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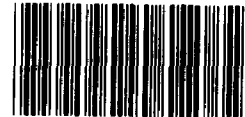
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RESOURCES, COMMUNITY,  
AND ECONOMIC DEVELOPMENT  
DIVISION

B-199623

FEBRUARY 9, 1983

The Honorable John R. Block  
The Secretary of Agriculture



120543

Dear Mr. Secretary:

Subject: Research and Extension Programs to Aid  
Small Farms (GAO/RCED-83-83)

In a 1975 report to the Congress entitled "Some Problems Impeding Economic Improvement of Small-Farm Operations: What the Department of Agriculture Could Do" (RED-76-2, Aug. 15, 1975), we made several recommendations on steps that the U.S. Department of Agriculture (USDA) should take to assure that it establishes small-farm research and extension programs that are practical, beneficial, and cost-effective.

Our review of Department actions to implement the recommendations in our report showed that research and extension services have been increased and data collection activities have been expanded since our 1975 report. However, USDA has not yet (1) developed data on overall costs and benefits of small-farm extension activities or (2) adequately encouraged State extension services to establish procedures to identify small farmers most in need of assistance and to establish action plans to improve the participants' farming skills.

The enclosure discusses extension service, research, and data collection activities initiated since our 1975 report and includes our observations on program benefits and weaknesses. We are recommending that the Administrator of the Federal Extension Service work, cooperatively with the State extension services, to develop guidelines for carrying out special small-farm extension programs in a way that will provide meaningful technical assistance to the maximum number of small farmers. We are also recommending that a mechanism be developed to collect cost and benefit information on the results of small-farm program activities.

The Extension Service agreed with the thrust of our recommendations. The Administrator said that the Service plans to implement a new program accountability and evaluation system that it has been developing cooperatively with the States and

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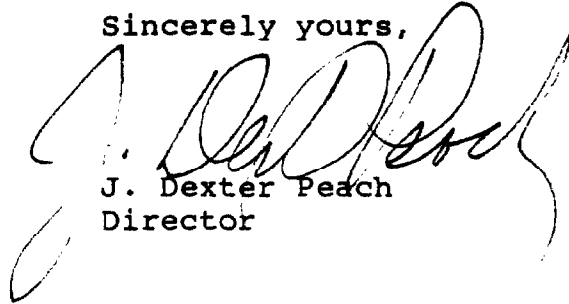
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that our recommendations would be considered as part of that effort. We agree that small-farm data and program guidance needs can be included as part of this new system.

As you know, 31 U.S.C. § 720 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the above congressional committees; the House Committee on Agriculture; the Senate Committee on Agriculture, Nutrition, and Forestry; your Assistant Secretaries for Science and Education and Economics; and the Director, Office of Management and Budget.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J. Dexter Peach", is written over the typed name and title. The signature is fluid and cursive.

J. Dexter Peach  
Director

Enclosure

RESEARCH AND EXTENSION PROGRAMS TO AIDSMALL FARMS

In our 1975 report we recommended that USDA (1) estimate the cost and benefits of extension programs that provide training and technical assistance to small-farm operators having the potential for improvement, (2) examine the potential for research specifically designed to improve the income of small-farm operators, and (3) collect information on the characteristics of small farmers to better determine the type and extent of extension and research beneficial to them. This enclosure describes the scope of our followup work, provides some background discussion on general small-farm issues, and describes the status of and actions taken on each of the three areas in which we made recommendations.

OBJECTIVES, SCOPE, AND METHODOLOGY

This study was conducted to follow up on recommendations in our 1975 report. Many of the small-farm activities discussed in our 1975 report were pilot projects. Our followup work included collecting information on the evolution of small-farm research and extension activities, examining program methods and operating procedures, and analyzing program accomplishments. We interviewed officials in USDA's Extension Service, <sup>1</sup>/ Agricultural Research Service (ARS), and Economic Research Service to obtain information on their small-farm activities. Our review was performed in accordance with generally accepted government audit standards.

