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Resources, Community, and  
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February 21, 1995

The Honorable Richard G. Lugar  
Chairman  
The Honorable Patrick J. Leahy  
Ranking Minority Member  
Committee on Agriculture,  
Nutrition, and Forestry  
United States Senate

To determine what changes the food and agriculture sector would like to see incorporated into the 1995 farm bill, your Committee surveyed commodity groups, agribusinesses, economists and consultants, environmental organizations, and academia. At your request, we categorized and summarized the responses to the Committee's survey to determine whether any major issues or themes emerged from the respondents' suggestions or approaches.

In summary, our review of the 135 responses to the survey showed that desired changes to the upcoming farm bill were concentrated in four major areas: (1) environment and conservation, (2) commodity programs, (3) agricultural trade, and (4) research and education. We have summarized the key issues and changes the respondents identified in each of these four areas. Generally, the respondents said that major changes to the farm bill should be phased in over time to lessen any adverse impact. It is important to note that the suggested changes discussed in this letter and in enclosure 1--which presents more details of the responses--reflect the opinions of the respondents and are not based on any independent work we have conducted. We have, however, issued a number of products over the past 5 years that are related to the four areas discussed in this correspondence. Enclosure 2 contains abstracts of the contents of these products.

Environment and Conservation

The largest number of suggested changes concerned environment and conservation. Of the 188 suggested changes discussed by the respondents to the survey, 52 dealt with

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this area. About half of these suggested changes came from environmental groups, while the other half was fairly evenly divided among agribusinesses, commodity interests, economists and consultants, and academia.

The largest number of the changes suggested in this area concerned renewing or reauthorizing the Conservation Reserve Program. Many of the respondents suggested continuing this program because it had accomplished its goals of controlling soil erosion, protecting wildlife habitat, and controlling supplies by taking land out of production.

The respondents acknowledged that because of budget constraints, the program's \$1.8 billion annual cost may need to be lowered. They suggested reducing the amount of land placed under the program in the future by 25 percent (the approximate amount of land enrolled in the program that is considered not to be highly erodible) and reducing the program's length from 10 years to 5 years. The two other changes suggested in this area were increasing the emphasis on the quality of water and redirecting farm payments from an emphasis on production to one on environmental or conservation benefits.

#### Commodity Programs

With respect to the second area--commodity programs--many of the suggested changes dealt with (1) moving commodity programs towards greater market orientation and away from the traditional price- and income-support programs and (2) targeting farm subsidies to small/medium farms. About 65 percent of the responses came from agribusinesses and commodity interests; the remaining responses came from the other groups.

In suggesting that commodity programs move toward greater market orientation, the respondents generally expressed the view that farm policies and programs should be restructured to eliminate restrictions on idled land and provide greater flexibility in making decisions about planting. More specifically, these respondents suggested doing away with programs that keep land out of production, such as acreage reduction.

In suggesting that the farm bill target farm subsidies to small/medium farms, the respondents discussed concerns about the subsidies paid to large and/or wealthy farms under the current commodity programs. Many of the

respondents pointed out that the dynamics of farming and the makeup of the farm community today differ from the situation in the 1930s, when the farm subsidy program was established and most farmers depended on subsidies. Currently, there are fewer farms; the farms are, on average, much larger; the farmers' net worth is much higher; many small farms rely heavily on income from off the farm; and half of all farmland is in farm programs. Because of these changes, the respondents said that the farm subsidies should go only to farmers who meet some type of means criteria. For example, the respondents suggested that farm payments might be targeted to those with less than \$1 million in real estate assets.

### Agricultural Trade

Twenty of the changes suggested by the respondents were aimed at agricultural trade. These suggestions came from commodity interests, agribusinesses, international food aid organizations, and economists and consultants. The suggestions dealt primarily with the Export Enhancement and Market Promotion programs. Under the Export Enhancement Program, bonuses are provided to exporters to make specified agricultural commodities more price-competitive in certain overseas markets. Under the Market Promotion Program--one of several trade promotion programs--money is provided to trade organizations to conduct generic promotions or to fund private companies' promotions of brand-name products.

Several respondents suggested eliminating the Export Enhancement Program because they said it is costly and ineffective--increases in exports have been negligible. Five respondents who said that they received funding from the Market Promotion Program called for an increase in the program's appropriations. These respondents said that the program had contributed to significant increases in exports. Several respondents called for reforms of trade promotion; for example, promotion financed increasingly by its beneficiaries.

### Research and Education

The majority of the respondents who suggested changes in research and education said that the current federal investment is inadequate to meet society's future needs for food, fiber, and conservation. Broadly, the respondents perceived a critical need to increase federal support through competitive grants and formula funds for both basic

and applied research. Of the respondents who expressed this view, the majority were associated with agriculture research groups, academia, or agribusinesses.

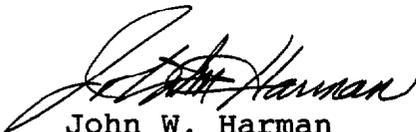
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To determine what major issues need to be addressed in the 1995 farm bill, the Senate Committee on Agriculture, Nutrition, and Forestry sent out 1,047 letters to food, farm, and environmental groups and individuals in July 1994 requesting them to identify possible changes and new approaches to be incorporated into the bill. The Committee requested that the respondents limit the number of suggested changes or approaches they would like to see to three. Our objective was to categorize and summarize the responses and to determine the major issues or themes that emerged from the responses. After doing so, we cited various respondents' suggestions in this correspondence as examples of the type of suggestions made.

The Committee received responses from 135 organizations or individuals that collectively identified 188 suggested changes or approaches. The data cannot be used to project the views of the organizations, groups, or individuals from the food and farm sector, nor can it be used to make statements about the universe of views on farm bill issues.

We will send copies of this correspondence to the Secretary of Agriculture and other interested parties. We will also make copies available to others on request.

If you or your staff have any questions about this correspondence, please call me at (202) 512-5138.



John W. Harman  
Director, Food and  
Agriculture Issues

Enclosures - 2

OVERALL INFORMATION ON SURVEY AND RESPONDENTSBACKGROUND OF THE SURVEY

In July 1994, the Senate Committee on Agriculture, Nutrition, and Forestry sent 1,047 letters to food and farm organizations, environmental and conservation groups, and individuals asking for their input in crafting the 1995 farm bill. Specifically, the Committee requested suggestions on changes in farm, conservation, agricultural trade, food, and rural programs and/or new policy approaches that the Congress should consider in drafting the bill. The Committee also asked the respondents to limit their specific suggested changes or approaches to three so that they would discuss only their top priorities.

Five main categories of groups and individuals received survey letters asking for responses. They included the following:

- Commodity interests. Groups that are involved in agricultural production, such as farmers and ranchers; commodity councils and growers' associations; and other general farm groups, such as farmer unions, state farm federations, and state departments of agriculture.
- Agribusinesses. Groups that support or use farm commodities, such as chemical/fertilizer, food, and feed and grain companies.
- Economists and consultants. Private, public, and nonprofit economic and forecasting groups and individuals that examine the agricultural sector.
- Environmental and conservation interests. Private, public, and nonprofit environmental and conservation groups and individuals that focus on environmental and conservation concerns.
- Academia. Individuals in colleges and universities that focus on agricultural issues.

