PD-AAX-538

AGENCY FOR
INTERNATIONAL
DEVELOPMENT

ANNUAL BUDGET SUBMISSION

FY 1982

DEVELOPMENT SUPPORT BUREAU

OFFICE OF AGRICULTURE

MAY 1980

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
WASHINGTON, D.C. 20523

FY 1982 ABS
Office of Agriculture
Bureau for Development Support

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A. Introduction

The Office of Agriculture in the Bureau for Development Support (DS/AGR) is the main sponsor of agricultural research and development work in AID. While the main emphasis of the Office is on developing improved production technology, involving associated natural resources, it also includes as increasingly important functions, (a) rural enterprise and employment, and (b) economic policy and planning.

Agricultural and development activities encompass a range of functions -- from funding research to providing technical assistance to regional bureaus and country missions. The research function is often the most visible and occupies the largest proportion of the Office's program funding. Research is sponsored in four principal ways: (a) through the International Agricultural Research Centers (principally those under the aegis of the Consultative Group on International Agricultural Research), (b) the International Fertilizer Development Center (IFDC), (c) through Collaborative Research Support Programs (CRSPs) with U.S. colleges of agriculture in cooperation with foreign institutions, and (d) through other research projects and contracts. In each case, attention is given to facilitating the utilization of research results.

The Office sponsors a number of technology development and field service projects which are designed specifically to meet the needs of the regional bureaus and country missions. Indirectly, the research programs are giving more attention to application; sometimes this is done through the bureaus and missions and sometimes it is carried out through other channels. In addition, the professional staff of the office contribute a significant portion of their work to field service activities.

The basic goal of all these activities is to assist the developing nations increase the production of food and related products and in the process improve the economic and nutritional well-being of their citizens. The principal technique utilized by the Office is the generation and utilization of improved production technology for small farms -- technology that makes it possible to increase output at lower unit costs.

The result, economically and commercially viable small farm enterprises, benefits (1) the farm family by giving them access to the marketplace through produce sold, (2) the consumer through lower prices for farm goods, and (3) ancillary business enterprises and 4) the labor force in general through stimulation of food chain related employment. Improvements in production technology of relevance to small farmers is seen as an essential factor of sustained economic growth and development.

B. Summary of FY 1981 to 1985 CPSS

The FY 81 CPSS calls for close adherence to the Agency agricultural development objectives of increasing nutritious food availability and income equity to the poor majority.

The strategy for accomplishing these objectives includes the development and dissemination of improved technology for production, processing, storage and distribution. This technology is to be transferred to LDC institutions and staff and through them to small-scale farmers. In many cases this requires extensive institutional development to provide the knowledge and facilities to implement the production and distribution activities. LDC staff training is thus a major element in the total program.

Cooperative and collaborative activities within DSB (i.e., DS/RAD, DS/N and DS/ST), with the regional bureaus via the Technical Program Committee for Agriculture (TPCA), and with U.S. university and other U.S. Government agencies under the Title XII mechanism, will be emphasized. International, regional and national research centers are additional entities where cooperation will occur.

The U.S. generally has a comparative advantage with the rest of the world in the technique of development and dissemination of agricultural technology. Most notable is our extensive network of public sector agricultural research and extension facilities in the land grant universities. Closely related to these are myriad related and generally integrated state and federal services. Further expertise is available in the U.S. private sector, where considerable unexploited potential exists, provided the incentives are attractive and the site environment is conducive to the private sector investment. AID can, and does, draw on all of these sources via a variety of mechanisms available to it.

Given the complex nature of agricultural technology, and the many factors influencing its acceptance by LDC governments and farmers, an experienced core of AID technical staff is essential. Among other duties, such grops judges the authenticity and appropriateness of proposed technologies, assists in project development and design, monitors implementation, aids in information dissemination, and provides evaluation services. Central expertise is also necessary in backstopping missions as specific new problems arise, and in determining new priorities of research and technical service that should be explored and adapted for LDC use. AID can, and in many cases does, depend on contractors for actual project implementation.

The above summary of the FY 81 CPSS is essentially valid for FY 82. However, a narrowing of focus and concentration in high priority areas will be necessary in light of the increasingly limited funding and staff resources of DS/AGR and the Agency.

C. Refinements in Strategy and Organization

Since the 1981 ABS was prepared, several events have taken place which have led to some refinements in strategy. The first was the report of the Senate Appropriation Committee which encouraged AID to further concentrate its efforts. According to the Committee, AID "... is trying to do everything and it is over-reaching." It stressed the need to concentrate on small-scale development activities. The second event was the issuance of the reports of the Brandt Commission and the President's Commission on World Hunger which stressed the importance of alleviating hunger in the developing nations. A third event was the expression of support for agricultural research at the Summit meeting in Japan last fall and the subsequent letter from President Carter to heads of state of Canada, France, Germany, Italy, Japan, and the United Kingdom encouraging support for the international agricultural research system. Among other things his letter noted that "Positive action by our governments also will encourage greater support by other countries... This would mark a major advance in international cooperation to end world hunger." The President's letter also commits A.I.D. to 10% real growth in contributions to CGIAR.

These events have led us to reevaluate the present and potential role to be played by DS/Agriculture. This reevaluation has led to some shifts in orientation and organization. Both, however, are evolutionary rather than revolutionary in nature.

1. Refinements in Strategy

In the current environment, it seems appropriate to move carefully to delimit and define what the Office of Agriculture can appropriately and reasonably expect to do. While agriculture/rural development is a broad area, other offices within DS and within AID are at work on many aspects of it. Given these other contributions, it is appropriate that DS/AGR focus its efforts on facilitating (1) growth of agricultural production on small farms to the point that such farmers enter the market economy or increase the marketed proportion of their production (without decreasing their own consumption), (2) growth of ancillary food chain related enterprises with high rural employment impact, and (3) development whih is low in consumption of fossil fuels and conserving of natural resources.

This focus involves more of a refinement of potential audience or target group than a radical change in activity. It stems back to the AID review of small farmer credit in the early 1970's. At that time it was recognized that there is a wide range of farming enterprises, and at the lower end are several marginal groups. The first and most disadvantaged group is (because of overwhelming or uncorrectable constraints such as insufficient land area) unlikely to ever make a viable enterprise out of agriculture. This group may be better off looking outside of agriculture for a livelihood, or supplementing their agricultural income from employment on other farms or from off-farm employment. DS/AGR's rural enterprise development programs (concentrating on food chain related industries) is focussed on generating employment for this group. The work of DS/RAD may also be of critical importance. A second group is composed of small farmers who, because of some resource or technological constraint, are barely making it in agriculture but who, with additional

assistance, could move into a much more productive and profitable situation. A third group might be composed of presently self-sufficient farmers who, with additional assistance, may have the ability to create even stronger small-scale agricultural enterprises.

The viable agricultural enterprise, one that might be characterized as commercial, is of significant value to society in many ways. It offers promise of increased income to small farmers, which, in turn, enables them to increase their own consumption and production expenditures. This leads to expanded employment of other rural residents and expanded purchases from local suppliers and manufacturers. With increases in the volume of farm produce marketed, lower food prices follow. Since the poor spend most of their incomes on food, they have the most to gain. The result is that both rural and urban residents benefit.

2. Shift in Organization

Given its basic focus on technology for small-scale agriculture, the question of how to organize the Office of Agriculture to meet the challenge is a difficult one. It is made more complex by the several related roles the Office is expected to play within AID.

