic. The average DPC among the 553 survey farms was \$2,212; the statewide average is likely somewhat lower but probably within the "medium" category. Milk sold per cow averaged 14,456 pounds annually in this sample compared to 12,163 pounds statewide in 1981 (N.Y. State Ag. and Markets, p.2). On this basis the average farm in New York State fell into the high end of the "low" MSC category. The average farm in the summary had 79 cows in 1981 while statewide the figure was 58 cows (N.Y. State Ag. and Markets, p.2), the extremely low end of the "medium" herd size category. Farmers wishing to place their own operation within the cash flow discussion to follow should identify which category their farm falls into for debt per cow, production level, and herd size.

TABLE 1. Farm Characteristic Classification Intervals Used in Categorizing 1981
New York Dairy Farm Business Summary Farms

<u>Debt per cow (DPC)</u>	<u>Range</u>	<u>Percent of farms</u>
Low (Lo):	0 - \$1499	34
Medium (M):	\$1500 - \$2999	36
High (H):	\$3000 and up	30.

<u>Milk sold per cow, annually (MSC)</u>	<u>Range</u>	<u>Percent of farms</u>
Low (Lo):	12,999 pounds or less	23
Medium (M):	13,000 - 14,999 pounds	39
High (H):	15,000 and up	38

<u>Herd size (HS)</u>	<u>Range</u>	<u>Percent of farms</u>
Small (S):	54 or fewer cows	38
Medium (M):	55 - 114 cows	45
Large (La):	115 and up	17

CASH POSITION PRIOR TO EITHER ASSESSMENTThe Effects of Business Organization and Operator Age

With a low debt per cow, milk sold per cow of 14,500 pounds, and a herd size of 162 cows, dairy farm corporations had the highest CAFW of any type of business organization (Table 2). Parent-child partnerships also had a favorable cash position on a per farm basis. Their debt advantage over the other partnership group likely derives from the higher equity base (parent) from which parent-child partnerships developed. The cash position of sole proprietors of different ages conforms to the conventional wisdom. Those operators under 35 years of age received only about one-third the cash of the oldest group. Debt per cow and herd size were the factors most responsible for this relationship; likely surprising to some, milk sold per cow was virtually identical in all three groups.

The Separate Effects of Debt per Cow, Milk Sold per Cow, and Herd Size

Cash available for family withdrawal fell precipitously as DPC rose (Table 3a). At a DPC of over \$3,000, CAFW was negative, signifying that the average farm in this high debt group had to dis-save or rely on off-farm income not only to meet family living expenses but also to fully meet scheduled debt payments. It is important to note that production level and herd size varied little across debt categories, dramatizing the pre-eminent role of debt in affecting cash flows.

As expected, cash flow was positively related to MSC (Table 3b). That debt is independent of MSC, is again apparent in this table. Of some interest is the negative relationship between MSC and herd size; the highest production levels occurred in the largest herds, a situation reconfirmed in Table 3c.

TABLE 2. Amount of Cash Available for Family Withdrawal Prior to Any Assessments, by Age of Primary Operator and Type of Business Organization

No. of Farms in Sample	Business Organization	Age of Primary Operator		Farm Characteristics Average Values			Cash Available for Family Withdrawal ^{a/}	
		Classification	Average	DPC (\$)	MSC (1000 lbs.)	HS (cows)	Per Farm	Per Operator
10	Corporation	All	49	\$1,821	14.5	162	\$53,355	25,407
71	Partnership	All	51	1,990	15.0	90	29,308	14,367
41	Parent-child ^{b/} Other							
108	Sole Proprietorship	Under 35 years	26	2,940	14.2	60	6,658	6,281
236		35 - 49	42	2,287	14.4	72	10,611	9,917
87		50 and over	55	1,462	14.3	79	17,269	16,447

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} "Cash available for family withdrawal" is net cash farm income + interest paid - scheduled debt payments (principal and interest).

^{b/} Defined as those partnerships for which age difference between the operators was 18 or more years.

TABLE 3. Amount of Cash Available for Family Withdrawal Prior to Any Assessments

(A) By Varying Debt Per Cow Levels

Debt/Cow Categories	No. of Farms in Sample	Farm Characteristics			Cash Available For Family Withdrawal ^{a/}	
		DPC (\$)	MSC (1000 lbs.)	HS (cows)	Per Farm	Per Operator
\$0 - \$1,499 (Lo)	186	841	14.8	79	\$34,540	25,698
\$1,500 - 2,999 (M)	202	2,226	14.4	84	13,789	10,966
\$3,000 and up (H)	165	3,872	14.3	72	-6,252	-4,960

(B) By Varying Production Per Cow Levels

Production/Cow Categories	No. of Farms in Sample	Farm Characteristics			Cash Available For Family Withdrawal ^{a/}	
		DPC (\$)	MSC (1000 lbs.)	HS (cows)	Per Farm	Per Operator
12,999# or less (Lo)	128	2,416	11.3	64	494	402
13,000 - 14,999# (M)	213	2,197	14.0	81	11,657	9,230
15,000# and up (H)	212	2,143	16.3	86	26,562	19,689

(C) By Varying Herd Sizes

Herd Size Categories	No. of Farms in Sample	Farm Characteristics			Cash Available For Family Withdrawal ^{a/}	
		DPC (\$)	MSC (1000 lbs.)	HS (cows)	Per Farm	Per Operator
54 or less cows (S)	212	2,282	13.8	42	7,621	6,568
55 - 114 cows (M)	248	2,255	14.6	75	16,315	12,261
115 or more cows (La)	93	2,110	14.8	173	27,049	18,497

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} "Cash available for family withdrawal" is net cash farm income + interest paid - scheduled debt payments (principal and interest).

The smallest spread in CAFW occurred among herd size categories (Table 3c). DPC was quite stable across herd sizes as suggested by Table 3a.

The Combined Effects of Debt per Cow, Milk Sold per Cow, and Herd Size

In Table 4 the three farm characteristics are examined together, each one at the three levels described in Table 1. This classification resulted in 27 separate groups of farms. To facilitate the use of this table by farmers and others, CAFW is shown along with its major components--NCFI, interest paid, and scheduled debt payment. This table is designed primarily for those readers desiring to examine the cash position of a farm with quite specific characteristics. It is sufficiently complex that general patterns across the characteristics under study are more easily detected in the preceding tables.

The first nine groups represent high debt under all possible combinations of MSC and herd size. Using scheduled debt payments for 1982, only one of these groups (no. 8) generated any cash for family withdrawal in 1981. Production levels had some effect on CAFW within these high DPC types, but it was not systematic. Seven groups among the second set of nine groups (10-18, representing medium debt loads) showed positive CAFW. The amount available was not particularly large, however, until high levels of MSC were reached. The final eight types ^{2/} all showed fairly high levels of CAFW per farm in 1981.

Before the cash flow impacts of the milk assessments are taken up, it is important to highlight what the analysis has revealed to this point.

1) Many dairy farmers in New York were not in strong cash flow positions in 1981. That 10 of the 26 groups examined, representing averages for 27% of the sampled farms, generated insufficient cash even to meet scheduled debt

^{2/} Farm type number 21 contained only one farm and so was omitted from the analysis to preserve confidentiality.

TABLE 4. Amount of Cash Available for Family Withdrawal for 27 Farm Types Prior to Any Assessments, Three-way Classification:
Debt per Cow by Milk Sold per Cow by Herd Size

Group No.	No. of Farms in Sample	Farm Characteristics						Cash Flow Analysis				
		Classifications			Average Values			Net Cash Farm Income ^{a/}	Interest Paid	Scheduled Debt Payments ^{b/}	Cash Available for Family Withdrawal ^{c/}	
		DPC	MSC	HS	DPC (\$)	MSC (1000 lbs.)	HS (milk cows)				(\$ per farm)	(\$ per operator)
1	22	H	Lo	S	4,189	11.2	40	9,037	14,721	32,169	-8,411	-7,646
2	12	H	Lo	M	4,206	11.2	72	23,586	20,298	48,539	-4,655	-3,879
3	7	H	Lo	La	3,333	11.8	177	9,884	54,438	110,071	-45,749	-35,192
4	23	H	M	S	3,968	14.0	40	12,960	12,469	32,167	-6,738	-5,615
5	32	H	M	M	3,691	14.0	74	23,319	24,831	56,269	-8,119	-6,245
6	7	H	M	La	3,950	14.2	141	47,908	51,952	105,494	-5,634	-3,521
7	23	H	H	S	4,204	16.0	44	21,721	15,302	38,651	-1,628	-1,480
8	32	H	H	M	3,896	16.3	75	39,749	24,178	56,105	7,822	6,017
9	7	H	H	La	3,765	16.2	176	50,270	66,505	149,549	-32,774	-20,484
10	31	M	Lo	S	2,262	11.0	41	13,394	8,817	19,868	2,343	2,343
11	13	M	Lo	M	2,298	11.4	73	18,764	15,091	34,056	-201	-134
12	5	M	Lo	La	2,272	12.4	145	39,349	31,740	76,082	-4,993	-4,993
13	25	M	M	S	2,219	14.0	43	19,434	8,922	21,081	7,275	7,275
14	41	M	M	M	2,250	13.9	75	30,722	17,450	42,115	6,057	5,048
15	15	M	M	La	2,319	14.0	175	72,812	40,240	84,147	28,905	16,058
16	18	M	H	S	2,255	16.6	46	26,854	10,093	19,950	16,997	13,075
17	34	M	H	M	2,261	16.3	77	47,350	16,200	38,750	24,800	19,077
18	20	M	H	La	2,128	16.1	187	83,966	40,801	88,425	36,342	25,959
19	23	Lo	Lo	S	616	10.9	42	18,908	2,425	8,982	17,351	8,822
20	14	Lo	Lo	M	853	11.1	76	28,587	7,262	15,898	19,951	14,251
21	d/	Lo	Lo	La								
22	21	Lo	M	S	808	14.2	42	26,686	3,404	10,499	19,591	17,810
23	33	Lo	M	M	885	14.2	76	46,254	7,023	20,788	32,489	24,992
24	16	Lo	M	La	996	14.2	169	77,300	18,966	59,382	36,884	30,737
25	26	Lo	H	S	454	16.9	41	33,108	1,920	6,679	28,349	23,624
26	37	Lo	H	M	747	16.5	74	56,040	6,089	16,972	45,157	32,255
27	15	Lo	H	La	953	16.3	175	123,219	17,225	49,562	90,882	53,460

SOURCE: 1981 New York Dairy Farm Business Summaries

Footnotes for TABLE 4:

- a/ "Net Cash Farm Income" is all receipts from sale of milk, cull cows, calves, extra crops, plus gas tax refund, government payments, machine work LESS costs of hired labor, purchased and grown feed, herd replacements, breeding, herd health, milk marketing, rent, real estate taxes, repairs, insurance, utilities (dairy share), and interest paid. From NCFI the following must be compensated: family and owner labor, management, equity. Out of this amount new dairy investments must be made as well.
- b/ "Scheduled Debt Payments" represent intentions to make principal and interest payments on farm debt in the year following the one for which cost and income figures are provided by survey participants.
- c/ "Cash available for family withdrawal" is net cash farm income + interest paid - scheduled debt payments (principal and interest).
- d/ There was only one (1) farm in this category. No data are reported for it to maintain confidentiality.

payments (for 1982) amply demonstrates this. Several of the remaining 16 farm types did not appear to generate sufficient cash from the farm business to meet debt payments and family living expenses. This will be examined more closely when the assessments are considered.

2) Of the three farm characteristics examined, debt load had the largest influence on the cash flow of a dairy farm business. Milk sold per cow was of secondary importance in this regard.

3) Herd size had a different effect on available cash depending on the farm's financial success. Larger herd size was associated with either greater financial success or greater cash stress. In general, among farm types 1 through 12, cash deficits grew as herd size grew. In contrast, among farm types 13 through 27 CAFW typically increased as cow numbers rose. This corroborates what is generally understood among farmers and students of farm management: increasing farm size requires especially skilled management.

CASH POSITION UNDER THE TWO ASSESSMENTS

In this section, the two milk assessments are deducted from CAFW in 1981. Several important assumptions and procedures employed to accomplish this should be noted at the outset.

1) The first 50 cent per hundredweight assessment was specified to be in effect for a full 12 months, a situation possible in calendar year 1983. The second 50 cent deduction was applied for the period April 1 through December 31, ^{3/} however, the cash flow impact would not be felt until May. As a result only eight monthly deductions would be made in 1981--the May through

^{3/} This is the period authorized for its collection in calendar year 1983. Phase two could continue from January 1, 1984 to September 30, 1985 provided government purchases of dairy products are expected to be at least 7.5 billion pounds (milk equivalent) in a marketing year.

December checks for April - November production. The average combined assessment in 1983 would be 83.3 cents per hundredweight under this program specification assuming a nonseasonal milk sales situation. ^{4/}

2) In computing the assessment under phase two, none of it was presumed to be refunded. While the legislation requires a refund of the second 50 cent deduction if a farmer reduces his production a specified amount from a base period, the proposed rules of the refund program appear to have been designed to minimize the amount refunded, that is, to discourage most farmers from choosing to meet the production cutback required for a refund. Moreover, any refunds would not be forthcoming until sometime after the end of the marketing year. In 1983 this means that no refund would likely be paid before December 1. By assuming no refunds in 1983, the cash flow-depressing impacts of the assessment have been maximized.

3) CAFW per operator in Tables 5-7 is compared for adequacy to a level of family living expenditures reported by 106 Minnesota farm families in 1981 (Voss). These families indicated they spent \$19,520 annually on the following living expense items: food and meals out, medical expenses and health insurance, church and welfare, gifts and special events, clothing and clothing materials, furnishings and home equipment, auto (personal share), household supplies, recreation, electric and phone (home shares), personal care, upkeep on house, education, taxes, and general home expenses. While this figure appears

^{4/} In these analyses the 83.3 cents was applied to total 1981 marketings of milk (equal monthly marketings assumed); no attempt was made to seasonally adjust annual production levels in accounting for the total dollar assessment under phase two. This procedure introduces a negligible downward bias in the amount of the assessment under phase two of the program since producer deliveries by New York dairymen for the period April 1 - November 30, 1981 represented 67.0 percent of annual deliveries (N.Y. State Ag. and Markets, p.11).

reasonable for a family of four (2.8 adult equivalents), it leaves some flexibility for a farm family in stressful financial times. It seems likely that many farm households could operate for one or more years on substantially less than \$19,520. In addition, off-farm family income is assumed to be zero. Despite the limitations of this estimated living expense threshold it is used here to indicate potential cash-flow shortages. The reader should keep its limitations in mind and will probably wish to establish his or her own living allowance in assessing any shortfalls in the CAFW per operator reported here.

The Effects of Business Organization and Operator Age

The first 50 cent deduction exacerbated what already seemed an inadequate cash flow for partnerships and sole proprietorships (Table 5). Those proprietors under age 50 found their cash position most seriously impaired. Upon the imposition of phase two, no group retained a CAFW per operator above the \$19,520 threshold.

The Separate Effect of Debt per Cow, Milk Sold per Cow, and Herd Size

As shown in Table 6a, farms in the medium and high debt per cow groups, relying only on farm income, had cash pressures prior to either assessment which were accentuated by the new program. The high debt group experienced serious cash flow problems which only dramatic steps might alleviate.

The situation was similar among the milk sold per cow categories (Table 6b). Farms in all but the high milk sold per cow group found themselves in cash flow situations almost as serious as those of the medium and high DPC groups.

The most interesting cash flow impact of the assessment program is shown in Table 6c. The absolute and percentage impact of the assessment was greater for large herds than for small herds. While the large farm group had a reasonably

TABLE 5. The Effect of the New Milk Assessments on Cash Available for Family Withdrawal by Age of Primary Operator and Type of Business Organization, Per Operator Basis

Business Organization	Age of Primary Operator		Cash Available for Family Withdrawal per Operator ^{a/}		
	Classification	Average	Before Assessment	50¢/cwt. ^{b/} Assessment	Both ^{c/} Assessments
Corporation	All	49	25,407	19,812	<u>16,085</u>
Partnership					
Parent-Child ^{d/}	All	51	<u>14,367</u>	<u>9,207</u>	<u>8,857</u>
Other	All	34	<u>9,503</u>	<u>5,078</u>	<u>2,132</u>
Sole Proprietorship ^{e/}	Under 35	26	6,281	2,263	-414
	35 - 49	42	<u>9,917</u>	<u>5,080</u>	<u>1,859</u>
	50 and over	55	<u>16,447</u>	<u>11,085</u>	<u>7,514</u>

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} Underlined figures are below the level needed for family expenses (\$19,520).

^{b/} Non-refundable 50¢/cwt. deduction is in effect for 12 months.

^{c/} Non-refundable 50¢/cwt. deduction is in effect for 12 months plus the refundable, additional 50¢/cwt. deduction is in effect from April 1 - December 31 (but reflected in milk checks from May - December 1981, for April - November milk sales). The average total annual deduction in this case is calculated to be 83.3 ¢/cwt.

^{d/} Defined as those partnerships for which age difference between the operators was 18 or more years.

^{e/} Multiple operators are allowed in sole proprietorships, e.g. husband-wife operations.

TABLE 6: The Effect of the New Milk Assessments on Cash Available for Family Withdrawal, Per Operator Basis

(A) By Varying Debt-Per Cow Levels

Debt/Cow Categories	Cash Available for Family Withdrawal per Operator ^{a/}		
	Before Assessment	50¢/cwt. ^{b/} Assessment	Both ^{c/} Assessments
\$0 - \$1,499 (Lo)	\$25,698	21,424	18,496
\$1,500 - 2,999 (M)	10,966	6,130	2,960
\$3,000 and up (H)	<u>-4,960</u>	<u>-9,039</u>	<u>-11,730</u>

(B) By Varying Milk Sold Per Cow

Production/Cow Categories	Cash Available for Family Withdrawal per Operator ^{a/}		
	Before Assessment	50¢/cwt. ^{b/} Assessment	Both ^{c/} Assessments
12,999# or less (Lo)	\$402	-2,537	-4,480
13,000 - 14,999# (M)	9,230	4,759	1,790
15,000# and up (H)	19,689	<u>14,472</u>	<u>11,046</u>

(C) By Varying Herd Sizes

Herd Size Categories	Cash Available for Family Withdrawal per Operator ^{a/}		
	Before Assessment	50¢/cwt. ^{b/} Assessment	Both ^{c/} Assessments
54 or less cows (S)	6,568	4,074	2,426
55 - 114 cows (M)	12,261	8,159	5,444
115 or more cows (La)	<u>18,497</u>	<u>9,770</u>	<u>3,985</u>

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} Underlined figures are below the level needed for family expenses (\$19,520).^{b/} Non-refundable 50¢/cwt. deduction is in effect for 12 months.^{c/} Non-refundable 50¢/cwt. deduction is in effect for 12 months plus the refundable, additional 50¢/cwt. deduction is in effect from April 1 - December 31 (but reflected in milk checks from May - December 1981, for April - November milk sales). The average total annual deduction in this case is calculated to be 83.3¢/cwt..

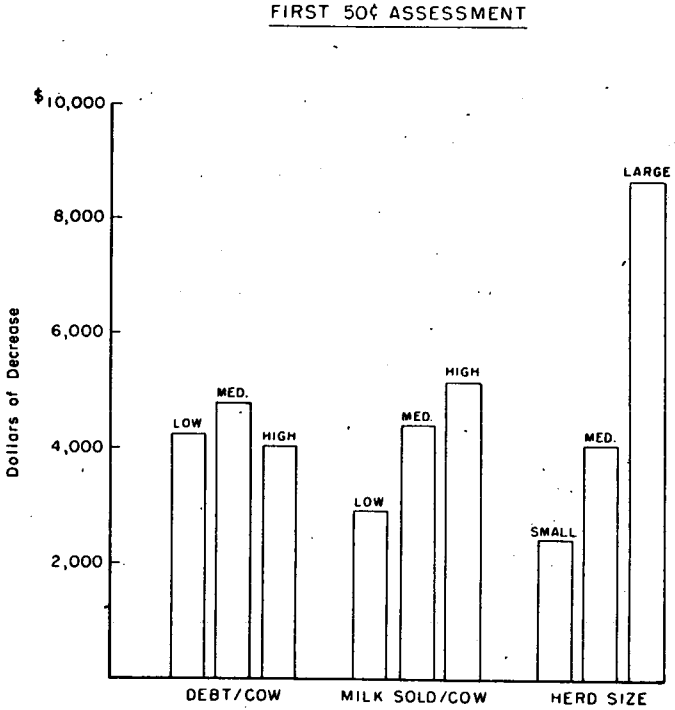
comfortable CAFW of \$18,497 per operator before any assessment, their cash position deteriorated by nearly 50 percent under the first deduction and by nearly 78 percent with both deductions. These percentages were 38 and 63, respectively, for the small farm group. Whether the assessment program is more likely to force larger or smaller farms out of business cannot be determined from these data. For equal per hundredweight cash shortfalls, however, larger farms will be at a disadvantage relative to smaller herds in using off-farm income or the drawing down of savings to alleviate cash deficits.

The absolute dollar impact of the assessment program on CAFW per operator can be clearly shown in bar graphs. In Figure 1, the decrease in CAFW per operator from the initial assessment is shown for the three debt per cow groups, the three milk sold per cow groups, and the three herd sizes. The cash lost to the assessment varies little by debt per cow, increases modestly (as expected) over the three sales per cow groups, and as noted previously, increases considerably with larger herd sizes. Figure 2 displays the same relationships under both assessments.

The Combined Effects of Debt per Cow, Milk Sold per Cow, and Herd Size

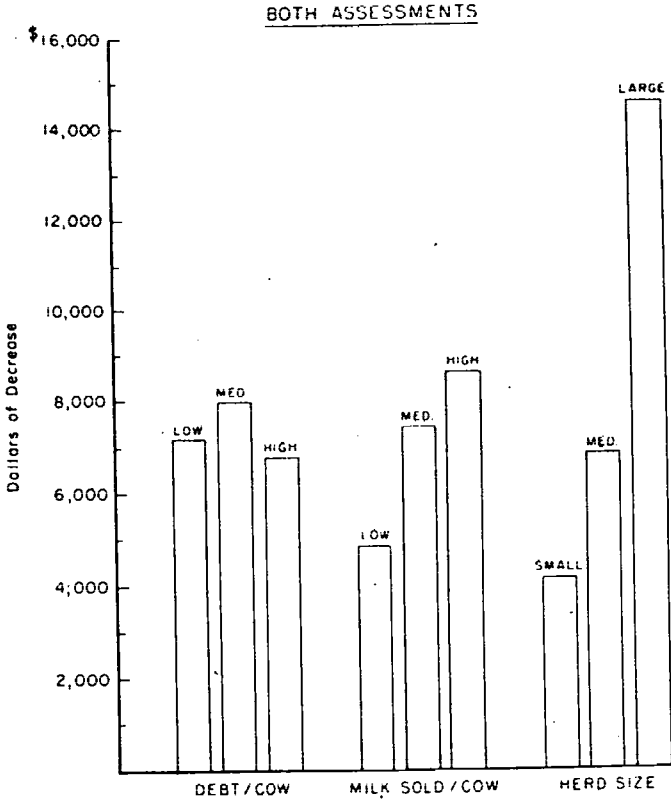
Before any assessments were deducted, only six groups generated sufficient CAFW per operator to meet the chosen living expense threshold without off-farm income (numbers 18, 23, 24, 25, 26, and 27), although five others were not too far below it (numbers 15, 16, 17, 20, and 22) (Table 7). Upon imposition of the first 50-cent deduction only five groups remained above the threshold level with three others close to it. With both assessments in place only two groups of farms had CAFW per operator which exceeded the threshold level while four others came fairly near it. As another measure of the cash flow stress these farms could experience under both assessments, consider that 13 of the 26 groups had a

FIGURE 1. DECREASE IN CASH AVAILABLE FOR FAMILY WITHDRAWAL PER OPERATOR AS A RESULT OF THE FIRST 50¢ ASSESSMENT, FOR 3 FARM CHARACTERISTICS



Source: Calculated from data in Table 6

FIGURE 2. DECREASE IN CASH AVAILABLE FOR FAMILY WITHDRAWAL PER OPERATOR AS A RESULT OF BOTH ASSESSMENTS, FOR 3 FARM CHARACTERISTICS



Source: Calculated from data in Table 6.