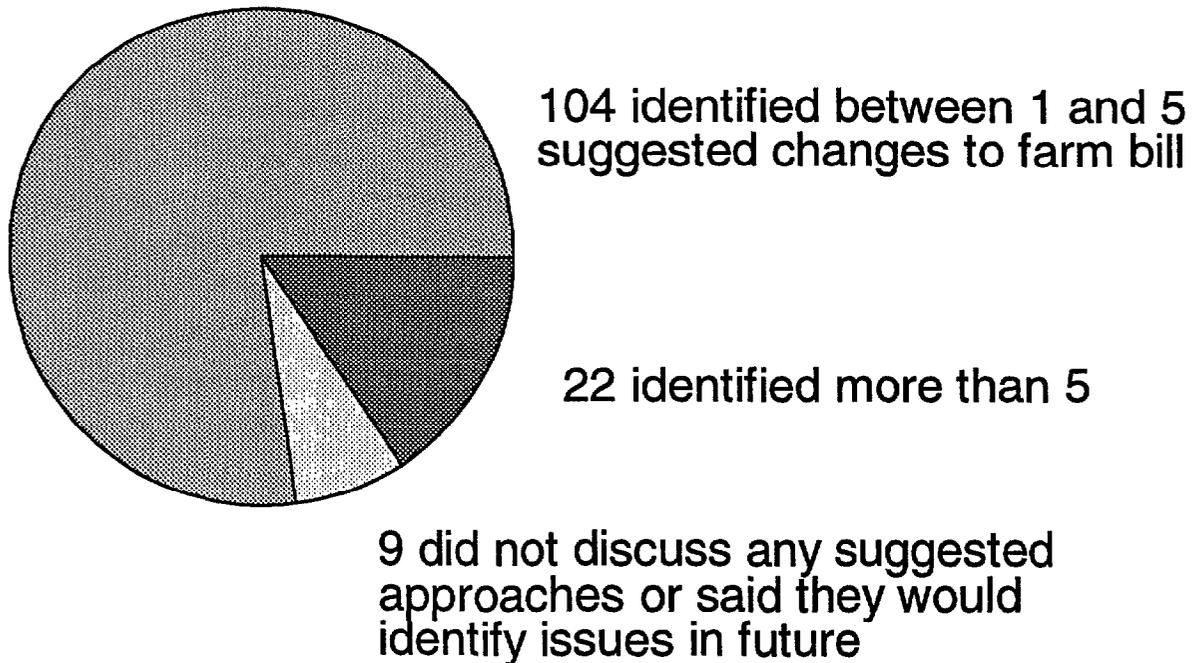
In addition, letters were sent to many other groups, organizations, and individuals that did not fall into one of the five groups identified. Categorized as "other," these included food groups, nutritionists, political scientists, sociologists, labor groups, and foundations.

DATA ON RESPONDENTS

One hundred and thirty-five organizations or individuals responded to the 1,047 letters the Committee sent asking for suggested changes or approaches to the 1995 farm bill. Figure 1 shows that

104 of the 135 respondents identified between 1 and 5 suggested changes or approaches to the bill, for a total of 188 changes or approaches.

Figure 1: Range of Suggested Changes From 135 Respondents



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Because of the complexity and magnitude of the farm bill legislation, we realize that in some cases it may have been very difficult to limit the number of changes or approaches that the respondents considered priorities to three, as they were asked to do. Therefore, we decided to review up to five suggested changes or approaches. We did not include the suggestions from the 22 respondents who identified more than five changes because we could not determine their priorities among the changes. As a result, the Committee agreed that we would not incorporate these respondents' suggestions into our review.

MAJOR AREAS OF SUGGESTED  
CHANGES OR APPROACHES

On the basis of the 188 suggested changes or approaches identified by 104 respondents, we categorized 124 of the 188, or about two-thirds of the suggested changes, into four major areas. These areas were environment and conservation, commodity programs, agricultural trade, and research and education. The largest number of suggested changes concerned environment and conservation, with 52 suggestions, followed by 32 suggestions concerning the commodity programs, 20 suggestions concerning agricultural trade, and 20 suggestions concerning research and education.

The remaining one-third of the suggested changes or approaches covered many different areas, including rural issues, such as housing and economic development; food assistance and nutrition; technology; and regulations.

Suggested Changes or Approaches in the  
Environment and Conservation Area

The largest number of suggested changes--52 of the 188 changes discussed--concerned the environment and conservation area. Environment and conservation groups suggested half of these changes. The other half of the responses were about evenly divided among agribusinesses, commodity interests, economists and consultants, academia, and others. Three suggestions or approaches emerged from the respondents' comments: (1) continue the Conservation Reserve Program, (2) increase emphasis on the quality of water, and (3) redirect farm payments from an emphasis on production to an emphasis on environmental benefits.

The largest number of suggested changes in the environment and conservation area dealt with continuing the Conservation Reserve Program. Many of the respondents who suggested continuing the program said it has accomplished its goals of controlling soil erosion, protecting wildlife habitat, and controlling supply by taking land out of production. One farm group said the program results in quantitative environmental benefits worth between \$6 billion and \$13.6 billion over its life by improving the quality of surface water, abating wind erosion, and protecting wildlife habitat. An agribusiness group further quantified the benefits of the program by saying it reduced soil erosion by 700 million tons annually. A conservation group said the program has been the most successful farm conservation initiative in the history of the federal government's involvement in agriculture.

Some of the respondents acknowledged that the Conservation Reserve Program's annual cost of about \$1.8 billion may need to be reduced.

Some suggestions on lowering the cost included reducing the amount of land placed under the program in the future by 25 percent (the approximate amount of land enrolled in the program that is not considered to be highly erodible) and reducing the program's length from 10 years to 5 years. In addition, some respondents suggested a revision to the soil erodibility index<sup>1</sup> used to determine which land should be placed in the program.

A second issue that a number of the respondents discussed in the environment and conservation area was the need to increase emphasis on water quality. A number of different suggestions were made. A research group suggested that funding for water quality projects needs to be targeted because states are conducting many different pilot projects and will be requesting federal funding. This group suggested that a priority system for funding be established, such as giving priority to (1) reducing pollution resulting from point source animal waste, (2) preserving and creating wetlands to filter point and nonpoint source pollution, and (3) purchasing easements in sensitive areas. An environmental group suggested better overall management of the watershed by improving interagency coordination among federal, regional, state, tribal, and local programs.

The third issue in this area concerned redirecting the current farm programs and subsidy payments, which primarily focus on agricultural production, to focus on environmental and conservation improvements and benefits, also known as "green payments." According to the respondents who addressed this issue, the suggested changes would offer new opportunities for farmers to enhance their farm incomes. Most of the suggested changes call for some form of compensation to farmers for making environmental improvements.

This group of respondents said that the changes or approaches would have to be phased in over time. For example, an environmental group suggested helping farmers make the transition by providing them with flexibility to help them pursue their farming, conservation, and economic goals. Under this approach, farmers would enter into an annual or multiyear agreement with the government to plant at least 20 percent of the base acres (acres used in determining a farmer's payment under a program) in a crop that conserves resources.