The usual division of labor has been for DS/AGR to focus on longer term and generalizable research while the regions/missions give greater emphasis on immediately applied activities. Over time the two should be quite complementary, though this may not always be evident in some short-run instances. There is an immediate connection in that DS/Agriculture sponsors a number of field assistance projects and Office personnel spend a significant portion of their time (around 25%) providing technical consultation to the regional bureaus/missions. The staff also helps arrange for technical assistance from other institutions.

Regional bureaus and missions, however, are but one of many ways that the results of the research sponsored by the Office of Agriculture flow to the farms of the less developed nations. The International Agricultural Research Centers, partly sponsored by DS/AGR, for instance, have their own linkages with scientists and extension workers in developing nations. In some cases, these linkages are reinforced by special country projects funded by AID country missions. Similarly, CRSP and other research projects involve the development agencies in developing nations. These relatively direct linkages may be expected to grow in the future.

In order to better accomplish its varied tasks in a changing setting, the Office of Agriculture has recently consolidated its activities into four divisions: (a) Agricultural Production, (b) Renewable Natural Resources Management, (c) Rural Enterprise and Employment and (d) Economic Policy and Planning. The International agricultural research institute program will continue to be managed by a small unit attached to the Director of the Office.

The first two divisions include a number of activity clusters. The Agricultural Production Division includes crop production (cereal grains and grain legumes) pest management, postharvest food losses, and livestock production. The Renewable Natural Resources Division includes soils and water management, fertilizer, biological nitrogen fixation, fisheries/aquaculture and agroforestry.

Within each of the four divisions, greater attention will be given to field service and to economic and social dimensions of development. Economists, for example, have been stationed in each of the Divisions. The focus will be on building national institutional capacity relating to small-scale agriculture.

Three institutional activities that cut across several of these divisions are also being given increased attention. The principal one is synthesis of known technologies into information packages, training courses and consultant services, and the development of systems to improve access of the LDC's to such information. A second is assistance to LDC's to improve their understanding of the farmer and his problems. A third is work to increase the employment generation impact of all projects through consideration of appropriate technologies, LDC labor force considerations, etc.

3. Need for Complementarity of Programs

Effective research and development in small-scale agriculture will require close coordination between the new divisions and with other offices in the Development Support Bureau, the regional bureaus and missions, and with other groups.

Within the Office of Agriculture, the division of responsibilities will be somewhat like the following: the Agricultural Production and Natural Resources Divisions will influence productivity by improving the growing environment, increasing yields or reducing pre- and post-harvest losses. The Economic Policy and Planning Division will evaluate the relative profitability of the various technological practices, assist with analyzing potential market policies, and analyze the trade-off between social and financial benefit. Tenure and other related issues will also be considered. The Rural Enterprise and Employment Division, working closely with the other three divisions, will assist missions and LDCs in establishing businesses and industries that handle agricultural inputs and outputs.

Outside of the Office of Agriculture, the cooperation and collaboration of DS/AGR, DS/ST, DS/RAD and DS/N, the regional bureaus and missions is essential. Other entities having a major impact on the system and with which DS/Agriculture must have close associations are: (a) the international, regional and national research centers that develop the improved technology, (b) the various institutions that train staff and package information for dissemination to rural areas, and (c) the extension staffs and other change agents such as private sector suppliers which take new technology directly to the farmers.

D. Synthesis of FY 82 Approach

As indicated in the previous sections, the Office of Agriculture plans to give further emphasis to techniques that would facilitate the shift of presently marginal small farmers into the category of economically and commercially viable small farmers. This orientation will represent more of a sharpening of activity focus (targeting) than a change in the nature of activities carried out. Because small scale farmers engage in a wide range of economic activity, work on a range of related enterprises (from agroforestry to aquaculture) continues to be important.

More specific details of the Office's proposed activities in FY 82 may appropriately be considered in terms of the two major types of activities: (1) long term research, and (2) technology development and assistance.

1. Long-Term Research Component

There are four main components to the Office's long-term research program: (a) the International Agricultural Research Centers (IARCs); (b) the International Fertilizer Development Center (IFDC); (c) the Collaborative Research Support Program (CRSP); and (d) other research. Together they represented almost 85% of the Office's budget in FY 80 and nearly 86% in FY 81. The relative role of the four was as follows:

Portion of Budget

Component	FY 80	FY 81
IARCs	54.4	61.1
IFDC	6.7	6.7
CRSPs	14.1	11.4
Other Research	9.5	6.3
TOTAL	84.7	85.5

In FY 82, the relative role of long-term research, and of the individual components, will vary according to funding availability (this matter will be discussed in greater detail in Section E).

In general, however, increased emphasis will (as suggested in Section C) be given to developing technologies for heretofore disadvantaged areas (those in the low rainfall or arid category and on relatively infertile soil) where the poorer small farmers are found, and to technologies which can be utilized by disadvantaged farmers in these and other areas.

a. International Agricultural Research Centers

The international agricultural research centers sponsored by AID - the funding for which is administered through the research unit - include the international centers sponsored by the Consultative group on International Agricultural Research (CGIAR) plus the Asian vegetable Research and Development Center (AVRDC). As of early 1980, the CGIAR was sponsoring the following ten International Research Centers and three related programs:

Centers:

- International Rice Research Institute (IRRI). 1960, Philippines.
- International Maize and Wheat Improvement Center (CIMMYT). 1964, Mexico.
- International Institute for Tropical Agriculture (IITA). 1967, Nigeria.
- International Center for Tropical Agriculture (CIAT). 1967, Colombia.
- International Potato Center (CIP). 1972, Peru.
- International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). 1972, India.
- International Laboratory for Research on Animal Diseases (ILRAD). 1974, Kenya.
- International Livestock Center for Africa (ILCA). 1974, Ethiopia.
- International Center for Agricultural Research in the Dry Areas (ICARDA). 1976, Lebanon, Syria.
- International Food Policy Research Institute (IFPRI). 1976, United States Washington, D.C.).

Related Programs:

- West Africa Rice Development Association (WARDA). 1971, Liberia.
- International Board for Plant Genetic Resources (IBPGR). 1973, Italy (Rome - FAO).
- International Service for National Agricultural Research (ISNAR). 1979, Netherlands (The Hague).

One additional center (the International Center for Insect Physiology and Ecology (ICIPE), in Nairobi) has applied for membership in the CGIAR. The matter will probably be decided in late 1980. An International Water Management Cente is under consideration and may be proposed for membership in 1981. Funds have been provisionally included in the proposed FY 82 budget for each, although a final AID decision on the question of the support has not yet been made.

The proposed AID contribution in FY 82 has been drawn up on the assumption that the U.S. would continue its policy of contributing about 25% of the total. This policy was reconfirmed by President Carter in late 1979. If total contributions are less than expected, the absolute level of the AID contribution would be reduced so as not to exceed 25%. While the U.S. contribution to the CGIAR is the largest in absolute terms this is primarily a function of the size of the U.S. In per capita terms the U.S. contribution has ranked only about tenth out of seventeen national donors. Several nations give three times as much as the U.S. in per capita terms.

In terms of programs, it may be useful to note that the centers have four major categories of activities: (a) technology generation or research, (b) formation of research networks, (c) training of personnel from developing nations, and (d) direct assistance to national programs. Technology generation is the main activity. Particularly involved or extensive assistance to national programs is generally arranged and funded on a special project basis (AID missions sponsor several such national projects). However, a new CGIAR program, ISNAR, was established in 1979 specifically to provide organizational assistance to national agricultural research programs.