TABLE 7. The Effect of the New Milk Assessments on Cash Available for Family Withdrawal, for 27 Farm Types, Three-way Classification: Debt per Cow by Milk Sold per Cow by Herd Size, Per Operator Basis

Farm Type No.	Farm Characteristics			Cash Available for Family Withdrawal per Operator ^{a/}		
	DPC (\$)	MSC (1000 lbs.)	HS (cows)	Before Assessment	50¢/cwt. Assessment ^{b/}	Both Assessments ^{c/}
1	4,189	11.2	40	<u>-7,646</u>	<u>-9,767</u>	<u>-11,031</u>
2	4,206	11.2	72	<u>-3,879</u>	<u>-7,432</u>	<u>-9,513</u>
3	3,333	11.8	177	<u>-35,192</u>	<u>-43,573</u>	<u>-48,597</u>
4	3,968	14.0	40	<u>-5,615</u>	<u>-7,823</u>	<u>-9,512</u>
5	3,691	14.0	74	<u>-6,245</u>	<u>-10,150</u>	<u>-12,880</u>
6	3,950	14.2	141	<u>-3,521</u>	<u>-9,962</u>	<u>-13,940</u>
7	4,204	16.0	44	<u>-1,480</u>	<u>-4,551</u>	<u>-6,804</u>
8	3,896	16.3	75	<u>6,017</u>	<u>1,269</u>	<u>-1,828</u>
9	3,765	16.2	176	<u>-20,484</u>	<u>-29,945</u>	<u>-35,311</u>
10	2,262	11.0	41	<u>2,343</u>	95	<u>-1,562</u>
11	2,298	11.4	73	<u>-134</u>	<u>-2,986</u>	<u>-4,753</u>
12	2,272	12.4	145	<u>-4,993</u>	<u>-14,006</u>	<u>-20,856</u>
13	2,219	14.0	43	<u>7,275</u>	<u>4,270</u>	<u>1,987</u>
14	2,250	13.9	75	<u>5,048</u>	<u>677</u>	<u>-2,215</u>
15	2,319	14.0	175	<u>16,058</u>	<u>9,271</u>	<u>4,750</u>
16	2,255	16.6	46	<u>13,075</u>	<u>9,907</u>	<u>8,179</u>
17	2,261	16.3	77	<u>19,077</u>	<u>14,023</u>	<u>11,017</u>
18	2,128	16.1	187	<u>25,959</u>	<u>15,769</u>	<u>8,045</u>
19	616	10.9	42	<u>8,822</u>	<u>7,036</u>	<u>6,097</u>
20	853	11.1	76	<u>14,251</u>	<u>10,992</u>	<u>9,215</u>
21	^{d/}					
22	808	14.2	42	<u>17,810</u>	<u>15,091</u>	<u>13,281</u>
23	885	14.2	76	<u>24,992</u>	<u>20,379</u>	<u>18,091</u>
24	996	14.2	169	<u>30,737</u>	<u>20,905</u>	<u>14,067</u>
25	454	16.9	41	23,624	20,904	18,802
26	747	16.5	74	32,255	27,316	23,039
27	953	16.3	175	53,460	44,310	39,519

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} Underlined figures are below the level needed for family expenses (\$19,520).

^{b/} Non-refundable 50¢/cwt. deduction is in effect for 12 months.

^{c/} Non-refundable 50¢/cwt. deduction is in effect for 12 months plus the refundable, additional 50¢/cwt. deduction is in effect from April 1 - December 31 (but reflected in milk checks from May - December 1981, for April - November milk sales). The average total annual deduction in this case is calculated to be 83.3¢/cwt..

^{d/} There was only one (1) farm in this category. No data are reported to maintain confidentiality.

negative CAFW--implying that some debt restructuring may be needed. Six other farm types had CAFW per operator under \$10,000 after both assessments were considered. With respect to herd size, observe that for reasons elaborated previously, it was the largest herds which either weathered the assessments the best or experienced the greatest cash shortfalls.

CONCLUSIONS

The analyses conducted on the two phase milk price assessment program portend potentially severe cash flow shortages for many New York dairy farms. Only six of the 26 groups, representing averages for 27 percent of the sampled farms, had a sufficiently high CAFW in 1981 to meet estimated family living expenses. This percentage dropped to 23 percent under the first 50 cent assessment and to 9 percent under both assessments. This must be put in perspective, however. That a high rate of exit from dairy farming in New York has not been observed in the past two years suggests that substantial cash shortages (as reported by surveyed farms in 1981) have been absorbed in ways not revealed by this set of data. It is likely some farms will again find ways to meet the additional cash deficits imposed by the price deductions. Clearly though, not all farms in this situation have the ability remaining to do this, even with debt restructuring and the securing of scarce off-farm employment. Some will be forced out of business but not likely nearly as many as these pessimistic numbers suggest.

The analyses performed here lead to some other important conclusions. Debt per cow is the most crucial factor affecting which farms will be hardest hit by the program. An operator's age and his production per cow also are related to his cash position but not as strongly as debt. As herd size increases, farm profits are magnified but so are losses. The price deduction program may have

the potential to affect large farms' cash position more adversely than small farms, but the structural effects of this program cannot be predicted from these data.

Although not considered here, it is important to note that the second phase of the assessment program may offer some New York farmers an incentive (in the form of additional available cash) to reduce their production by culling when compared to the "no change" or "add cows" options. This incentive could exist for some dairymen despite the rather rigid requirements proposed by the U.S. Department of Agriculture for refund qualification. The best production level for a farmer after April 1, 1983 will need to be evaluated on an individual basis, but some guidelines can be offered. To this end, the authors have made plans for a study to assess the extent to which there is an incentive to cut back production under phase two of the assessment plan.

REFERENCES

- Boynton, Robert D. and Andrew M. Novaković, "A Look at the New Milk Price Support Program", Hoard's Dairyman, Vol. 127, No. 20, October 25, 1982, pp. 1325 and 1363.
- New York State Department of Agriculture and Markets, New York State Dairy Statistics, 1981 Annual Summary, Albany, N.Y.
- Smith, Stuart F., Dairy Farm Management Business Summary, New York 1981, A.E. Res. 82-24, Department of Agricultural Economics, Cornell University, September, 1982.
- Voss, Elwyn G., "Looking Ahead: Family Income - How Much is Enough?", Northeast Improver (324), November 1982, pp. 14-15.

APPENDIX

THE IMPACT ON ANNUAL CASH POSITIONS OF THE
ASSESSMENT IMPOSED ON APRIL 16, 1983

On March 16, 1983, U.S. Secretary of Agriculture John R. Block announced his Department's intention to begin one month hence the collection of a non-refundable 50¢ per hundredweight assessment on all milk marketed in the United States. This represents the U.S. Department of Agriculture's second attempt to implement the collection plan authorized by Congress late last summer; the first attempt, scheduled to begin on December 1, 1982, was blocked by a court order. Subsequently, the U.S. Department of Agriculture redressed the violations of the Administrative Procedures Act identified in that court case. Furthermore, at this writing it appears that the other legal challenges to the assessment have failed. Consequently, the likelihood of a non-refundable 50¢ per hundredweight deduction on all milk marketed beginning April 16, 1983 appears high. In this Appendix the cash flow impacts of this assessment are examined, again using data from the 1981 New York Dairy Farm Business Summaries.

In this analysis the April 16, 1983 assessment is assumed to remain in effect throughout the balance of the calendar year (eight-and-a-half months). As they affect annual cash flow, however, the deductions apply for only seven-and-a-half months (on marketings from April 16 to November 30) since handler payments to farmers are lagged one month. The imposition of a second 50¢ per hundredweight assessment (this one, refundable) is not analyzed here, as the likelihood of its implementation seems remote at this writing. Under these assumptions, the average annual assessment is 31.4¢ per hundredweight on all milk produced in the calendar year. The impact of this assessment on "Cash Available for Family Withdrawal" (CAFW) per operator is shown in REVISED versions of Tables 5, 6, and 7. Recall that CAFW is net cash farm income plus interest paid minus scheduled debt payments (principal and interest). For comparison to the CAFW per operator, \$19,520 is again used as an estimate of the 1981 living expenses of a farm family of four (2.8 adult equivalents).

Revised Tables 5, 6, and 7 should be interpreted exactly as their original versions. Reductions in CAFW per operator are, of course, more modest in the present case than under the two assessment scenarios examined in the original version of this publication. Nonetheless, the impact on New York farmers' cash positions is significant. To put the impact of this program in perspective two observations should be made. First, observe that only two farm categories or types in the three tables (the high "milk sold per cow" group in Revised Table 6B and farm type No. 18 in Revised Table 7) which prior to any assessments generated sufficient cash to meet the threshold level of family living expenses, would fail to do so after imposition of the April 16, 1983 deduction. Second, while resulting in reduced total deductions compared to the full year 50c per hundredweight scenario analyzed in the original publication, the April 16, 1983 deduction scenario would yield the identical set of farm categories or types with available cash below the threshold level of family living expenses.

These results should be interpreted with the same cautions noted in the original publication. CAFW per operator includes only on-farm income and assumes scheduled debt payments are met. In all likelihood, many New York dairy farmers whose cash flow is seriously impaired by this most recent deduction program will find ways to remain in business. These results, as those in the original publication, cannot be used to directly predict the number of dairy farmers who might be forced out of business by the assessment program.

TABLE 5 REVISED. The Effect of the April 16, 1983 Assessment on Cash Available for Family Withdrawal by Age of Primary Operator and Type of Business Organization, Per Operator Basis

Business Organization ^{a/}	Age of Primary Operator		Cash Available for Family Withdrawal per Operator ^{a/}	
	Classification	Average	Before Assessment	50¢/cwt. ^{b/} Assessment begun 4/16/83
Corporation	All	49	25,407	21,893
Partnership				
Parent-Child ^{c/}	All	51	<u>14,367</u>	<u>12,290</u>
Other	All	34	<u>9,503</u>	<u>6,724</u>
Sole Proprietorship ^{d/}				
	Under 35	26	<u>6,281</u>	<u>3,757</u>
	35 - 49	42	<u>9,917</u>	<u>6,880</u>
	50 and over	55	<u>16,447</u>	<u>13,080</u>

SOURCE: 1981 New York Dairy Farm Business Summaries

- ^{a/} Underlined figures are below the level needed for family expenses (\$19,520).
- ^{b/} Non-refundable 50¢/cwt. deduction is in effect for 8½ months (mid-April - Dec. 31), but is reflected in milk checks for 7½ months (mid-May - Dec.). The average annual deduction is calculated to be 31.4¢/cwt.
- ^{c/} Defined as those partnerships for which age difference between the operators was 18 or more years.
- ^{d/} Multiple operators are allowed in sole proprietorships, e.g. husband-wife operations.

TABLE 6. REVISED. The Effect of the April 16, 1983 Assessment on Cash Available for Family Withdrawal, Per Operator Basis

(A) By Varying Debt Per Cow Levels

Debt/Cow Categories	Cash Available for Family Withdrawal per Operator ^{a/}	
	Before Assessment	50c/cwt. ^{b/} Assessment begun 4/16/83
\$0 - \$1,499 (Lo)	\$25,698	22,965
\$1,500 - 2,999 (M)	10,966	7,943
\$3,000 and up (H)	<u>-4,960</u>	<u>-7,520</u>

(B) By Varying Milk Sold Per Cow

Milk Sold/Cow Categories	Cash Available for Family Withdrawal per Operator ^{a/}	
	Before Assessment	50c/cwt. ^{b/} Assessment begun 4/16/83
12,999# or less (Lo)	\$402	-1,443
13,000 - 14,999# (M)	9,230	6,409
15,000# and up (H)	19,689	<u>16,421</u>

(C) By Varying Herd Sizes

Herd Size Categories	Cash Available for Family Withdrawal per Operator ^{a/}	
	Before Assessment	50c/cwt. ^{b/} Assessment begun 4/16/83
54 or less cows (S)	6,568	5,000
55 - 114 cows (M)	<u>12,261</u>	<u>9,681</u>
115 or more cows (La)	<u>18,497</u>	<u>12,998</u>

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} Underlined figures are below the level needed for family expenses (\$19,520).

^{b/} Non-refundable 50c/cwt. deduction is in effect for 8½ months (mid-April - Dec 31), but is reflected in milk checks for 7½ months (mid-May - Dec.). The average annual deduction is calculated to be 31.4¢/cwt.

TABLE 7 REVISED. The Effect of the April 16, 1983 Assessment on Cash Available for Family Withdrawal, for 27 Farm Types, Three-way Classification: Debt per Cow by Milk Sold per Cow by Herd Size, Per Operator Basis

Farm Type No.	Farm Characteristics			Cash Available for Family Withdrawal per Operator ^{a/}	
	DPC (\$)	MSC (1000 lbs.)	HS (cows)	Before Assessment	50c/cwt. b/ Assessment begun 4/16/83
1	4,189	11.2	40	-7,646	-8,933
2	4,206	11.2	72	-3,879	-6,047
3	3,333	11.8	177	-35,192	-40,284
4	3,968	14.0	40	-5,615	-7,060
5	3,691	14.0	74	-6,245	-8,727
6	3,950	14.2	141	-3,521	-7,524
7	4,204	16.0	44	-1,480	-3,433
8	3,896	16.3	75	6,017	3,148
9	3,765	16.2	176	-20,484	-26,180
10	2,262	11.0	41	2,343	974
11	2,298	11.4	73	-134	-1,923
12	2,272	12.4	145	-4,993	-10,653
13	2,219	14.0	43	7,275	5,388
14	2,250	13.9	75	5,048	2,355
15	2,319	14.0	175	16,058	11,795
16	2,255	16.6	46	13,075	11,271
17	2,261	16.3	77	19,077	16,085
18	2,128	16.1	187	25,959	18,956
19	616	10.9	42	8,822	7,816
20	853	11.1	76	14,251	12,392
21 ^{c/}					
22	808	14.2	42	17,810	16,103
23	885	14.2	76	24,992	22,450
24	996	14.2	169	30,737	24,401
25	454	16.9	41	23,624	21,791
26	747	16.5	74	32,255	29,579
27	953	16.3	175	53,460	48,296

SOURCE: 1981 New York Dairy Farm Business Summaries

^{a/} Underlined figures are below the level needed for family expenses (\$19,520).

^{b/} Non-refundable 50c/cwt. deduction is in effect for 8½ months (mid-April - Dec. 31), but is reflected in milk checks for 7½ months (mid-May - Dec.). The average annual deduction is calculated to be 31.4c/cwt.

^{c/} There was only one (1) farm in this category. No data are reported to maintain confidentiality.

**IMPLICATIONS OF REDUCED
MILK PRICES ON THE
NORTHEAST DAIRY INDUSTRY**



Edited by

M. C. Hallberg and R. L. Christensen

**Department of Agricultural Economics and Rural Sociology
Agricultural Experiment Station
The Pennsylvania State University
University Park, Pennsylvania 16802**

Northeast Regional Research Publication

Technical Committee of Northeastern Regional Research Project
NE-126, An Analysis of the Spatial Organization of the Northeast
Dairy Industry.

Administrative Advisor

West Virginia

A. L. Barr

Technical Committee Members

Connecticut (Storrs)
Delaware
Maine
New Jersey
New York (Cornell)
Ohio
Pennsylvania
Vermont

Donald Stitts
Joachim Elterich
Homer Metzger
Michael Moorehart
Andrew Novakovic
David Hahn
Blair Smith
Lynn Fife

Economic Research Service
Cooperative Research, Science, and
Education Administration

Lynn Sleight
Roland Robinson

This study was supported in part by funds from the Cooperative State Research Service, U.S. Department of Agriculture, Regional Research Project Number NE-126, and by appropriations from the Pennsylvania Legislature and the United States Congress. Authorized for publication May 16, 1983. The views expressed in this report are those of the respective authors, and do not necessarily conform with those of all members of NE-126.

Preface

The United States dairy industry is currently suffering from the pains of severe disequilibrium. For reasons discussed in this report, milk production is outpacing milk demand and the consequent federal burden is politically unacceptable. To right the situation in a reasonable period of time will neither be easy nor pain-free. Whatever option is chosen will most likely make dairy farming less financially attractive to the nation's dairy farmers. It may spell trouble for some of the nation's dairy processing firms as well. Some of these farmers and processing firms will simply "tighten their belts". Some will "grin and bear it". Others may be forced to seriously consider alternative occupations or enterprises.

The research reported here was motivated by an interest in isolating and more thoroughly understanding the nature of the adjustment problems the Northeast dairy industry may be expected to face as new policy options are adopted. Hopefully this research will contribute to a better understanding of the problems and issues, also lead to more informed policy choices and to additional educational and research efforts designed to help ameliorate or assist with the adjustment problems.

The study team for this effort consisted of the authors of the individual Chapters of this report as well as Olan D. Forker, Cornell University, and Richard F. Fallert, ERS/USDA. The team is indebted to G. Joachim Eiterich, University of Delaware, Lynn G. Sleight, ERS/USDA, and Blair J. Smith, The Pennsylvania State University for their contribution in reviewing the entire manuscript.

TABLE OF CONTENTS

I. . PROBLEM SETTING FOR THE NORTHEAST DAIRY INDUSTRY	1
R. L. Christensen, University of Massachusetts	
M. C. Hallberg, Pennsylvania State University	
Current Setting in the Northeast	2
Prospects for Supply Reduction	4
Dairy Farm Adjustments	5
Dairy Processing Adjustments	6
Overview of Report	7
II. . POLICY CHOICES	9
M. C. Hallberg, Pennsylvania State University	
R. L. Christensen, University of Massachusetts	
Policy Objectives	9
Demand Expansion Options	10
Supply Reduction Options	11
Adjusting Resources Out of Dairy	14
Supply Control	15
Policies to be Considered	18
III. . INTERREGIONAL COMPETITION AND DAIRY FARM ADJUSTMENTS	20
B. F. Stanton, Cornell University	
Changes in Numbers of Cows and Herd Sizes in Selected States	21
Changes in Herd Sizes by Counties	26
Costs of Production by Region	28
Future Changes in Cow Numbers	31
IV. . FUTURE PRICE/COST EFFECTS ON FAMILY LIVING INCOME IN DAIRY	32
W. Grisley, Pennsylvania State University	
G. Frick, University of New Hampshire	
G. B. Cilley, University of New Hampshire	
Methodology and Assumptions	33
Results	35
Costs of Production	45
Debt Retirement and Cash Operating Expenses	48
Concluding Remarks	48

V.	OPPORTUNITIES FOR RESOURCE ADJUSTMENT IN NORTHEAST DAIRY PRODUCTION	54
	John W. Malone, Jr., Pennsylvania State University	
	Resource Adjustment Internal to the Dairy Enterprise	55
	Shifting Resources Totally from Dairy Farming to Other Farm Enterprises	59
	Transfer of Resources from Dairy to Non-Agricultural Employment	61
	Implications	68
VI.	IMPACT OF REDUCED MILK SUPPLIES ON DAIRY PROCESSING AND SERVICE INDUSTRIES	70
	David E. Hahn, Ohio State University	
	Andrew Novakovic, Cornell University	
	James Pratt, Cornell University	
	Feed Industry	70
	Fluid Milk Processing Industry	72
	Manufacturing Milk Industry	72
	Plant Costs	75
	Plant Ownership	82
	Retailers	82
	Conclusions	83
VII.	SUMMARY AND IMPLICATIONS	84
	F. C. Webster, University of Vermont	
	Choosing Policies	86
	Interregional Competition in Dairy	88
	Impact of Lower Milk Prices on Dairy Farms	90
	Current Policy	90
	TECHNICAL APPENDIX	92

CHAPTER I

PROBLEM SETTING FOR THE
NORTHEAST DAIRY INDUSTRY

R. L. Christensen and M. C. Hallberg*

Milk marketing in the United States is highly complex involving regulations and policies at both federal and state levels. At the turn of the century milk markets were primarily local with virtually no federal regulation or price intervention. Beginning in the 1930s, state and federal governments began to play an increasing role in the marketing of milk and dairy products. State governments have been concerned with public health issues and, in some cases, with price regulation. The federal government has become actively involved in milk marketing through price support programs, the Federal Milk Marketing Order program, and food distribution programs.

By the 1950s milk marketing could be characterized as being regional in nature with physical and regulatory factors inhibiting interregional flows. Today, however, a national market exists with relatively free movement of milk among regions facilitated by developments in transportation, processing, and refrigeration technology. While a national market exists, a key aspect of milk marketing is the Federal Milk Marketing Order. In 1981 there were 47 Federal Milk Marketing Orders encompassing two-thirds of all milk produced in the United States and more than 80 percent of the milk eligible for fluid use. Within each of these Orders, minimum producer prices are set for milk used in fluid products and for milk used in manufacturing.

Minimum class prices in each Order are established on the basis of a specified relation to the price of manufacturing grade milk in Minnesota and Wisconsin. The lower limit of the price of manufacturing grade milk in Minnesota and Wisconsin is effectively determined by the support price. The price of class I milk (milk used for fluid purposes) is higher than is the price of milk used in manufacturing by a fixed differential in each of the Federal Order Markets. In general, these differentials increase with distance from the Minnesota-Wisconsin base point. Thus, the lower limits of prices for fluid grade milk are also effectively determined by the support price for manufacturing grade milk. Prices under the

*Professors of Agricultural Economics at the University of Massachusetts and The Pennsylvania State University, respectively.

Federal Milk Marketing Order program are thus coordinated through the national supply-demand situation and the price support level.

The dairy price support program and the related Federal Milk Marketing Order program could yield a structure of milk prices which would encourage producers to produce exactly that amount of milk consumers (and the government) are willing to buy. A little reflection, however, points to the unlikelihood of this event. The best that can be hoped for is that prices are set so that milk production and milk demand do not get "too far" out-of-line. Over most of the course of the last three decades, this has been the case. The past couple of years, however, represent a glaring exception.

Milk production in the United States has varied considerably since 1965, but is currently at an all-time high. As Figure 1 reveals, the number of milk cows has declined by about 30 percent during this period; but the 45 percent increase in production per cow has more than offset the decline in cow numbers.

Population in the United States has increased by 51 percent between 1950 and 1981. Per capita consumption of dairy products, however, has fallen by 30 percent. The net effect on consumption for the period is an increase of only 10 percent --- significantly short of the 13 percent increase in total milk production occurring over the same period. Substantial declines in per capita consumption have occurred for on-farm consumption of milk, and for total consumption of beverage milk, evaporated and condensed milk, and butter. Strong competition for dairy products has come from vegetable oil products. A trend away from consumption of high-fat products is evident.

The consequences of these trends can be seen in Figure 2. Government purchases of dairy products under the price support program have increased to levels that are not only unprecedented, but also socially and politically intolerable under current economic conditions.

Current Setting in the Northeast

Sales of milk and of dairy products rank second among major sources of farm cash receipts in the United States. The value of cash receipts from dairy products in 1981 amounted to \$18.1 billion, with additional income derived from the sale of cull cows and calves. Among the ten leading states in sales of dairy products are two Northeastern states --- New York (third) and Pennsylvania (fifth).

Milk Production, Number of Cows, and Milk per Cow

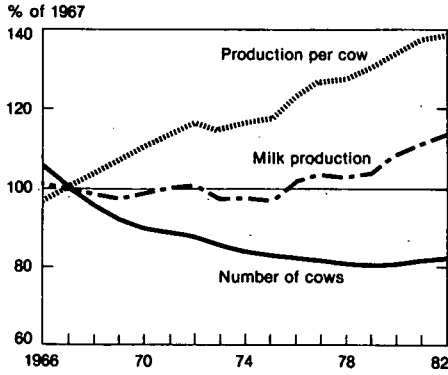


Figure 1

Milk Supply, Use and Stocks

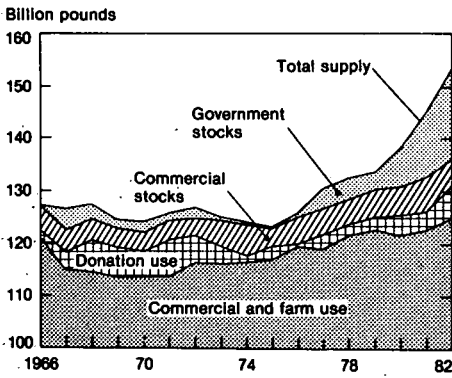


Figure 2

Changes in milk production since 1950 show substantial differences by region. Milk production in the Pacific region doubled from 1950 to 1980. The Mountain States increased production by 50 percent and production in the Lake States increased by 31 percent. More moderate increases were noted in the Northeast (23.4 percent) and in the Southeast (18.6 percent). Decreases occurred in the other five regions with the greatest decreases in the Cornbelt (28.4 percent) and the Delta States (27.4 percent).

In the Northeast region, milk production during 1950-54 averaged 22.6 billion pounds annually. By 1981 production had risen to 27.2 billion pounds --- a 20 percent increase over the 1950-54 period. Seven of the 12 states in the region have exhibited substantial declines in milk production since the 1950s. However, production in the remaining five states has increased. By 1981, two states --- New York and Pennsylvania --- produced 73.8 percent of the total production for the region. When Maryland and Vermont are added, 88 percent of regional production is accounted for by four states.

From the foregoing statistics it is apparent that production has grown more rapidly in the Northeast than nationally over the past 30 years. Over the same period population in the Northeast has grown slower than for the nation as a whole (26.6 percent in the Northeast versus 45.8 percent for the nation). However, population in the Northeast region grew only 1.1 percent during the decade of 1970 to 1980 while milk production within the region increased by 10.4 percent.

Milk cows on farms (and number of dairy farms) within the Northeast region declined steadily from 1960 through 1980, although the rate of decline has decreased (a slight increase in cow numbers is shown for 1981). From 1960 to 1980, the number of milk cows on farms decreased from 3 million to 2 million head. Offsetting this decline in cow numbers was an increase in productivity. Production per cow in 1960 nationally was 7,000 pounds and by 1980 had risen to 11,889 --- a 70 percent increase. In the Northeast production per cow had risen to 12,284 pounds in 1981.

Prospects for Supply Reduction

One option for bringing milk supply more in line with demand is to implement some form of supply control for the dairy industry. The above evidence relating to productivity illustrates one of the dilemmas confronting supply control in the dairy industry. Reductions in the cow herd do not necessarily result in decreased output. Cows culled from the herd tend to be those which are low producers. A reduced herd size with cows of high genetic production potential may result in the same or higher production due to the reallocation of feed and other resources to the remaining cows possessing higher production capabilities.

Another problem is related to the interactions between marginal productivity, feed prices, and milk prices as they influence production. Conventionally it is assumed that the rational decision maker will adjust input use and, therefore, output with changes in either input or product prices. Thus, given stable product prices and production functions, a decrease in input prices will result in increased input use and a consequent increase in production. Similarly if input prices are constant and the product price decreases, a decrease in production would be expected. Obviously, the actual situation is more complicated because other factors also influence production adjustments. But, the three variables mentioned above contribute significantly to the problem since all three have been dynamic. Production functions have been shifting upward with improvements in the genetic pool of dairy animals. Exacerbating the situation has been recent relative reductions in the cost of feed grains. Milk prices have steadily increased due to institutionally determined price support mechanisms. The latter have been notably deficient in recognizing (1) the response of milk supply to changes in input costs or product prices, and (2) changes in consumer demand.