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<sup>1</sup>A soil erodibility index is a commonly used measure of soil productivity that compares the amount of potential erosion caused by wind and water with the amount of erosion the soil can tolerate and still remain productive.

Another environmental group called for adopting a national agriculture conservation policy focused on producing food and fiber in harmony with the land. Under such a policy, farmers would be encouraged to continue the transition to site-specific, whole-farm natural resource management plans begun in 1985. The federal government could offer a mix of incentives, including a farm income safety net and green payments for farmers that benefit the quality of the environment as an alternative to the current program of paying farmers on the basis of production.

Suggested Changes or Approaches  
in the Commodity Programs

The second highest number of suggested changes--32 out of 188--concerned commodity programs. About 45 percent of the changes suggested in this area came from the agribusiness group, and about 20 percent came from commodity interests. The remaining 35 percent came from the other groups. The suggestions and approaches that emerged in this area were to (1) move towards greater market orientation and away from traditional price- and income-support programs and (2) distribute payments within farm programs by targeting payments to small/medium farms.

In suggesting that commodity programs move toward a greater market orientation, the respondents generally expressed the view that farm policies and programs should be restructured to eliminate restrictions on idled land and provide greater flexibility in making decisions about planting. More specifically, these respondents suggested doing away with programs that keep land out of production, such as acreage reduction. One respondent representing a grain company suggested that allowing farmers to expand production would increase the availability of commodities, lower prices, make the United States more competitive in international markets, and give farmers more flexibility in their decisions about planting. Several respondents representing commodity interests also suggested that eliminating crop-specific acreage bases (such as those for corn and feed grain) would free the farmer to produce other commodities in response to market conditions.

The second major suggestion in this area concerned changing the distribution of payments under the commodity programs by targeting payments to small/medium farms through a means test. In considering this suggestion, it is important to note that the dynamics of farming and the makeup of the farm community are far different today than they were in the 1930s, when the farm subsidy program was established. At that time, most farmers depended on subsidies. Today, there are fewer farms; the farms are, on average, much larger; the farmers' net worth is much higher; many

small farms rely heavily on income from off the farm; and half of all farmland is in farm programs. Because of these changes, the respondents said that the subsidies should only go to certain farms or groups of farmers.

A number of those who proposed a means test for payments under the commodity programs stated that their proposals would spread payments more equitably among farmers. A rural interest group suggested a \$50,000 payment limit per person from all farm programs, achieved by not allowing farmers to subdivide their farms into separate entities. A college professor suggested that farmers with more than \$5 million in real estate assets be ineligible for benefits, those with real estate worth between \$1 million and \$5 million be partially eligible, and those with less than \$1 million in real estate be fully eligible. According to an economist, if the federal government wants to help the few low-production farmers whose incomes are low, it should develop a program that would enable those farmers to acquire land that is of sufficient size to be cost-effective to farm. Another economist suggested spreading payments more equitably by lowering the payment limit from \$50,000 to \$20,000 and reducing the target and support prices of commodities.

Another group of respondents did not explicitly support a means test or specify intended beneficiaries but did recommend changes from the current distribution of program payments among farmers. Under one suggestion, family farms would be targeted for benefits; under another, moderate farms would be targeted. A third respondent proposed replacing commodity programs with programs that would act as a safety net by providing financial aid to farmers.

#### Suggested Changes or Approaches in Agricultural Trade

The respondents suggested 20 changes with respect to agricultural trade programs. Most of the suggestions focused on the Export Enhancement and Market Promotion programs. These suggestions were made by commodity interests, agribusinesses, international food aid organizations, and economists and consultants.

Several respondents suggested eliminating the Export Enhancement Program, principally because they said that it was costly and ineffective. For example, an economics professor responded that the program only marginally helps wheat exports despite its \$1 billion annual cost, is costly to wheat producers and grain companies because it reduces wheat prices, and hurts U.S. relationships with traditionally friendly trading countries like Canada and Australia. Opposition to the Export Enhancement Program was also voiced by one of the commodity interests, which said that

its members had lost export sales as a result of subsidies given to a competing product under the program.

Five of the respondents who said they had received funding under the Market Promotion Program supported an increase in the program's appropriations. For example, an agribusiness respondent said the program's funding should be restored to \$100 million because the program allows agricultural cooperatives to increase traditional market development programs and develop innovative ways of addressing new markets and new value-added commodities.

Other respondents said that significant increases have occurred in exports as a result of the Market Promotion Program. A commodity interest added that if funding for the program is eliminated, farmers and their trade associations will have to eliminate overseas offices, staff, and programs because there is no other source of available funding. In addition, several respondents noted that funding for the program is not limited by the World Trade Organization's new rules restricting agricultural subsidies.

Finally, in commenting on trade promotion more generally, several respondents called for significant reform of market development programs. For example, one respondent called for sustained expansion of trade based on market forces and trade promotion financed increasingly by its beneficiaries. Another respondent called for reforms that (1) recognize the importance of a true private-public partnership and (2) better leverage federal funds for success.

#### Suggested Changes or Approaches in Research and Education

The majority of the respondents who suggested changes in research or education said that the current federal investment is inadequate to meet society's future need for food, fiber, and conservation. Of the respondents expressing this view, over half were associated with agricultural research, universities, or agribusinesses. Other respondents suggesting changes in research or education included environmental groups, farm organizations, food and nutrition groups, and commodity producers. Overall, the respondents said that research and education are fundamentally linked to sustaining a growing population, improving human health, protecting the environment, and ensuring the nation's security. Generally, these respondents were concerned with (1) the type of research--basic or applied--that is funded and (2) the funding mechanism--competitive grants or formula funding.

About half of the respondents said that further investments are needed in basic research for biotechnology, including plant and

animal genetics; new crops; and alternative uses for plant and animal products. The respondents said that research has been a key element of agricultural progress. The respondents who support basic research said that increased funding for developing new technologies will benefit both producers and consumers. These benefits include reduced production costs, protection of the environment, and enhanced human health and safety.

Several respondents also said that although basic research is necessary, it is only part of the equation in harnessing future opportunities. In general, they identified research areas for market development in which they had a commercial interest. For example, an agribusiness group stated that wheat exports face stiff competition from Canada and Australia and that expanding research for improved grain quality and handling would enhance the United States' ability to capture export markets.

Some respondents also commented on the mechanisms used to fund research, such as competitive grants and formula funding. These respondents said that peer-reviewed, competitive grants funded through the National Competitive Research Initiative have succeeded in supporting increased productivity and more sustainable agricultural practices. They said that competitive grants ensure that the best possible research is done and result in new technologies. To maintain U.S. leadership in agricultural research, they are asking the Congress to fund at a level closer to that authorized for fiscal year 1995--approximately \$500 million--rather than fund at the level in effect each of the past 2 fiscal years--about \$100 million.

Similarly, representatives of some land grant institutions asked for changes in the legislation that governs formula funds for research and education. Formula funding is a type of categorical or block grant that allows states considerable discretion in allocating funds. Representatives of these institutions are asking that the Congress change the legislation to increase the funding of these institutions so they can have adequate facilities and equipment to attract members of minority groups talented in scientific and professional fields into the food and agricultural sciences.