Within the research category the work may be divided into four main categories. They, and the proportion of the research budget they represented in 1979, are crops (54%), livestock (21%), farming systems (5%), and other (16%). Major activities carried out under these categories are as follows:

Crop Improvement: The early goal of IRRI and CIMMYT was to obtain higher yields. Then more emphasis was given to improving plant characteristics and product quality. In recent years, particular attention has been given by all the centers to factors which improve yield stability and ability to withstand adverse conditions (both climate and soil). The latter course has been taken to extend the benefits of the new technology to disadvantaged or previously by-passed farmers. Crop improvement activities may be grouped into the following main areas:

- Genetic Resources and Testing: In order to develop improved plants through plant breeding, genetic stocks must be built up, crossed, and tested on a vast scale. Each center has built up extensive holdings of genetic stocks. IRRI alone has over 50,000 accessions in its germplasm bank.

- Development of Pest and Disease Resistance: An attempt is made to build-in as much resistance as possible in order to minimize the need for chemical controls. This is of vital importance for smaller farmers who have neither the funds nor the knowledge to adopt chemical techniques.

- Tolerance to Adverse Climatic and Soil Conditions: Researchers are attempting to develop increased plant tolerance of drought, high or low temperatures, adverse soil conditions, and other factors. Increased tolerance will, among other things, make it possible to use the technology in presently disadvantaged areas.

- Nutritional Quality: In making the above improvements, scientists make sure that the nutritive value of the crop is not lowered and where possible, is raised. Special attention has been given, for instance, to improving the protein (lysine) level of corn.

- Other: Important areas of crop research work which do not quite fit the above categories include wide crosses (such as between wheat and rye, to produce triticale, a new crop which may be raised in areas ecologically unfavorable for other crops), studies of biological nitrogen fixation (which will lessen the need for purchased fertilizer) and the development of true seed for tuber crops (which could lead to a significant reduction in costs of production for small farmers).

Livestock Improvement: This work is largely concentrated in two centers in Africa. One is devoted to seeking a cure for two of the major livestock diseases of our time, and the other is devoted to finding ways of developing improved livestock farming systems in Africa. The disease work is relatively high science (by CGIAR standards) in nature, but promises to be of very widespread and significant value to small farmers who are not now able

to raise livestock because of disease problems. The livestock systems work is much more general in nature but focuses on poor farmers. Improved pastures for livestock are being studied at a third center in South America.

Farming Systems: Small farmers in developing nations seldom grow just one or two crops (monoculture). Rather, they grow a wide variety of crops at the same time or in sequence, often in close association with livestock. Thus, improvements in a single crop or animal may not contribute a great deal to the welfare of the farmer unless they fit in with the rest of his farming pattern. Four centers have programs on farming or cropping systems. Others are considering such systems in their research.

Other Research: Economists and social sciences are involved in all the foregoing areas of work. In a few cases, the crop or systems work also includes the development of associated but small-scale equipment. The purpose of these machines is to make it possible to intensify production and raise yields without displacing labor.

b. International Fertilizer Development Center

The International Fertilizer Development Center (IFDC) was established by AID at Muscle Shoals, Alabama, next to the TVA national fertilizer center, in 1975. Its purpose is to develop a dependable supply of better fertilizer at lower cost to farmers of the developing nations. The Center has made excellent progress towards this goal in the relatively short period of its existence.

It was originally hoped that the Center would come under the aegis of the CGIAR. This has not yet come to pass, in part because of the Center's location in the United States, but the vital work of the Center has drawn independent support from a number of developed and developing nations. It is planned to hold the AID contribution at the same monetary value as in the past — which means that it will decline in real terms as inflation continues and other donors are added. The funding of IFDC is administered by the Renewable Natural Resources Management Division.

c. Collaborative Research Support Program (CRSP)

The third main category of long term research is the Collaborative Research Support Program (CRSP). For FY 82, eight CRSPs and four CRSP planning activities are included in the ABS. Of the eight CRSPs, six will have been established in previous years (before FY 82) and require continuing funding, while planning activities will lead to an additional two in FY 82.

CRSPs previously placed into effect include the following (year of initiation in parentheses):

- Small Ruminants (FY 78).
- Grain Sorghum/Pearl Millet (FY 79).
- Beans and Cowpeas (FY 80).
- Fisheries/Aquaculture (FY 80).

CRSPs planned for initiation in FY 81 include:

- Soil Management
- Fisheries/Stock Assessment

FY 80-81 planning activities will lead to the establishment of the following CRSPs in FY 82:

- Peanuts
- Fisheries/Post Harvest Utilization

Four new CRSP planning activities are also scheduled in FY 82 which will include soybeans, animal health, large ruminants, and small farm systems.

Of the 12 present and proposed CRSPs and CRSP planning activities, eight would be under the supervision of the Agricultural Production Division, and four under the Renewable Natural Resources Management Division.

In terms of orientation of the six CRSPs established prior to FY 82: two are devoted to crops largely raised by small farmers which are basic foods for many of the world's poorest inhabitants; one is devoted to sheep and goats, also raised by small holders; one is devoted to soil management problems of small and poor farmers; one is to developing pond production technology which will lead to increased food fish availability and better income and employment opportunities for poor people; and one is to develop and refine fishery management and exploitation practices to increase harvests of food fish and raise employment levels.

The new CRSPs proposed for funding in FY 82, have the following purposes:

- Peanuts: To increase peanut production utilization and to improve research capability in the LDCs. Peanuts are one of the basic food legume crops consumed by the poorest segment of the population in Africa and Asia.

- Fisheries/Post Harvest Utilization: To increase the availability of food fish to poor consumers, to provide additional employment for low income coastal fishermen, and to develop small rural fish processing facilities.

The four CRSP planning activities to be initiated in FY 82, have the following purposes for the resultant CRSP programs:

- Soybeans: To increase soybean production and utilization, and to improve research capability in the LDCs. Soybeans are an important food source of edible beans, edible protein, and cooking oil. More and more LDCs are looking to soybeans to alleviate protein and oil shortages among the malnourished rural and urban poor.

- Animal Health: To identify and relieve health related technical and socio-economic constraints on livestock and poultry production in developing nations where they are important food items of the rural and urban poor.

- Large Ruminants: To increase the productivity of cattle and buffalo kept for meat, milk, and draft purposes in crop/livestock systems and for cattle in pastoral grazing systems, and to improve the research capability for these purposes in the LDC's.

- Small Farm Systems: To increase the productivity of small farm swine, poultry, and crop production as integral parts of the total farming system.

The CRSPs are, of course, developed in close cooperation with the Joint Research Committee (JRC) of the Board for International Food and Agricultural Development (BIFAD).

d. Other Research

Other research includes contract projects with American universities and institutions beyond that involved in the CRSPs. These projects are administered by the Agricultural Production and Renewable Natural Resources Management Divisions.

Current projects of this nature include, among others: Spring and Winter Wheat Crossing, Oregon State University (1976); Improved Varieties of Soybeans, University of Illinois (1973); Control of Vertebrate Pests, USDA/DWRC (1967); Symbiotic Nitrogen Fixation by Tropical Legumes, University of Hawaii (1974); and Limiting Factors to Biological Nitrogen Fixation, USDA (1976).

Continuation of these and other projects is proposed for FY 82. Some have been forward funded and require no additional funding. Others do require continuing funding. Some additional projects have been proposed for FY 82 such as Animal Nutrition and Disease in Latin America, Immunology of Ticks, Babesiosis, and Mycorrhiza on Tropical Grains.