Dairy Farm Adjustments

The production sector of the dairy industry is comprised of individual farm units. Output decisions are made on these farm units by the farmer-decision-maker. In making production decisions a large number of variables specific to the individual farm situation are involved. While it is indisputable that several goals are involved, it is equally indisputable that net income from farming (including growth in net worth) ranks very high among them. Logically, farmers facing increases in costs and inflationary erosion of purchasing power will respond to exogenous factors by making adjustments that will maintain or increase real net incomes. For many farmers constrained by land, capital and other factors, and with access to non-farm alternatives, the adjustment has been to cease farming.

It should be emphasized that adjustments to non-farm alternatives depend greatly upon employment and growth in the national and regional economies. During recessionary periods these adjustments are inhibited, and when made are often painful. The dramatic decrease in the number of dairy farms nationally and in the Northeast region does not, however, mean that the resources used go out of dairying. At the same time that the number of dairy farms has decreased, the size of dairy farms (in acres and cow numbers) has increased. Expansion in the size of the remaining units has been in response to the income needs previously mentioned, along with the development of technology that has permitted such expansion with little additional labor required.

In the Northeast, for example, productivity per hour on dairy farms increased by a factor of nearly 10 from 1950 to 1980. In simple terms this means that if one man-year of labor produced 50,000 pounds of milk in 1950, the same labor input in 1980 produced 500,000 pounds of milk. This same phenomenon has also had the effect of changing the relative proportion of cost factors on the farm.

Capital costs and, in particular, debt service now claims a higher proportion of farm income than was the case even a decade ago. A 1980 survey of 119 young Wisconsin beginning dairy farmers found debt to constitute 57 percent of total assets.¹ By conventional debt-equity standards this does not appear to be a long term problem. However, it was estimated that for every one-dollar in sales within the year, these farmers paid \$0.53 for debt service. Since nearly 90 percent of this debt is intermediate and long term, there is continuing economic pressure to increase output (and income) per unit of fixed resource. It is, in fact, the only way these farms will be able to survive. At the same time it is indicative of the critical nature of the current situation. The potential exists for economic disaster for a number of dairy farmers, particularly those with heavy debt loads. Of course, the situation for this group of Wisconsin farmers should not be construed as being representative of all dairy farms. But the fact remains that the pressures to maintain disposable incomes at recent levels affect all dairy farm situations.

Dairy Processing Adjustments

Milk processing firms too can be expected to make adjustments in response to changes in the price they must pay for milk. These firms can be expected to be impacted most severely, however, by changes in the number and/or location of dairy farms.

If a number of dairy farms in a given area cease producing milk, the processor in that area may find that he must incur added assembly costs to obtain the same volume of milk, or operate at a reduced volume. Added assembly costs may put the firm under severe financial stress. But operating at a reduced volume may also cause financial stress.

In most processing facilities, economies to scale are substantial so that as processing volume falls, per unit processing costs rise. Some fluid milk processing plants are probably already large enough so that a small reduction in volume will not materially affect

¹ Philip E. Harris and William E. Saupe. "Debt Repayment Capacity of Low Equity Farmers." Economic Issues. #63. October 1981. Wisconsin Agricultural Experiment Station.

processing costs. Plants producing manufactured dairy products, however, typically must produce at capacity to realize maximum processing efficiency. Hence as the volume of raw milk available at a reasonable cost declines, some processing facilities may also be forced out of business. This could, in turn, impact producers who would otherwise remain in dairy production to the extent that a nearby market for their milk no longer exists.

Overview of Report

A question of vital importance and one currently being discussed in the halls of Congress and elsewhere, is what public policies should be adopted to alleviate the problem described in the previous sections. A wide array of proposals have been offered. Most of these proposals can be expected to create adjustment problems for certain classes of dairy farmers and for certain types of processing firms in the industry. The research presented here was motivated by an interest in the nature and likely severity of these adjustment problems. If, for example, the support price is held at \$13.10 per hundredweight over the next four years, and a \$1.00 per hundredweight overproduction tax is levied on dairy farmers, a series of questions are relevant: What is the likely impact on the income and debt position of different dairy farmers? Are "small" dairy farmers likely to be more severely impacted than are "large" dairy farmers? Will dairy farmers who are forced out of dairying by the proposed policy be able to shift their resources into other farming activities or will they be able to seek non-farm employment? Will some areas of the region lose so many dairy herds that milk processors and/or feed mills find it impractical to remain in business? Will the Northeast lose some of its competitive advantage for milk production vis-a-vis other regions? Are there policies that could be adopted (in addition to the support-price-maintenance policy) that might ease some of the adjustment pains that are to be expected?

These questions and others will be treated in the remainder of this report. In Chapter II some possible policy alternatives for alleviating the surplus problem are outlined, and some issues that must be faced when deciding upon these alternatives are discussed. This chapter also presents some policies that might be considered to help ease some of the adjustment problems of dairy farmers and/or dairy processors. In Chapter III the structural character of dairy farming in the Northeast is presented in detail, and the basis for an assessment of the Northeast's competitive advantage or disadvantage in milk production under various policy alternatives is presented. The likely impact on dairy farm income and farm debt position of the policy alternatives considered here are assessed in Chapter IV. A simulation model applied to budget data from specific farms in the region is used to make this assessment. In Chapter V the adjustment potentials (both farm and non-farm) for dairy farmers

in the Northeast are discussed. Chapter VI considers the impact of the policy alternatives on the processing and service industries in the region. The policy implications of the previous work are presented in summary form in Chapter VII.

CHAPTER II

POLICY CHOICES

M. C. Hallberg and R. L. Christensen*

Policy Objectives

Future policy for the United States dairy industry must recognize the existence of a multiplicity of policy objectives. One such objective is to seek an improved balance between milk supply and milk demand so as to reduce the treasury cost of the dairy price support program. A second objective is to ensure consumers an adequate and uninterrupted supply of fluid milk and processed dairy products at reasonable prices. A third is to protect dairy farmers and dairy processing firms from excessive price and market instability. A fourth is to ensure a sufficient supply of milk to help meet our food aid commitments at home and abroad. foreign competition. A fifth (related to or influenced by the first four) is to ensure farmers an adequate level of income.

How these different objectives are prioritized will be determined by tradeoffs in the political arena. This prioritization is likely to change as economic conditions and/or political philosophies change. Given the improvement that has been made in recent years with respect to farm-nonfarm income equality,¹ for example, we might expect the income goal to receive lower priority in the near future than in the past. Reducing the cost of the price support program, and maintaining price and market stability for farmers, on the other hand, are likely to receive fairly high priority. It is a generally held view that public costs should be minimized and that market stability is desirable to both producers and consumers.

Protection of United States dairy farmers from foreign competition appears likely to remain a high priority objective. This priority could change, however, if protection of the United States dairy industry should in the future seriously conflict with our goal of increasing foreign outlets for such products as grains, red meats, or industrial goods.

*Professors of Agricultural Economics at The Pennsylvania State University and University of Massachusetts, respectively.

¹ M. C. Hallberg. "Changing Trends in United States Agriculture Call for New Policies to be Forged." Farm Economics. Cooperative Extension Service. The Pennsylvania State University. April 1982.

As was pointed out in Chapter I, government purchases of dairy products under the price support program have in recent years increased to levels that are socially and politically intolerable. Thus the goal of overriding importance for the near future is likely to be that of achieving a better balance between milk supply and demand, and hence in reducing the treasury cost of the dairy price support program. In this chapter we shall discuss various options which might be used in an attempt to achieve this goal. This discussion is intended to serve as a basis for the policy options to be examined in subsequent chapters. In addition it will highlight some of the inherent difficulties of and prospects for these different options.

Demand Expansion Options

A variety of options designed to stimulate demand for milk and dairy products have been proposed or discussed in recent months. These include (1) increasing expenditures on the promotion of milk and dairy products, (2) increasing expenditures on research designed to develop new products, (3) providing subsidies that would permit some or all consumers to increase their purchases of milk and dairy products, (4) increasing exports of dairy products, (5) enacting legislation designed to permit altering the nonfat solids and/or butterfat components of dairy products, and (6) providing more food aid in the form of dairy products.

Marginal gains may be possible using some or all of these options, but a lasting solution to the basic problem is not likely via these means. There is little consensus among experts that increased generic advertising of milk will sell significantly greater quantities of milk. The dairy processing industry has been fairly active in developing, testing, and marketing new dairy products. Increasing food aid or providing consumption subsidies is not necessarily consistent with cutting treasury costs. Increasing demand through export markets is not likely to occur when, for example, the United States price of butter is double the world price of butter as at present, or when several countries have a comparative advantage over the United States in milk production.

A more certain way to expand the quantity of milk demanded is to lower the price of milk at retail. This, of course, means that the farm price of milk would also have to drop (assuming a constant farm-retail price spread). A price reduction will not bring about large increases in quantity demanded, however, because as analysts have repeatedly demonstrated, consumers do not increase (decrease) their demand for fluid milk and other dairy products greatly in

response to decreases (increases) in the price of these products.² Nevertheless, since a milk price reduction (at the farm level) would not only result in a slight demand expansion but also restrict supply in the long run at least (see discussion in the following section), this is an economically viable option for contributing to the solution of the current dairy problem.

Supply Reduction Options

Reduce Price Support Level

Reducing the price of milk can be accomplished by reducing the support price of milk. Proponents of this tactic argue that farmers will reduce milk output in response to a price reduction and that consumers will increase their consumption of milk and/or processed dairy products as retail prices fall. These two reactions will, therefore, result in a better supply-demand balance and less government expenditure.

This argument is certainly consistent with theoretical notions currently in vogue. There is, though, considerable uncertainty about the magnitude of producer and consumer responses, and about the speed with which these adjustments might take place. Economic theory is of little help in reducing these uncertainties; thus we must resort to empirical models based on historical data. One such model was developed for use here and is reported in the Technical Appendix to this report.

In 1981, the United States average price of all milk sold to dealers was \$13.80 per hundredweight or 69 percent of parity. Based on estimates made with the model outlined in the Technical Appendix, this price would have had to have been near \$12 per hundredweight or 60 percent of parity in order to equilibrate demand with actual 1981 supply of 132,600 million pounds of milk without excessive government expenditures. Model projections were made assuming government purchases of milk were fixed at about two percent of total milk production in all years of the projection period as well as in 1981. This was done in order to determine equilibrium prices under conditions of no or little excess milk production not only currently but in the recent past. Projections of equilibrium prices through 1982 based on the model are as follows:

² Several studies have verified that as the retail price of dairy products decreases by, say, one percent, the quantity of these products demanded increases by much less than one percent. See, for example, the Technical Appendix to this report.

³ Based on the model and projections of exogenous conditions specified in the Technical Appendix. Equilibrium prices for the Northeast were set at 1.02 times those of the United States average based on recent historical averages.

	1982	1983	1984
	-----	-----	-----
	(\$ per cwt)		
Manufacturing milk	\$12.69	\$13.04	\$13.41
All milk sold, U.S.	13.15	13.52	13.89
All milk sold, Northeast	13.41	13.79	14.17

"Equilibrium" prices are prices that would prevail if consumers, producers, and marketers make decisions precisely according to their behavior pattern in the past (in this case from 1955 to 1980), if there are no barriers to the adjustment of resources, if the market operates free of government influence and of restrictive business practices and if there are no outside events influencing the industry such as wars or floods. These are rather strong "ifs"! For example, even if government regulations are eliminated, the indicated "equilibrium" prices are not likely to prevail because resources simply cannot be moved into or out of dairy production easily, and certainly not instantaneously. Furthermore, consumers and business firms, collectively, cannot anticipate the equilibrium, market clearing price precisely --- at times they over-consume or over-produce and at other times they under-consume or under-produce. Thus even in a free market, prices are not expected to hit the mark exactly. Rather prices are more likely expected to tend toward the mark and fluctuate around it.

For these reasons, the "equilibrium" prices shown above are not to be interpreted as prices that are predicted to prevail in the absence of government regulations or restrictive business practices. On the contrary, these prices should be used as guidelines for anticipating the tendency of prices in the absence of such influences over a period of time sufficient to permit the necessary adjustments to take place. Lacking greater foresight concerning market and external events, these are the best such guidelines that can be produced.

In contrast to the "equilibrium" prices presented above, the minimum support levels for manufacturing milk for the United States specified in the Agricultural and Food Act of 1981 are:

in 1982, \$13.10 per hundredweight,
 in 1983, \$13.25 per hundredweight, and
 in 1984, \$14.00 per hundredweight.

Based on our estimated equilibrium prices, the minimum support levels specified in the 1981 Act are not likely to reduce milk supplies nor the treasury cost of the dairy price support program! In recognition of this fact, Congress passed the Omnibus Budget Reconciliation Act of 1982 in August, 1982 which specified that beginning in October 1982 the support price for manufacturing milk in the United States will be maintained at \$13.10 per hundredweight through September 1984. This Legislation further stipulated that the Secretary of Agriculture will have the authority to collect from each dairy farmer 50 cents per hundredweight on December 1, 1982 so long as CCC purchases (on an annual basis) exceed five billion pounds of milk equivalent. Further, if CCC purchases (on an annual basis) are 7.5 billion pounds or greater on April 1, 1983, the Secretary has the authority to collect an additional 50 cents per hundredweight from each dairy farmer.⁴ Thus under the worst possible scenario, dairy producers could be facing an "effective" support price of \$12.10 by April of 1983.

The Secretary was enjoined from collecting the first 50 cents by a South Carolina Court decision on the basis that appropriate procedures were not followed in announcing and implementing the Legislation. As of March 1983, the Secretary intends, this time following the appropriate procedures, to implement the Legislation by not only collecting the second 50 cents but also retroactively collecting the first 50 cents. This action may also be challenged in the Courts. The important point is, however, that every effort is being made by the Secretary to make milk production less attractive to dairy farmers, and in this way attempt to reduce the burdensome surpluses.

A variety of proposals have been made for modernizing the current basis of establishing support prices including (1) updating the 1910-14 base period currently used in calculating parity prices, (2) devising a new parity formula for calculating "parity" milk prices that more adequately represent the quantity and cost of dairy enterprise inputs, and (3) replacing "parity" with "cost-of-production" as the pricing standard. Any one of these options might be superior to the current method of determining support prices for milk. However, none of them is likely to be any more effective than is the present parity base at resolving the dairy problem unless the support price is reduced. Congress seems clearly to have recognized this fact by its recent decision not to tie the support price for milk to "parity".

⁴ If the additional 50 cents per hundredweight deduction is implemented, the Secretary must also establish a production base system, and remit the payment back to those producers who stay within their base.

Adjusting Resources Out of Dairy

Another means of reducing the supply of milk is to encourage the adjustment of some of the resources now devoted to milk production into other productive activities --- farm or nonfarm. A reduction in the price of milk can be expected to encourage such an adjustment over the long term. But the "long term" may be 5-10 years --- much too long a period of time to solve the problem plaguing the dairy industry today. Hence it may be in society's interest to devise means of speeding up this adjustment process.

A thorough understanding of the possibilities for and barriers to resource adjustment in dairy production is necessary before wise choices can be made in this area. Chapter V provides the basis for some of this understanding. In this section our intent is merely to list some possible public options that might be considered as means to assist with the adjustment of resources out of dairying. Which if any of these options are salient must be determined in view of the background information presented in Chapters III thru VI.

On Farm Adjustments

One means of adjusting resources out of dairying is to encourage the transfer of some or all resources on dairy farms now devoted to dairy production into the production of other agricultural commodities. The following are possible means of encouraging such transfers:

1. Support research designed to identify enterprises in which the region or local area has a comparative advantage.
2. Support research designed to isolate the problems or bottlenecks to resource adjustments.
3. Support extension education programs designed to assist farmers with resource adjustments.
4. Encourage state departments of agriculture to provide incentives for resource adjustments in such areas as: (a) providing low interest loans for purchase of equipment or buildings needed in the alternative activity, (b) providing grants to farmers having innovative proposals for converting dairy facilities to other uses, (c) providing low interest loans to farmers for training relative to non-dairy production, and (d) providing low interest loans to farmers and research grants to educators for devising

alternative farming systems that involve less intensive dairy production.

Off-Farm Adjustments

Another way of adjusting resources out of dairying is to encourage dairy farmers to seek non-farm employment. Some means of encouraging such adjustments are:

1. Support research designed to identify retraining needs.
2. Provide funding for farmer retraining and for farm asset disposition.
3. Support extension education programs designed to assist with retraining, disposition of dairy assets, and for farmer relocation.

Supply Control

Reduce Number of Cows

The market for beef and, hence, cull cows shows little indication of strengthening in the near term. While recent declines in prices of dairy cows relative to slaughter cow prices have occurred, this change is probably not sufficient to stimulate higher culling rates from dairy herds. A program of incentives for culling of dairy cows to reduce production can be effective but costly. If, for example, the incentive payment were \$500 per cow, a reduction of 10 percent of the national milk cow herd would cost \$542 million. Such a reduction would not, however, be expected to result in a 10 percent reduction in milk output. As discussed elsewhere, those animals culled would tend to be lower producers and the released feed and other resources available would doubtless result in increased production per cow from the remaining animals. Thus, a reduction in the milk cow herd of 10 percent might induce a reduction in total supplies of only 6 to 8 percent. A reduction of 7 percent would be equivalent to 9.2 billion pounds of milk. For perspective, government purchases in 1981 were about 15 billion pounds of milk equivalent.

Milk production in the United States for 1981 was estimated to be 132.6 billion pounds. Purchases in 1981 were about 15 billion pounds at a cost of about \$1.9 billion. Government purchases under the support program were, therefore, 11.3 percent of total production. To achieve a reduction in production of this magnitude (resulting in no government purchases) would require a reduction in

the national dairy herd of 13 to 15 percent. A 15 percent reduction would be equivalent to 1 63 million head. At a payment of \$500 per cow, such a government supported herd reduction program would have cost \$815 million.

A voluntary program to reduce the size of the national herd would have several implementation difficulties. First is the determination of the incentive payment. Presumably this would have to be higher than the market price for slaughter animals to encourage more than the normal rate of cull. Also some limits would need to be imposed so that only producing members of the herd are liquidated --- not replacement animals. A phased liquidation program would appear necessary to minimize the impact on beef cow prices. Thus, the reduction would only gradually slow government purchases and stockpiles of surplus dairy products would continue to grow for some time.

In general, the program would be met with stiff opposition from the beef industry. Further as milk prices stabilized or improved rebuilding of the herd would take place, effectively erasing any gains achieved. Thus, a corollary supply control program (perhaps a production quota plan) would be needed.

Production Quotas

Letters to the editor in recent issues of Hoard's Dairymen indicate increasing acceptance by dairy farmers of the concept of a production quota program. As Manchester⁵ points out, such a program has limitations. It requires detailed regulation of individual producers, restricts resource adjustments, and results in the capitalization of quotas in land values. Nevertheless, quota programs have worked successfully in other countries (notably Canada) and could be designed so as to minimize their inherent weaknesses.⁶

Production rights or quotas are typically assigned to farms or farmers as a proportion of production in some historical or "base" period. Milk produced in excess of the quota either may not be sold or is sold at a substantial discount. Theoretically the price paid for "excess" should be below the marginal cost of production so that it is economically irrational to produce beyond the quota. Since

⁵ Alden C. Manchester. Dairy Price Policy: Setting, Problems, and Alternatives. ESCS/USDA. Agricultural Economic Report No. 402. April 1978.

⁶ For one of the more complete discussions of the problems and prospects of production quota plans, see U. S. Government Printing Office. "A Study of Alternative Methods for Controlling Farm Milk Production and Supporting Prices to Farmers for Milk and Butterfat". House Document No. 57. 84th Congress, 1st Session. 1955.

marginal cost will vary somewhat from farm to farm it is necessary that the price for "excess" be below the marginal cost for even the most efficient farms. Increases in quota would occur only with increases in demand. Reductions in quota would be necessary if demand should fall. Distribution of increases (or decreases) in quotas might be expected to be different if the concepts of equity or, alternatively, efficiency were the guiding principle. The two concepts would obviously exert different forces on the structure of the industry.

A major problem of a quota program is that, like most "rights" or licenses, the quotas acquire value. For example, experience with crops has shown that quotas identified with land can result in capitalization of the value of the quota into land values. If quotas on milk sales are permitted to be transferred between farms they will also acquire value. The implications of capitalization of quota values are significant.

On the positive side, transferability permits adjustments to occur within the industry. Economically efficient adjustments may occur. At the same time it may lead to even greater concentration of milk production and effectively restrict production opportunity only to well capitalized family or corporate entities. This leads to a point concerning market entry under a production quota system. Dairy farming already has high capital requirements which restrict entry of new farmers. With quotas acquiring capitalized values, entry would become even more restricted. This is why it is sometimes urged that increases in market quota resulting from growth in demand be reserved for new entrants into production. Another mechanism might be to require that on any sale of quota a given percentage of that quota (say 5 percent) would revert back to the quota pool to be reserved for new entrants.

A difficult question concerns regional differences in markets. It is well documented that there have been substantial differences in milk production growth in different regions, and supply-demand balances vary considerably in the different market areas. Quotas established on the basis of a national market would have differential impacts. In individual market areas with relatively favorable supply-demand balances, uniform reductions might result in deficits. This would indicate the desirability of different proportional quota adjustments in the separate Federal Milk Marketing Order areas reflecting the supply-demand situation in those markets. Impacts on producers in the surplus producing markets could be severe. While general procedures for institution of quotas could be established on a national basis, the aspects of determination and adjustment of quotas within individual market areas would require considerably greater administrative costs. In general, a quota program would increase administrative costs, however, government purchases of surpluses could be essentially eliminated. On balance, it would be expected that government dairy program costs would be reduced substantially from current levels.

A major problem with a supply control-quota program relates to its impact on farmer incomes. Assuming that a support program continues to provide the price floor for milk (with supports at or near current parity levels), a reduction in output would have an enhancing effect on prices. This effect would be different in different markets depending on the impact the reduction would have on blend prices (the weighted average price for Class I and Class II milk that farmers receive). It would not be expected, however, that in most cases the increased blend price and the reduction in variable and fixed costs associated with cow ownership would compensate for the decreased income. Consider the following example in which we assume:

total herd production is 10,000 hundredweight,
Class I price is \$16 per hundredweight,
Class II price is \$12 per hundredweight,
Class I utilization is 50 percent, and
Class II utilization is 50 percent.

In this case the blend price is \$14 per hundredweight and total milk receipts to the farmer is \$140,000. Now consider the case where a production quota of 9,000 hundredweight is imposed and:

Class I and Class II prices are as before,
Class I utilization is 55.55 percent, and
Class II utilization is 44.45 percent.

In this case blend price is \$14.22 per hundredweight and total milk receipts is \$128,000 --- a reduction of \$12,000. The reduction in milk production to the quota level can be accomplished by reducing the herd by eight cows, each of which produce 12,500 pounds per year. A reduction in variable and fixed costs of \$1,500 per cow culled from the herd will offset the reduction in milk receipts.

In the example just given, the effect of the quota would be a significant reduction in farm receipts. (The reduction in cash receipts can be easily calculated as the product of reduced output in hundredweights multiplied by the blend price.) The net effect on farm income, however, depends on the reduction in costs associated with the reduction in number of cows. Impacts on net income would be greater for more efficient producers than for those with higher production costs.

Policies to be Considered

Subsequent chapters of this report will consider, in various degrees of specificity, three pricing alternatives for the 1982-84 planning horizon. The alternatives are as follows:

	1982	1983	1984
	-----	-----	-----
	(\$ per cwt)		
<u>Reduced Price Support</u>			
Blend Price in Northeast	\$13.36	\$13.36	\$13.36
<u>Reduced Price Support with Overproduction Tax</u>			
Blend Price in Northeast	\$13.77	\$13.08	\$13.34
<u>Market Equilibrium</u>			
Blend Price in Northeast	\$13.41	\$13.79	\$14.17

The first of these alternatives is designed to encourage supply reduction by lowering the price support levels somewhat below equilibrium levels. (The prices shown here are assumed to be higher than for the average in the United States for reasons explained in footnote 3 above.) The second anticipates that a producer tax of 50 cents per hundredweight in December of 1982 and of \$1.00 per hundredweight in April of 1983 will be imposed. Alternative three specifies prices based on the model presented in the Technical Appendix to this report. The prices specified here are those estimated to equilibrate supply and demand under the assumed exogenous conditions. Because of resource adjustment lags, and other factors discussed previously, however, the prices specified in alternative three are not expected to bring about an immediate supply-demand balance.

CHAPTER III
INTERREGIONAL COMPETITION AND
DAIRY FARM ADJUSTMENTS

B. F. Stanton*

Over the past 25 years a revolution has taken place in the United States dairy industry. It started quietly and went almost unnoticed by most people outside dairy production. The results of that revolution are now making the headlines.

The number of dairy cows in the United States was cut in half, but simultaneously milk production per cow increased dramatically. Milk consumption in all forms per person dropped modestly while population increased so that total consumption remained relatively constant. During most of the 1960s and 1970s, national demand and supply were in reasonable balance. In the late 1970s, cow numbers stabilized, rates of production continued to rise, and demand remained steady. The resulting gap between supply and demand has become a costly national issue in the 1980s.

This chapter describes the nature of adjustments in cow numbers and milk production which have occurred in the United States during the most recent years. These data provide background in understanding the changes that have occurred and those now in progress. The nature of regional competition within the production sector of the dairy industry is given primary attention. Some adjustments have occurred which cannot occur again. The decrease in numbers of dairy cows in a number of states in the last decade has been quite substantial. Milk production is now concentrated on a much smaller number of farms in the major producing states than just 10 years ago. The adjustments required to bring national supply into balance with national demand and the likely locations where such adjustments will be required are highlighted.