We examined small-farm activities conducted by 4 of the 31 States having special small-farm extension programs (Mississippi, Missouri, North Carolina, and Texas). These four States are recognized as having large special programs for small farmers. Our examination of State extension services' activities concentrated on special extension programs for small farmers and did not include regular extension services used by all farmers. For these four States, we reviewed program records and interviewed

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<sup>1</sup>/The Smith-Lever Act (7 U.S.C. 341 et seq.), passed in 1914, created the Cooperative Extension Service "To aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same." The Cooperative Extension Service is made up of a Federal office in USDA and State extension services located within the land-grant colleges and universities.

program personnel in three counties 1/ in each State. We chose these counties to get a representative sampling of extension activities in different geographic areas. We discussed and received input on our choices from State extension service personnel to assure that the counties we visited were representative of geographic areas and clientele mix in their respective States.

At ARS' small-farm research centers in Beltsville, Maryland; Booneville, Arkansas; and Charleston, South Carolina, we reviewed project reports and interviewed directors and researchers regarding the methods used to identify small-farm research needs, develop projects to meet those needs, and disseminate research project results. State land-grant institutions also conduct research under regular cooperative State/Federal research programs, some of which may be applicable to small farmers. We concentrated on special research programs for small farmers and did not examine regular ARS or State cooperative research projects that may have some small-farm application.

#### FEDERAL FOCUS ON SMALL FARMS

Small-farm concerns generally fall under two areas. First, public policymakers have been concerned with (1) the disadvantages faced by some small farmers who have been unable to increase returns from their farms or increase income through off-farm employment and (2) policies to improve the well-being of these small farmers. Second, during the 1970's, the industrialization of agriculture and the increasing concentration of farm production among fewer larger farms raised questions as to whether the concentration of power in the diminishing number of farms was good for the Nation and national security. Particular concern was voiced about the resiliency of the farm sector; that is, the sector's ability to absorb shocks of economic adversity and continue to produce during economic crises.

According to some agricultural economists, smaller farms have considerable staying power during adverse times because small- to mid-size volume farmers typically do not pay themselves or their families minimum wages and their equity is often high. On a relative basis, their cash expenditures are substantially lower than those of larger farms. Because a greater proportion of the smaller volume farm's labor is provided by family members, labor costs are not as significant a factor in the decision to produce or not to produce during adverse periods. Once crops are in the ground, the cash expenditures until harvest are

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1/Winston, Claiborne, and Pike Counties in Mississippi; Oregon, Morgan, and New Madrid Counties in Missouri; Caswell, Cumberland, and Johnston Counties in North Carolina; and Falls, Nacogdoches, and Bowie Counties in Texas.

usually low. Maintaining a basic subsistence level for their families is the farmers' incentive to maintain output, even if prices fall to very low levels. Consequently, even though smaller volume farmers may suffer financial crises, historically they continue production. Because smaller volume farmers are able to produce in adverse economic times with minimal cash outlay, they have become a shock absorber for the farm sector and contribute to this Nation's stable food supply.

The Congress recognized the importance of small farms to the Nation in the 1977 and 1981 farm bills. In the Food and Agriculture Act of 1977, the Congress stressed the need for USDA to focus on small, family farms, including expanding small-farm research and extension programs. Subsequently, in 1978, a series of regional conferences brought together farm delegates to discuss key problems and issues important to the small farmers in their areas. These conferences, together with the Congress' concerns, led in January 1979 to USDA's adoption of a small-farm policy aimed at preserving a place in agriculture for the small farm. In the Agriculture and Food Act of 1981, the Congress again affirmed the need for USDA to foster and encourage the family farm system of agriculture in this country, especially through small-farm research and extension programs.

The small farmer is defined  
in socioeconomic terms

Various guidelines have been used to define a small farm. Section 1442 of the Food and Agriculture Act of 1977 (Public Law 95-113, 91 Stat. 1006) defines a small farmer as one with annual gross sales from farming of \$20,000 or less. In 1979 USDA adopted a definition of a small farm that includes all farm families

- whose net family income from all sources (farm and non-farm) is below the residence State's median, nonmetropolitan income;
- who depend on farming for a significant portion, though not necessarily a majority, of their income; and
- whose family members provide most of the farm labor and management.