These projects play an important role in filling the cracks between larger projects carried out by the IARCs and CRSPs and are often quite closely related to these larger efforts and are responsive to the needs of the developing countries.

e. Utilization of Research

The foregoing research program is specifically designed to develop improved technology which will be used at the farm level in developing nations. Considerable progress has been made in bridging knowledge gaps between international and national agricultural research programs in developing nations. Some progress has been made in narrowing the gap between LDC national programs and LDC farmers, but more remains to be done.

Virtually all of the long-term research sponsored by the Office of Agriculture is international in nature — it is conducted in and/or is relevant to a number of developing nations. This information generally flows directly to national research programs, often through a research network. Network activities vary but may include cooperation in the actual research or field testing, exchange of materials, field trips, conferences, training, and publications. The common factor is a direct linkage between international and and LDC researcher.

The specific form varies somewhat with the type of research activity. The IARCs often provide network leadership for the commodities that they handle. They not only develop technology, but usually involve LDC researchers in its testing, sponsor workshops, conduct training programs, and issue numerous publications. The CRSPs always involve one or more LDC research groups in the conduct of the research the Small Ruminant CRSP will in part be carried out in four LDC sites, while the Sorghum and Millet CRSP is planned for five to eight LDC sites. Projects in the "other" research category are increasingly being linked to technical service support projects.

A few examples of the activities carried out by a few of the IARCs are illustrative: In 1978, CIMMYT's wheat research involved 285 cooperators in 110 countries and a total of 110 trials. In 1979, IRRI and CIAT sponsored the International Rice Testing Program which involved more than 1,000 test nurseries in over 60 countries. IRRI and IFDC are sponsoring an International Network on Soil Fertility and Fertilizer Evaluation in Rice. In 1979, IRRI provided training to 426 scientists and extension workers from 33 nations and conducted three two-week rice production courses for another 100 specialists. IRRI also conducted special cooperative research projects in six Asian nations. IITA has a particularly heavy program of cooperative projects because of the relatively limited state of development of natural systems in Africa.

Another example is provided from the "other" research category. In 1979 under the INTSOY Program at the University of Illinois, 46 cooperators from 46 different countries planted 97 yield trials. INTSOY also cosponsored the World Soybean Conference II at North Carolina University, and the Conference on Irrigated Soybean Production in Arid and Semi-Arid Regions, Cairo, Egypt. Over 600 people attended these two meetings.

While the link between international research and national research programs is relatively strong and growing stronger, there are some weak spots in the remainder of the chain. One is the national research programs in the LDC's themselves. Many are still not strong enough to adequately utilize the international research or to generate their own. In an effort to help overcome this, the CGIAR has, as noted earlier, recently established an International Service for National Agricultural Research (ISNAR). The Office of Agriculture is contributing to the support of this unit, but many of the financial resources needed for national programs will have to come from AID missions and other donors.

The other weak area is the linkage between national agricultural research programs and the farmers. This link has to be provided by national extension and outreach services. While the international research programs outlined above provide some technical training programs and training materials for these programs, they are obviously not in a position to conduct such services at the field level. While the missions and other donors have provided some support for extension/outreach, it still has a long way to go.

Even so, superior new technologies are being adopted, and by small farmers. The most outstanding example is the high-yielding varieties of wheat and rice: Starting from a level of about 0 in the mid-1960's, they were adopted on about 44% of the wheat area and nearly 28% of the rice area in the developing nations by 1976/77. Generally they were adopted as readily by small as by large farmers, and in some rice areas the small farmers accepted them more quickly. Other internationally generated technology is beginning to find its way into use. This process will be accelerated as national institutions are strengthened. The Office of Agriculture has such strengthening as a goal but obviously the assistance of many other groups is also needed, particularly at the country level.

At the country or mission level, the international agricultural research efforts provide a vast resource of technology and technologists to draw upon. A number of AID missions have already done so. Aside from a few crops, this

resource is a product of the 1970's. It is in most cases entering its most productive stage — both in terms of its own research product and the boost it provides to national agricultural research programs. As national research programs are strengthened, the challenge will be to see that national extension/ outreach programs are also strengthened. This process may well play a larger role in subsequent programs.

2. Technology Development and Assistance Component

Technical services projects have been developed in response to mission demand. While some research may be carried out, the main purpose is to respond to requests for services or materials.

Some of the better-known long-standing projects in this area include. Seed Industry Development, Mississippi State University (1953); Food Grain Storage and Marketing, Kansas State University (1967); Pest Management and Environmental Protection, University of California (1971); and Fertilizer Technical Assistance, TVA (1965). More recent service programs have been established in the fisheries and agribusiness areas. Continuation of these projects and establishment of 16 others are proposed for FY 82.

This category of activity represents about 15% of the budget of the Office of Agriculture in FY 80 and 14% in FY 81. It is, as might be expected, probably the most popular category of activity with the regional bureaus and country missions because it is more immediately responsive to their needs. The extent to which these activities can be implemented in FY 82 will depend on the funding available.

The general objective of the office is to provide technical expertise and programs to help generate and support agricultural development in LDCs in subjects and in technical depth not available in the regional bureaus and missions. An important objective is to improve the size and quality of the outreach component to support the field. Descriptions of division programs follow.

In the Agricultural Production Division service oriented projects will be developed in grain legumes, cereal grains, and fruits and vegetables. More emphasis will be placed on rainfed and arid lands cropping and on adaptation of new crops to low potential tropical and arid soils that, due to toxicity or adverse environment, create serious stress situations for conventional crops. The total farm enterprise in its socio-economic and cultural sense will be given more emphasis, incorporating both crop and livestock activities as does the farmer in his individual operation. Animal health, nutrition and husbandry will be the main concern of livestock activity. Integrated pest and pesticide Management activities will continue to emphasize biological control measures and reduce dependence on chemicals. Further, the project will continue to encourage and support LDC institutional development in the pest management areas by working with LDC staff attending project training programs.

In the Renewable Natural Resource Management Division the main areas of emphasis will be irrigation, natural resource degradation, tropical soils, marine fish development and agroforestry. Project emphasis is on the basic "how to" aspects of

development. Considerable success in on-farm water management and tropical and problem soil taxonomy has been achieved already by adherence to the basic technological needs of farmers. This strategy is understood by LDC agricultural staff and can easily be transmitted to and understood by farmers. Agro-forestry is a logical adjunct to soil and water technology. Small wood lots can complement the small scale commercial farm by providing fuel, building material, food, feed and erosion control. In areas unsuited to field crops, trees reduce desertification, protect watersheds and can provide various export products as well as feed for animals. Large scale plantings on government lands have been the most evident reforestation projects; however, more emphasis is now being placed on agro-forestry for small farms. Marine fishery enterprises, though limited in total population impact in some LDCs, have high potential where applicable. The extension of country jurisdiction to 200 miles offers many possibilities but also presents many problems to countries not prepared or knowledgeable in marine fishing. Programs are being prepared to help close this gap.