*Professor of Agricultural Economics, Cornell University.

Changes in Numbers of Cows and
Herd Sizes in Selected States

The dramatic changes in numbers of dairy cows and changes in herd sizes are shown in Table 1. In 1969 about one-third of the nation's dairy cows were on farms with less than 30 cows. Only about 17 percent were on farms with 100 cows or more. Milk production came primarily from one- or two-worker farms throughout the United States. The situation today, however, is markedly different.

Table 1. Percent of All Milk Cows by Size of Herd,
United States, 1969 and 1981.

Size of Herd	1969	1981
	percent	
Under 30	32	12
30-49	29	23
50-99	22	31
100 or more	17	34
Total Number of Milk Cows (thousand)	12,578	10,919

Source: U.S. Census of Agriculture and USDA
Statistical Reporting Service.

Changes in Herd Sizes

There are striking differences among the leading dairy states in the sizes and types of dairy farms (Tables 2 and 3) and the changes which have occurred between 1969 and 1981. Census data were the only source of information available in 1969. The Census data appear to be roughly compatible with the Statistical Reporting Service (SRS) data for 1981.

Table 2. Percent of Milk Cows by Herd Size in Leading Dairy States and United States, 1969.

States	Number of Cows	Herd Size		
		Under 50	50-99	100 or more
	thousands	percent of total		
1-Wisconsin	1,846	79	19	2
2-New York	1,030	55	34	11
3-Minnesota	980	88	10	2
4-California	775	5	8	87
5-Pennsylvania	720	71	23	6
6-Iowa	508	86	12	2
7-Michigan	469	67	24	9
8-Ohio	457	73	21	6
9-Missouri	362	75	20	5
10-Texas	354	26	32	42
United States	12,578	61	22	17

Source: U.S. Census of Agriculture and USDA, Statistical Reporting Service.

Table 3. Percent of Milk Cows by Herd Size in Leading Dairy States and United States, 1981.

States	Number of Cows	Herd Size		
		Under 50	50-99	100 or more
	thousands	percent of total		
1-Wisconsin	1,825	54	36	10
2-California	923	1	3	96
3-New York	912	29	44	27
4-Minnesota	886	62	30	8
5-Pennsylvania	721	48	33	19
6-Michigan	393	34	39	27
7-Iowa	382	51	40	9
8-Ohio	380	53	35	12
9-Texas	324	7	26	67
10-Missouri	249	33	45	22
United States	10,919	35	31	34

Source: USDA Statistical Reporting Service.

The top five states in dairying have changed rankings in the 12 years. Wisconsin has been the nation's leading dairy state for many years and continues as the nation's leader. California ranked fifth in 1969, but by 1981 ranked second by virtue of a 19 percent increase in cow numbers over the period. In 1969, more than 75 percent of the cows in Wisconsin, Minnesota, and Iowa were on farms with less than 50 cows. By 1981 the proportion of farms with dairy herds of that size had dropped to between 51 and 62 percent. In the center of the Lake States, dairy production is still concentrated on small farm businesses where most of the labor is supplied by family members.

In New York, Vermont, Pennsylvania and Michigan there were more cows on farms with 50 cows or more in 1969 and the adjustment to larger herd sizes occurred more rapidly in the years to 1981. Much of this adjustment was accomplished by combining existing farms and by investing in relatively new dairy facilities with pipeline milking systems or milking parlors. A somewhat smaller proportion of Iowa, Minnesota and Wisconsin farmers have made such size adjustments.

In contrast, dairy production in California, and to a large degree in Texas as well, is concentrated on farms with 100 cows or more, many on units with 1,000 or more milking cows. In all the states, the number of farms selling milk has decreased sharply while herd sizes have increased.

Changes in Numbers of Cows

Actual changes in the numbers of milk cows by states during the past decade indicate something about the forces at work in the dairy industry and how different these forces are in different locations. Figure 1 shows the states in which significant increases in cow numbers have occurred over the decade. The actual numbers of cows in 1981 and the changes in cow numbers for these and selected additional states are shown in Table 4. Milk production has become more concentrated on fewer farms with more cows. Dairying is of some importance in all states with obvious economic and political consequences.

Substantial decreases in cow numbers occurred in Iowa, New York, Missouri, Kentucky, Mississippi and Minnesota. California had the one big increase in numbers, but other western states expanded cow numbers as well. In general there was a shift of cows out of the southeastern states, the Corn Belt and the Great Plains. With the exception of Pennsylvania, all increases in cow numbers occurred in the West and Southwest.

FIGURE 1. STATES WITH AN INCREASE IN COWS BETWEEN 1969 and 1981

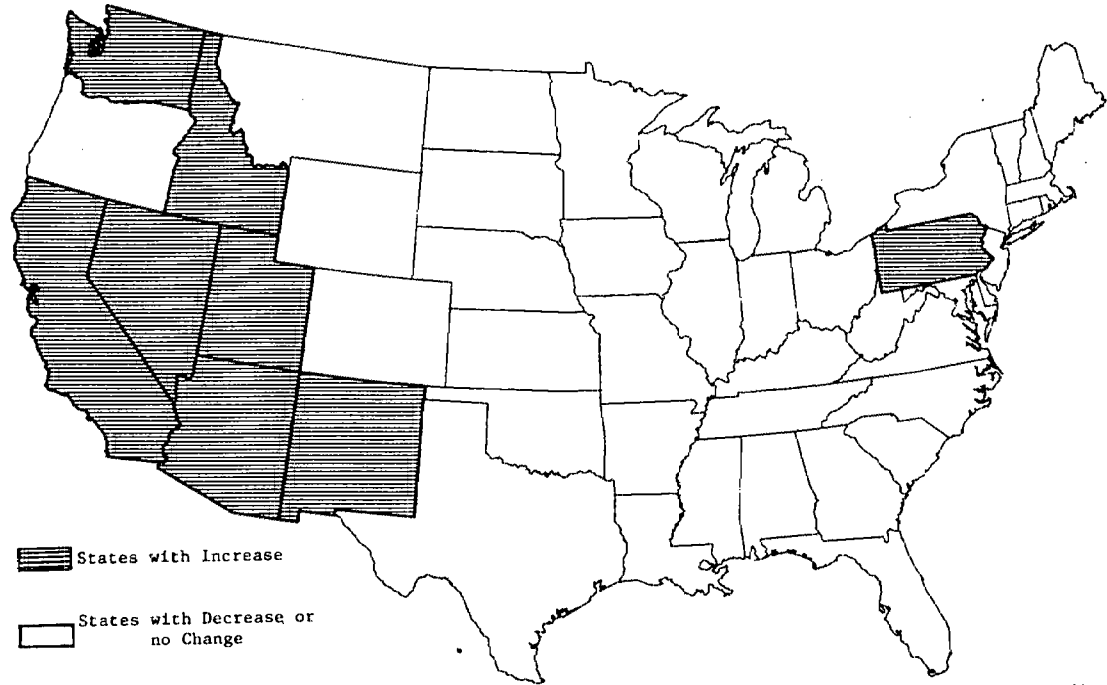


Table 4. Changes in Numbers of Milk Cows in Selected States Between 1969 and 1981.

Selected States	Cows in 1981	Change in Number of Cows	Percent Decrease or Increase
-----thousands-----			
<u>Decreases</u>			
1-Iowa	382	-126	-25
2-New York	912	-118	-11
3-Missouri	249	-113	-31
4-Kentucky	242	-106	-30
5-Mississippi	97	-101	-51
6-Minnesota	886	-94	-10
7-Tennessee	214	-93	-30
8-Kansas	124	-80	-39
9-Ohio	380	-77	-17
10-Michigan	393	-76	-16
11-Illinois	233	-75	-24
12-Alabama	63	-73	-54
<u>Increases</u>			
1-California	923	148	19
2-Arizona	77	26	51
3-New Mexico	51	15	41
4-Washington	205	15	8

Source: U. S. Census of Agriculture and USDA, Statistical Reporting Service.

Table 4 calls attention to Mississippi and Alabama, where not only did dairy cow numbers decline in large numbers absolutely, but the numbers were reduced by more than 50 percent. Other states where the number of cows was reduced by more than 35 percent in 12 years included North Dakota, Nebraska, Kansas, Louisiana, West Virginia and New Jersey.

During the 1970s, crop farming, particularly wheat, corn, soybeans, and sorghum, was a profitable alternative to dairying.

Off-farm jobs were increasingly available to operators of the smaller dairy units and the opportunity to give up the routine of twice daily milking was exercised. In 1983, such alternatives are less readily available.

Changes in Herd Sizes by Counties

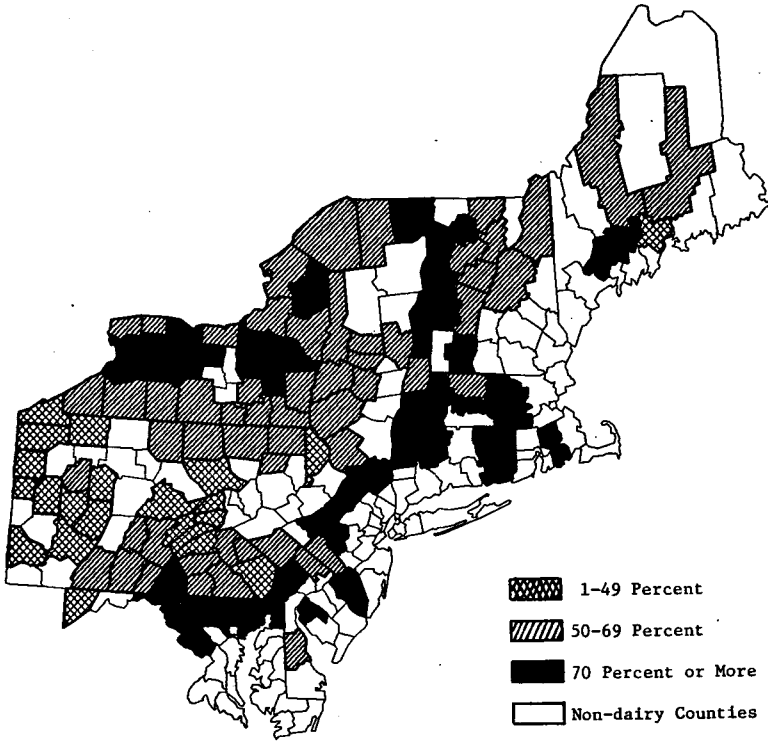
The Northeastern States.

Nationally, it is generally true that cow numbers have held steady or increased during the past 12 years in counties where 70 percent or more of all the cows are in herds with 50 or more cows. But as small dairy herds have gone out of business, the land and resources in many cases have been combined with existing dairies to provide larger, more economic units. This has been the general pattern in the 12 Northeastern States.

The leading dairy counties in the Northeast are identified in a county map in Figure 2. For every county with 5,000 or more dairy cows in the 1978 Census, the percent of all dairy cows in herds of 50 or more is presented. Most of the dairy cows are located in New York, Pennsylvania and Vermont (83 percent), but all of the other states have at least one county where dairying is important. Lancaster County, Pennsylvania has more cows than any other county in the Northeast and is one of the top ten counties nationally.

One reason for considering these figures carefully is to note the amount of adjustment or consolidation in dairy enterprises that has already taken place or may be necessary in the future. Competitive pressures may well cause cooperatives and private handlers to consider more carefully the additional costs of obtaining their supplies of milk from small producers. Moreover, the costs of enlarging barns or modernizing facilities in the 1980s may make it more difficult for some of the farms with less than 50 cows to continue under stronger pressures from increased costs and narrower operating margins. In general, the higher the percentage of cows in herds of 50 or more, the more likely these counties will maintain or increase cow numbers. At least this has been the general pattern in the past decade. At the time of the 1978 Census, Pennsylvania had more counties and more cows in herds of less than 50 cows than did any other state in the Northeast. These counties were largely those with the less desirable soils and steeper slopes. Most counties in New England, New Jersey, Maryland and New York had 65 percent or more of their cows in herds of 50 or more.

FIGURE 2. PERCENT OF DIARY COWS IN HERDS OF 50 COWS OR MORE BY COUNTIES IN THE NORTHEAST, 1978



Minnesota, Wisconsin and California.

With 50 percent of the national dairy cow herd now concentrated in the five leading dairy states, it is important to look at some of the differences in the distribution of herd sizes in each of these states by county. Minnesota and Wisconsin have modest proportions of their cows in herds of 50 or more cows. In much of northern and central Wisconsin as well as many of the leading dairy counties in Minnesota, only from 30 to 49 percent of the cows were in herds of 50 or more cows (Figure 3). Relatively small specialized dairy farms are the rule. Good alternatives to dairy farming within production agriculture are few because hay and forage crops are generally the best way to use the available land and soil resources. These areas are somewhat less industrialized than New York and Pennsylvania. Off-farm jobs are often few in number and movement of some dairymen out of agriculture is likely to be slow, even though persistent. In both Minnesota and Wisconsin, herd sizes are largest in the more heavily populated areas, closer to cities and where there are more alternatives both for the productive use of cropland and for off-farm employment.

In contrast, almost all the dairy cows in California are in herds of 100 or more cows (Figure 3). Units of 500 to 2,000 cows are much more nearly typical. During the past decade, dairy herds have moved out of the area immediately adjacent to Los Angeles and the San Francisco-Oakland area. The number of cows in San Bernardino and Riverside counties has doubled in 12 years to 253,000. San Bernardino with 163,000 cows in 1981 was the largest dairy county in the United States. The other area of growth has been in the central San Joaquin Valley. Tulare, Stanislaus, Merced, Fresno and Kings counties account for over 400,000 of California's dairy cows largely between Modesto on the north and Visalia and Tulare on the south. This is the heart of the irrigated fruit, vegetable and cotton country. Cow numbers have increased here by 157,000 in 12 years. There are other options for use of the land resource. Dairying has moved in because dairymen have considered it to be a good alternative.

Costs of Production by Region

USDA has recently released 1981 cost of milk production estimates by region. These estimates are based on survey data in each of the regions and budgets developed for typical dairy farm situations in each of the regions. These cost of production estimates indicate something about the current cost-return situation for average producers in each of the regions (Table 5). As would be expected, there is a substantial amount of variation around each of these averages in each region.

FIGURE 3

PROPORTION OF TOTAL MILK COWS IN HERDS OF 50 COWS OR MORE 1978 CENSUS

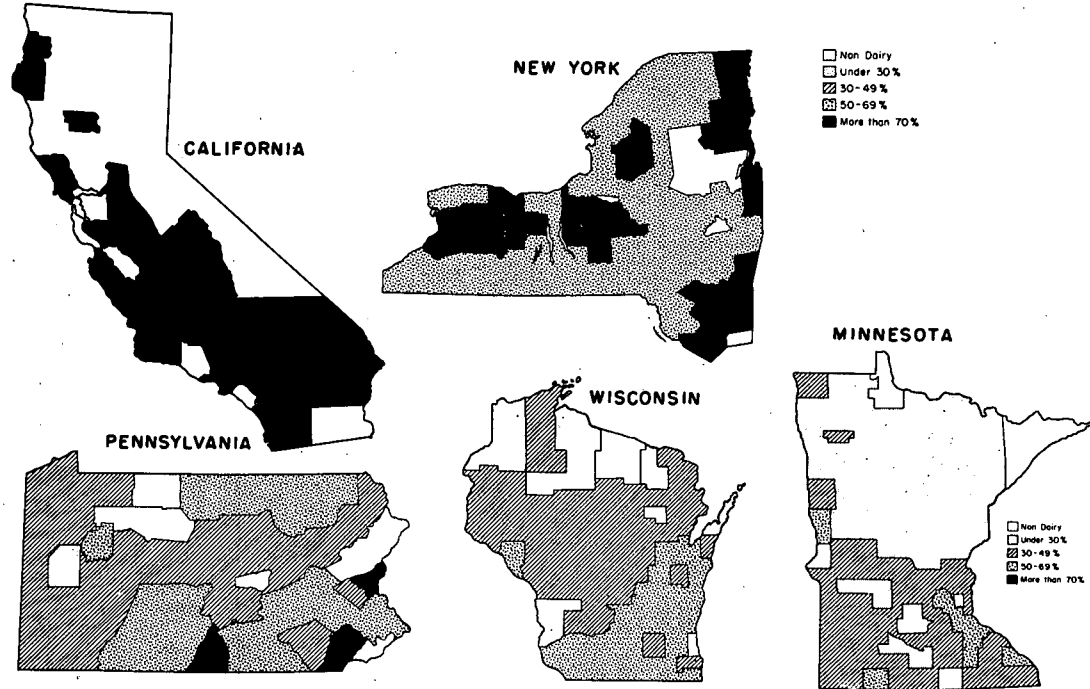


Table 5. Estimated Costs and Returns per Hundredweight of Milk on Specialized Dairy Farms by Region, United States, 1981.

Region	Milk	Returns		All Direct Return to and operator's Ownership Labor and Costs Management	
		Cull Cows, Calves	Total	Costs	Management
-----dollars/cwt-----					
1-Upper Midwest ^a	\$13.37	\$1.51	\$14.88	\$12.45	\$2.43
2-Northeast ^b	14.08	1.20	15.28	12.97	2.31
3-Pacific ^c	13.47	0.93	14.40	12.34	2.06
4-So. Plains ^d	14.84	1.03	15.87	14.14	1.73
5-Corn Belt ^e	13.49	1.20	14.69	13.93	0.76
6-Appalachia ^f	14.17	1.02	15.19	14.49	0.70
National Average	13.72	1.25	14.97	13.00	1.97

Source: USDA. Economic Research Service.

^a Minnesota, Wisconsin, Michigan, and South Dakota.

^b New York, Pennsylvania, Ohio, and New England.

^c California and Washington.

^d Texas.

^e Indiana, Illinois, Iowa, and Missouri.

^f Kentucky, Tennessee, Virginia, North Carolina, and Georgia.

These estimates are helpful in assessing both the geographic structure of prices and returns for milk in 1981, and the nature of direct and ownership costs associated with production. Prices for milk within the United States are now quite uniform, and relative differences between regions have narrowed during the last decade. The three regions with the most concentrated areas of milk production have the lowest costs and the greatest returns to operator's labor and management. The cost estimates and the relative returns to labor and management by region suggest further concentration of production in the Upper Midwest, Northeast and

Pacific regions over time. At the same time it appears that the number of dairy farms and dairy production will decline in Appalachia, the Corn Belt and the Southern Plains.

Future Changes in Cow Numbers

In trying to look at the experience of the last 10 to 12 years to consider future changes in location of dairy production in the United States, it may be helpful to look again at Figure 1 and Tables 1-4 showing the current distribution of cows across the country. If rates of milk production per cow continue to increase because of advances in animal breeding, nutrition, herd health, and improved technology, then cow numbers must decrease nationally if supply and demand are to come into balance. Many of the small herds of less than 30 cows have already been "squeezed" out of production. Less than 12 percent of the cows remain in such herds. That means important reductions must come from among full-time family operations where milk sales are the primary source of family income. Undoubtedly some of this can come from the wheat, corn, soybeans and sorghum states of the Plains and Corn Belt. But crop prices to date have provided little incentive to shift to dairying, and dairying is commonly on the rougher, less tillable land in these states. There may be further reductions in Kentucky, Tennessee, North Carolina and Virginia following the pattern of the last 12 years, particularly on farms with less than 50 cows. Big changes could occur in California if there are important changes in incentives in terms of prices and costs for alternative agricultural enterprises. Large investments are already in place which in most cases means continued operations. On the other hand, the same kind of aggressive management that moved large blocks of capital into dairying could also move it out if other alternatives become more profitable.

In the Northeast, the reductions in dairy farms associated with urbanization, growth of metropolitan areas, and increases in agricultural land prices, because of expected future sales for urban uses, are largely behind us. Selling out to a developer seems a less likely option to most dairymen in the region. While there are substantial differences in soils, climate, markets and resources within the region, the majority of dairy farms and dairy farmers have few good alternatives inside or outside agriculture. Shifts will come slowly. The farms on the better soils and where substantial numbers of farms are reasonably close together on good, all weather roads will have a competitive advantage. The smaller units, farthest from other farms or at the margin of bulk tank routes will face stiff challenges both in the Northeast and in Wisconsin, Minnesota and Iowa as well.

CHAPTER IV

FUTURE PRICE/COST EFFECTS ON FAMILY
LIVING INCOME IN DAIRY

W. Grisley, G. Frick and G. B. Cilley*

Northeast dairy farmers experienced favorable cash flows and net cash operating incomes during the late 1970s and through 1981. Even 1982 proved reasonably good for dairymen in the Northeast, although the threat of reduced milk prices was on the horizon. For the New York CAMIS¹ farms, the difference between cash operating receipts and cash operating expenses was \$390 per cow in 1979, \$385 per cow in 1980 and \$392 per cow in 1981. In 1982 this difference was \$349 per cow. New England farms in the ELFAC² farm business management program had annual cash receipts less cash operating expense of \$360 per cow in 1979, \$337 per cow in 1980, and \$385 in 1981. These cash flows, coupled with a prevailing expansionary philosophy encouraged increased indebtedness on many dairy farms. For example, the 55-69 cow herd farms included in the New York Dairy Farm Management Business Summary³ increased debt per cow from \$1,375 in 1976 to \$2,400 in 1982. Expected decreases in cash flows in 1983 will dictate a much less expansionary situation and less reliance on debt financing.

An approach to the evaluation of short-run dairy price programs which uses family living income as an indicator of pressure for adjustment will be presented in this chapter. The "maintained hypothesis" asserts that farmers will make adjustments in an effort to maintain recent standards of living.

The analysis estimates annual family living incomes as a result of current and expected milk price policies. Individual farm income records for 1981 incorporated in a simulation model were used to

*Assistant Professor of Agricultural Economics, The Pennsylvania State University, Lecturer at the University of New Hampshire and former Agricultural Economist, ERS/USDA, and Research Associate at the University of New Hampshire, respectively.

¹ CAMIS is the Cornell Agricultural Management Information System.
² ELFAC is the Electronic Farm Accounting System at the University of New Hampshire.

³ S. F. Smith, Dairy Farm Management Business Summary, A.E. Res. 82-84. Department of Agricultural Economics. Cornell University. September 1982.

estimate annual incomes for 1982 through 1984.⁴ These records included information on net cash operating income, sales and purchases of dairy livestock, total debt, and number of cows per farm. Sales and purchases of dairy livestock were used to adjust net cash operating income to reflect cash available for such purposes as current debt retirement, family living, or additional new debt retirement. The net income information reported in this chapter represents annual return to the farm family for consumption or investment purposes. It does not include income from farm enterprises other than dairy nor income earned from off-farm sources.

Methodology and Assumptions

The data base for individual farm information was for the year 1981. Average farm income and expense information was developed for three farm sizes in Vermont, eight farm sizes in Pennsylvania, and nine farm sizes in New York for a total of 20 representative farms. Each of the 20 representative farms were analyzed with a farm income-expense simulator to estimate net cash operating income for 1982 through 1984. The static simulation model used assumed the farm structure to be constant over the three years of the simulation period and the same as in 1981. Two production parameter changes were made each year. On the output side, milk per cow was assumed to increase at the rate of 200 pounds per year. Grain concentrates, on the input side, were assumed to increase at the rate of 60 pounds per cow per year. With these two production assumptions and appropriate cost adjusters, the model indicates how price assumptions in future years would affect net cash operating income. Thus, the model describes how expected prices for 1983, for example, would influence costs and returns if the farm were to be operated as it was in the base year of 1981. The price and cost indices used to estimate costs and returns over the simulation period are shown in Table 1.

The analysis ignored such long-run costs as depreciation and returns to unpaid family labor and farm equity. These must be met in the long run, but can be postponed in the short run. The analysis here was cash-oriented with cash receipts and cash expenses adjusted for livestock purchases and sales. The result, called adjusted net cash operating income, is the amount of cash available for the farm operator to use for family living and for debt retirement. The amount of money available for family living and

⁴ Individual farm records were obtained through cooperation with the Pennsylvania Farmer's Association, The Pennsylvania Agriculture Records Program of the Cooperative Extension Service, the Cornell Agricultural Management Information System (CAMIS), and the Electronic Farm Accounting System (ELFAC) of New England.

Table 1. Prices and Indices Assumed for Estimating Farm Costs and Returns.

Item	1981	1982	1983	1984
	-----dollars-----			
Blend Price for Milk/cwt				
Series A Prices	14.08	13.41	13.79	14.17
Series B Prices	14.08	13.77	13.08	13.34
Dairy Cow Replacements/head				
With Series A Prices	1,200	1,150	1,000	900
With Series B Prices	1,200	1,150	900	700
Cull Cows/cwt	42.00	42.50	44.50	47.00
Dairy Concentrate/ton	192	175	176	181
	-----indices-----			
Consumer Prices	100	106	112	117
Feed	100	90	92	94
Feeder Livestock	100	102	107	114
Seed	100	101	100	104
Fertilizer	100	101	102	107
Agricultural Chemicals	100	108	113	119
Fuel and Energy	100	98	106	116
Farm and Motor Supplies	100	104	111	119
Auto and Truck	100	111	121	130
Tractor and Power Mach.	100	108	116	124
Other Machinery	100	109	117	124
Building and Fencing	100	101	107	113
Farm Services and Rent	100	107	114	121
Interest	100	112	122	132
Taxes	100	106	112	114
Wages	100	100	105	111

debt retirement was hypothesized to be a good indicator of current farm viability.

The Series A prices were developed as described in Chapter II in an effort to approximate "equilibrium" milk prices for the Northeast. The Series B prices were estimated to approximate the prices that would prevail under the policy adopted by the Omnibus Budget Reconciliation Act of 1982. Replacement cow prices were estimated to be consistent with the Series A and Series B milk prices. The 1981 individual farm records for the 20 representative farm size classes were adjusted annually by using yearly net cash operating income changes for the respective size classes as movers.