USDA adopted this definition along with a policy to "encourage, preserve, and strengthen the small farm as a continuing component of American agriculture." USDA estimated that of the 2.5 million farms in the United States in 1977, about 1.3 million fell within this definition. Of those farms, 1 million had sales of less than \$20,000 annually while 300,000 had sales exceeding \$20,000 annually. An additional 700,000 farms had sales of less than \$20,000 annually but net family incomes above the median, nonmetropolitan income.

EXTENSION PROGRAMS USED BY THE STATES  
TO AID SMALL FARMERS

State extension services are assisting small farmers through regular extension programs that are available to all farmers. In addition, 31 States have special small-farm programs funded from regular extension budgets. The actual amount of funding for extension services to small farmers is not known, but USDA estimates the cost to be about \$52 million annually: \$25 million from State and local funds, \$25 million in Federal matching funds from Smith-Lever general appropriations, and \$2 million from Smith-Lever appropriations that are earmarked for special small-farm and home gardener programs. USDA estimates that a total of about \$5 million is spent annually on the special small-farm programs.

The special small-farm programs commonly use paraprofessionals to provide technical assistance to small farmers on a one-to-one basis. These paraprofessionals are generally local farmers who are employed, trained, and supervised by the regular extension staff. Of the 31 States having special programs, 21 use paraprofessionals.

Special small-farm programs began with pilot projects in Texas in the late 1960's and in Missouri in the early 1970's. The objectives of these pilot programs were the same as the objectives of the current programs in these two States: (1) reach small-farm operators who are not being reached by regular extension programs, (2) improve participants' skills in agricultural production and management practices and home food production, (3) increase participants' income levels, and (4) give participants the foundation they need to use regular extension services for further assistance. The basic approach of the programs has included (1) selecting participants who were in need of assistance, (2) analyzing the farmer's situation and making an inventory of available resources, (3) developing short- and long-term goals for farm operations, and (4) providing instructions to establish the technical and management skills necessary to achieve operational goals.

In our 1975 report we recognized the potential benefits of such specialized pilot programs for small farmers. Accordingly, we recommended that USDA estimate the costs and benefits of such programs and present the information to the Congress for its consideration. In response to our 1975 report, USDA disagreed with the need to intensify its efforts to aid small farmers and therefore it did not specifically address the cost/benefits recommendation.

Adequate data on overall costs  
and benefits is not available

USDA has not yet estimated overall costs and benefits of small-farm extension programs. However, benefit information reported by State extension services has been used in USDA presentations on the benefits of small-farm extension services. For example, USDA publications frequently use figures on income increases reported by small farmers participating in these programs. In addition, in the July 1979 hearings on USDA research and extension services for family farms before the Senate Subcommittee on Agricultural Research and General Legislation, Committee on Agriculture, Nutrition, and Forestry, a principal justification for the special small-farm extension programs was Missouri's reported benefit-to-cost ratio of 3.5 to 1. The Texas program was also cited in the hearings as having increased net farm income by 48 percent for program participants.

In 1979 the Joint Council on Food and Agricultural Sciences <sup>1/</sup> established an ad hoc committee on small farms. In a December 1979 report the ad hoc committee commented that the results of special small-farm extension programs have been impressive and recommended increased funding for such programs. However, the ad hoc committee also pointed out the need for additional information with which to evaluate such programs and the need for more specifications on the small farmers to be targeted for assistance.

USDA did fund a research project, "An Inventory and Evaluation of Cooperative Extension Programs in the South Aimed at Small and Part-time Farmers," which was conducted by the Virginia Polytechnic Institute and State University, Blacksburg, Virginia. This study's objectives were to (1) develop a profile of southern farms and farm operators, (2) determine the availability of cooperative extension small-farm assistance programs in the southern region, and (3) evaluate these programs' effectiveness. The study report, issued in 1980, stated that most small-farm program participants make modest improvements in their production practices, resource management, and farm sales revenues; however, the report drew no conclusion about the relationship of benefits to costs in the small-farm programs.