The Rural Enterprise and Employment Division is focusing on the critical problem of unemployment in rural areas which is highlighted by the fact that of one billion new workers worldwide entering the labor market by the year 2,000, only one-third will work on farms. New programs have been developed for financing in FY 82 to help create the new enterprises needed to give those people jobs. Target groups are (a) rural unemployed, (b) small market town agribusiness entrepreneurs, (c) small rural agriculturally-related industries, and (d) small farmers and their families. Mission and LDCs require assistance in developing policies, institutions, and a favorable economic climate that will attract business development capital. It is basically the private sector that can provide needed services to the agricultural economy. The indigenous private sector must be closely involved to advise on the socio-economic and cultural aspects of industrial development and be the primary implementers of programs and establishers and entrepreneurs of new businesses. The U.S. private sector has vast experience in providing the required services to the agricultural economy. It is in the area of analysis, design and establishment that U.S. expertise can be of most value.

In Economic Policy and Planning, all activities will be more sharply focused on direct service to missions and host government program requirements. All new projects, including foodgrain policy, small farmer market access, small farm production systems and agricultural planning and policy analysis will have a major short-term consulting component in addition to applied research activities. Furthermore, the agricultural planning and support service project will be utilized to augment our ability to deliver high-quality expertise to missions and bureaus in agricultural economics. Finally, this project will continue to provide a readily accessible source of agricultural expertise for mission and bureau utilization.

E. Effects of Varying Budget Levels

While the full array of proposed projects have been briefly outlined in the previous section, the inclusion of some of them is dependent upon the actual budget level attained in FY 82. For planning purposes, five budget levels have been utilized: Minimum, Current, Proposed, Increment I and Increment II. In terms of the two major categories discussed in the previous section, the budget breakdowns would be as follows (proportion of total budget indicated in parentheses) in FY 82:

Step	Budget Level	Long Term Research								Tech. Dev. & Assistance		Total
		IARCs		IFDC		CRSPs		Other				
		$	%	$	%	$	%	$	%	$	%	$
1	Minimum	45.0	(82.6)	4.0	(7.3)	5.5	(10.1)	0	0	0	(0)	54.5
2	Current	45.0	(78.3)	4.0	(6.9)	5.5	(9.6)	0	0	3.0	(5.2)	57.5
3	Proposed	45.0	(67.2)	4.0	(6.0)	9.2	(13.7)	0	0	8.8	(13.1)	67.0
4	Increment I	45.0	(54.9)	4.0	(5.0)	13.4	(16.4)	4.5	(5.4)	15.1	(18.3)	82.0
5	Increment II	45.0	(48.4)	4.0	(5.0)	18.6	(20.0)	6.3	(6.8)	19.0	(20.5)	92.9

In the case of individual activities the following may be noted that in FY 82:

- The IARC and the IFDC budgets would be covered at the Minimum level (Step 1) and would not increase with subsequent increments.

- Only two currently existing CRSPs (Sorghum/Millet and Small Ruminants) would be covered through the first two budget levels. Of the four other CRSPs expected to be active by FY 82, two (Beans/Cowpeas and Soils Management) would not be added until the Proposed level (Step 3), while two others (Fisheries/Aquaculture and Fisheries/Stock Assessment) would not be added until the Increment I level (Step 4). The two new FY 82 CRSPs (Peanuts and Fisheries/Postharvest Utilization) would also not be added until the Increment I level. The planning grants for the remaining four (Small Farm Systems, Soybeans, Animal Health, and Large Ruminants) would not be funded until the Increment II level (Step 5).

- The "other" research activities would not be funded until the Increment I level (Stp 4). They would grow somewhat at the Increment II level (Step 5).

- Technical development and field service would be eliminated at the Minimum level (Stage 1), added at a sharply reduced level (compared to FY 80 funding) at the Current level (Stage 2), increased to approximately Current levels at the Proposed level (Stage 3), and enlarged in Increments I and II (Stages 4 and 5).

More will be said of these matters in the following sections.

II. FY 1981 BUDGET REQUIREMENTS:

FUNDING ENHANCEMENT ABOVE FY1981 CP LEVEL

The FY 1981 Congressional Presentation (CP) Funding level for DS/AGR is $59,735,000. This amount is inadequate to meet ongoing and planned program needs. This problem has been developing over the past few years. The "stop-gap" solution of the past has been to draw down heavily on project pipeline funds. Each year the situation has become increasingly more serious. The net results of this situation is that, without additional FY81 funds above the current CP1981 level: (1) some ongoing projects will be underfunded with a corresponding reduction of effort as planned, approved or considered desirable; and (2), planned new projects will have to be deferred to future fiscal years or dropped. This situation affects both the "Technology Development and Assistance Component" and "Long Term Research Component" of the DS/AGR project portfolio. A total of $16,475,000 in additional FY81 funds is required to halt the trend set by past "stop-gap" solutions and also allows for new initiatives-all to meet the needs and responsibilities of the Agency in terms of Congressional Mandates; the Board for International for Food and Agricultural Development (BIFAD), the Consultative Group for International Agricultural Research (CGIAR) and DSB's field support role vis-a-vis the regional bureaus, missions and LDC's. Immediately below is a summary table showing how the additional $16,475,000 FY81 funds would relate to the FY81 CP level for the total DS/AGR program. This table is in turn followed by a list of ongoing and new projects for which these additional funds would be used. *

SUMMARY TABLE
For
FY1981 Enhancement Funds

PROGRAM COMPONENT	DS/AGR CP 81 Level $000	ENHANCEMENT Ongoing Projects $000	ENHANCEMENT New Projects $000	ENHANCEMENT Total Ongoing & New $000	TOTAL-FY81 CP plus Enhancement $000
Tech. Dev. & Assistance	8,120	4,401	5,699	10,100	18,220
Long Term Research	51,615	5,690	685	6,375	57,990
TOTAL - DS/AGR Program	$59,735	$10,091	$6,384	$16,475	$76,210

* NOTE: FY 1982 project funding levels were based and developed on the FY 1981 CP levels and not on the additional funds as required and outlined in this "Enhancement Section".

PROJECT LISTING
for
FY1981 Enhancement Funds

		Project CP 81 Levels (Redestributed) $000	Project Enhance. Funds Req'd $000	Project Total: CP plus Enhance. $000
I.	FY81 ONGOING PROJECTS REQUIRING ADDITONAL FUNDS			
	A. Technology Development And Assistance Component			
0930	Pest Mgmt. Related Enviromental Protection	825	230	1055
0786	T.A. Food Grain Drying Storage & Market	950	145	1095
1323	Storage/Processing of Fruits/Vegetables	300	150	450
1149	Livestock Production Capability	100	300	400
0473	Control of Vertebrate Pests	345	316	661
0050	Improved Feed Nutritional Information	90	210	300
1229	Soils Management Support Service	425	375	800
4054	International Benchmark Soils Network	410	390	800
1007	Synthesis of Water Management	0	600	600
0832	Fertilizer Technical Assistance - TVA	175	75	250
1314	Aquaculture Technical Development	200	200	400
0236.92	Basic Planning - Food Policy	100	400	500
4099	Farming Systems for Small Farmers	265	235	500
5313	Rural Market Systems	0	500	500
0060.03	Agr. Sector Planning & Support - USDA	485	145	630
1398	Agribusiness Development & Support	160	130	290
Subtotal:	Projects in the Technology Component-"Ongoing"	$4,830	$4,401	$9,231
	B. Long Term Research Component			
1318	Control of Barley Disease	100	200	300
1254	CRSP - Sorghum/Millet	1800	690	2490
0560	Improved Varieties of Soybeans	825	10	835
1310	CRSP - Beans/Cowpeas	1675	1325	3000
0614	Rootknot Nematodes	200	130	300
0600	Mineral Study - Ruminant Animals	200	100	300
1328	CRSP - Small Ruminants	2000	1035	3035
1311	CRSP Soils Management	750	1125	1875
4055	Tissue Cultures	475	125	600
0610	N-Fixation Limiting Factors	400	200	600