GAO PRODUCTS RELATED TO THE ISSUES  
IDENTIFIED BY RESPONDENTS IN THIS CORRESPONDENCE

ENVIRONMENT AND CONSERVATION

Soil and Wetland Conservation: Soil Conservation Service Making Good Progress but Cultural Issues Need Attention (GAO/RCED-94-241, Sept. 27, 1994)

GAO provided information on the Soil Conservation Service's (SCS) conservation compliance and swampbuster programs, focusing on whether (1) recent reforms in SCS would help it better manage the two programs and (2) additional improvements were needed to ensure effective management of the programs.

GAO found that (1) although SCS had initiated extensive reforms to effectively manage its conservation compliance and swampbuster programs, additional reforms were needed; (2) although SCS had substantially revised its guidance to county offices to provide better technical instructions on how to develop conservation plans and identify wetlands, it had not instituted a follow-up system to ensure that the county offices revise deficient plans; (3) SCS had developed new enforcement procedures, but its oversight staff lacked the authority to require county offices to follow their recommendations; (4) although SCS was developing an information system to track violations, it had not established performance goals for the conservation compliance and swampbuster programs; (5) one of the barriers inhibiting the effective implementation of SCS' reforms was the conflict between the service's traditional role and its new regulatory role; (6) SCS county office staff were reluctant to cite farmers for violations because citations could result in these farmers' losing farm program benefits; (7) SCS had historically worked with farmers to provide technical assistance and foster voluntary conservation programs; (8) SCS was often in the conflicting position of acting as adviser and regulator; and (9) SCS needed to change its corporate culture if it was to effectively administer its regulatory responsibilities.

Water Quality: Information on USDA's Water Quality Cost-Share Programs (GAO/RCED-92-139FS, Mar. 16, 1992)

GAO provided information about 10 USDA programs that provided cost-share payments to farmers and ranchers to implement USDA-approved water-quality activities, focusing on the programs' (1) intent, (2) activities that were eligible for cost-sharing, and (3) funding.

GAO found that (1) 3 of the 10 programs were dedicated solely to enhancing or protecting water quality, while the other 7 programs

had water quality as a secondary benefit; (2) the 10 programs provided for a total of 92 activities that protect or enhance water quality and were eligible for cost-share funding; (3) the activities eligible for cost-share funding included testing of wells, planting of vegetative cover, irrigation work, and management of habitat; (4) appropriated funding for the 10 programs totalled about \$1.71 billion in fiscal year 1991, about \$62.5 million of which was used for water quality activities and \$39.7 million of which was used to provide cost-share payments; and (5) the Agricultural Conservation Program was the largest water quality cost-share program, using about two-thirds of the \$39.7 million in total cost-share payments.

Agriculture: USDA Needs to Better Focus Its Water Quality Responsibilities (GAO/RCED-90-162, July 23, 1990)

GAO reviewed USDA's management and coordination of water quality activities. GAO found that (1) USDA had developed a water quality initiative for fiscal year 1990 to expand its ongoing water quality programs and establish new programs; (2) 10 USDA agencies were involved in water quality activities and planned to spend \$155 million that year; (3) USDA expected the initiative to be more comprehensive and better coordinated than its previous water quality activities; (4) groundwater contamination was a critical issue, since groundwater is the major source of water for many Americans; (5) the agricultural sector is the largest user of pesticides and fertilizers, and these chemicals were increasingly being found in surface water and groundwater; (6) the public increasingly perceived that the farm chemicals found in groundwater threaten human health and that limiting their use was warranted; (7) the USDA Low-Input Sustainable Agriculture Program (LISA) offered research grants to promote agricultural production methods that reduce the use of agricultural chemicals and protect the environment; and (8) USDA had not developed a comprehensive departmental policy on water quality.

Other Related Products

Conservation Reserve Program: Cost-Effectiveness Is Uncertain (GAO/RCED-93-132, Mar. 26, 1993)

USDA's Water Quality Cost-Share Programs (GAO/RCED-92-202R, July 9, 1992)

COMMODITY PROGRAMSRice Program: Government Support Needs to Be Reassessed  
(GAO/RCED-94-88, May 26, 1994)

GAO reviewed USDA's rice program, focusing on its impact on the federal government and on rice buyers and producers. GAO found that (1) the rice program was costly despite USDA's attempts to curtail costs; (2) between 1986 and 1992, annual government support costs averaged \$863 million and annual export promotion costs averaged \$157 million; (3) the rice program increased buyers' expenditures by an average of \$12 million annually; (4) the rice program's costs were greater than the benefits because USDA has kept some land from productive use; (5) rice producers' incomes from program payments increased from 27 percent in 1984 to 50 percent in 1992; (6) without the program, some rice producers would have gone out of business; (7) the rice program had the highest participation rate of any commodity program, with 96 percent of all rice acres enrolled in 1992; (8) although the Congress attempted to limit payments under the rice program, producers had reorganized their farm operations so that they could receive multiple payments; (9) in 1992, 15 percent of the rice farms received 52 percent of USDA's deficiency payments; (10) despite federal efforts to promote rice exports, the United States' share of the world market declined from 24 percent in 1980 to 15 percent in 1992, and the volume of rice exported declined by 14 percent; and (11) the reasons for the decline in the United States' share of the world market included the improved quality of foreign rice, increased price competitiveness, foreign governments' increased protection of their domestic markets, increased domestic consumption, and the rice program's supply restrictions.

Recommendations to the Congress: With the anticipated reauthorization of the Farm Bill in 1995 and the opportunities provided by the General Agreement on Tariffs and Trade and the North American Free Trade Agreement, GAO said that the Congress might wish to consider ways to move rice producers toward greater market orientation and reduce their dependency on government support. For example, the Congress could reduce government costs by lowering the target price, incorporating marketing loan gains into the calculation of deficiency payments, eliminating the 50/85 program, and reducing export assistance. Because this approach could have a substantial impact on some producers, the Congress might wish to consider options to give producers time to make adjustments in their investment decisions. For example, the Congress could phase out payments to producers over a number of years.

Commodity Programs: Flex Acres Enhance Farm Operations and Market Orientation (GAO/RCED-94-76, Dec. 30, 1993)

GAO reviewed whether the 1990 farm legislation will reduce government costs and increase farmers' flexibility and responsiveness to market demands. GAO found that (1) although flex acres are designed to reduce the government's agricultural support costs and increase U.S. farmers' market competitiveness, the total impact of flex acres on farm income was unknown; (2) USDA estimated that flex acres and other legislative changes will reduce government costs and federal payments to farmers by about \$12 billion from 1991 through 1995; (3) farmers had gained greater flexibility by using flex acres and believe that flex acres' overall impact on farm operations had been positive and had improved farmers' crop rotation practices, response to weather conditions, compliance with conservation objectives, and efficiency; (4) farmers had increased their income by using flex acres to plant alternative crops; (5) allowing farmers the flexibility to grow crops outside of federal income support programs gave them the opportunity to use their land to respond to market demands; and (6) the government should expand the concept of flex acres in future farm legislation so that farmers can become more responsive to market forces.