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<sup>1/</sup>The Joint Council, which includes USDA and State land-grant officials, was established by the Food and Agriculture Act of 1977 to foster coordination of agricultural research, extension, and teaching activities of the Federal Government, the States, colleges and universities, other public and private institutions, and persons involved in the food and agricultural sciences.

Dependable data on program benefits was not generally available in the States we visited. Mississippi and Texas do not keep adequate records to provide a basis for calculating benefits. Mississippi maintains only a list of participants, and State officials there told us that they do not collect data because they are not required to do so. County records in Texas contain only a description of the family and farm operation at the time they joined the program. Texas State officials told us that recordkeeping is kept to a minimum so that paraprofessionals can spend more time working with farmers.

Missouri records include data on farm production and gross income each year, but the figures are estimates prepared by the paraprofessional and do not include all expense data. North Carolina collects farm production sales and expense data each year; however, the data has not been consolidated, analyzed, or used for program management. We were told that North Carolina had planned to place this data in a computer and analyze it as part of a special study of its program, but this plan was postponed because funding was not available.

We did not examine the need for a computer analysis or its cost as part of our review. However, we believe that the data could be collected and tabulated simply and inexpensively. For example, information on costs and benefits could be collected as part of the paraprofessionals' routine contacts with farmers participating in the program.

#### Need for more effective program procedures

Each of the four States we visited followed somewhat different procedures for identifying and recruiting participants and structured their programs to meet participants needs with varying degrees of effectiveness. In two States we visited, overall small-farm program benefits are limited because the States use procedures that generally cannot identify all eligible farmers or recruit participants who need assistance most. Also, the States we visited do not always structure their programs so that paraprofessionals can determine each participant's training needs and establish a plan to provide the skills needed to enable the farmer to successfully complete the program in a reasonable time period.

#### Better procedures needed for identifying and recruiting participants

Mississippi and Texas have an unstructured approach to identifying and recruiting participants. In Mississippi, for example, personnel supervised by Alcorn University use a different approach than those supervised by Mississippi State University. Alcorn University asked its paraprofessionals to recruit, from the communities they live in, farmers they believe would meet



the definition of a small farmer. In one county we visited that was supervised by Mississippi State, however, program assistance was provided to all farmers who asked to participate and the small-farm definition was not applied. Information supplied to us by Mississippi program officials showed that 23 of the 179 participants in this county were professionals such as bankers, lawyers, and physicians. Such occupations would be expected to generate income above that specified in USDA's small-farm definition.

Texas paraprofessionals also recruited participants from farmers they knew or from those referred to them by other farmers or extension organizations. In one county we visited, all 25 participants were home gardeners rather than farmers.

Missouri and North Carolina have a more structured approach to identifying eligible participants and to recruiting those most in need of assistance. At the start of Missouri's program in each county, program personnel used census data to identify farm families with less than \$10,000 in sales and then interviewed these families to determine eligibility and desire for assistance. They were able to establish contact with about 80 percent of the farm families. However, in one area we visited, they were able to interview only about one-third of the potential participants because of the limited resources for the survey. At the time of our fieldwork, paraprofessionals relied heavily on (1) peer referrals by participants and (2) personal contacts to identify and recruit eligible participants.

When North Carolina started its program in each county, program personnel obtained lists of small-farm operators from Government and quasi-Government agencies, refined the lists by determining eligibility based on gross farm acreages, collected information from Federal and private lending institutions to determine those most in need of assistance, and then contacted these farmers to determine whether they wanted to participate. Since establishing the initial lists of potential participants, paraprofessionals have periodically updated their lists of target farmers by making personal contacts with farmers, soliciting peer referrals from program participants, and obtaining updated lists from other entities.

Procedures for assisting  
small farmers could be improved

Paraprofessionals do not always establish and follow a plan of action that would provide the necessary skills to enable the small farmer to complete the program in a reasonable time period. We found that some participants stay in the program for extended periods, thus limiting the amount of assistance that can be provided to other farmers.