		Project CP 81 Levels (Redestribued) $000	Project Enhance. Funds Req'd $000	Project Total CP plus Enhance. $000
0613	N-Fixation Symbiotic	500	150	650
4023	CRSP-Fisheries/Aquaculture	0	600	600
	Subtotal: Projects in the Research Component -"Ongoing"	$8,925	$5,690	$14,585
TOTAL For "Ongoing" Projects		$13,755	$10,091	$23,816

II. FY1981 "NEW" PROJECTS TO BE INITIATED WITH ENHANCEMENT FUNDS

		Enhancement Funds Req'd $000
	A. Technology Development And Assistance Component	
0829	Plant and Seed Material-for Cacao	74
4046	Cereal Grain Support Service	150
1327	Grain Legume Support Service	400
1311.01	Soils Cooperative Agreement	1505
4050	Tropical Legume Inoculant Service	200
4025	Milkfish Seed Production	300
4024	Fisheries Dev. Planning Assistance	320
4080	Agroforestry Crop Systems	1200
4081	Reforestation of Degraded Soils	800
4084	Agr. Planning & Policy Analysis	100
4053	Agribusiness Intermediary	250
4052	Agribusiness Training	100
4078	International Small Business Corporation	300
	Subtotal: Technology Component-"New"	$5,699
	B. Long Term Research Component	
4009	CRSP Planning - Animal Health	450
4073	Babesiosis-Illinois	135
4051	Mycorrhiza on Tropical Grains	100
	Subtotal: Research Component-"New"	$ 685
	TOTAL - For "New" Projects	$6,384

FY 1982 ABS
Office of Agriculture
Bureau for Development Support

III. FY 1982 BUDGET NARRATIVE

As can be seen by Table V and the budget summary on the "Staff and Funding Projection FY 80 to 86" Table, DS/AGR is greatly restricted in developing new initiatives by ongoing commitments. This has been brought about by escalation in the International Agricultural Research Centers' (IARCs) costs due to inflation and a drawdown in pipeline funds for ongoing projects. Also, the proposed two-year initial funding for new CRSPs (which was supposed to eliminate contractor concern over annual funding and budget uncertainties) has not been possible due to funding constraints. Throughout, external commitments receive first priority, then continuing activities, and then new initiatives responding to current and anticipated field needs.

MINIMUM LEVEL: At this level, only external commitments can be funded. The Presidential commitment to the IARCs and the IFDC are the major funds recipients, receiving $49 million. The two earliest CRSPs, for Small Ruminants and Sorghum/Millet, require $5.5 million. No technical service projects are funded nor are currently planned CRSPs or ongoing "other research" projects. At the Minimum 34 FTEPP employees would be required to manage the IARCs, the IFDC, two CRSPs, thirteen projects requiring no FY 82 funding, and a number of projects that have funds to continue part way into FY 82 and would then have to terminate.

CURRENT LEVEL: At this level, six high priority continuing technical service projects are partially funded at a cost of $3.015 million. Five additional staff are required to supervise these projects and provide mission and regional bureau support.

PROPOSED LEVEL: The proposed level partially funds the rest of the nineteen ongoing technical service projects at a cost of $5.775 million. Also, two CPSPs (for Beans/Cowpeas and Soils Management which are now in the planning stage and scheduled to be initially funded in FY 80 or 81) will be funded with $3.710 million.

ADDITIONAL REQUIREMENTS-INCREMENT I LEVEL: It is only at this level that non-CRSP continuing research projects are funded. $4.465 million are required for these seven projects (rank items 48 thru 54). Two Fisheries CRSPs (for Aquaculture and Stock Assessment) which are now in the planning stage and scheduled for implementation in FY 80 or 81 will also be funded at a total cost of $1.450 million.

Also, it is in this funding level that new initiatives are first funded. Sixteen new technical service projects (rank items 55 thru 70) in crop protection, forestry, fisheries, post harvest losses and agribusiness as well as high priority mission support projects in grain legumes and cereal grains are included and will require funds totaling $6.363 million. The last two items in Increment I are for initial funding for two new CRSPs (Peanuts and Fisheries/Postharvest Utilization) which will require of $2.722 million.

Delay of these important projects until the Increment I funding level emphasizes the constraints imposed on the DS/AGR budget by commitments to the IARCs, IFDCs and CRSPs, leaving little possibility for new initiatives or for taking advantage of new opportunities as they arise.

ADDITIONAL REQUIREMENTS INCREMENT II LEVEL: CRSP planning projects for Small Farm Systems, Soybeans, Animal Health, and Large Ruminants are initiated at this level and require funds totaling $1.820 million. Even so, a number of other priority CRSPs and projects such as Tropical Vegetables, Maize, and Roots and Tubers must wait for FY 83 funding. Four new "other research" project (Animal Nutrition/ Disease, Immunology of Ticks, Babesiosis and Mycorrhiza on Tropical Grains) would then be funded with $1.050 million at this level (rank items 77 thru 80).

Finally, supplemental funds to bring previously funded projects up to full budget levels are included starting with rank item 81 and account for $8.015 million.

It is recognized that the workload represented by the projects in Increments I and II exceeds the management capacity of forty-three FTEPPs alone. However, this type of workload has generally been the case in DS/AGR, RSSAs, IPAs, and part-time direct hire have been used to supplement FTEPPs. Further, a large number of projects now in the portfolio will terminate or be absorbed into CRSPs over the next five years. It is planned that once a CRSP is operational it will not require the work load currently required to get the planning and implementation under way. Therefore, given the current availability of additional staff under various mechanisms, it is expected that a FTEPP staff of forty-three could manage the projected portfolio.

Office of Agriculture - DS/AGR

STAFF AND FUNDING PROJECTIONS

STAFF (Totals by Personnel Type)	FY 1980	FY 1981	FY 1982 LEVELS					FY 1983	FY 1984	FY 1985	FY 1986
			MINIMUM	CURRENT	PROPOSED	Additional Requirements					
						Increment I	Increment II				
Direct Hire Employee (FTEPP)	39	39	34	39	39	41	43	43	43	43	43
Part-time Employees	5	9	10	12	14	14	14	14	14	14	14
RSSA Personnel	17	17	11	14	17	17	17	17	17	17	17
IPA Personnel	7	8	4	6	8	8	8	8	8	8	8
FUNDING ***	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
TOTAL: DS/AGR PROGRAM***	54,432	59,735	54,500	57,515	67,000	82,000	92,925	125,295	143,450	152,120	167,090
Subtotal:Technology Development & Assistance Component***	7,744	8,590	-0-	3,015	8,790	15,153	19,000	24,915	29,190	32,590	36,490
Subtotal: Long-Term Research Component***	46,688	51,145	54,500	54,500	58,210	66,847	73,925	100,380	114,260	119,530	130,600
Sub-Subtotal: Long Term Res.											
Int'l Agr. Res. Ctr	29,600	36,500	45,000	45,000	45,000	45,000	45,000	50,700	59,600	67,600	75,700
Int'l Fert. Dev. Ctr.	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,400	4,800	5,300
CRSP's & CRSP Planning	7,819	6,825	5,500	5,500	9,210	13,382	18,660	38,300	42,900	40,600	43,950
Other Research	5,269	3,820	-0-	-0-	-0-	4,465	6,265	7,380	7,360	6,530	5,650
*** Note: All funding figures	are under	the									
Appropriation Account for	"Agriculture, Rural										
Development and Nutrition-	ARDN"										