Recommendations to the Congress: While conclusive data on the full impact of flex acres on farmers' economic well-being were not available, flex acres generally had a positive impact on farmers' operations and were projected to reduce federal spending. Because of the advantages of flex acres as a tool for reducing the budgetary costs of farm programs and for moving farmers to a market orientation, GAO said that the Congress should consider reauthorizing or expanding the provisions for flex acres in the 1995 farm bill.

Dairy Industry: Potential for and Barriers to Market Development (GAO/RCED-94-19, Dec. 21, 1993)

GAO reviewed the development of domestic and international markets for U.S. dairy products, focusing on (1) how the U.S. dairy industry's export activities compare with those of other major milk-producing countries, (2) opportunities to develop and expand dairy markets, and (3) obstacles to expanding dairy markets.

GAO found that (1) the United States was the third largest milk producer in the world; (2) the U.S. dairy industry was not taking full advantage of the expanding international dairy market, since it exported less than 2 percent of its dairy products; (3) the United States had a relatively small share in most international dairy markets; (4) Mexico and the Pacific Rim countries had the

greatest potential for increasing U.S. dairy exports because of their increasing per capita incomes, low milk consumption, and preference for Western-style diets; (5) the U.S. domestic dairy market had some potential for expansion in low-fat and specialty cheeses and processed foods; (6) federal dairy policies that encourage the production of dairy products did not always meet consumer demand, increased U.S. dairy prices above world market prices, and impeded expansion and competitiveness in global markets; (7) U.S. dairy prices remained above world market prices despite reductions in dairy price supports; and (8) the U.S. dairy industry needed to change to a more global marketing strategy that focuses on consumers' needs.

Recommendations to the Congress: GAO said that the Congress, jointly with the executive branch and the dairy industry, should consider initiating efforts to develop a long-range dairy policy that better recognizes the importance of exports of dairy products to the continued viability of the industry. Steps could include conducting hearings, gathering information on alternatives to overcome impediments to export development, and analyzing the implications of those alternatives for the industry's current structure. GAO said the Congress should consider directing the Secretary of Agriculture to facilitate discussion.

Wheat Commodity Program: Impact on Producers' Income  
(GAO/RCED-93-175BR, Sept. 8, 1993)

GAO provided information on the effect of USDA's wheat commodity program on wheat producers' incomes, focusing on the (1) program's costs and benefits to wheat producers and buyers, (2) distribution of payments to program participants by county and farms, and (3) distribution of government payments to farms whose wheat production accounted for 50 percent or more of the farms' crop and livestock production.

GAO found that (1) the wheat commodity program cost the government an average of \$2.2 billion annually from 1990 through 1992; (2) wheat producers' economic program benefits averaged 63 percent of total government costs as a result of idled crop lands; (3) the program cost wheat buyers \$32 million annually because of the restricted wheat supply; (4) in 1990, USDA paid over \$2.4 billion in wheat deficiency payments; (5) about 85 percent of the deficiency payments went to wheat-producing counties located in the Plains and northwestern states; (6) in general, a county's share of wheat deficiency payments was directly related to the county's share of wheat acres; (7) about 72 percent of the farms in the program received less than \$5,000 each, since wheat was a supplementary crop in their operations; (8) 1 percent of the farms received more than \$50,000 in deficiency payments and one farm

received a total of \$666,475; and (9) specialized wheat farms received about \$782 million in all types of government payments in 1990.

Honey Program (GAO/RCED-93-227R, Sept. 1, 1993)

GAO reviewed payment limitations governing USDA's honey price support program, focusing on (1) the statutory provisions that applied to payment limitations for the honey program as compared with those of other farm commodity programs, (2) payments received by honey producers and associated loan forfeitures for 1991 and 1992, (3) the potential for honey producers to reorganize their businesses in response to lower payment limitations, and (4) the potential impact on government costs if the payment limitation was set at zero dollars.

GAO found that (1) the honey program was not subject to the statutory payment limitations applicable to other farm commodity programs; (2) the honey program aimed to limit payments to producers by attributing benefits to individuals; (3) USDA's data showed that most honey producers received government payments of \$10,000 or less, and only a few received more than \$50,000 for 1991 and 1992; (4) in 1991, 4,186 honey producers received about \$11.3 million in payments, and in 1992, 3,477 producers received about \$11 million; (5) the honey program experienced loan forfeitures amounting to about \$1.4 million in 1991 and \$204,000 in 1992; (6) honey producers had little incentive to insulate themselves from these limits since existing payment limitations substantially exceeded the payments actually received; (7) it was unlikely that a reduction in the payment limitation would reduce government costs; and (8) if a zero dollar payment limitation was approved for the honey program without limiting loan forfeitures, government costs would likely increase.

Sugar Program: Changing Domestic and International Conditions Require Program Changes (GAO/RCED-93-84, Apr. 16, 1993)

GAO reviewed USDA's sugar program, focusing on (1) the program's effects on users and producers of sweeteners, (2) the impact of changes in domestic production and consumption of sweeteners, and (3) the effect of pending international trade agreements on the program's operation.

GAO found that (1) the sugar program cost users of sweeteners an average of \$1.4 billion annually because they pay higher prices for domestic sugar; (2) the price support was implemented through a loan program and import restrictions; (3) domestic products containing sugar were at a competitive disadvantage with imported products because of higher domestic sugar prices; (4) sugar users

could import sugar at world market prices without extra duties if their products were intended for export; (5) a few large sugar farms received the majority of the sugar program's benefits because the beneficiaries were not subject to payment limitations; (6) some individual producers received millions of dollars in annual benefits; (7) the high support price encourages inefficient sugar production; (8) the sugar program benefited manufacturers of high-fructose corn sweeteners and corn growers by increasing the demand for their less-expensive products; (9) USDA might have to limit sugar imports further because of increases in the domestic production of sugar and stable sugar consumption, but it could not maintain price supports merely by controlling sugar imports; (10) the Congress had established domestic marketing allotments for sugar if imports fell below a specified minimum, but administrative and user costs would increase if this occurred; (11) pending international trade agreements would prevent USDA from shielding sugar producers from increasing imports; and (12) the trend toward more open markets could make the sugar program inoperable.

Recommendations to the Congress: Because of the additional costs to users of the sugar program and the possibility that it will not operate in the future as it did during GAO's review, GAO said that the Congress needed to consider legislation to move the sugar industry toward a more open market. As part of this transition, the market price for sugar should be lowered. To achieve a lower market price, the Congress should gradually lower the loan rate for sugar and direct USDA to adjust import quotas accordingly. Reducing the loan rate gradually would allow producers time to make orderly adjustments.