At present, the special small-farm programs can serve only about 1 percent of the estimated eligible population. To extend their coverage, the programs must provide participants with an acceptable level of skills in a reasonable time period and then bring in new participants. Although the time required for this process would vary by individual, extension officials generally agree that 3 to 5 years should be adequate for most farmers to complete the program. Most farmers are considered to have successfully completed the program when they become sufficiently familiar with recommended production and management techniques to seek and interpret information without individual assistance. Commonly, the ability to participate in regular extension activities is viewed as a measure of successful completion of a small-farm program.

In the States we visited, the paraprofessionals generally inventoried each farmer to identify the resources and skills available and the areas where the farmer needed assistance to improve management and production skills. The paraprofessionals did not, however, clearly establish a list of skills the farmer needed or a plan of action to provide the skills over a reasonable time period.

An important part of the special small-farm programs is having paraprofessionals demonstrate how to do a job and provide hands-on experience. This is done to provide the training and technical assistance the farmers need to do the work themselves. However, we found cases in which paraprofessionals sometimes performed tasks for farmers beyond those required for demonstration. In the Texas counties we visited, paraprofessionals sometimes provided labor in order to gain the confidence of the small farmers. For example, one farmer told us that the paraprofessional was helpful in controlling gophers--every time he had a gopher problem he would call the paraprofessional, who would trap the gophers for him. We also found that paraprofessionals plowed gardens, selected replacement cattle, and helped cross-fence pastures and that program personnel provided the labor to start catfish farming. The program personnel cleaned the ponds and stocked them with fingerling fish. After farmers made the first harvest, however, most of the projects were discontinued because the participants were unwilling to restock the ponds themselves.

In Missouri we found that some paraprofessionals are taking soil test samples rather than having the farmers take them. In Mississippi, program personnel are providing a marketing service for program participants. They recruit commercial buyers for produce and coordinate the participants' crop planting to match orders from the commercial buyers. Program personnel have been supplying this service since 1976, and small farmers have come to depend on the program rather than take responsibility for carrying out the marketing function themselves.

Of the four States we visited, only North Carolina and Missouri normally collect and report completion data. According to program officials, since 1976 North Carolina has averaged 19 participants successfully completing its program each year from about 500 participants (4 percent). In Missouri from 6 to 17 percent of the participants have successfully completed the program annually during the last 3 years, according to program officials. Mississippi program officials told us that no one has completed their program. In the three Texas counties we visited, program personnel gave us annual completion estimates of 20 percent, 16 to 24 percent, and zero. In the county in which no one had completed the program, 10 participants had left the program during the prior 2 years--3 had died and 7 had dropped out of the program.

#### INCREASED RESEARCH SPECIFICALLY DIRECTED TO SMALL FARMS

The major change in small-farm research after our 1975 report came in 1979 when the Congress for the first time appropriated funds to USDA specifically for small-farm research. During fiscal years 1979 through 1981, the Congress appropriated \$3 million to \$4 million annually specifically for small-farm research. In 1980 USDA's ARS designated three regional research centers as focal points for small-farm research. Two of these centers--the Northeast Center in Beltsville, Maryland, and the Southeast Center in Charleston, South Carolina--were existing research facilities. The third, the South Central Center in Booneville, Arkansas, was a newly established center.

ARS provided varying kinds and amounts of guidance to help develop the small-farm research program and the research centers. Each center played a major role in determining its research needs, with varying degrees of effectiveness. Approaches used to identify research projects varied greatly among the three research centers. One center collected opinions from a sample of county agents to determine research needs; another held meetings with extension service representatives from each State in its service area; and the other center held meetings with area farmers.