A sample of farms from the New York Farm Business Management Summary shows the trend in debt per cow and per farm for recent years (Table 2). While debt per cow has consistently increased over the past several years, the rate of change has varied considerably. In the analysis reported here, debt is treated as follows. The debt repayment amount, which is deducted from net cash operating income, was based on the recorded 1981 debt. The repayment schedule was assumed to average 10 years, so one-tenth of the debt was retired each year.⁵ However, debt and debt cost was assumed to increase through 1984. The simulation model included interest payments as a part of costs (see Table 1). The interest indices used in the model (and, hence, the quantity of debt) were increased during 1982-1984 at about eight percent per year.⁶ The interest cost of the increased debt was reflected in the computed net cash operating incomes, but no debt repayment was calculated for the additional debt. In summary, debt repayment was assumed to be based on the outstanding debt of individual farms in 1981. Debt during the analysis period was assumed to increase and the cost increase was reflected only through higher interest charges.

Results

Vermont

Eighty-three dairy farms from Vermont were sampled, with an average herd size of 66 cows. The average debt per cow was \$1,335 for the 60 farms reporting debt.

⁵ Based on average loan repayment periods reported in New York. See S. F. Smith, *op. cit.*

⁶ The quantity of debt is assumed to increase by the same proportion as interest costs if interest rates remain stable. Otherwise, an inverse relation would exist between interest rates and quantity of debt.

Table 2. Total Farm Debt and Debt Per Cow for Herds of 55-69 Cows, New York, 1976-1982.^a

Year	Debt		
	Per Farm	Per Cow	Increase
	(dollars)	(dollars)	(percent)
1976	83,740	1,375	
1977	89,440	1,465	+ 7
1978	93,640	1,535	+ 5
1979	113,980	1,870	+22
1980	128,680	2,110	+13
1981	136,870	2,245	+ 6
1982	146,220	2,400	+ 7

^a S. F. Smith. op. cit.

The average annual family living income (hereafter referred to as income) on both a per cow and per farm basis by herd size and in the aggregate are shown in Table 3. In the base year, 1981, the overall average income on a per cow and per farm basis was \$406 and \$24,470 respectively. Income per cow was greater on those farms with less than 40 cows because of the smaller levels of debt per cow. Farms with 80 cows and over had the smallest income per cow.

The incomes estimated for 1982 through 1984 under both price assumptions show a reduction compared to the base year, but those under Series B prices were notably less than under Series A prices.⁷ On a per farm basis, average income fell to \$19,865 in 1982, but then increased to \$21,476 in 1983 and to \$22,330 in 1984. As a percent of the 1981 average income, the 1982 income was 81 percent while in 1984 it was 91 percent.

⁷ Series A prices were defined as those resulting from the equilibrium model described in Chapter II and in the Technical Appendix. Series B prices were estimated to approximate those established by the policy adopted in the Omnibus Budget Reconciliation Act of 1982.

Table 3. Annual Family Living Income Per Farm, Vermont, Actual 1981 and Estimated for 1982 Through 1984, Assuming a Ten-Year Average Debt Retirement.

Herd Size	1981		1982		1983		1984	
	Per Cow	Per Farm	Per Cow	Per Farm	Per Cow	Per Farm	Per Cow	Per Farm
-----dollars-----								
<u>SERIES A PRICES</u>								
Less than 40	564	19,900	504	17,900	546	19,270	575	20,290
40-79	405	22,600	338	18,860	362	20,200	376	20,980
80 and over	259	34,810	187	25,130	206	27,690	213	28,630
All Farms	406	24,470	339	19,860	325	21,480	381	22,330
(As % of 1981)		100		81		88		91
<u>SERIES B PRICES</u>								
Less than 40	564	19,900	566	19,970	447	15,770	460	16,230
40-79	405	22,600	397	22,160	264	14,730	260	14,508
80 and over	259	34,810	249	33,470	104	13,980	91	12,230
All Farms	406	24,470	399	23,940	266	14,770	264	14,380
(As % of 1981)		100		96		61		59

For Series B prices, the sample average income on a per farm basis was \$23,940 in 1982, \$14,770 in 1983, and \$14,380 in 1984. The 1982 figure was 96 percent of that in 1981. In 1983 and 1984, however, incomes dropped to 61 and 59 percent of 1981 levels, respectively.

The distribution of income per farm is shown in Table 4 for Series A and Series B prices. Importantly, this table shows the number of farms that have positive or negative incomes. Again, Series A prices had little depressing influence on income. In 1981, eight percent of the farms had negative incomes. This percentage remained essentially the same for the estimated incomes in the years 1982-84. Under Series B prices, however, the percent of farms with negative incomes increased to 12 percent in 1983 and 1984. At the upper income levels, 28 percent of the farms had an income of \$30,000 or more in both 1981 and 1982. By 1983, however, only 12 percent of the farms had incomes of \$30,000 or more.

Table 4. Distribution of Annual Family Living Income for Vermont Farms, Actual 1981 and Estimated for 1982 through 1984.

Annual Income for Family Living	Actual 1981 Farms	Estimated		
		1982 Farms	1983 Farms	1984 Farms
-----percent-----				
<u>SERIES A PRICES</u>				
Negative	8	10	8	9
0 to \$9,999	12	15	13	12
\$10,000 to \$29,999	51	55	57	55
\$30,000 or more	29	20	22	24
Average Income/farm	\$25,470	\$19,860	\$21,480	\$22,330
<u>SERIES B PRICES</u>				
Negative	8	8	12	12
0 to \$9,999	12	13	20	24
\$10,000 to \$29,999	52	52	56	52
\$30,000 or more	28	28	12	12
Average Income/farm	\$24,470	\$23,940	\$14,770	\$14,380

New York

Six hundred and three farms from New York were sampled with an average size of 78 cows per herd. The average debt per cow of those reporting debt was approximately uniform over all size classes. With the exception of the 150 and over cow herds, debt per cow ranged between \$2,488 and \$2,123.

Table 5 gives the family living income on both a per cow and per farm basis. The income per cow for 1981 ranges from \$66 to \$297 with an average of \$220. The variability in the income per cow and the relatively small variation in average debt per cow suggests that most of the variability in per farm income is derived from the income side of farm costs and returns. The 26 farms in the 115-129

cow class, however, appear to be quite different from the farms in the other size classes and should be treated accordingly. It is difficult to explain the difference in income for this size class without a more detailed analysis.

The Series A prices had the effect of significantly lowering incomes in 1982-84 compared to the base year 1981. On a per farm basis, the overall average incomes were \$10,230, \$11,500, and \$12,190 in 1982 to 1984, respectively, as compared with \$16,050 in 1981.

The Series B prices had a more dramatic effect on incomes, however. Annual family living incomes in 1983 and 1984 dropped considerably below the average levels in 1981 and 1982. Significant decreases occurred in all farm size categories, but were more pronounced on farms with herd sizes of 115 and over. The overall average incomes on a per farm basis were \$14,960 in 1982, \$4,320 in 1983, and \$3,280 in 1984. These values are only 93, 27, and 20 percent, respectively, of the overall average income in 1981. Compared to the results under Series A prices, incomes for 1983 and 1984 were dramatically reduced.

The per farm distributions of income for 1981 through 1983 are shown in Table 6 for both price series. The Series A prices had relatively little effect on the distribution of income over all size classes. In 1981, 145 (24 percent) of the farms had a negative family income. This percentage increased to 30 percent in 1982 and then showed small decreases in 1983 and 1984. On the other hand, the Series B prices had considerable influence on the distribution of incomes in 1983 and 1984. Where 24 percent of the farms had negative incomes in 1981, 39 percent had negative incomes by 1984. On the upper income scale, 25 percent of the farms had incomes of \$30,000 or more in 1981. By 1984 only 10 percent of the farms had incomes over \$30,000. This analysis indicates that more than 60 percent of New York dairymen would have severe financial problems by 1984 under Series B prices.

Pennsylvania

A sample of 1,169 dairy farms was used in the Pennsylvania portion of the study. Those farmers reporting debt had an average debt per cow of \$2,336, with little variability across farm sizes. For all farms with debt, 24 percent had less than \$1,000 debt per cow and 28 percent had over \$3,000 debt per cow.

The annual income for family living on both a per cow and per farm basis is shown in Table 7. The values in Table 7 were estimated using the same method as for the Vermont and New York farms.

Table 5. Annual Family Living Income Per Farm, New York, Actual 1981 and Estimated for 1982 through 1984, Assuming a Ten-Year Average Debt Retirement.

Herd Size	1981		1982		1983		1984	
	Per Cow	Per Farm	Per Cow	Per Farm	Per Cow	Per Farm	Per Cow	Per Farm
-----dollars-----								
<u>SERIES A PRICES</u>								
Less than 40	221	7,470	148	5,000	168	5,680	182	6,150
40-54	220	10,320	134	6,290	131	6,180	158	7,410
55-69	246	15,000	161	7,820	176	10,730	181	11,040
70-84	230	17,680	172	13,760	202	15,530	211	16,220
85-99	297	27,030	205	18,660	215	19,570	220	20,020
100-114	209	22,300	123	13,130	140	14,940	145	15,480
115-129	66	7,960	-28	-3,380	-25	-3,020	-31	-3,740
130-149	275	38,390	159	22,200	176	24,570	170	23,730
150 or more	144	29,510	114	23,360	123	25,200	123	25,200
All Farms	220	16,050	143	10,230	155	11,500	166	12,190
(As % of 1981)		100		64		72		76
<u>SERIES B PRICES</u>								
Less than 40	221	7,470	206	6,960	74	2,500	69	2,330
40-54	220	10,320	191	8,960	57	2,680	47	2,210
55-69	246	15,000	216	13,170	87	5,300	77	4,670
70-84	230	17,680	221	16,990	132	10,150	132	10,150
85-99	297	27,030	261	23,750	113	10,280	98	8,920
100-114	209	22,300	179	19,100	51	5,450	39	4,160
115-129	66	7,960	30	3,620	-126	-15,210	-155	-18,710
130-149	275	38,390	236	32,950	46	6,500	19	2,650
150 or more	144	29,510	171	35,040	20	4,100	1	210
All Farms	220	16,050	199	14,960	68	4,320	57	3,280
(As % of 1981)		100		93		27		20

Table 6. Distribution of Annual Family Living Income for New York Farms, Actual 1981 and Estimated for 1982 through 1984.

Annual Income for Family Living	Actual 1981 Farms	Estimated		
		1982 Farms	1983 Farms	1984 Farms
-----percent-----				
<u>SERIES A PRICES</u>				
Negative	24	30	29	27
0 to \$9,999	19	23	21	21
\$10,000 to \$29,999	32	29	31	32
\$30,000 or more	25	18	19	20
Average Income/farm	\$16,050	\$10,230	\$11,500	\$12,190
<u>SERIES B PRICES</u>				
Negative	24	26	38	39
0 to \$9,999	19	19	25	24
\$10,000 to \$29,999	32	32	27	27
\$30,000 or more	25	23	10	10
Average Income/farm	\$16,050	\$14,960	\$4,320	\$3,280

As in the case of the Vermont and New York results, both Series A and Series B prices had a negative impact on incomes, with Series B prices having the more dramatic impact. On a per farm basis, the overall average incomes were \$12,930 in 1982, \$14,590 in 1983, and \$15,380 in 1984 as compared with the 1981 base of \$17,840. On a percentage basis, these incomes were 72, 82 and 86 percent of that realized in 1981. Except for herd sizes of less than 40 cows, the size category averages exceed \$11,000 in each of the three years.

Table 7. Annual Family Living Income Per Farm, Pennsylvania, Actual 1981 and Estimated for 1982 through 1984 Assuming a Ten-Year Average Debt Retirement.

Herd Size	1981		1982		1983		1984	
	Per Cow	Per Farm	Per Cow	Per Farm	Per Cow	Per Farm	Per Cow	Per Farm
-----dollars-----								
SERIES A PRICES								
20-29	164	4,380	84	2,320	117	3,190	148	3,980
30-39	278	9,630	197	6,840	232	8,060	251	8,720
40-49	340	14,940	258	11,320	290	12,720	306	13,440
50-59	300	16,340	215	11,730	238	12,970	246	13,400
60-69	302	19,630	218	14,160	249	16,190	264	17,140
70-89	305	23,770	215	16,740	238	18,540	246	19,110
90-109	293	28,270	195	18,720	228	21,900	241	23,160
110 or more	288	38,080	229	29,920	250	32,920	263	34,670
All Farms	294	17,840	212	12,930	241	14,590	255	15,380
(As % of 1981)		100		72		82		86
SERIES B PRICES								
20-29	164	4,380	132	3,550	17	600	44	1,310
30-39	278	9,630	253	8,780	146	5,080	153	5,330
40-49	340	14,940	315	13,820	200	8,770	202	8,900
50-59	300	16,340	271	14,760	147	8,010	139	7,550
60-69	302	19,630	277	17,940	158	10,270	159	10,380
70-89	305	23,770	272	21,150	147	11,380	139	10,720
90-109	293	28,270	255	24,570	135	12,870	136	12,980
110 or more	288	38,080	267	35,170	188	24,320	190	24,600
All Farms	294	17,840	267	16,150	152	9,410	154	9,410
(As % of 1981)		100		91		53		53

Under the Series B prices, the overall average incomes on a per farm basis were \$16,150 in 1982, \$9,410 in 1983, and \$9,410 in 1984 as compared with \$17,840 for the 1981 base year. These income figures are 91, 53, and 53 percent of that realized in 1981. The incomes for the latter two years are indeed significant decreases in dollar value terms. Importantly, farm sizes with less than 60 cows had an average income of less than \$10,000. Some of these herds are only slightly smaller than the average herd of 62 cows in the sample.

The distributions of income per farm for 1981 through 1984, assuming a 10-year debt retirement schedule, are shown in Table 8. In 1981, for Series A prices, 21 percent of the farms had negative incomes and 28 percent had incomes of \$30,000 and larger. Under Series A prices, the percent of farms showing negative incomes were 26, 24, and 23 respectively for 1982 through 1984. On the upper end of the income scale, 25 percent of the farms realized incomes of \$30,000 or greater. Series A prices, then, did not greatly alter the distribution of income.

The distributions of income per farm under Series B prices, however, indicate that a larger percentage of the farms would have negative incomes in the latter two years. The percentage increased from 22 percent in 1981 to 29 percent in 1983 and 1984. On the upper end of the income distribution, 27 percent realized incomes of \$30,000 and over in 1981, but by 1983 and 1984 only 15 percent would be expected to have incomes of \$30,000 or more.

An alternative analysis not shown here yielded estimated incomes using the actual annual principal payments reported in 1981. The availability of data for Pennsylvania enabling such an analysis provided an opportunity to examine the correspondence between results of the 10 year debt retirement assumption and the actual principal payment schedule. A comparison of the two debt repayment bases for the Series A prices showed relatively little difference in impacts over the projection period. However, the distribution of farms among income classes differed both in 1981 and, in a consistent manner, for the period 1982 through 1984. In general, the alternative method using the 1981 actual debt retirement schedule yielded larger annual income values. This would suggest that the ten-year average debt retirement method may overestimate the impact of the Series A prices on incomes.

When a comparison was made for the Series B prices, similar results were noted. With both approaches, however, rather substantial decreases were noted in the proportion of farms in the higher income classes and a corresponding increase in the proportion in the lower income groups. For example, both approaches provided nearly identical estimates (15 versus 16 percent) for the proportion of farms in the \$30,000 and over income class and 50 percent versus 43 percent for the farms in the \$10,000 or less income class.

Table 8. Distribution of Annual Family Living Income for Pennsylvania Farms, Actual 1981 and Estimated for 1982 through 1984.

Annual Income for Family Living	Actual 1981 Farms	Estimated		
		1982 Farms	1983 Farms	1984 Farms
-----percent-----				
<u>SERIES A PRICES</u>				
Negative	21	26	24	23
0 to \$9,999	16	20	18	18
\$10,000 to \$29,999	35	34	35	34
\$30,000 or more	28	20	23	25
Average Income/farm	\$17,840	\$12,930	\$14,590	\$15,380
<u>SERIES B PRICES</u>				
Negative	22	23	29	29
0 to \$9,999	16	18	21	21
\$10,000 to \$29,999	35	33	35	35
\$30,000 or more	27	26	15	15
Average Income/farm	\$17,840	\$16,150	\$9,410	\$9,410

In summary, it appears that estimates of income impacts based on the two approaches to debt retirement differ significantly when Series A prices are used, but do not differ greatly when Series B prices are used.

Costs of Production

The individual farm record data for the three states can also be used to estimate variable costs per hundredweight of milk. Total cash operating receipts were divided by the price of milk to estimate hundredweight of milk equivalents per farm.⁸

The simulation model produced an annual cost index as part of the output. This cost index is dependent on the input cost assumptions used and shown in Table 1. Variable costs of production were developed for the Series B prices for 1981 and 1983 which enabled a comparison of costs in the base year with projected costs in subsequent years.

Cash operating expense per hundredweight of milk produced on each farm in 1981 was estimated by dividing total farm cash operating expenses by the hundredweights of milk equivalent produced. Hundredweights of milk equivalent produced was estimated as the ratio of total farm cash operating receipts to price of milk per hundredweight.

To estimate farm operating expenses per hundredweight for subsequent years, two adjustments must be made. First each farm's total farm operating expenses must be adjusted to reflect the difference in costs from 1981 based on the cost assumptions employed (see Table 1). Secondly the hundredweights of milk equivalents must be adjusted to reflect any increase in productivity over time. Here we assumed a productivity increase of 2.5 percent per year which is equivalent to an increase of 200 pounds of milk per cow per year.

The results of this analysis are shown in Table 9 for four size categories of farms for each of the three states.

Vermont

A total of 83 farms had valid information for use in estimating cash operating costs in Vermont. Table 9 shows the distribution of farms by cost for 1981 and 1983. For the four size classes of farms for both years, the proportion of farms with costs less than \$10.00 per hundredweight was 40 percent for herds of under 40 cows while for herds of 120 or more cows, all had costs of more than \$10.00 per hundredweight. As herd size increased, operating expenses per hundredweight also increased to reach \$12.10 for the herds with 120 or more cows. Average cost for all farms in 1981 was \$11.02. Per

⁸ Using total cash operating receipts assumes that the costs for the products produced jointly with milk have the same production costs. Using only milk receipts or hundredweights of milk would entail cost allocations for non-milk items which are difficult to do and justify for conditions of joint production.

hundredweight costs for 1983 increased only \$0.03 over that for 1981 for all farms. Almost no changes were observed in the proportion of farms in each cost class from 1981 to 1983.

New York

Farm cash operating expenses per hundredweight for 603 New York farms are shown in Table 9. As with the Vermont records, the cost per hundredweight increased with increases in number of cows per farm. Farms with under 40 cows averaged \$10.50, increasing to \$11.47 per hundredweight on farms with 120 or more cows. The average costs for all farms in 1981 was \$10.85.

Adjusting for expected 1983 cost and production changes resulted in a cost per hundredweight increase to \$11.08 — roughly two percent higher than in 1981. Farms with under 40 cows had average costs of \$10.66. Those with 120 or more cows had average costs of \$11.77 per hundredweight.

Pennsylvania

The distribution of farm cash operating expenses per hundredweight by herd size for the 1,169 sampled Pennsylvania farms is shown in Table 9. On the average, the level of expenses was fairly uniform across all herd sizes, with a sample mean of \$10.25 per hundredweight. Eighty-five percent of all herds had costs per hundredweight of less than \$12.00.

In comparison to New York, the sample average in Pennsylvania was \$0.65 per hundredweight less. Three inputs could be responsible for most of the difference. Purchased feed was 30 cents higher, labor was 23 cents higher, and taxes were 19 cents higher per hundredweight of milk on the average in the New York sample as compared to the Pennsylvania sample.

Adjusting the individual farm data for expected 1983 cost and production changes resulted in an overall sample average cost per hundredweight increase to \$10.37, which was roughly one percent higher than 1981. The increase was approximately uniform across all herd sizes.

Table 9. Cash Operating Expenses Per Hundredweight by Size of Farm on Sample Farms, 1981 and 1983.

	Herd Size									
	Under 40		40 to 79		80 to 119		120 and Over		All	
	1981	1983	1981	1983	1981	1983	1981	1983	1981	1983
	-----percent-----									
Vermont										
\$6.00 to \$7.99	13	13	4	4	0	0	0	0	4	4
\$8.00 to \$9.99	27	27	18	18	10	10	0	0	18	17
\$10.00 to \$11.99	40	53	48	48	50	50	58	58	48	52
\$12.00 to \$13.99	20	7	28	28	40	40	28	28	28	25
\$14.00 and over	0	0	2	2	0	0	14	14	2	2
Average Costs	\$10.14	\$10.04	\$11.01	\$11.07	\$11.60	\$11.66	\$12.10	\$12.17	\$11.02	\$11.05
Std. Deviation	\$ 1.80	\$ 1.78	\$ 1.40	\$ 1.41	\$ 1.45	\$ 1.46	\$ 1.76	\$ 1.77	---	---
New York										
Under \$6.00	0	0	0	0	0	0	1	1	0	0
\$6.00 to \$7.99	8	7	5	4	0	0	0	0	4	3
\$8.00 to \$9.99	33	32	31	25	26	18	15	14	27	23
\$10.00 to \$11.99	37	36	48	51	54	55	61	58	50	51
\$12.00 to \$13.99	20	23	14	16	19	23	20	20	17	19
\$14.00 and over	2	2	2	4	1	4	3	7	2	4
Average Costs	\$10.50	\$10.66	\$10.62	\$10.84	\$11.26	\$11.84	\$11.47	\$11.77	\$10.85	\$11.08
Std. Deviation	\$ 1.92	\$ 1.95	\$ 1.72	\$ 1.75	\$ 3.44	\$ 3.53	\$ 3.82	\$ 3.92	---	---
Pennsylvania										
Under \$6.00	2	2	2	2	0	0	0	0	1	2
\$6.00 to \$7.99	15	15	13	11	7	7	6	5	12	11
\$8.00 to \$9.99	37	36	38	37	36	35	34	26	37	35
\$10.00 to \$11.99	26	27	35	37	38	37	46	48	35	35
\$12.00 to \$13.99	12	12	9	10	16	18	8	13	10	12
\$14.00 and over	8	8	3	3	3	3	6	7	5	5
Average Costs	\$10.41	\$10.44	\$10.13	\$10.27	\$10.35	\$10.51	\$10.52	\$10.73	\$10.25	\$10.37
Std. Deviation	\$ 3.28	\$ 3.28	\$ 3.69	\$ 3.75	\$ 1.80	\$ 1.82	\$ 1.71	\$ 1.71	---	---

Debt Retirement and Cash Operating Expenses

For each of the three states, 1981 debt was assumed to be amortized over ten years. The annual amortization for 1983 was then divided by the milk equivalents expected for each farm in 1983 to obtain the debt repayment per hundredweight. Table 10 shows the distribution of annual debt repayment per hundredweight by size of farm and for all farms. There is considerable variation within states and between states. Vermont farmers appear to maintain the most conservative posture with only a \$0.65 per hundredweight debt repayment load compared to \$1.46 for New York and \$1.60 for Pennsylvania.

Table 11 combines annual debt repayment with farm cash operating expenses per hundredweight. Using this table one can, for a given milk price, identify what proportion of farms would be unable to cover their obligatory cash expenses. For example, in Table 11 if the 1983 price of milk was \$12.00 per hundredweight, about 58 percent of the New York farms would have no cash returns left for family consumption. At a \$14.00 per hundredweight milk price, about 21 percent of the farms would have no money left for family living. In reality, most of these farms would make one or more adjustments. They might postpone principal payments, create new loans, sell inventory of assets such as animals or feeds, use savings, use retirement plans, postpone purchase of inputs such as fertilizer and machinery, change farm practices, or look at alternative enterprises. These types of adjustments could then soften the price/cost impact in the short run. In the long run, they cannot escape adjusting resource allocations to price.

Figure 1 shows the distribution of hundredweight costs combining debt costs with estimated farm cash operating expenses for the three states in graphic form.

Concluding Remarks

The objective of the analyses reported in this chapter was to determine the effect that reduced milk prices would have on family living incomes for the years 1982 through 1984 under two sets of milk prices and assumptions concerning future costs and debt repayment. These estimates of per farm incomes and costs per hundredweight provide insights regarding the economic viability of dairy farms in the three states in the near future under alternative milk price situations.