Peanut Program: Changes Are Needed to Make the Program Responsive to Market Forces (GAO/RCED-93-18, Feb. 8, 1993)

GAO reviewed USDA's peanut program and found that (1) the number of peanut farms with quota had decreased as the average farm size increased; (2) peanut farms were producing yields nearly five times greater than the yields produced in 1934; (3) 22 percent of U.S. peanut producers controlled over 80 percent of the quota; (4) peanut producers with quota had an opportunity to receive a 51-percent minimum net return after costs, since the yearly quota support price was well above production costs; (5) the peanut program provided disaster transfer payments to protect producers with quota from losses in peanut quality caused by adverse conditions; (6) the peanut program supported farmers with assigned quota who elected not to grow peanuts, since these farmers sell or rent their quota to others; (7) the peanut program added \$314 million to \$513 million each year to consumers' costs of buying peanuts; (8) USDA incurred average annual costs of \$34.4 million from 1986 through 1990 to support the peanut program; (9)

government agencies required to purchase peanuts and peanut products for various food assistance programs at the high quota support price continually paid more for peanuts than they would have without the program; and (10) the peanut program might affect the international market by increasing the volume of peanuts available for export.

Recommendations to the Congress: In view of the many changes that have occurred in agriculture since the peanut program was created, including globalization of agricultural markets, a reduction in the number of peanut producers who receive most of the program's benefits, and increased costs to consumers, GAO said that the Congress should restructure the peanut program to make it more responsive to market forces. In restructuring the program, the Congress should provide for a period of transition to allow producers time to make adjustments in their investment decisions. In determining the length of any transition period, the Congress, with assistance from USDA, should consider such factors as (1) producers' recent expectations about the life of the peanut program; and (2) the useful life of capital investments in equipment specifically purchased for peanut production. The Congress should reduce the annual quota support price so that, over time, the price will more closely parallel the cost of producing peanuts and the world market price. Such action would reduce the net returns after costs that peanut producers with quota now receive, as well as reduce costs to U.S. consumers and the government. The Congress should reexamine the method of assigning quota in view of the fact that a large volume of the total quota is owned by persons who do not grow peanuts with their quota. If the Congress wanted to continue the poundage quota system, it should allow quota to be transferred to producers outside the boundaries of counties where quota was currently assigned in order to promote competition among the more efficient peanut producers.

GAO also said that the Congress should amend the peanut legislation to allow the quota support price to decrease as well as increase each year as production costs decrease and increase. The Congress should permit government agencies such as USDA, which procures peanuts and peanut products for various food assistance programs, to purchase domestic peanuts at the world market price rather than at the higher quota support price.

Agriculture Payments: Effectiveness of Efforts to Reduce Farm Payments Has Been Limited (GAO/RCED-92-2, Dec. 5, 1991)

GAO reviewed whether (1) amendments to the Food Security Act of 1985 effectively prevented producers from avoiding the \$50,000 payment limit and reduced payments under the program and (2) USDA's

computer systems were effectively monitoring and enforcing payment limit requirements.

GAO found that the Food Security Act of 1985 limited deficiency payments, which were designed to protect agricultural producers when crop prices fall below an established target price, to \$50,000 per person. GAO also found that the 1987 amendments had a very limited effect in reducing payments, since (1) the amendments allowed equitable reorganizations under which farmers could reorganize their farming operations, within a specified time period, to avoid any reductions in their total payments; (2) USDA required that only 50 percent of a corporation's ownership provide significant contributions of personal labor or active personal management for the corporation to meet the requirement that it be actively engaged in farming; and (3) individuals could qualify for payments from up to three eligible entities. In addition, GAO found that (1) because the amendments' provisions worked against one another, the provisions only reduced 1989 program payments by \$3.4 million; (2) according to a USDA report, 12 of the 52 farming operations reviewed had reorganized their business structures to avoid losses in payments; and (3) USDA's computer systems were effectively monitoring and limiting payments to producers.

Recommendations to the Congress: GAO said that if the Congress wanted to further tighten payment limits as a means of reducing program costs, it might wish to consider having the payment limit apply to individuals only, with payments limited to \$50,000 for individuals actively engaged in farming whether those payments (1) were earned from their own operations or (2) were attributed to them as owners in one or more entities. A higher limit could be established for specific crops that would not be considered economically viable if held to the \$50,000 limit.

Wool and Mohair Program: Need for Program Still in Question  
(GAO/RCED-90-51, Mar. 6, 1990)

GAO assessed USDA's wool and mohair program and found that (1) USDA made \$665 million in wool payments from 1981 through 1988; (2) wool production declined from 110 million pounds in 1981 to 89 million pounds in 1988; (3) from 1977 through 1983, payments boosted wool production by 18 percent; (4) industry representatives contended that the payments had improved wool quality and production and stabilized the domestic wool industry; (5) military purchases accounted for 8 percent of the annual domestic wool production but could substantially decline as new synthetic materials are used; (6) from 1981 through 1988, mohair producers received \$173 million in payments under the program; and (7) in 1988 alone, mohair payments represented \$47.1 million, or 53 percent, of total program payments.

Recommendations to the Congress: GAO said that in light of the current budget constraints, the high per-pound subsidy cost, the broad objectives for the wool portion of the program, and the absence of objectives for the mohair portion, the Congress should consider whether the wool and mohair program was needed. If the Congress decided to continue the program, GAO recommended that it consider, in light of current conditions, what it wanted the program's objectives to be, including establishing specific, measurable objectives for both wool and mohair and deleting from the Wool Act all references to wool as a strategic commodity and as a measure of national security, since those references are no longer applicable.

Other Related Products

Wheat Support: The Impact of Target Prices Versus Export Subsidies (GAO/RCED-94-79, July 7, 1994)

Agriculture Payments: Number of Individuals Receiving 1990 Deficiency Payments and the Amounts (GAO/RCED-92-163FS, Apr. 27, 1992)

Federal Dairy Programs: Insights Into Their Past Provide Perspectives on Their Future (GAO/RCED-90-88, Feb. 28, 1990)

Milk Pricing: New Method for Setting Farm Milk Prices Needs to Be Developed (GAO/RCED-90-8, Nov. 3, 1989)

AGRICULTURAL TRADE

General Agreement on Tariffs and Trade: Agriculture Department's Projected Benefits Are Subject to Some Uncertainty (GAO/GGD/RCED-94-272, July 22, 1994)

GAO reviewed USDA's report on the impact of the Final Act of the Uruguay Round of trade negotiations on U.S. agriculture, focusing on the (1) report's analytical framework and (2) assumptions USDA used in preparing the report.

GAO found that (1) although USDA used a reasonable analytical framework to determine the economic impact of the act on U.S. agriculture, the report's predictions had to be interpreted with caution because of the inherent uncertainty in the assumptions USDA used; (2) the least certain assumptions included the projections of economic growth resulting from the Final Act, foreign governments' implementation of the Final Act, and how agricultural producers worldwide would respond to expected changes in agricultural policies; (3) it is difficult to measure the economic gains and

future trade flows on which an increase in world income was predicated; (4) USDA could not incorporate every potential policy change in its assumptions; and (5) agricultural producers operate within a complex set of internal and external policies that are subject to change.

Former Soviet Union: Agricultural Reform and Food Situation in Its Successor States (GAO/GGD-94-17, Nov. 19, 1993)

GAO assessed the (1) status of agricultural reforms in the newly independent states in the former Soviet Union; (2) relationship, if any, between U.S. credit-guaranteed food exports and agricultural reform; (3) amount of U.S. credit provided to the former Soviet Union, and whether food provided under the guarantees was being distributed equitably among its republics; and (4) food situation in the newly independent states.