TABLE V - FY 1982 PROPOSED PROGRAM RANKING
05\27\80

OFFICE 021 DS\AGR

RANK	DECISION PACKAGES\PROGRAM ACTIVITY	TERM\ NEW/ CONT	LOAN/ GRANT	APPROP ACCT.	PROGRAM FUNDING ($000) INCR	CUM	WORKFORCE USDH INCR	USDH CUM	FNDH INCR	FNDH CUM	RECNO
	DECISION PACKAGE - MINIMUM										
1	9361489 DS/AGR-STAFF REQUIRED TO OPERATE OFFICE	C	G				30	30			9887
2	9311181 AFLATOXIN REDUCTION IN MAIZE	C	G	FN				30			9888
3	9364013 CRSP-PL: PEANUTS	T	G	FN				30			9890
4	9310206 WEED CONTROL UTILIZATION	T	G	FN				30			9889
5	9310463 WEED CONTROL SYSTEMS IN LDCS	T	G	FN				30			9891
6	9364002 ICP METHODS - PLANNING GRANT	T	G	FN				30			9892
7	9310030 STERILITY METHOD FOR TSETSE FLY CONTROL	C	G	FN				30			9893
8	9364055 TISSUE CULTURES FOR FOOD PROD.	C	G	FN				30			9894
9	9311005 DETERMINANTS OF IRRIGATION PROBLEMS	T	G	FN				30			9895
10	9310127 TROPICAL SOILS - CORNELL	T	G	FN				30			9896
11	9310128 TROPICAL SOILS - PUERTO RICO	T	G	FN				30			9897
12	9310129 TROPICAL SOILS - HAWAII	T	G	FN				30			9898
13	9310130 TROPICAL SOILS - NCSU	T	G	FN				30			9899
14	9310236.29 PLNG ASST: FOOD POLICY	T	G	FN				30			9900
15	9364101 CGIAR/INT'L AGR RESEARCH CENTERS	C	G	FN	45000	45000	1	31			9901
16	9310054 INTL FERTILIZER DEVELOPMENT CENTER	C	G	FN	4000	49000	1	32			9935
17	9311328 CRSP-PROG: SMALL RUMINANTS	C	G	FN	2900	51900	1	33			9915
18	9311254 CRSP-SORGHUM/MILLET	C	G	FN	2600	54500	1	34			9913
	DECISION PACKAGE - CURRENT (30)										
19	9310930 PEST MGT - RELATED ENV. PROTECTION	C	G	FN	1075	55575	1	35			9961
20	9310786 FOOD GRAIN STORAGE AND MARKETING	C	G	FN	750	56325	1	36			12515
21	9310203 SEED PROGRAM AND INDUSTRY DEVELOPMENT	C	G	FN	320	56645	1	37			12508
22	9310829 PLANT AND SEED MATERIALS	C	G	FN	170	56815		37			12622
23	9311007 SYNTHESIS OF WATER MANAGEMENT	C	G	FN	450	57265	1	38			12516
24	9310242 NOAA ADVISORY SERVICE	C	G	FN	250	57515	1	39			12487
	DECISION PACKAGE PROPOSED (50)										
25	9311229 SOILS MANAGEMENT SUPPORT SERVICES	C	G	FN	700	58215		39			9984
26	9310060.03 AGR. SECTOR PLANNING AND SUPPORT	C	G	FN	400	58615		39			12620
27	9311398 SEEU: AGRIBUSINESS DEVLPMT AND SUPPORT	C	G	FN	200	58815		39			12535
28	9311149 LIVESTOCK PRODUCTION CAPABILITY	C	G	FN	200	59015		39			12591
29	9364021 DRYLAND AGRICULTURE SUPPORT SERVICE	C	G	FN	700	59715		39			9998
30	9310832 FERTILIZER TECHNICAL ASSISTANCE (TVA)	C	G	FN	275	59990		39			9990
31	9311323 STORAGE/PROCESSING OF FRUITS/VEGETABLES	C	G	FN	300	60290		39			12595
32	9364071 PEST MANAGEMENT CAPABILITY (RSSA)	C	G	FN	125	60415		39			12585
33	9310582 SOIL FAMILIES - HAWAII	C	G	FN	600	61015		39			12577
34	9311314 AQUACULTURE TECHNOLOGY DEVELOPMENT	C	G	FN	200	61215		39			12549
35	9365313 RURAL MARKETING SYSTEMS	C	G	FN	200	61415		39			12614
36	9364054 INT'L BENCHMARK SOILS NETWORK	C	G	FN	400	61815		39			9992
37	9310473 CONTROL OF VERTEBRATE PESTS	C	G	FN	500	62315		39			9989
38	9310236.19 PLNG ASST: WATER RESOURCES ECONOMICS	C	G	FN	300	62615		39			12553
39	9310050 IMPROVED FEED NUTRITION INFORMATION	C	G	FN	100	62715		39			12622