The analysis indicates that the Series A prices would have a less negative impact on incomes than would the Series B prices. Using

Table 10. Debt Repayment per Hundredweight by Size of Farm Vermont, New York, and Pennsylvania, 1983.^a

Debt Payment Per Hundredweight of Milk	Herd Size				
	Under 40	40 to 79	80 to 119	120 or more	All
	Percent				
Vermont					
Under \$1.00	80	76	70	43	74
\$1.00 to \$1.99	13	18	30	43	21
\$2.00 to \$2.99	7	4	0	14	4
\$3.00 and over	0	2	0	0	1
Average	\$0.57	\$0.63	\$0.45	\$1.28	\$0.65
Std. Deviation	\$0.60	\$0.77	\$0.58	\$0.85	---
New York					
Under \$1.00	37	36	37	45	37
\$1.00 to \$1.99	28	36	41	40	36
\$2.00 to \$2.99	26	19	19	12	20
\$3.00 and over	9	9	3	3	7
Average	\$1.51	\$1.55	\$1.33	\$1.27	\$1.46
Std. Deviation	\$1.13	\$1.55	\$0.83	\$0.73	---
Pennsylvania					
Under \$1.00	44	42	35	38	41
\$1.00 to \$1.99	24	27	29	37	27
\$2.00 to \$2.99	13	16	21	14	16
\$3.00 and over	19	15	15	11	16
Average	\$1.71	\$1.55	\$1.66	\$1.48	\$1.60
Std. Deviation	\$1.75	\$1.36	\$1.25	\$1.12	---

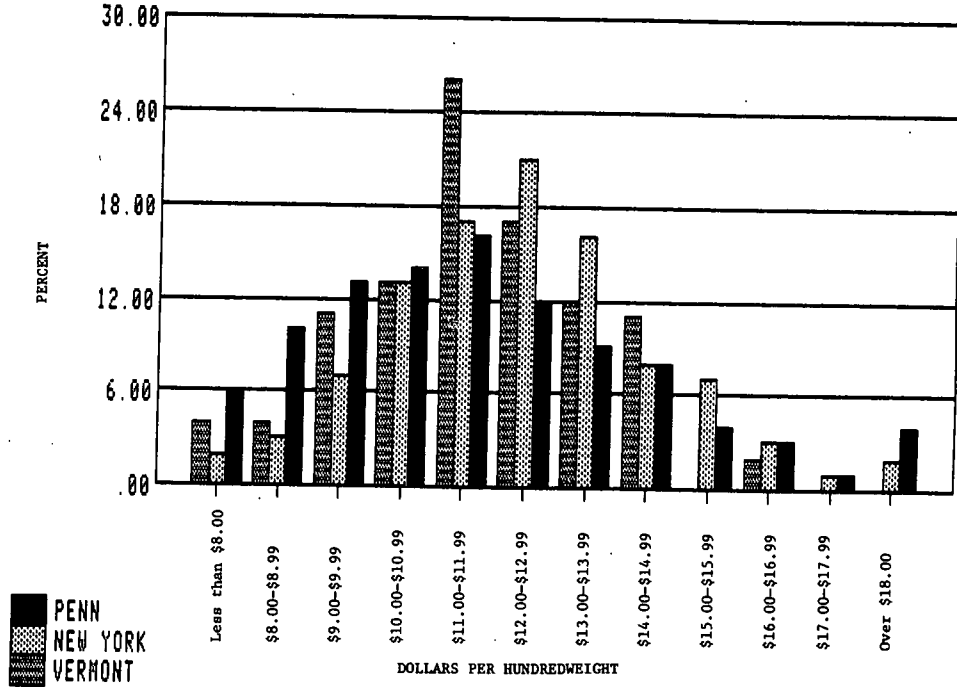
^a Debt repayment was estimated for each farm by taking the 1981 debt, assuming a ten-year amortization and dividing by the estimated milk equivalents.

Table 11. Cash Operating Expenses Plus Debt Repayment Per Hundred-weight by Size of Farm, Vermont, New York, and Pennsylvania, 1983.

Cash Operating Expenses Plus Debt Repayment	Herd Size				All
	Under 40	40 to 79	80 to 119	120 or more	
	Percent				
Vermont					
Under \$10.00	40	16	10	0	19
\$10.00 to \$11.99	33	45	30	29	39
\$12.00 to \$13.99	20	27	60	14	29
\$14.00 and over	7	12	0	57	13
Average	\$10.60	\$11.69	\$12.11	\$13.45	\$11.69
New York					
Under \$10.00	25	12	6	9	12
\$10.00 to \$11.99	22	33	33	25	30
\$12.00 to \$13.99	31	35	41	46	37
\$14.00 and over	22	20	20	20	21
Average	\$12.17	\$12.40	\$12.85	\$13.03	\$12.54
Pennsylvania					
Under \$10.00	32	29	23	17	29
\$10.00 to \$11.99	28	30	28	39	30
\$12.00 to \$13.99	17	22	25	20	21
\$14.00 and over	23	19	24	24	20
Average	\$12.15	\$11.82	\$12.17	\$12.21	\$11.97

Series A prices, cost and income distributions did not change significantly. Approximately 90 percent of the farms in Vermont, 70 to 76 percent in New York, and 74-78 percent in Pennsylvania had positive incomes over the four years analyzed. In the aggregate, the percent with negative incomes increased from 22 to 24 percent from 1981 to 1984. Thus, the Series A prices should not

Figure 1. Farm Cash Operating Expenses Estimated for 1983 Summed with 1981 Debt Repayments Per Hundredweight, for Pennsylvania, New York and Vermont



significantly alter the percent of farms with negative or positive incomes.

A useful reference would be to determine the percent of farms that have family living incomes above or below some acceptable benchmark level. For example, if \$10,000 is used as a benchmark, in the base year 1981, 39 percent of the farms had an income less than this amount. Thus, in 1981 it would appear that a large percentage of farms may have been relying on outside income to supplement or support their income for family consumption. Using Series A prices did not greatly alter the percent below and above this \$10,000 benchmark. By 1984, 43 percent of the farms had estimated incomes below the \$10,000 level.

Series B prices, however, increased the percentage of farms with negative incomes and with incomes of \$10,000 or less. The percent of farms in the three states with negative incomes over the period 1981 to 1984 increased from 22 to 32 percent. Restated, by 1984, 32 percent of the sampled farmers in the three states would have negative family incomes. Importantly, those farms will neither be able to meet their debt commitments nor provide reasonable income for family living. Without significant reductions in the cost of production, increases in output per cow, or the renewal of outstanding debts, a number of these farms will not be in operation by 1984 without substantial non-farm income subsidy. In the short run, appropriate adjustments may be made to continue in operation, but in the long run it will be necessary for farms to repay existing debt commitments as well as provide an income for family living. Farmers in Vermont will have less problems than those in either New York or Pennsylvania because of their lower debt loads.

The percent of farms with family incomes of \$10,000 and above also decreases significantly under the Series B prices. For all farms sampled, 54 percent are projected to have an income of less than \$10,000 in 1984. If Series B milk prices become a reality, a large number of farmers will find it necessary to seek outside employment income or exploit additional income generating activities on the farm just to provide an acceptable level of income for family consumption.

Summing the debt costs and the estimated cash operating expenses per hundredweight gave an estimated total cost per hundredweight as described in the preceding section. Assuming a figure of \$12.00 per hundredweight as a benchmark value, an estimated 52 percent of the farms in the states sampled would not break even in 1983. Farms in Vermont and New York would fare slightly better than those in Pennsylvania. Total costs exceeding \$12.00 per hundredweight indicates that those farms would not be able to meet all debt, and in some cases operating costs. For a price of \$13.00 per hundredweight, about 31 percent of the farms in the three states would be unable to generate positive incomes for family living after payment of cash expenses and debt amortization. These farms, 575 in our sample, will find it necessary to make significant adjustments

CHAPTER V

OPPORTUNITIES FOR RESOURCE ADJUSTMENT
IN NORTHEAST DAIRY PRODUCTION

John W. Malone, Jr.*

The current surplus problem in the dairy industry, as documented in earlier chapters of this report, has spurred renewed interest in the opportunities for adjusting some resources out of dairy production and into other productive activities. It is clear that a number of farm alternatives to dairying in the Northeast may exist. These alternatives are not likely to be as profitable as dairying has been in the past several years. However, neither is dairying expected to be as profitable in the future (see Chapter IV). Hence some dairy farmers may need to consider one or more of such alternatives.

The potential for adjusting some resources out of dairying in the Northeast will be addressed by examining three types of adjustments: (1) those internal to the continuing dairy farm, (2) those consisting of shifting resources completely out of dairying and into some other farm enterprise, and (3) those relating to the transfer of resources from dairy to employment outside of agriculture. Where applicable, this examination will include a discussion of the potential for public policies directed at assisting with resource adjustment. The dairy industry has for decades been a major producer of farm income in the Northeast because of its relative advantage over other agricultural enterprises. Climate, soil, topography and proximity to large markets provide fluid milk production in the Northeast with this advantage. Government price and income support programs have enhanced and provided some stability to dairy producers' income since the 1930s.

*Professor of Agricultural Economics and Head, Department of Agricultural Economics and Rural Sociology, The Pennsylvania State University.

Resource Adjustments Internal
to the Dairy Enterprise

Internal adjustments may be carried out through (1) more efficient resource or input use in current operations, and/or (2) by a reduction of resources used in milk production and the transfer of those resources into other farm enterprises.

In the first case, determination of the least cost mix of inputs going into the production of milk (or any other commodity) is one of the basic conditions necessary for maximizing profit. The economizing process includes production at a constant level with reduced inputs. Dairy farmers need, as do all business managers, to continually adjust resource use in response to changing conditions in product and input markets. Continual attention to the improvement of management practices is essential to firms in an industry involved in a resource adjustment process. The previous chapter suggests, for example, that per unit cost reductions are possible on many dairy farms in the region.

As alluded to in earlier chapters, many dairy farmers have increased their size of operation through equipment and land purchases in an attempt to maintain or increase net income. In doing so, loan payments on such purchases have become a large proportion of farm expenses and have created cash flow and debt repayment problems for some operators. For new entrants into dairy farming and for those contemplating expansion, some form of leasing and/or rental agreements with operators exiting the industry may be a more feasible approach.

A second possible resource adjustment within the individual dairy farm might consist of shifting some resources currently employed in milk production to other farm enterprises. Such shifting of resources by dairy farmers will necessarily involve careful consideration of a number of economic and physical factors which vary considerably between areas within the Northeast region. Climate, soil type, topography, capital, land, labor requirements, economic size of the enterprise, and farmer preference for a particular enterprise are major factors. Some enterprises that might be considered include grains (corn, wheat, oats, and soybeans), forage crops, beef cattle, hogs, sheep, dairy replacement heifers, vealers, poultry and eggs, and a variety of vegetable crops.

The data in Table 1 show the total value of sales for selected products for eleven Northeastern states. Sales of dairy products clearly dominate in the region. These data provide some insight into the diversity of agricultural activities in the region,

¹ There are some dairy farmers who will find limited expansion profitable where fixed resources are currently underutilized.

Table 1. Value of Agricultural Products Sold in the Northeast by States, 1978.^{ab}

Product	Conn.	Del.	Maine	Nd.	Mass.	N.H.	N.J.	N.Y.	Pa.	R.I.	Vt.	TOTAL ^c
(Product Value in Million Dollars)												
Hay	2		3	6	2	1	9	31	48		3	105
Wheat				8				5	30			43
Corn Grain		23		69			11	42	160			305
Soybeans		41		65			37		16			160
Dairy	71	14	73	172	67	38	59	1,086	1,165	6	240	2,992
Cattle and Calves	13	4	15	50	10	8	14	141	283	1	37	537
Hogs and Pigs	2	9		22	8	1	8	18	80	1	1	149
Broilers		182	94	261					127			644
Eggs	52	7	101	17	19	12	18	71	180	3	8	489
Potatoes	3	5	80		5		8	49	28	4	1	183
Sweet Corn	2				4		6	14	8			37
Tobacco	23			34	9				16			59
Tomatoes				5	3		16	7	9			40
Snapbeans				3			5	22				30
Peaches				3			16		15			35
Apples	6	1	11	9	13	7	12	93	76		6	227

^a No entry in a column of the table indicates zero or less than one million dollars of sales.

^b Sales of other products of one million dollars or more consist of (sales in millions of dollars are in parentheses):

Oats.....N.Y.(9),Pa.(9)	Cabbage.....N.J.(7),N.Y.(24)	Cauliflower N.Y.(5)
Cucumbers...Md.(4),N.J.(5)	Escarole....N.J.(4)	Lettuce.....N.Y.(7),N.J.(6)
Onions.....N.Y.(31)	Peppers.....N.J.(7)	Cranberries Mass.(21),N.J.(4)
Cherries...N.Y.(20)	Grapes.....N.Y.(46),Pa.(10)	

^c Total value of agricultural products sold in the region.

Source: U.S. Census of Agriculture, 1978.

as well as what might serve as potential enterprises in the Northeast if resources employed in milk production were reduced.

Grains and Forage Crops

The Northeast is a grain deficit region. Most feed grains and forage produced by dairy farmers are utilized for milk production. Numbers of cash grain farmers in the area are small. Some potential may exist for local grain production to replace some imported grain. Any consideration by the dairy farmer of producing grains and forage for cash markets and/or other livestock enterprises on the farm must include careful assessment of a number of physical and economic factors. In many areas of the Northeast, climate, soil, and topography are major limiting factors. Other constraints include capital and land availability for sufficient economic size of operation and market access for products.

Beef Cattle and Hogs

Pennsylvania is the major meat animal producing state in the Northeast, and accounts for about 53 percent of cash receipts in the region from the marketing of meat animals.² Although beef and hog production in Pennsylvania has increased during the last five years, the number of marketing and slaughter facilities has been reduced drastically because of the lack of sufficient volume to operate at economically efficient levels. Development of such market outlets are a necessity for expanded meat production in the Northeast.

The production of grass fed and lightly finished beef may be a feasible additional enterprise for some dairy farmers, assuming consumer preference continues to tend toward less finished beef. The Northeast, however, has traditionally been a market for highly finished beef. Some highly finished beef cattle feeding as an additional enterprise to dairy may be economically feasible during certain time periods. The beef cow-calf enterprise may be feasible in the region for some farmers, but climate, feed availability, land requirements, and lack of sufficient markets for feeders may place limitations on this enterprise.

Hog production may be an enterprise to which some resources might be shifted from milk production. Grain input per pound of pork production is less than for beef, and pork may have a relative

² U.S. Department of Agriculture. "Economic Indicators of the Farm Sector, State Income and Balance Sheet Statistics." Economic Research Service. 1981.

advantage over highly finished beef in a grain deficit area. In addition, land requirements would be less than for beef. Some existing facilities used for dairy operations might be employed in hog production, but additional facilities and equipment would likely be required. Adequate marketing and slaughter facilities also pose a problem for hog production.

Sheep

The Northeast region has been a major market for lamb. However, the per capita consumption of lamb nationally is extremely low relative to other red meats and poultry. The market for wool has faced stiff competition for many years from imports and synthetic materials. A shift of some resources such as feed and physical facilities out of milk production to the sheep enterprise might be an alternative for some. The sheep enterprise may be more adaptable in terms of some physical factors (e.g., soil, topography, and climate) to the northern section of the Northeast than a number of other agricultural enterprises. As with the beef and hog enterprises, market access in terms of marketing and slaughtering facilities would be a problem confronted by the sheep raiser.

Dairy Calves for Veal Production and Dairy Heifer Replacements

Veal calf production may utilize a number of resources already possessed by the dairy farmer. The nature of veal production requires a high level of skilled management and could prove a challenging additional enterprise for many dairy farmers. Per capita consumption of veal is low in the United States relative to other meats and poultry. Market outlets for new producers may be a limiting factor since veal is consumed primarily in the hotel and restaurant trade.

The milk producer has an alternative in shifting some resources such as feed and physical facilities into the production of replacement heifers for other dairy farm operators. Market demand for fluid milk and dairy products, and numbers of dairy cows required to satisfy such demand, will be a limiting factor to the economic feasibility of the heifer replacement enterprise.

Poultry and Egg Production

Poultry and/or egg production does not appear to be very feasible as an additional enterprise for the dairy farmer. The broiler industry is highly integrated and concentrated, with the market being difficult "to crack" for the independent producer. The start-up costs for facilities and equipment would seem prohibitive for the producer in those frequent cases where one is paid only for his labor under a contractual arrangement with a feed or processing firm.

The high degree of capital investment, the size of operation required, and the decline in per capita egg consumption limits the egg enterprise as a viable alternative. The trend toward increasing vertical integration in the egg industry presents problems similar to those which would be encountered in the broiler enterprise.

Vegetable Crop Production

Dairy farmers in certain areas of the Northeast might find some types of vegetable production feasible in utilizing some of the resources of the dairy enterprise. Some land and equipment could be transferred from forage to the production of vegetable crops. Irrigation equipment is likely to be essential, and labor and management requirements are high in this type of enterprise. Access to markets is a major consideration along with the determination of production for fresh markets versus processed markets. Production for the fresh market appears to be most advantageous in the Northeast given the comparative advantage other regions have for producing vegetables for the processed market.

Shifting Resources Totally From Dairy Farming to other Farm Enterprises

It is rather unlikely that large numbers of dairy farmers in the Northeast would shift completely out of dairy production into another new farm enterprise. Past studies indicate that the majority of operators having left dairy farming either retired or

sought non-agricultural employment.³ Some older dairy farmers did shift to other farm activities during the transition period prior to retirement.

A possible reduction in resources employed in the dairy industry may come about by a decrease in the number of potential new entrants and the shifting of these resources into other feasible farm enterprises. Public policy aimed at assisting new entrants and current dairy operators into farm enterprises other than dairy may take the form of research and education, or loans and compensation.

Resource adjustment involving the transfer of resources out of the dairy industry and into other farming activities may be achieved through three major approaches or some combination of three approaches. A policy of reliance on the marketplace will gradually encourage resources to shift within as well as out of the dairy industry, but may result in economic and social hardship for some, at least in the short run. A public policy of education and research may be directed toward a goal of resource adjustment in the dairy industry. Finally, a policy of loans and/or direct compensation to producers might be developed to assist current dairy farmers or aspiring dairy farmers to employ their resources in alternative farm enterprises.

Public Policy Programs

Federal, state, and local governments have long supported education and research programs related to agricultural production and marketing. Increased programming which focuses specifically on the dairy problem in the Northeast may be economically, socially, and politically desirable. Research efforts would include identifying and evaluating (1) the economic feasibility of alternative enterprises to the dairy operation, or of farming systems which combine dairy farming and alternative enterprises, and (2) the economic, social and institutional barriers to resource adjustment in the dairy industry (e.g., finance, labor mobility, lack of markets, individual and family values, etc.). Extension education efforts could be aimed at assisting farm families to cope with issues related to resource adjustments on dairy farms and in shifting resources to other farm enterprises.

³ See L. W. Zuidema. "A Study of the Withdrawal of Farms and Farmers from Dairying in Two Areas of New York State Between 1958 and 1963." M.S. Thesis, Cornell University. June 1964, and J. R. Cummings. "Structural Adjustment in the Ontario Dairy Farm Sector, 1971-76." Economic Working Paper. Agriculture Canada. December 1980.

Government agencies might be directed to offer long term, low interest loans to potential farmers interested in alternative farm enterprises identified as economically feasible. Compensation payments may be provided to dairy farmers opting for retraining and/or for losses sustained when disposition of assets employed in dairying do not provide a "fair" return. Such programs may also be employed in supporting the transfer of resources from dairying to non-agricultural employment.

Transfer of Resources From Dairy Farming to Non-Agricultural Employment

Resources have been exiting from agricultural to non-agricultural employment in the United States during most of the 20-th century. In the dairy industry, as pointed out earlier in this report, numbers of dairy cows in the United States have been reduced by one-half over the last 25 years. Increased production per cow, however, has offset the decrease in numbers of dairy farmers and cows. In the Northeast, numbers of dairy farms and of dairy cows have decreased, but herd size has increased.

The marketplace has been influencing resource adjustments within the Northeast dairy industry since the 1930s. Adjustments have also taken place in the form of resource transfer from the dairy industry to non-agricultural employment.

Dairy Operator Characteristics and Their Influence On Resource Transfer Out of Agriculture

Past studies have identified a number of factors which affect the resource adjustment process. Age of farmer, educational level, skills, economic viability of the current farm operation, off-farm employment opportunities, and preference for farming and individual farm enterprises have been major factors.

Changes in number of farm operators and in the number of operators between age groups over time have important implications for resource adjustment in the future. The total number of dairy farm operators in the three major dairy states in the Northeast --- New York, Pennsylvania, and Vermont --- has declined dramatically, indicating that resource adjustments have been taking place (Table 2). Dairy farm operators with sales of more than \$2,500 in each of the states in 1959 were: 38,091 in New York, 30,774 in Pennsylvania, and 7,551 in Vermont. In 1978, the number of operators for each of these states was: 15,462 in New York, 14,135

in Pennsylvania, and 3,198 in Vermont.⁴ Recognizing the lack of direct comparability for some of the Census data between 1978 and 1959, the data should still provide generally meaningful comparisons over time. There has been a reduction of operators in each age group in all three of the states between 1959 and 1978 with the exception of the "under 35" age group between 1974 and 1978. It is difficult to sort out how much of the increase was due to "new entrants" into dairying, or may have been the result of the 1978 Census obtaining counts of small farms (farms with sales of less than \$2,500) which were not accounted for in the 1974 Census.⁵

The change in the percentage distribution of dairy farmers for the three states in the "under 35" age group between 1959 and 1969 reflects what had been occurring at the national level for this group of farm operators since the 1920s. The "under 35" age group for the three states decreased from 15.8 percent of all dairy farm operators to 13.8 percent. The "65 and over" age group for the period, however, decreased from 11.5 percent to 10.3 percent. The "35 to 44" age group decreased from 24.3 percent to 23.2 percent, while the percentage distribution of dairy farm operators in age groups "45 to 54" and "55 to 64" increased from 27.2 percent to 29.5 percent and from 21.1 percent to 23.1 percent, respectively.

There has been some change in the percentage distribution of dairy farmers by age groups between 1969 and 1978. Again, one must consider the possible impacts of the adjustment for small farms in the 1978 Census. From 1969 to 1978, operators "under 35" increased from 13.8 percent to 18.3 percent of all dairy farmers in the three states. Dairy farmers "65 and over" continued to be a decreasing proportion of total dairy farm operators, declining from 10.3 percent in 1969 to 8.3 percent in 1978. The percentage distribution of operators in the "35 to 44" age group declined slightly from 23.2 percent to 22.4 percent. The "45 to 54" age group declined from 29.5 percent to 27.9 percent while the "55 to 64" age group percentage distribution remained constant at 23.1 percent.

A look at net entries and withdrawals of dairy farm operators in New York, Pennsylvania, and Vermont for 1959, 1969, and 1978 (Table 3) may be helpful in assessing the resource adjustment process which has been taking place. There were 20,779 dairy farmers in the "45 to 54" age group in 1959. By 1978, the "65 and over" age group had

⁴ The 1978 Census of Agriculture includes data for all farms classified by specific characteristics. In earlier censuses, comparable data were tabulated only for farms with sales of \$2,500 or over. Data for farms with sales of less than \$2,500 in 1969 and earlier censuses are not directly comparable to 1974 and 1978 data because of changes in the definition of a farm.

⁵ The 1978 Census of Agriculture for Pennsylvania recorded 166 dairy farm operators in the category with sales of less than \$2,500. There were 2,780 dairy farm operators in Pennsylvania in the age group "under 35".

Table 2. Number of Dairy Farm Operators by Age Group in New York, Pennsylvania, and Vermont for Census Years 1959, 1964, 1969, 1974, and 1978.

	1978	1974	1969	1964	1959
All Age Groups					
New York	15,462	17,025	21,711	30,841	38,091
Pennsylvania	14,135	15,536	19,162	26,025	30,774
Vermont	3,198	3,328	4,017	5,769	7,551
Total	32,795	35,889	44,890	62,635	76,416
Under 35 Age Group					
New York	2,609	2,409	2,884	4,312	5,559
Pennsylvania	2,780	2,332	2,754	4,024	5,445
Vermont	603	549	540	759	1,106
Total	5,992	5,290	6,177	9,095	12,110
35 to 44 Age Group					
New York	3,580	3,666	4,852	7,348	8,974
Pennsylvania	3,020	3,325	4,588	6,844	7,973
Vermont	746	711	985	1,368	1,694
Total	7,346	7,702	10,425	15,560	18,641
45 to 54 Age Group					
New York	4,248	5,063	6,323	8,595	10,380
Pennsylvania	4,022	4,837	5,824	7,466	8,217
Vermont	874	970	1,130	1,680	2,182
Total	9,144	10,870	13,277	17,741	20,779
55 to 64 Age Group					
New York	3,701	4,164	5,142	6,832	8,402
Pennsylvania	3,195	3,580	4,246	5,157	6,031
Vermont	682	731	957	1,284	1,655
Total	7,578	8,475	10,345	13,273	16,088
65 and Over Age Group					
New York	1,324	1,723	2,510	3,754	4,776
Pennsylvania	1,118	1,462	1,751	2,534	3,108
Vermont	293	367	405	678	914
Total	2,735	3,552	4,666	6,966	8,798

Source: U.S. Census of Agriculture.

Table 3. Net Entries and Withdrawals of Dairy Farm Operators in New York, Pennsylvania, and Vermont in 1959, 1969, and 1978.^a

1959		1969		1978	
Age Group Operators		Age Group Operators		Age Group Operators	
45 to 54	20,779	55 to 64	10,345	over 65	2,735
35 to 44	18,461	45 to 54	13,277	55 to 64	7,578
under 35	12,110	35 to 44	10,425	45 to 54	9,144
		under 35	6,177	35 to 44	7,346
				under 35	5,992

^a Includes dairy farm operators with sales of \$2,500 or more for 1959 and 1969.

a total of 2,735 operators. There were also withdrawals of dairy farmers by 1978 for the other age groups farming in 1959 and 1969 with the exception of the "under 35" age group in 1969. In 1969, there were 6,177 dairy operators "under 35" and by 1978 that group reflected an increase to 7,346 operators.

The "under 35" age group entering dairy farming declined considerably from 1959 to 1969. The change from 1969 to 1978, however, does not appear to be significant when compared with that of the previous decade.