GAO found that (1) implementation of agricultural reforms had been slow, and some reforms had been partially rescinded; (2) guarantee-assisted food imports from the United States and other countries might hinder agricultural reform in the newly independent states by prolonging the existence of the state-owned enterprises that processed and distributed the food; (3) guarantee-assisted food imports might hinder agricultural production by keeping prices down for domestically produced food; (4) some state officials believed that guarantee-assisted food imports benefited the economic reform process by preventing food shortages in their countries; (5) the United States did not place conditions on credit guarantees related to the implementation of agricultural reforms, but some state and other officials believed that placing conditions on these credit guarantees was necessary to move the reform process forward while meeting the need for food; (6) USDA made \$3.75 billion in GSM-102 export credit guarantees available to the Soviet Union before it was dissolved; (7) the distribution of guarantee-assisted food imports among the former Soviet republics had been generally equitable; (8) USDA was not required to monitor the distribution of food imports under the GSM-102 program's guidelines; (9) food supplies were generally adequate during 1991 through 1992, but there were shortages of some items; and (10) the affordability of food became a serious concern for many citizens during 1992 and remained a problem in 1993.

High-Value Product Exports: Good Potential Exists for More Trade With Taiwan, Malaysia, and Indonesia (GAO/GGD-94-52, Nov. 19, 1993)

GAO provided information on the (1) potential for increased exports of U.S. agricultural high-value products (HVP) to Indonesia, Malaysia, and Taiwan; (2) factors that could limit HVP exports to these countries; (3) need for activities to develop competitive

markets in these countries; and (4) need to enhance the competitiveness of U.S. businesses in these markets.

GAO found that (1) Taiwan, Malaysia, and Indonesia were potentially good markets for increased U.S. HVP exports, since rising incomes, an expanding middle class, an increasing preference for Western-style food, and more women in the workforce had increased the demand for HVP; (2) U.S. HVP exports to these countries were increasing faster than U.S. exports of bulk products; (3) the factors that could limit increases in HVP exports included high tariffs, nontariff trade barriers such as import licensing, and competition from local sources and third-world countries; (4) although the countries had attempted to reduce their tariffs, import tariffs in these markets remained high on many agricultural products; (5) U.S. companies lacked a strong commitment to exporting, which is a key to success in these markets; (6) U.S. companies' commitment to exporting could be demonstrated through marketing activities such as developing an export strategy, conducting market research, adapting products to specific markets, establishing a local presence, developing a promotion plan, and providing after-trade servicing, but few U.S. companies engaged in these activities; and (7) the U.S. government could help exporters by providing more practical and product-specific market information and working with foreign countries to lower tariffs and remove nontariff trade barriers on HVP.

International Trade: Changes Needed to Improve Effectiveness of the Market Promotion Program (GAO/GGD-93-125, July 7, 1993)

GAO reviewed the Foreign Agricultural Service's (FAS) administration of the Market Promotion Program (MPP), focusing on whether (1) MPP funds increased commercial participants' promotional expenditures, (2) FAS had criteria for the length of time firms could remain in the program, (3) FAS had criteria for foreign firms' participation, (4) FAS had encouraged small firms' participation in the program, and (5) FAS considered a product's domestic content and processing in awarding MPP funds.

GAO found that (1) FAS had no mechanism for ensuring that MPP funds were used to increase promotional activities; (2) there was evidence that commercial firms had substituted MPP funds for promotional expenditures; (3) FAS had no criteria for ending firms' participation in MPP; (4) FAS opposed limiting the length of time successful participants could remain in the program, but it did phase out firms whose promotional activities were ineffective; (5) FAS had no criteria for foreign firms' participation in MPP; (6) foreign firms received a significant proportion of MPP funds despite congressional guidance that MPP funds were to go to U.S. firms; (7) FAS believed that foreign firms could help create a

demand for U.S. products in foreign markets, but they might do so at the expense of U.S. firms trying to compete in those foreign markets; (8) FAS did not collect data on firms' size and could not determine if it had met the Congress's recommendation that it encourage participation by small, medium-sized, and new-to-export firms; (9) FAS had developed criteria for using domestic content and processing in funding MPP recipients, but it relied on unverified information for its funding decisions; and (10) FAS believed the Congress needed to clarify its guidance for MPP.

Recommendations to the Congress: GAO said that if the Congress believed that the structure of MPP needed more explicit legislative direction, it might wish to make its desires more explicit by amending the program's authorizing legislation.

International Trade: Effectiveness of Market Promotion Program Remains Unclear (GAO/GGD-93-103, June 4, 1993)

GAO evaluated USDA's Market Promotion Program (MPP), focusing on whether the program (1) had successfully developed, maintained, or expanded U.S. agricultural exports and (2) participants continued to need federal funding.

GAO found that (1) the Foreign Agricultural Service (FAS) believed that there was a positive correlation between MPP funding levels and U.S. export levels and that the additional value of exports due to MPP ranged between \$2 and \$7 for each dollar in expenditures in the program; (2) the large number of variables that determine export levels made it difficult to demonstrate a relationship between program-funded promotional activities and increased exports; (3) FAS conducted only 12 evaluations of the program between fiscal year 1986 and fiscal year 1992; (4) some program activities in Japan had not achieved their objectives, in part because of inadequate market research and management problems; (5) some program activities in Japan had helped remove trade restrictions and increased consumer awareness and sales of certain products; (6) FAS had no method for ensuring that the program's funds were used for additional promotional activities since applicants are not required to provide information on their prior expenditures for promotion; and (7) FAS had not established criteria for how long participants can remain in the program and was opposed to a mandatory graduation requirement.

U.S. Department of Agriculture: Strategic Marketing Needed to Lead Agribusiness in International Trade (GAO/RCED-91-22, Jan. 22, 1991)

GAO reviewed the management of marketing strategies by USDA to support its role in the changing international marketplace. GAO found that (1) USDA's production-oriented philosophy was not well

suited for providing marketing leadership, (2) policymakers were attempting to reduce or eliminate trade barriers and create a flexible farm program to allow farmers to make decisions about planting on the basis of consumer needs, (3) the United States spent significantly more on developing and promoting high-value agricultural products than most of its competitors and received less return on its marketing investment; (4) USDA lacked the proactive marketing programs and activities necessary to assist agribusinesses in developing more effective marketing practices; (5) the four USDA agencies responsible for trade management differed sharply in strategic marketing perspectives, professional skills, and degree of interagency coordination; (6) USDA lacked a departmentwide strategic marketing plan; and (7) the Foreign Agricultural Service (FAS) believed that the utility of USDA's management-by-objectives system would remain limited without strong support from top management and improved interagency coordination.