Shortly after receiving the designation for small-farm research, the Southeast Center's staff met with extension service representatives from the States in its region. From these representatives, the staff learned the needs of the farmers the representatives worked with, and in the end the group identified 10 crops for which research is needed to help small farmers. Research needs of small farmers were also identified by representatives of State experiment stations, who are known as collaborators. It had been the center's practice, even before receiving the small-farm designation, to meet with the collaborators from all the States in the region every 2 years to review what has been done and what should be done in both the center and in the States. The

collaborators provide the center with feedback at these meetings, including what the farmers in their States need and want and the use made of previous research results.

The Northeastern Region small-farm research coordinator developed a survey to determine the research needs of small farmers in his 12-State region. The State extension service directors were asked to select approximately 25 percent of their States' county agents for the study. In May 1979 a questionnaire was sent to the 70 selected county extension agents with an explanation of the study and its purpose, USDA's definition of a small farmer, and a list of various agricultural enterprises. The agents were asked to rank the top three enterprises of both small farms and other farms in their counties and to specify commodities involved. Vegetable crops, beef cattle, forage crops, dairy, and sheep and goats were the small-farm agricultural enterprises ranked highest by the selected agents.

The questionnaire also asked the respondents to list the research needed to provide immediate benefit to their counties' small farms. They listed specific areas, such as horticulture, production, marketing, and management, and included suggestions for research on particular problems, such as developing intensive vegetable production systems for up to four crops per year on the same acreage.

The South Central Small Farm Research Center held four meetings in 1980 to solicit input from local small farmers in different locations within Arkansas. But the farmers attending addressed only their individual problems, and the researchers were unable to determine from these meetings what most of the region's farmers needed. The researchers received most of the direction for their work from specially formed advisory committees of peers from other research centers. The advisory committees were charged with the responsibility for assisting scientists in developing effective research projects at the center to address problems faced by small farmers. In April 1981 an advisory committee met to discuss potential research projects in the area of horticulture for small farmers, and in May 1981 another advisory committee met to discuss potential livestock and forage projects.

It is too early to determine how successful each research center's projects will be, but researchers at the South Central Center could not relate their projects to identified needs of small farmers. One was working with crops for greenhouse operations, but he believed only the successful farmers would readily try these crops. Research was also being conducted on berry crops on the premise that small farmers would be willing to install irrigation systems and wait 2 or 3 years before a profitable harvest. Another project is being conducted to determine whether certain crops can be grown in the area, but we were told by a researcher at the center that currently no market exists for the crops. Although these projects have merit, the absence of a

survey of small-farm needs in the center's research area could cause doubt as to whether the most necessary projects were selected.

The ARS small-farm research coordinator told us that the research program is fairly new and that small-farm planning and coordination is evolving and would continue to evolve in a way that is consistent with other ARS research. Further, he said that he was only assigned small-farm coordination responsibility in early 1982 and he is taking steps to (1) develop criteria for determining small-farm researchable problems, (2) develop operating procedures for program planning and coordination, and (3) evaluate current programs.

SOME ADDITIONAL DATA ON CHARACTERISTICS OF  
SMALL FARMS HAS BEEN COLLECTED

In our 1975 report we recommended that USDA collect information on the characteristics of small farmers to better determine the type and extent of extension and research assistance most beneficial to such farmers. Since 1975 USDA has undertaken studies to collect data on farmers in general and several studies that deal particularly with small farmers in various regions of the country. At the time of our followup, the studies related to small farmers had not been completed.

USDA's Economic Research Service has tried to gain additional insight into the characteristics of the farm sector through a special analysis of data obtained from the 1979 Farm Census and Farm Finance Survey conducted by the Bureau of the Census. The Service prepared a report in December 1981 entitled "The Production and Financial Structure of U.S. Farming," which deals with the organization of the agricultural sector and the composition of farm-family income. Among other things, the report showed that the farming sector is becoming increasingly bimodal; that is, the number of small farms and the number of large farms are increasing while the number of midsize farms is slowly decreasing. The report also showed that the composition of farm-family income, especially for small farms, has changed. Off-farm income has increased, and the total family income of farms with less than \$10,000 in sales now exceeds the national median. This change has come about because these farms are increasingly becoming part-time farms whose operators rely on off-farm employment for most of their income. On the other hand, the report stated that farms in areas with limited off-farm employment opportunities are experiencing particular stress because of depressed farm prices. Such changes in the farm sector in general, and the small-farm sector in particular, support the need for current detailed data on characteristics of small farmers so that extension and research services can be better targeted to meet their needs.