A question of significance is what will happen in the future relative to entries into and withdrawals from dairy farming between and within age groups. Of the 32,795 operators in 1978 in three of the major dairy states and for all dairy operators in the Northeast, how many are likely to (1) continue in dairy farming at a constant or increased size, (2) become involved in farm enterprises other than dairying, or (3) retire or find new employment in the non-agricultural sector? Age, education, level of skills, off-farm employment opportunities, etc. will be important determinants. Two studies concerning resource adjustment related to dairying (one in the 1960s and one in the 1970s) provide some insights on the importance of these factors.⁶

⁶ Zuidema and Cummings, *op. cit.*

In the Canadian study 15,000 dairy farmers left dairying between 1971 and 1976. Forty-seven percent of these dairy farmers took up a non-dairy farm enterprise and 53 percent exited from farming. Of the 53 percent who exited from farming, the author indicated that 18 percent were probably retiring from farming while the remaining 35 percent were seeking full-time off-farm employment. Dairy farmers adjusting out of dairy farming were offset to some degree by some 5,000 new dairy farmers. Some specific findings of the study relative to the farmers studied were:

1. Between 1971 and 1976 almost 8,000 dairy farmers exited completely from farming. Their average age in 1971 was 53 years. Of these, 51 percent and 42 percent had dairy cow herd sizes of 3-17 and 18-47, respectively. Eight percent of exiting dairy farmers were under 35 years of age, over 40 percent were between 35 and 55 years of age, 32 percent were between 55 and 64 years of age, and 18 percent were over 64 years of age.
2. For those staying in dairy production in all herd sizes, it was generally the younger age groups who expanded herd sizes over the period 1971-76. These dairy farmers had fewer days of off-farm employment as well.
3. The most numerous farm enterprises entered into by farmers adjusting out of dairy were by rank order, beef cattle (the most prevalent among the smaller dairy operators), small grains (most prevalent among the larger dairy operators), and hog production. These three alternatives accounted for 89 percent of the exiting farmers. The smaller dairy farmers (those in the herd size categories of 3-17 and 18-47 cow herds) accounted for over 96 percent of the farm enterprise changes noted.
4. For new entrants into dairy in 1976, the majority of operators (58.4 percent) were in the smallest herd size group.
5. Over 58 percent of the exiting dairy farmers giving up farming entirely or moving into alternative farm enterprises were in the smallest herd size group.
6. Dairy farmers expanding their dairy enterprise or adjusting to a non-dairy enterprise which would generate sales comparable to a constant or expanding dairy enterprise were younger than those farmers reducing the size of dairy enterprise or adjusting to a non-dairy enterprise with a

⁷ Other herd size groups delineated in this study were 48-92 cows and 93 cows and over.

lower level of sales.

7. Days of off-farm work declined during the study period for expanding and constant sized dairy farmers while days of off-farm work increased for farmers reducing the size of their dairy operation or adjusting to another farm enterprise.

The New York State study was conducted on a much smaller scale. It looked at the characteristics of 118 former dairy farmers in two areas of New York for the period 1959-63. Some specific findings of this study were:

1. The decline in dairy farms was, for the most part, comprised of small farms with low per cow milk yields.
2. Eighty-four percent of the dairy operators who ceased milk production for physical reasons were over 54 years of age while over one-half who gave economic reasons for ceasing milk production were between 35 and 54 years of age.
3. The majority of discontinuing farmers owned, managed or rented out the farm for crops and pasture with about 25 percent selling the farm.
4. About two-thirds of the "adjusted out" farmers secured other employment, 28 percent retired from farming, and 8 percent were unemployed at the time of the study.
5. Approximately 20 percent of the former dairy farmers were employed as unskilled laborers. Of those who had 8 years or less of formal education, over one-half were unemployed or were employed as unskilled labor. Those who had specific job experience, either while dairying or before, were more easily absorbed into the job market.
6. After discontinuing dairy farming, the family income of the former dairy farmer was greater than or the same as while engaged in dairy farming in 91 percent of the cases.
7. In terms of the current (1963) use of resources employed by former dairy operators, 75 percent of the land was being used for crop production, about two-thirds of the barns were being used for various purposes but mainly for farming, and about one-half of the equipment and tools had been sold.

Non-Agricultural Employment
Opportunities In the Northeast

Currently, unemployment is a major problem in the United States economy. In the Northeast region, the growth of total employment and manufacturing employment has lagged behind other regions during the sixties and seventies.⁸ Fuller's findings on total employment, manufacturing employment, and unemployment in the Northeast during the 1960s and 1970s has implications for potential resource transfers from the dairy industry to non-agricultural employment.

There was a slowdown in the growth rate of total employment in the Northeast relative to the national rate during the 1960s and 1970s. Further, the lag in employment growth was greater in the Middle Atlantic States (New Jersey, New York, and Pennsylvania) than in New England. New York, Pennsylvania, and Vermont are the three major states in the Northeast in terms of milk production and cow numbers.

During the 1960s and 1970s, total employment in the Northeast showed a higher annual rate of growth in nonmetro areas (areas with less than 50,000 population), than in metro areas. Again, differences between areas of the Northeast were apparent. Total employment growth in nonmetro areas in New England during the 1970s exceeded the national rate while nonmetro areas in the Middle Atlantic States experienced slower growth. New York and Pennsylvania showed average to slow growth in nonmetro areas and mostly slow growth in metro areas from 1971 to 1978. Vermont showed average to fast growth in nonmetro total employment during the same period.

Another consideration in evaluating potential employment opportunities in a region is the mix of slow and fast growth industries as compared to the national average. Fuller's analysis indicates that New England in the 1960s and 1970s had an above average proportion of employment in fast growing industries while this proportion for the Middle Atlantic States was average to below average. Any appraisal of non-agricultural employment opportunities for exiting dairy farmers and/or farm family members and for those who adjust to other farm enterprises will require a more specific look at nonmetro and metro regions between and within states of the Northeast. Also, the ability to take advantage of off-farm employment opportunities may be a function of the size of the dairy

⁸ Theodore E. Fuller. "The Northeast: Two Decades of Slow Employment Growth." Northeast Regional Center for Rural Development. Publication #31. May 1982. Fuller's analysis excluded Delaware, Maryland, and West Virginia because the employment structure and/or the employment growth rate in these states were considerably different than in New England or in the Middle Atlantic States.

herd, since larger size dairy farmers tend to have little or no days of off-farm employment.

The potential for non-agricultural employment opportunities can be illustrated by several specific examples. In Vermont, for example, nonmetro areas have exhibited average to above average growth in employment. Orleans County in Vermont had an above average growth rate in employment from 1971 to 1978. This county had a dairy cow population of 26,000 in 1978 with 69 percent of the cows in dairy herds of 50 or more cows. A potential may exist in a county such as Orleans for non-agricultural employment for some dairy farmers or farm families. But, in Schoharie County, New York where there were 15,000 dairy cows in 1978 with 60 percent in herds of 50 or more cows, there was a decline in growth of total employment. A number of nonmetro counties in New York state with a significant number of dairy cows experienced slow growth in total employment. Lancaster County, Pennsylvania --- a metro area with 82,000 dairy cows and 46 percent in herds of 50 or more cows --- showed an average rate of growth in employment. But surrounding metro counties in southeast Pennsylvania with dairy cow populations ranging from 15,000 to 20,000 experienced slow growth in total employment. Five nonmetro counties in Central Pennsylvania with a total population of 43,000 dairy cows experienced slow growth in employment. The percentage of cows in herd sizes of 50 or more cows in these latter counties ranged from 31 to 62 percent. Windham County, Connecticut located in a nonmetro area, had 11,000 dairy cows 90 percent in herds of 50 or more cows. Its experience has been opposite that of Orleans County, Vermont having a slow growth in employment during 1971-78.

From the above examples it is clear that generalizations about non-agricultural employment potentials applicable to all counties in the region cannot be made. Each county needs to be examined in detail and as a special case.

Implications

Resource adjustment in United States agriculture has generally been a gradual process over time. Price and income support for dairy farmers as afforded by federal dairy policy of the past has at times hindered the process. It does not focus on the human resource adjustment problems. Federal, state and local support has been available for research and education for the dairy sector. Its major emphasis has been on matters of efficiency, although some attention has been given to resource adjustment issues by agricultural scientists.

Census data clearly indicate that resources have in the past transferred out of the dairy industry in the Northeast. The number of dairy operators in all age groups except the "under 35" age group

dropped noticeably from 1969 to 1978. The number of operators in the "under 35" age group dropped only slightly over that decade. It would appear that the number of operators under 35 has stabilized.

The supply of milk, however, continues to exceed demand requirements. Currently, political and economic pressure is being directed toward reduced price and income maintenance. Over the long haul, five to ten years, a policy to reduce milk prices will induce more resources to leave the industry. A society with a goal of reducing milk production during the next few years may want to consider a policy of assistance not only for those dairy operators who would be the "withdrawals" from the industry, but also for those operators in the young age group and the new entrants who will need to replace some proportion of the operators leaving the industry. In the young age group are found those dairy farmers who are beginning the expansion stage of the "dairy age cycle". Many of these operators are faced with cash flow and equity problems. Assistance may also be necessary for those dairy farmers "adjusting in" to other farm enterprises and for those "adjusting out" of farming altogether.

Two studies reviewed in this chapter have provided some insight into how dairy farmers with different attributes have adjusted to change in the industry — some successfully and some not so successfully. Most shifting of dairy farm resources to alternative farm enterprises was from smaller size dairy operations. Most of the continuing dairy farmers who were expanding were in the younger age groups. A number of dairy farmers leaving farming entirely experienced some difficulty finding non-agricultural employment. Age, and educational and skill levels appear to be important factors in their rate of success. Finally, a major portion of the land and equipment of exiting dairy farmers continued to be employed, primarily in crop production. The above factors will most likely impact on adjustment in the Northeast dairy industry in the future. Programs of research, education, and financial assistance through use of loans and/or various incentives may ease the human resource adjustment process which will continue during the remainder of this century.

CHAPTER VI

IMPACT OF REDUCED MILK SUPPLIES ON
DAIRY PROCESSING AND SERVICE INDUSTRIES

David E. Hahn
Andrew Novakovic
James Pratt*

Dairy farmers in the Northeast rely on input suppliers, particularly feed dealers, and milk processing plants for the production and marketing of milk and dairy products. Economic changes affecting dairy farmers also affect the input suppliers and milk processing firms. The purpose of this chapter is to examine the potential impact of lower milk prices at the producer level, and hence lower milk supplies, on the dairy processing and service industries.

Feed Industry

In addition to the milk processing industries, several input industries are closely related to milk production. Among the numerous expenditures made by dairy farmers today, those for livestock feed are the largest. The production of feed varies considerably from one region to another. Three major feed producing regions are (in order of importance) the Corn Belt, the Southern Plains, and the Northeast. The Corn Belt is the major producer of hog feed whereas the Southern Plains is the major producer of feed for beef cattle and sheep. Dairy feed is produced primarily in the Northeast and the Lake States. The feed industry is dominated by manufacturing firms which handle a large volume of feed. However, about 20,000 retail feed dealers in the United States account for only about 60 percent of retail feed sales.

No comprehensive study of the feed manufacturing and distribution industry in the Northeast has been conducted, although a study of the New York feed and fertilizer industries has recently been

*Professor of Agricultural Economics at Ohio State University,
Assistant Professor of Agricultural Economics at Cornell University,
and Research Associate at Cornell University, respectively

completed.¹ It is assumed that the structure and characteristics of the New York feed industry is representative of the Northeast. This study reports that the bulk of the feed used in New York State is consumed by milk cows. This feed was distributed primarily by small feed firms (Table 1). Of the 345 firms participating in this study, approximately two-thirds sold less than 5,000 tons.

Table 1. Distribution of Feed Firms by Sales, New York, 1979.

Sales in Tons	Number of Feed Firms
1 - 5,000	223
5,001 - 10,000	70
10,001 - 15,000	18
15,001 - 20,000	4
20,001 - 25,000	4
25,001 - 30,000	2
30,001 - 35,000	3
35,001 - 40,000	2
40,001 - 45,000	1
45,001 - 50,000	3
over 50,000	15
TOTAL	345

Source: Anderson, Bruce L. op. cit.

¹ Anderson, Bruce L. "The New York Feed and Fertilizer Industries: Structure, Characteristics and Input Movements." Department of Agricultural Economics, Cornell University. AE Res. 81-26. October 1981.

Fluid Milk Processing Industry

The structure of the fluid milk processing industry has undergone considerable change during the past 30 years. As shown in Table 2, the number of fluid milk processing plants decreased by nearly 90 percent from 1948 to 1980. However, the increased volume processed per plant has compensated for the loss in plant numbers. Nationally, average volume per plant increased, from 1 593 gallons daily in 1952 to 12 053 gallons daily in 1976.²

The relationships between plant volume and survival in the Northeast were consistent with national trends during this same period. Currently, 450 fluid milk processing plants are packaging fluid milk in the Northeast. The locations of these plants are shown in Figure 1. Of these 450 plants, approximately one-third process less than 500,000 pounds per month. These plants account for approximately one percent of the fluid milk processed in the region. Twenty-seven large plants in the Northeast package more than 20 million pounds of milk per month, and account for nearly 40 percent of the milk processed in the region.

Manufacturing Milk Industry

The primary function of manufacturing milk plants is to provide manufactured dairy products for consumers. In addition, manufacturing milk plants also perform a balancing function in various periods throughout the year. Grade A supplies of milk are substantially in excess of fluid milk requirements. This is particularly true through the May-June period, but it is also a weekly occurrence as Friday, Saturday, and Sunday producer milk deliveries must be accommodated even while fluid milk processing plants are shut down for the weekend. Furthermore, holidays interrupt the normal flow of market milk. Occasional strikes at processing plants require that surplus handling facilities be available when normal outlets for milk are not available.

The structure of the manufacturing milk industry has also undergone considerable change. The number of operating butter plants decreased from 1,152 in 1963 to 238 by 1981. The number of cheese plants followed the same trend. In 1965 there were 1,207 cheese plants in the United States, and by 1981 this number had decreased to 725.

² Williams, Sheldon, and James W. Grucbele. "Structural Changes with Some Implications for Behavior and Performance for Fluid Milk Processing Firms, Illinois, 1950-1980." North Central Journal of Agricultural Economics. 4:2:64. July 1982.

Table 2. Number of Fluid Milk Processing Plants Operated by Commercial Processors, United States, 1948-1980.^a

Year	Number of Plants	Percent Decrease From Preceding Year
1948	8,527	—
1949	8,299	2.7
1950	8,195	1.3
1951	7,867	4.0
1952	7,508	4.6
1953	7,238	3.6
1954	6,979	3.6
1955	6,726	3.6
1956	6,472	3.8
1957	6,187	4.4
1958	5,888	4.8
1959	5,571	5.4
1960	5,328	4.4
1961	4,959	7.0
1962	4,683	5.6
1963	4,442	5.1
1964	4,103	7.6
1965	3,743	8.8
1966	3,379	9.7
1967	2,978	11.9
1968	2,656	10.8
1969	2,473	6.9
1970	2,216	10.4
1971	2,096	5.4
1972	1,859	11.3
1973	1,627	12.5
1974	1,484	8.8
1975	1,408	5.1
1976	1,361	3.3
1977	1,284	5.7
1978	1,215	5.4
1979	1,135	6.6
1980	1,076	5.2

^a Source: Manchester, Alden C. "Market Structure, Institutions, and Performance in the Fluid Milk Industry." Economic Research Service, USDA. A. E. 248. January 1974 and private conversation with Alden C. Manchester.

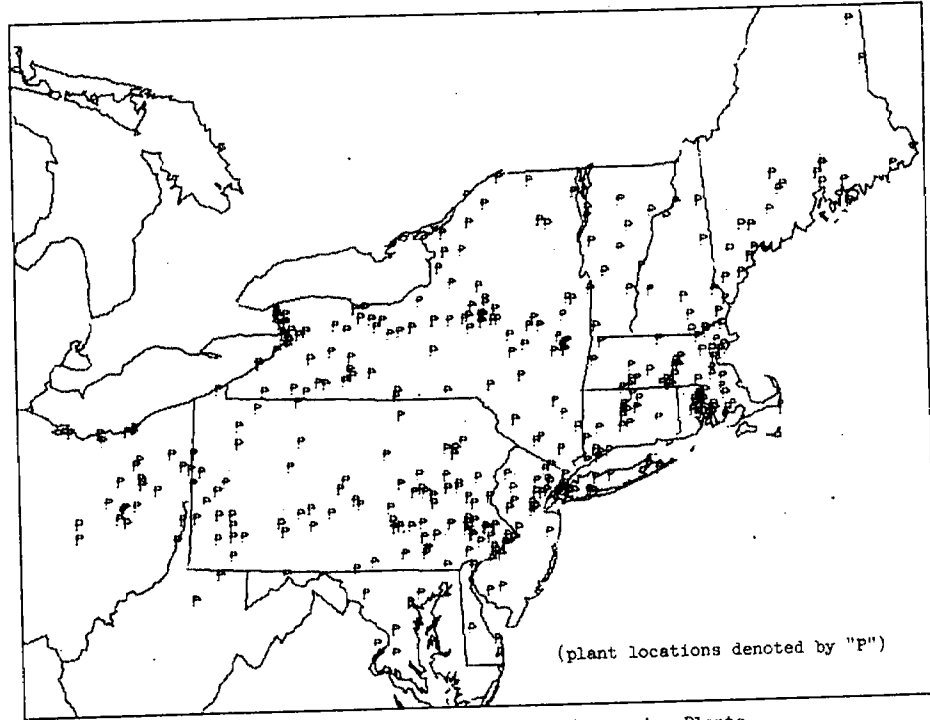


Figure 1. Geographic Location of Fluid Milk Product Processing Plants in the Northeast, 1982.

Source: Published and unpublished data from State Departments of Agriculture and Federal Milk Marketing Orders.

Plant survival in the Northeast followed this same trend. In 1965 there were 102 butter plants and 171 cheese plants operating in the Northeast. Currently there are only 106 butter and cheese plants combined. In addition, there are 39 plants manufacturing soft, or Class II, products for a total of 145 plants. The locations of these plants are shown in Figure 2.

Plant Costs

The producer price for milk in dairy products is only one part of the final retail price. To put these costs in perspective, processing costs are presented for fluid milk and butter in Table 3. The farm share accounts for only 55 percent of the retail store price for fluid whole milk and two-thirds of the retail price of butter.

New technology and the subsequent economic forces have been the primary factors in causing a milk processing structure of fewer firms and plants distributing milk over larger and larger marketing areas. Size economies dictate that current fluid milk capacity should start with a processing capacity of 5 million pounds per month (see Table 4 and Figure 3).

Table 3. Farm Value, Marketing Costs by Function and Retail Prices for Grade A Whole Milk and Butter, in the United States, 1981.

Market Function or Level	Whole Milk	Butter
	Sold in Stores	
	(cents/half gal)	(cents/lb)
Farm Value	61.8	132.5
Procurement	4.1	4.7
Processing	14.9	20.2
Wholesaling	15.0	11.4
Retailing	16.0	30.5
Retail Price	111.8	199.3

Source: Webster Jones. "Costs and Margins for Fluid Whole Milk and Butter", Dairy Outlook and Situation. USDA. March 1982. pps. 23-27.

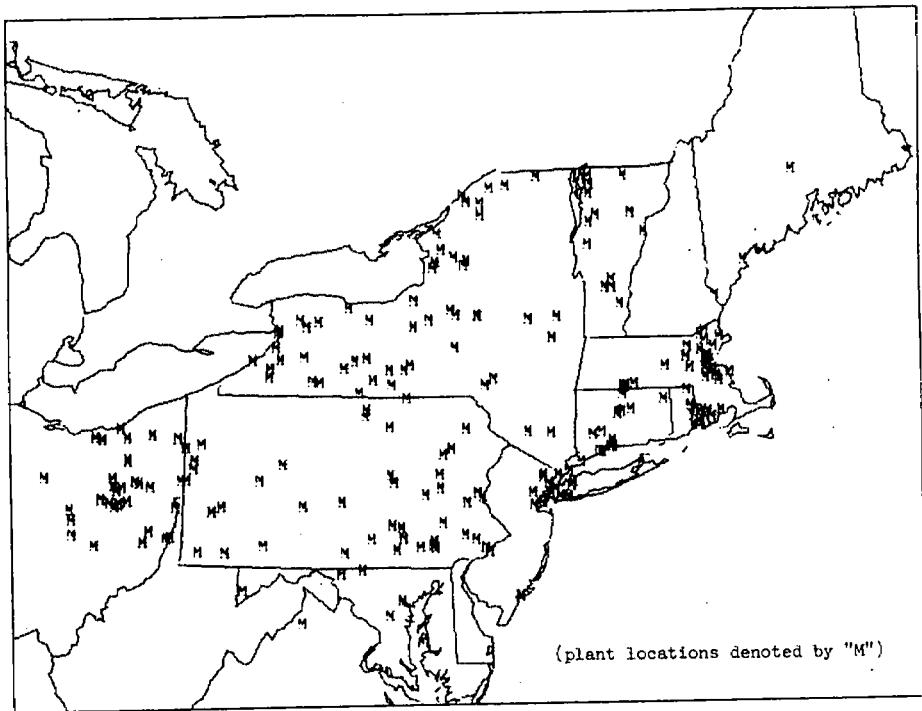


Figure 2. Geographic Location of Dairy Product Manufacturing Plants in the Northeast, 1982.

Source: Published and unpublished data from State Department of Agriculture and Federal Milk Marketing Orders.

Table 4. Fluid Milk Processing Costs in the Northeast, 1980.^a

Monthly Volume of Milk Processed	Cost Per Cwt.	Monthly Volume of Milk Processed	Cost Per Cwt.
(pounds)	(cents)	(pounds)	(cents)
250,000	487	20,000,000	253
500,000	418	25,000,000	249
1,000,000	364	30,000,000	246
2,500,000	313	35,000,000	244
5,000,000	286	40,000,000	243
10,000,000	267	45,000,000	241
15,000,000	258	50,000,000	240

^a B. J. Smith. Unpublished report. The Pennsylvania State University. 1982. The costs shown here are based on the following functional relation:

$$APC = 217.98581264 - 115.63021309V^{-1} + 498.62107029V^{-1/2}$$

where:

APC = Cost of processing milk, cents per cwt., and
V = Volume of milk processed per month in
thousand pounds.

At monthly volumes greater than 50,000,000 pounds, processing costs remain constant at 240 cents per hundredweight of milk processed.

This function pertains to the year 1980 and to a plant with a full line of fluid milk products.

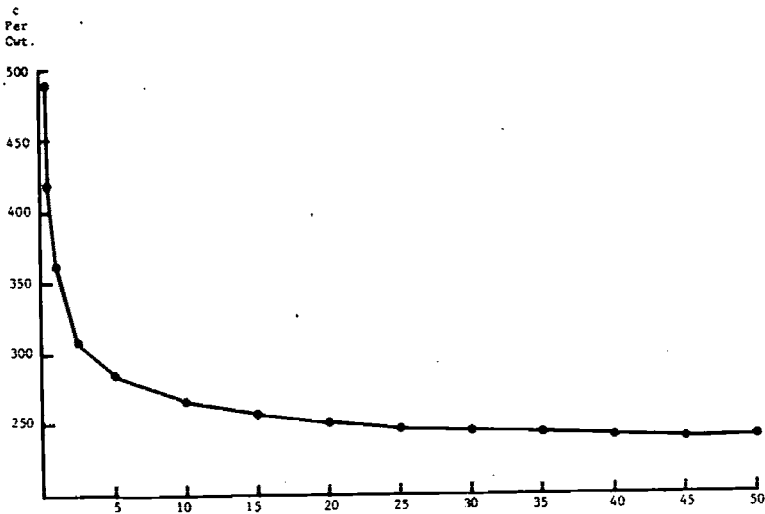


Figure 3. Fluid Milk Processing Costs, Northeast Region, 1980.

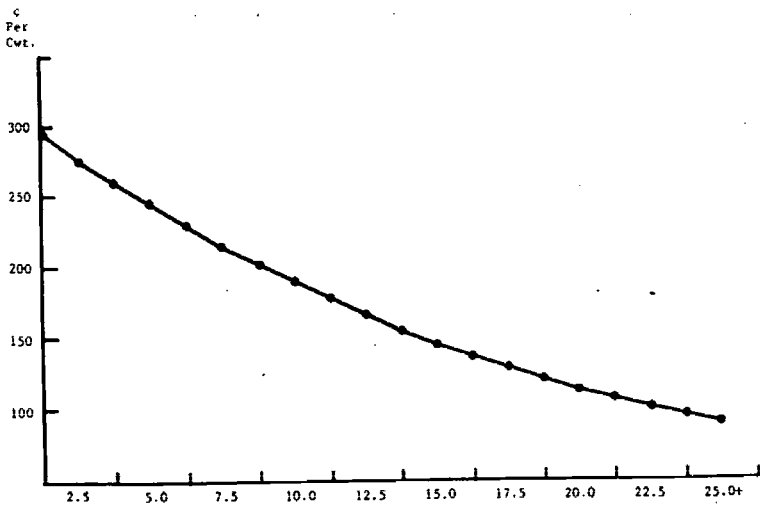


Figure 4. Hard Products Manufacturing Costs, Northeast Region, 1980.

Butter, Non-Fat Dry Milk, and
Cheese Processing Costs

The current "make allowance" established by the price support authority for butter and non-fat dry milk is \$1.22 per hundredweight of milk processed --- approximately 10.8 cents per pound for non-fat dry milk and 7.2 cents per pound for butter. The current "make allowance" for cheese is \$1.37 per hundredweight of milk processed --- approximately 13.6 cents per pound of cheese. (see Table 5 and Figure 4). Only manufacturing firms with very large volumes can profitably manufacture cheese or butter and non-fat dry milk with the current "make allowances".

Transportation

The movement of raw milk from the farm to the processing plant and then to the ultimate consumer are important links in the marketing system. The unique characteristics of milk (its perishability and bulkiness) increases the importance of this marketing function.

The costs of moving milk and dairy products have increased substantially during the past several years. For example, one recent study of the hauling of bulk milk shows that between 1969 and 1979, fixed costs increased approximately 120 percent (Table 6). Increases in equipment costs and related insurance costs account for this large increase. During this same period, variable costs increased by approximately 178 percent. Variable costs in all categories increased. As might be expected, driver labor and fuel costs increased the most. As truck costs and labor and fuel costs continue to increase, transportation costs become an even more important segment of the marketing complex. A recent study, however, indicates the potential exists for significant reductions in miles traveled in farm-to-plant milk assembly³, and hence in transportation costs.