#### Other Related Products

Public Law 480 Title I: Economic and Market Development Objectives Not Met (GAO/T-GGD-94-191, Aug. 3, 1994)

General Agreement on Tariffs and Trade: Uruguay Round Final Act Should Produce Overall U.S. Economic Gains (Volume 2)  
(GAO/GGD-94-83B, July 29, 1994)

International Trade: Market Oriented Strategy Would Help U.S. Agriculture Into the Future (GAO/T-GGD-94-177, June 23, 1994)

Agricultural Trade: Significance of High-Value Products as Agricultural Exports (GAO/GGD-93-120, Aug. 10, 1993)

Agricultural Marketing: Export Opportunities for Wood Products in Japan Call for Customer Focus (GAO/RCED-93-137, May 19, 1993)

#### RESEARCH AND EDUCATION

Agricultural Marketing: Federally Authorized Commodity Research and Promotion Program (GAO/RCED-94-63, Dec. 29, 1993)

GAO provided information on the Agricultural Marketing Service's (AMS) agricultural commodity research and promotion programs, focusing on the extent of (1) the use of check-off funds, (2) AMS' oversight, and (3) coordination of oversight between AMS and other USDA agencies.

GAO found that (1) as of 1992, 11 of the 18 authorized check-off boards had been active and had completed at least 1 full year of operations; (2) during 1992, the 11 active check-off boards

collected about \$250 million in assessments from agricultural producers and handlers and spent most of the funds on promoting commodities in the domestic market; (3) the check-off boards sponsored research, administered information programs for consumers and producers programs, and funded general and administrative expenses; (4) although AMS was responsible for ensuring that check-off programs complied with authorizing legislation and for evaluating the effectiveness of the dairy program, individual check-off boards were responsible for evaluating the general effectiveness of the program; (5) AMS reviewed check-off boards' budgets, projects, and contracts to prevent the boards from engaging in prohibited activities; (6) the check-off boards reimbursed AMS for its oversight services and USDA charged the boards for any legal services it provided; (7) AMS coordinated its activities to oversee the check-off program with many USDA agencies; and (8) the coordination of the oversight varied depending on the agency involved and the activity performed.

Agricultural Research: Refocusing Priorities to Meet Current Concerns (GAO/T-RCED-94-45, Oct. 7, 1993)

In this testimony, GAO discussed the implementation of USDA's research priorities, focusing on (1) USDA's research structure and budget, (2) past and current agricultural research objectives, and (3) factors that inhibited refocusing the research agenda. GAO noted that (1) USDA's research and funding levels were controlled and coordinated by the Secretary of Agriculture and distributed to numerous agencies under several assistant secretaries; (2) of the \$3 billion spent on agricultural research programs, two-thirds was spent on state-level programs and the remaining third was managed by USDA; (3) the Agricultural Research Service managed the largest percentage of USDA's research funds; (4) 52 percent of state research funds came from state contributions and 48 percent came from USDA's grant programs and the private sector; (5) although USDA had attempted to refocus its research funding on emerging priorities and social needs, most USDA research funds were devoted to increasing agricultural productivity; and (6) factors that inhibited USDA from shifting its research priorities included the lack of a departmentwide research agenda and an adequate management information system, specialization in the research community, and congressionally earmarked funds.

USDA Research and Extension Agencies: Missions, Structures, and Budgets (GAO/RCED-93-74FS, Feb. 18, 1993)

GAO provided information on the missions, programs, organizational structures, and staffing and funding of the Agricultural Research Service (ARS), the Cooperative State Research Service (CSRS), the Extension Service (ES), and the Soil Conservation Service (SCS).

GAO found that (1) ARS served as a research agency for the Department of Agriculture and had acquired new responsibilities in food safety and research on sustainable agriculture; (2) CSRS supported agricultural research and education programs through grant administration; (3) ES provided national leadership to the Cooperative Extension System and assisted in financing the System's educational programs; (4) SCS was responsible for a national soil and water conservation program; (5) the four agencies accounted for about 20 percent of USDA's total staff years in fiscal year 1991; (6) ARS, CSRS, and ES were directed by the Assistant Secretary for Science and Education, whereas SCS was directed by the Assistant Secretary for Natural Resources and Environment; (7) from fiscal year 1987 through fiscal year 1991, the Congress provided \$10.3 billion in funding for the four agencies--SCS received \$3.9 billion, ARS received \$2.7 billion, CSRS received \$1.9 billion, and ES received \$1.8 billion.

Farm Program Research (GAO/RCED-93-48R, Oct. 7, 1992)

GAO provided information on (1) barriers to the use of alternative, less environmentally intrusive agricultural practices; and (2) the impact of farm commodity programs on rural communities. GAO noted that (1) the two paradigms within the agricultural sector are conventional and sustainable agricultural practices; (2) conventional agriculture utilizes specialized farming and cropping systems and relies on chemicals for pest control and soil fertilization; (3) sustainable agriculture attempts to integrate plant and animal production practices, satisfy needs for human food and fiber, enhance environmental quality, efficiently use nonrenewable resources, sustain the viability of farm operations, and raise the living standards of farmers and the society; (4) barriers to sustainable agriculture included farmers' inability to grow other crops and implement diverse rotations; (5) the Congress had enacted provisions allowing farmers in the program to independently plant 15 percent of their base acreage while remaining eligible for the program; (6) federal taxes, farm credits, and environmental policies also affected decisions about production; (7) farm commodity programs had kept moderate-sized farmers in the farm sector; and (8) little evidence had been shown linking farm commodity programs with declines in rural farming communities.

Sustainable Agriculture: Program Management Accomplishments and Opportunities (GAO/RCED-92-233, Sept. 16, 1992)

GAO provided information on USDA's efforts to encourage sustainable agriculture, focusing on the Sustainable Agriculture Research and Education (SARE) Program.

GAO found that (1) nine USDA agencies managed numerous programs and activities addressing various aspects of sustainable agriculture, but management was fragmented, and non-USDA agencies were participating in some of the activities; (2) USDA's sustainable agriculture policy expired in 1989, and activities were operating without a departmental policy to guide their efforts or use of resources; (3) some of SARE's goals conflicted with the goals of other agriculture programs; and (4) the legislatively mandated National Sustainable Agriculture Advisory Council had not yet met, and the Agricultural Council on Environmental Quality had met primarily on organizational issues. GAO also found that (1) SARE had funded 183 projects with about \$39 million in combined federal and public and private matching funds through 1991; (2) USDA was slow to request SARE funding, and its funding requests were continually lower than the amount the Congress allocated; (3) SARE successfully involved farmers, nonprofit organizations, agribusinesses, and public and private research and extension institutions in reviewing and selecting projects and had increased interest in and acceptance of sustainable agriculture; (4) dissemination of information for SARE projects was effective at the local level but not at the regional or national level, but USDA was establishing a uniform system for reporting SARE's program activities; and (5) SARE's grant and audit procedures for controlling funds might not be sufficient to ensure that SARE funds were used as intended.

#### Other Related Products

Data Collection: Opportunities to Improve USDA's Farm Costs and Returns Survey (GAO/RCED-92-175, July 30, 1992)

Pesticides: USDA's Pesticides Residue Research Project (GAO/T-RCED-92-38, Mar. 11, 1992)

Plant Germplasm: Improving Data for Management Decisions (GAO/PEMD-91-5A, Oct. 10, 1990)

Alternative Agriculture: Federal Incentives and Farmers' Opinions (GAO/PEMD-90-12, Feb. 16, 1990)

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