USDA's Economic Research Service has conducted studies on characteristics of small farmers in Tennessee and Mississippi.

These studies were made to get more detailed data on the characteristics and expectations of such farmers. Data collection for both studies has been completed, and the Service is now analyzing the data. The studies' authors told us that they plan to issue a series of reports dealing with the characteristics of the farmers surveyed and that such reports should be useful to program decisionmakers. We were also told that the Service plans to undertake a similar detailed study on farmers in Wisconsin during fiscal year 1983. Future studies will depend on funding and the ranking of research needs within the Service.

In 1981, nine 1890 State land-grant institutions undertook a research study to gather socioeconomic data on small farms in the South. Objectives of the project include identifying (1) the availability and accessibility of resources to small farmers, (2) attitudes and values that affect small-farm operations, and (3) ways to increase the income of small-farm operations. At the time of our fieldwork, the project was in the second of its planned 5 years. In its first year (1981), the project primarily dealt with project design and in the second year involved data collection. No data analyses have yet been completed, but based on project design, the study should yield useful data on the characteristics of small farmers.

#### CONCLUSIONS

Since our 1975 report, more Federal resources have been directed toward aiding small farmers. With these increased funds, various organizations supported in whole or in part by USDA have generated additional research projects specifically designed for small farms and have expanded special extension programs to small farmers.

Regarding special small-farm extension programs, various studies have shown that such programs have been beneficial to some small farmers. However, several matters need to be given additional attention. First, dependable data upon which to base cost/benefit analyses of such programs is limited and, accordingly, USDA has not estimated overall program costs and benefits. Second, program impacts have been limited because (1) specifications on the small farmers to be targeted are lacking and (2) services were provided beyond the scope of training activities and for periods longer than expected for successful program completion, thus limiting the number of small farmers that can benefit from the extension service programs.

#### RECOMMENDATION

We recommend that the Secretary of Agriculture direct the Administrator of the Federal Extension Service to work, cooperatively with the State extension services, to develop:

--Guidelines for carrying out special small-farm extension programs in a way that will provide technical assistance to the maximum number of small farmers. Factors that should be addressed include the type of small farmer to be served and parameters on the type, amount, and duration of assistance to be provided.

--A means to collect data on and estimate the costs and benefits of small-farm extension program activities. Such data collection requirements need not be elaborate but should provide some minimum information on program benefits as well as on program costs and, to the extent practicable, be uniform among the States.

COMMENTS OF RESPONSIBLE AGENCY  
OFFICIALS AND OUR EVALUATION

Representatives of USDA's science and education organization, including the Administrator of the Extension Service, the Administrator of the Cooperative State Research Service, and the Associate Administrator of ARS commented on a draft of this report. All provided technical comments that have been incorporated into the report. The Extension Service also commented on our recommendations.

The Extension Service agreed with the thrust of our recommendations regarding data and program guidance needs. The Service pointed out, however, that (1) Missouri has the most reliable cost/benefits data, which is why Missouri's program has been cited in discussions of benefits of small-farm programs and (2) extension service is a cooperative program in which over 60 percent of the funding comes from State and local sources and programs are tailored to each State's individual needs. Accordingly, although the Federal Extension Service would provide general program guidance to the States, it would not attempt to provide specific program direction. The Administrator said that the Service plans to implement a new program accountability and evaluation system that it has been developing cooperatively with the States and that our recommendations on small-farm program data needs and guidelines will be considered as part of that effort. We agree that small-farm data and program guidance needs can be included as part of the overall extension program accountability and evaluation system.

The Extension Service also commented that it believed that the report did not sufficiently recognize the benefits of small-farm programs. We have made appropriate changes to the report to more clearly reflect the positive benefits of special small-farm extension programs.