³ Jean Schulster. "Potential for Increasing Efficiency in Milk Assembly: A Case Study in Cortland County New York". Unpublished M.S. Thesis. Cornell University. 1983.

Table 5. Manufactured Products Processing Costs in the Northeast, 1980.^a

Monthly Volume of Milk Processed	Cost Per Cwt.	Monthly Volume of Milk Processed	Cost Per Cwt.
(pounds)	(cents)	(pounds)	(cents)
1,250,000	294	13,750,000	155
2,500,000	277	15,000,000	145
3,750,000	261	16,250,000	136
5,000,000	245	17,500,000	127
6,250,000	230	18,750,000	119
7,500,000	216	20,000,000	112
8,750,000	202	21,250,000	106
10,000,000	190	22,500,000	100
11,250,000	178	23,750,000	95
12,500,000	166	25,000,000	90

^a B. J. Smith Unpublished report. The Pennsylvania State University. 1982. The costs shown here are based on the following functional relation:

$$APC = 311.50087426 - 1.43978930V + 0.00221754V^2$$

where:

APC = Cost of processing milk, cents per cwt., and
 V = Volume of milk processed per month
 in thousand pounds.

At monthly volumes greater than 25,000,000 pounds, processing costs remain constant at 90 cents per hundredweight of milk processed.

This function pertains to the year 1980 and to a plant with a manufactured product mix of 60 percent cheddar cheese and 40 percent butter and non-fat dry milk powder.

Table 6. Transportation Costs for Hauling Bulk Milk in 6,000 Gallon Bulk Tankers, 1969, 1975, and 1979.

	1969 ^a	1975	1979
<u>Fixed Costs per year</u>			
Depreciation:			
Tractor ^b	\$ 320	\$ 358	\$ 770
Trailer ^c	1,120	1,261	1,680
Interest ^d	1,225	1,375	3,450
Road Tax (1.5 cents/mile and 40,000 miles/yr.)	600	600	600
Licenses	650	1,056	1,056
Insurance ^e	500	1,662	2,100
Total Annual Fixed Cost	\$4,415	\$6,312	\$9,656
Average Daily Fixed Cost	\$14.15	\$20.23	\$30.95
<u>Variable Costs per mile</u>			
Diesel Fuel ^f	\$0.0600	\$0.1000	\$0.2000
Tires	0.0346	0.0488	0.0600
Repair and Maintenance	0.0342	0.0520	0.0800
Driver Labor ^g	0.0825	0.1788	0.2600
Depreciation ^h	0.0360	0.0403	0.0866
Total Variable Costs	\$0.2473	\$0.4199	\$0.6866

^a Adapted from M. C. Conner and T. D. McCullough. "Transfer and Distribution Costs for Milk to Distant Markets". Agricultural Economics Research Report #2. Virginia Polytechnic Institute and State University. June 1970.

^b Based on purchase prices of \$19,000 in 1969, \$21,250 in 1975, and \$45,000 in 1979. Ten percent of the capital is recovered on a straight line depreciation schedule for 5 years. The remaining 90 percent of capital is recovered through variable charges.

^c Based on purchase prices of \$13,000 in 1969, \$14,600 in 1975, and \$20,000 in 1979.

^d Computed at 7 percent in 1969 and 1975, and 10 percent in 1979 on the average amount of unrecovered capital (investment) per tractor-trailer rig.

^e \$100,000/300,000 bodily injury; \$100,000 property damage; fire, theft; and \$500 deductible on collision.

^f Fuel costs were \$0.27 per gallon in 1969, \$0.45 per gallon in 1975, and assumed to be \$1.00 per gallon in 1979. Fuel mileage was 4.5 miles per gallon in 1969 and 1975, and 5 miles per gallon in 1979.

^g Wage rate of \$3 plus 10 percent fringe benefits per hour in 1969, \$5.50 plus 25 percent fringe benefits per hour in 1975, and \$8.00 plus 30 percent fringe benefits per hour in 1979.

^h Ninety percent of depreciation schedule for tractor to provide for capital recovery over 400,000 miles.

Plant Ownership

In addition to plant and transportation costs, changing plant ownership also affects the structure of the industry. During the past two decades, plant ownership has shifted from national and regional chains and local proprietary firms to farmer cooperatives and food chains.

Between 1958 and 1970, the aggregate market share of the four largest national milk processors dropped from 25.8 to 18.8 percent of total milk sales, and that of the eight largest declined from 31.0 to 25.1 percent. Similarly, between 1964 and 1970, the proportion of the nation's fluid milk sold by national and regional firms declined from 32.3 to 31.0 percent; and that sold by local firms from 53.5 to 47.2 percent. The proportion sold by plants of integrated food chains increased from 4.5 to 10.3 percent, and that by farmer cooperatives from 9.7 to 11.5 percent.

In general, cooperatives view the handling of surplus milk as a high priority marketing function because market outlets are essential in order to guarantee their membership a market, and surplus handling facilities are necessary to strengthen their bargaining position. For the most part, cooperatives in the Northeast have individually pursued their own surplus handling strategy. With the current milk surplus, several cooperatives have acquired additional processing capacity. Of the 450 fluid processing plants in the Northeast, 27 are owned by farmer cooperatives, and 18 of the 145 manufacturing plants are owned by farmer cooperatives.

Retailers

Approximately 70 percent of all fluid milk products is currently sold through foodstores -- ten percent is sold through home delivery, and the remainder is sold to wholesale institutional accounts such as restaurants, schools, hospitals and factories. Prior to World War II, home delivery of fluid milk accounted for 70 percent of all fluid milk sales.

The marketing of fluid milk through foodstores, primarily supermarkets, has resulted in a change of market control from the processor to the supermarket. Supermarkets represent large volume accounts. These accounts frequently require private labelled containers. Management of the supermarkets have control over the shelf space for competing brands and of the prices paid by customers. Sometimes these prices are set at levels below cost to generate more store traffic. Larger supermarket chains also have sufficient volume to vertically integrate backward into fluid milk processing. Currently, 20 percent of the fluid milk in the United States is processed in plants operated by food chains.

Conclusions

As dairy farms become fewer in number and less dense geographically, the number of input suppliers will decrease. Added transportation costs, and the competition to serve a smaller population of farmers, will force many smaller supply firms out of business. Generally, these firms are not as specialized as are milk processing plants. This results in a smaller capitalized investment and more readily transferable resources for alternative uses.

The trend of fewer fluid processing plants will continue, and the small volume plants will be most vulnerable. As dairy farms become more dispersed, milk assembly costs will increase causing additional financial stress for these plants. Fluid processing plants generally contain very specialized equipment. This equipment frequently has little resale value. The plant buildings sometimes can be converted to other uses by food manufacturers. Some alternative uses for these resources do exist.

Maximum efficiency in butter and cheese plants usually is realized only when operating at or near capacity. However, plants handling the reserve supply for fluid markets seldom realize the efficiency possible from producing at capacity. Volume variability is regarded as the most significant factor influencing manufacturing costs. Therefore, manufacturing plants handling the reserve supply for the fluid markets in the Northeast frequently operate at a loss.

It should be noted that with the current surplus situation, more of the manufacturing plants are operating at capacity year round. This situation is causing many cooperatives in the region to acquire additional manufacturing capacity. Some of this additional capacity is being acquired through joint venture arrangements between dairy cooperatives through the acquisition of existing facilities currently owned by proprietary firms. If the government support price should decrease and supply more nearly match demand, the cooperatives may find that they have generated too much excess capacity. This could result in financial stress for the cooperatives and for their farmer members.

The trend toward cooperative and supermarket chain ownership of dairy processing plants will continue. Dairy cooperatives will be forced to acquire facilities to guarantee a market for members' milk. The larger supermarket chains have sufficient volume to vertically integrate backward into fluid milk processing.

CHAPTER VII
SUMMARY AND IMPLICATIONS

F. C. Webster*

It has been said many times that the marketing system for milk and dairy products is unique. Nearly everyone in our society uses dairy products, and milk is produced in every state of the union. Milk is perishable being a good medium for bacterial growth. Dairy marketing is highly regulated. Quality controls are strict. Economic controls reach almost every aspect of the dairy industry.

At the same time, dairy farmers have a tradition of independence. They struggle to keep their costs low and compete to produce more milk so as to increase the profitability of their farming operations. With the exception of limited areas under state orders, quotas have generally not been well accepted by dairy farmers. Base-excess plans have achieved considerable popularity to level out seasonal production. But the dog-eat-dog approach of producing for profit or going broke is almost universal in the United States dairy industry despite the underlying stability provided by price supports and marketing orders.

As a result of this situation, production per man and production per cow have jumped dramatically. Productivity per man in the last 30 years has increased ten-fold. Milk production per cow has nearly tripled.

Total United States milk production has increased, but the number of farms has dropped drastically. Yielding to the law of comparative advantage, some areas of the country reduced milk production while other areas increased their production. Generally, dairying has been sharply reduced in grain producing areas and in the Old South. Dairying has increased on the specialized farms of the Northeast, the Upper Midwest, and the Far West.

On the consumption side, United States population increased over 50 percent in the last 30 years, but consumption of dairy products per capita fell 30 percent. The net effect was a small increase of about ten percent in total consumption as against a 13 percent increase in milk production. In the Northeastern part of the United States, population increased only one percent in the last decade while milk production increased ten percent.

*Professor of Agricultural Economics and Chairman, Department of Agricultural Economics and Resource Economics, University of Vermont.

Several dilemmas face the dairy industry because of this situation. The most pressing problem is that production has outpaced increases in consumption. Further, the decline in number of cow herds has not resulted in decreased output. In fact, the animals remaining in production generally have a higher genetic potential and are managed by farmers with better ability to achieve higher production.

Secondly, per capita consumption of dairy products is down. The exact amount of dairy products which have been displaced by substitutes or by competing products is hard to define. Some estimates indicate that dairy products have lost at least one-third of their market. It is clear that other beverage industries spent a great deal more than did the dairy industry in promoting their products, and have been successful in increasing their share of the market. Margarine, synthetic cheese, and replacements for dried skim milk have come onto the market in recent years. One can only guess at the amount of dairy products which could be sold if dairy products were priced more competitively or promoted more aggressively and imaginatively instead of being priced by price supports and sold as homogeneous products. The fact is that the per capita consumption of most dairy products has declined under current pricing systems.

Thirdly, the price support policies set up by the federal government were designed to follow inflation very closely. However, price supports did not follow costs of production. The result is that when some inputs to the dairy industry (notably feed) became relatively cheap and new technology reduced costs per unit of production, these changes were not reflected in price support adjustments.

Because milk production occurs on many individual farm units, production decisions are not centralized. When changes occur in cost relationships or technology, each farmer must adjust in an almost perfectly competitive market. The choices often consist of only two real alternatives --- cease production or expand operations. With new technology, the survivors tend to be large farmers with very high capital costs on which the debt service claims a high proportion of farm income. Adding to this, the large cash outflows for purchased feed and energy means that farmers are faced with very high cash costs. They are no longer able to "live off the fence posts" as many of their forebears are said to have done when prices of farm products dropped due to periodic surpluses or temporarily depressed markets.

Choosing Policies

Given the situation outlined above, this report asked, "What are the implications for Northeast dairy farmers of current attempts to alleviate the supply-demand problems of the dairy industry?" A second and related question is "What adjustment options are available to dairy farmers in the Northeast?"

The policy choices must fit multiple objectives. Therefore, the selection requires weighting. For instance, one of the current objectives of government dairy policy is to bring the supply and demand for milk into closer alignment. Although the current problem is oversupply, measures designed to cut supplies sharply might cause a shortage in the future. Secondary problems are also important. Consumers are willing to pay reasonable prices for dairy products but don't want to pay unnecessarily high prices. Dairy farmers and dairy processors want reasonable market stability so as to provide reasonable income over a long period. Social issues about farm size and family businesses and monopolies become battle cries. Each of these policy questions or objectives raises a host of other thoughts which must be answered in both economic and political terms. Often, economics and politics will be in conflict, and compromises must be made.

Since the current problem is one of more milk than consumers are buying at the supported price, a number of demand expansion proposals have been made. These proposals range from increasing expenditures for milk promotion and research to outright subsidies for various disposal programs: domestic and foreign. Seldom favored by dairy farmers, but always lurking in the background, is the possibility of lowering prices to increase demand. Because the demand for dairy products is quite inelastic, price reductions would have to be sharp to bring about significant increases in demand.

The other possibility for bringing supply and demand into alignment is to cut production. Theory tells us that supply can be reduced by reducing market price, by direct control of production, or by encouraging producers to voluntarily shift resources into other activities.

Milk prices represent wages to dairy farmers. No one likes to see their wages cut or their costs increased. However, there can be no doubt that prices and costs are a strong incentive in a capitalistic society such as ours. Higher milk prices attract more resources to the dairy industry. More resources mean more production. Higher input costs (costs of production) tend to discourage production.

Lower milk prices may have a somewhat perverse effect in the short run. Those who have already invested in the industry see their capital investment as sunk costs and may try even harder to produce more milk if prices drop. Indeed this is a popular response

among dairy farmers today. Nevertheless, in the long run every business must make enough money to attract labor and capital. Thus one should expect lower milk prices to be accompanied by less production in the long run, if not in the short run.

Just how much prices would have to be lowered to balance demand and supply is a difficult question to answer. Technology and costs of various inputs are constantly changing. The model estimated as part of this study suggests that, with current technology and demand for dairy products and assuming no previous accumulation of surplus milk, prices could balance demand and supply through 1984 at approximately 60 percent of parity. An adequate supply of milk and dairy products for the demand which would exist at these prices would be produced. Under price relationships used in the study for 1983, this would mean a manufacturing support price of approximately \$13 per hundredweight or \$13.50 per hundredweight for all milk. This figure could be outdated by a further drop in grain prices. Its effectiveness may also be suspect due to the currently limited alternatives open to dairy farmers (particularly in the Northeast) for both their land and their labor resources.

If, for political or economic reasons, milk prices are not reduced but are maintained at present levels, how else can resources be shifted out of dairy farming to reduce production? Dairy farming involves large capital investments and deals with animals requiring long life cycles. Capital invested in dairying has limited transferrability into other lines of endeavor. For instance, a milking parlor has little use for anything other than milking cows. A silo designed to store moist roughage for cattle is poorly adapted to any other use. Going along with this are the human resources. A person trained to feed and care for dairy animals may not have a great deal of training in the care and feeding of sheep or in the production of vegetables and fruit crops on a commercial scale. In other words, those persons who have invested years developing their skills in managing a dairy herd may be poorly equipped to handle other agricultural enterprises. Thus, shifting resources out of dairy production requires a severe write-off of the resources invested in dairy farming. The reduced market value would apply to both human and material resources.

Some studies have shown that this fear of loss is not always real. Many people and many resources can be better utilized in other fields of endeavor. For instance, some land has higher economic value for nonfarm uses such as homes, factories, highways, or other developments. In certain parts of the country, field crops bring a better return than growing roughage for the dairy industry. The opportunities for such nonfarm uses vary widely with location, soil, climate, and other factors affecting the usefulness of these basic resources. As for the people, their ability to adapt also varies widely. Some farmers have found that their income improved when they left farming. Farmers who have hung on with the hope of improving their income or because they like farming as a way of life are sometimes able to increase their standard of living by going to employment which offers better returns for their effort.

A more direct method of supply reduction involves supply control by limiting the number of dairy animals or assigning quotas for marketing milk. The details of such plans vary widely. Among the most common are incentives to cull animals, and plans which provide a good milk price only for quota quantities of production.

Any supply limiting plan has its drawbacks. Perhaps one of the major drawbacks is that those with resources invested in the industry tend to receive a windfall benefit from the imposition of such controls. If the program involves culling of animals, it means that some farmers can remove animals from their herds with higher returns than would probably otherwise prevail. If the control involves some sort of marketing allotment, it means that those who have a history of milk production have a vested interest in any future production. Those who would come after or seek to compete later in the field find themselves at a disadvantage. Without a history of production or resources which they can sell off under some sort of incentive plan, their total income is less than is that of established producers.

A further and seldom discussed aspect of this sort of plan is that once it is in place those in the industry have a strong incentive to maintain the plan. If the plan is successful, they see it as a necessity for maintaining stability and prices in their industry. Any attempt to take away that plan is seen as destruction of their vested interest. A successful production control plan often means higher prices to consumers as compared to a system which would exist without controls.

In summary, policy objectives are fraught with many pitfalls and frequently require a very careful balancing act. Benefits and negative aspects of each plan need to be carefully weighed. Social, economic, and political factors will all have an influence on the plans which are finally adopted.

Interregional Competition in Dairy

Census data and United States Department of Agriculture publications have clearly shown that productivity per farm is up and that production has shifted to large, specialized dairy units. Furthermore, production has tended to shift out of the areas where dairying has a poor comparative advantage (such as the grain belts) into areas of the northern North Central States, the Northeast and certain areas of the West where specialized conditions make dairying profitable.

Aggregate data on these production shifts, however, tend to hide many of the details behind these changes. Even in the northern tier of states where dairying is preeminent, many counties have actually decreased milk production. Only the better adapted counties have increased their proportion of the milk supply. Marginal land or

land which is especially attractive to nonfarm use has been attracted to non-dairy uses. Dairy farmers do well in the north where land is of good quality, but dairying cannot compete where conditions are suited to growing specialized crops or the location is too attractive to urban and commercial development.

Some other myths are hidden behind the aggregate figures. For instance, it is often said that only small farmers have been forced out of business. Actually, most farmers have had to grow in size in order to stay in business. Economies of scale have caused the average size of dairy farm to increase. But some large farms of today grew from small units as their operator took over operation of a neighboring unit as well. Both large and small units have gone out of business where operating conditions or business management did not keep them competitive.

It has also been pointed out that some of the Northeastern and northern North Central States significantly increased their production of milk in the past few years. However, every state that has shown major increases in cow numbers is in the West or the Southwest. The only state east of the Mississippi River to show an increase in number of cows milked during the 1970s was Pennsylvania. There has thus been a major shift in cow numbers and in milk production toward the West.

Dairy farms in hot or dry areas generally require entirely different operations than the traditional dairy farms in the more temperate parts of the United States. With a warm climate and dependence on irrigated crops, the Southwest tends to have very large units of production. These units tend to bring all of the feed necessary for the milking cows to the animals and organize them in large production units of hundreds of dairy animals. These units obviously are a long way from the traditional family operated units of the Northern states where one, two, or three workers could handle the entire farm operation, including production and storage of roughage.

The law of comparative advantage mentioned previously in this chapter is well illustrated when one looks at the relative returns to the operator and manager in various parts of the country. Areas with higher returns have expanded milk production. Those areas with low net returns have decreased their milk production. According to a study of costs and returns of producing milk done by the United States Department of Agriculture for 1981, the three areas of the country yielding more than \$2 per hundredweight for total returns to operator, family labor, and management were the Northeast, the Upper Midwest, and the Pacific Region. The Corn Belt, Appalachia, and the Southern Plains all yielded far lower returns to farmers producing milk in those areas.

A look at the areas expanding and contracting milk production correlates quite highly with these figures. Wherever returns for milk production are low, production has declined; where returns are favorable, milk production has increased.

Impact of Lower Milk Prices on Dairy Farmers

The average debt per cow in 1981 on the farms studied by the authors of Chapter IV of this report ranged from zero to \$2,560. In general debt per cow decreased with size of herd, but some glaring exceptions were noted. Many of the smaller herds had little or no debt load. A few of the larger, more recently enlarged operations had exceptionally high debt loads.

Cash operating costs on these farms ranged from about \$5.00 per hundredweight to over \$15.00 per hundredweight. Again on many of the smaller dairy farms, cash operating costs were relatively low which is probably a reflection of the fact that these dairy farmers can avoid the higher labor costs of year-round employees.

Many Northeastern dairy farmers found it necessary to seek off-farm employment or to exploit additional income generating activities on the farm in 1981, in order to provide an acceptable level of living for the farm family. Many more will be faced with the same prospect if milk prices are reduced sharply.

Quite clearly milk production will continue to be a lucrative business for many farmers -- for some small ones as well as for some large ones. It will be so because they are the efficient, relatively low cost producers. Those with high debt loads and high per unit costs will likely seek alternatives to dairy production. This will present serious problems to farmers in the many areas of the region where on-farm and (at the present time, at least) off-farm alternatives are severely limited.

Current Policy

Both government policy and the dairy industry change direction slowly. The United States government continued to raise dairy price supports in 1979 and 1980 despite danger signals that milk supplies were expanding too rapidly. When prices were stabilized in 1981, dairy farmers had already committed large resources to expansion, including the starting of huge numbers of heifer calves. A drop in grain prices completed the defeat of policy makers who sought to control production by holding milk prices constant in a period of inflation.

One bright spot should be noted. Dairy product consumption in the United States increased the equivalent of one and one-half billion pounds of milk in 1982 over the previous year. At least part of this increase must be credited to level prices during a period of inflation -- that is, lower real prices for milk.

Pressure to bring the supply and demand for milk into balance will continue. Under our present pricing system, milk production decisions are not made at any central location. The over 40,000 dairy farmers in the Northeast, their families, their hired workers, and the people who service their businesses have their individual goals, resources, and alternatives. As a result, averages mean little to each individual. Some farmers will show a profit even in hard times. Some farmers endure losses even when prices are generally favorable.

The examples shown in Chapter IV document the increase in costs per hundred pounds of milk likely to occur in the next two years. If milk prices remain static or drop, more and more farmers will show a loss or realize too little income to cover debt repayment.

Which farmers will go out? Farmers who leave dairying generally do so because of physical condition (age, health, etc.) or because they seek better alternatives.

Who will survive? If price/cost relationships remain relatively stable or decline moderately, farmers with well-managed businesses in favorable locations will survive. If prices drop sharply, farmers with high debt loads or low profit businesses will certainly have a difficult time to survive.

Loss of all price supports and market orders would bring about considerable change and uncertainty in the short run. A possible result would be rapid movement toward large integrated operations such as are now typical of the poultry industry. This might well be expected to be accompanied by corresponding adjustments in the milk processing and feed industries, and by a loss of economic activity and services to rural people in several areas.

TECHNICAL APPENDIX

Model for Determining Equilibrium Prices*

Consumer Demand

$$q_F = 986.77 - 0.0752P_F/CPI + 462.82AGE45 - 2710.31AGE50$$

$$q_M = 1122.21 - 0.4311P_M/CPI - 1699.31AGE20 - 1.9622TIME$$

where

q_F = per capita consumption of fluid milk, lbs.,

q_M = per capita consumption of manufactured dairy products, lbs.
fluid milk equivalent,

P_F = price of fluid eligible milk at the farm, cents per hundred-weight,

P_M = price of manufacturing milk at the farm, cents per hundred-weight,

Y = per capita disposable income deflated by CPI, \$,

AGE 20 = percent of population 20 years of age or less,

AGE45 = percent of population 20-45 years of age,

AGE50 = percent of population over 45 years of age,

TIME = variable having a value of 32 in 1981, 33 in 1982, 34 in 1983, etc., and

CPI = consumer price index (1967=100).

Fluid-Manufacturing Differential

$$P_M = P_F / 0.95$$

*The equations presented here are based on estimates given in M. C. Hallberg. "Cyclical Instability in the United States Dairy Industry Without Government Regulations". Agricultural Economics Research 34:1:1-11. January 1982.

(This relation is based on the 1981 ratio of P_P to P_M).

Milk Supply

$$Q_S = 40575 + 58.80P_B - 14.09P_{FD} + 845.31TIME$$

where

Q_S = milk production, million lbs.,

P_B = blend price for milk, cents per hundredweight,

P_{FD} = price of 16% dairy ration, cents per hundredweight.

(This relation is based on assumed elasticities given below.)

Blend Price Relation

$$P_B = [q_P^*P_P^*POP + q_M^*P_M^*POP + GOV^*P_M] / [q_P^*POP + q_M^*POP + GOV]$$

where

GOV = government purchases of dairy products, million pounds milk equivalent, and

POP = total United States population, millions.

Equilibrium Condition

$$Q_S = q_P^*POP + q_M^*POP + GOV - IMPORT$$

where

IMPORT = net imports of dairy products, million lbs. milk equivalent.

Elasticities (Long Run)

Demand

Fluid	-0.14
Manufacturing	-0.55

Supply:

Own price	0.50
Feed price	-0.10
Time	0.20

Exogenous Variables (Actual data for 1981, assumed for 1982-1984)

	1981	1982	1983	1984
CPI	2.724	2.878	3.017	3.174
AGE20	0.314	0.314	0.314	0.314
AGE45	0.375	0.374	0.374	0.373
AGE50	0.311	0.312	0.312	0.313
Y	3219	3257	3353	3447
POP	229.87	232.2	234.5	236.9
P	960	970	993	1062
FD	32	33	34	35
TIME	12,861	3500	3500	3500
GOV	2,400	2,400	2,400	2,400
IMPORT				

Endogenous Variables (Predicted by the Model)

	1981 ^a	1981	1982	1983	1984
Q _F	230	228	223	222	218
Q _M	342	329	334	336	338
Q _G	132,600	129,204	130,426	131,897	132,793
P _F	1274	1363	1390	1428	1468
P _M	1164	1244	1269	1304	1341
P _B	1208	1292	1316	1352	1389
P _{BNE} ^b	1232	1318	1342	1379	1417

^a With total milk output, Q_G fixed at 132,600 million pounds, and GOV and IMPORT fixed at 3,500 and 2,400, respectively.

^b Blend price in the Northeast at 1.02P_B based on the actual 1981 ratio of the price in the Northeast to the United States average.