TABLE V - FY 1982 PROPOSED PROGRAM RANKING
05/27/80

OFFICE 021 DS/AGR

RANK		DECISION PACKAGES\PROGRAM ACTIVITY	TERM/ NEW/ CONT	LOAN/ GRANT	APPROP ACCT.	PROGRAM FUNDING ($000) INCR	CUM	WORKFORCE USDH INCR	USDH CUM	FNDH INCR	FNDH CUM	RECNO
40	9311121	SEEU: COMMERCIAL SEED INDUSTRY	C	G	FN	100	62815		39			12546
41	9364099.01	FARMING SYSTEMS FOR SMALL FARMERS	C	G	FN	200	63015		39			12621
42	9310236.70	LAC PLANNING NETWORKS	C	G	FN	75	63090		39			12580
43	9310236.05	PROGRESS INDICATORS - EL SALVADOR	C	G	FN	200	63290		39			12571
44	9311310	CRSP-BEANS AND COWPEAS	C	G	FN	2000	65290		39			9980
45	9311311	CRSP: SOILS MANAGEMENT	C	G	FN	1710	67000		39			12530
		DECISION PACKAGE - EXPANSION I										
46	9364023	CRSP-FISHERIES/AQUACULTURE	C	G	FN	850	67850		39			12449
47	9364086	CRSP - FISHERIES STOCK ASSESSMENT	C	G	FN	600	68450		39			12453
48	9364102	BIOLOGICAL NITROGEN FIXATION	N	G	FN	1600	70050		39			12627
49	9310560	DEV OF IMP VARIETIES OF SOYBEANS	C	G	FN	825	70875		39			12542
50	9310614	PEST MGT - ROOTKNOT NEMATODE	C	G	FN	500	71375		39			12466
51	9310621	SPRING WINTER WHEAT	C	G	FN	500	71875		39			12437
52	9311318	CONTROL OF BARLEY DISEASES FOR LDCS	C	G	FN	340	72215		39			12444
53	9310600	MINERAL STUDIES WITH RUMINANT ANIMALS	C	G	FN	300	72515		39			12615
54	9311050	ICLARM - FISHERIES DEVELOPMENT	C	G	FN	400	72915		39			12583
55	9364049	INTEGRATED CROP PROTECTION METHODS	N	G	FN	1800	74715		39			12446
56	9364080	AGRO-FORESTRY CROP SYSTEMS	N	G	FN	600	75315	1	40			12598
57	9364046	CEREAL GRAINS SUPPORT SERVICE	N	G	FN	300	75615		40			12433
58	9311327	GRAIN LEGUMES SUPPORT SERVICE	N	G	FN	393	76008		40			12439
59	9364050	TROPICAL LEGUMES INOCULANT SERVICE	N	G	FN	200	76208		40			12455
60	9364024	FISHERIES DEVELOPMENT PLNG ASSISTANCE	N	G	FN	270	76478		40			12459
61	9364084	AG PLANNING AND POLICY ANALYSIS	N	G	FN	600	77078		40			12435
62	9364053	SEEU: INTERMEDIARY AGRIBUSINESS	N	G	FN	350	77428		40			12436
63	9311322	FARM LVL POSTHARVEST GRAIN STORAGE LOSS	N	G	FN	150	77578		40			12597
64	9364081	REFORESTATION OF DEGRADED SOILS	N	G	FN	600	78178		40			12465
65	9364078	INT'L SMALL BUSINESS CORP	C	G	FN	400	78578		40			12556
66	9364079	MOLLUSK CULTURE UTILIZATION	N	G	FN	200	78778		40			12468
67	9364025	MILKFISH SEED PRODUCTION	N	G	FN	100	78878		40			12470
68	9364072	AFRICAN SWINE FEVER CONTROLXD	N	G	FN	100	78978		40			12473
69	9364052	SEEU: MANAGEMENT DEVELOPMENT TRAINING	N	G	FN	200	79178		40			11097
70	9364077	EXTENDED MARITIME JURISDICTION	N	G	FN	100	79278		40			12478
71	9364048	CRSP - PEANUTS	N	G	FN	2222	81500	1	41			12460
72	9364088	CRSP - FISHERIES POST HARVEST	N	G	FN	500	82000		41			12467
		DECISION PACKAGE - EXPANSION II										
73	9364074	CRSP PL: SMALL FARMS SYSTEMS	N	G	FN	500	82500		41			12602
74	9364085	CRSP-PL: SOYBEANS	N	G	FN	420	82920	1	42			12464
75	9364009	CRSP-PL: ANIMAL HEALTH	N	G	FN	450	83370	1	43			12604
76	9364008	CRSP-PL: LARGE RUMINANTS	N	G	FN	450	83820		43			12617
77	9364076	ANIMAL NUTRITION AND DISEASE IN LA	N	G	FN	355	84175		43			12002
78	9364083	IMMUNOLOGY OF TICKS	N	G	FN	300	84475		43			12003
79	9364073	BABESIOSIS RESEARCH	N	G	FN	135	84610		43			11096
80	9364051	MYCORRHIZA ON TROPICAL GRAINS	N	G	FN	300	84910		43			12459
81	9311323 *	STORAGE/PROCESSING OF FRUITS/VEGETABLES	C	G	FN	100	85010		43			12469
82	9310050 *	IMPROVED FEED NUTRITION INFORMATION	C	G	FN	100	85110		43			12464

TABLE V - FY 1982 PROPOSED PROGRAM RANKING
05/27/80

OFFICE 021 DS\AGR

RANK	DECISION PACKAGES/PROGRAM ACTIVITY		TERM/ NEW\ CONT	LOAN\ GRANT	APPROP ACCT.	PROGRAM FUNDING ($000) INCR	CUM	WORKFORCE USDH INCR	USDH CUM	FNDH INCR	FNDH CUM	RECNO
83	9311229	* SOILS MANAGEMENT SUPPORT SERVICES	C	G	FN	300	85410		43			12476
84	9364054	* INT'L BENCHMARK SOILS NETWORK	C	G	FN	250	85660		43			12475
85	9364021	* DRYLAND AGRICULTURE SUPPORT SERVICE	C	G	FN	300	85960		43			12594
86	9311007	* SYNTHESIS OF WATER MANAGEMENT	C	G	FN	550	86510		43			1225
87	9311314	* AQUACULTURE TECHNOLOGY DEVELOPMENT	C	G	FN	250	86760		43			12483
88	9364099.01	* FARMING SYSTEMS FOR SMALL FARMERS	C	G	FN	222	86982		43			12479
89	9365313	* RURAL MARKETING SYSTEMS	C	G	FN	300	87282		43			12480
90	9310060.03	* AGR. SECTOR PLANNING AND SUPPORT	C	G	FN	100	87382		43			12561
91	9311254	* CRSP-SORGHUM/MILLET	C	G	FN	900	88282		43			12689
92	9311310	* CRSP-BEANS AND COWPEAS	C	G	FN	500	88782		43			12477
93	9311328	* CRSP_PROG: SMALL RUMINANTS	C	G	FN	245	89027		43			12466
94	9311311	* CRSP: SOILS MANAGEMENT	C	G	FN	560	89587		43			12472
95	9311318	* CONTROL OF BARLEY DISEASES FOR LDCS	C	G	FN	160	89747		43			12462
96	9310614	* PEST MGT - ROOTKNOT NEMATODE	C	G	FN	100	89847		43			12036
97	9364102	* BIOLOGICAL NITROGEN FIXATION	N	G	FN	450	90297		43			12628
98	9364049	* INTEGRATED CROP PROTECTION METHODS	N	G	FN	825	91122		43			12475
99	9364080	* AGRO-FORESTRY CROP SYSTEMS	N	G	FN	100	91222		43			12465
100	9364081	* REFORESTATION OF DEGRADED SOILS	N	G	FN	100	91322		43			12468
101	9364084	* AG PLANNING AND POLICY ANALYSIS	N	G	FN	200	91522		43			12473
102	9364078	* INT'L SMALL BUSINESS CORP	N	G	FN	150	91672		43			12481
103	9364048	* CRSP - PEANUTS	N	G	FN	1253	92925		43			12032

ITEMS RETRIEVED 103

TABLE III - PROJECT OBLIGATIONS BY APPROPRIATION ACCOUNT
FY 1980 TO FY 1982 ($ THOUSANDS)

OFFICE: DS/AGR

APPROPRIATION ACCOUNT - FN

PROJECT#	PROJECT TITLE	FY 1980 OYB_REVISED	FY 1981 REVISED	FY_82 MINIMUM	FY-82 CURRENT	FY-82 PROPOSED	FY-82 ENHANCED I	FY-82 ENHANCED II
931-0030.	STERILITY METHOD FOR TSETSE FLY CONTROL	$0	$0	$0	$0	$0	$0	$0
931-0044.	WEST AFRICAN RICE DEV ASSN (WARDA)	$0	$700	$850	$850	$850	$850	$850
931-0050.	IMPROVED FEED NUTRITION INFORMATION	$200	$90	$0	$0	$100	$100	$200
931_0054.	INTL FERTILIZER DEVELOPMENT CENTER	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
931_0056.	INT BD OF PLANT GENETIC RSRCES_IBPGR	$750	$800	$1,000	$1,000	$1,000	$1,000	$1,000
931_0060.03	AGR. SECTOR PLANNING AND SUPPORT	$485	$485	$0	$0	$400	$400	$500
931-0069.	INT CTR FOR AG RES IN DRY AREAS(ICARDA)	$3,050	$3,700	$4,250	$4,250	$4,250	$4,250	$4,250
931-0075.	ASIAN VEGETABLE RES/DEV CTR (AVRDC)	$600	$700	$800	$800	$800	$800	$800
931-0095.	WORLD RHIZOBIUM COLLECTION CENTER	$150	$150	$0	$0	$0	$0	$0
931-0127.	TROPICAL SOILS - CORNELL	$125	$0	$0	$0	$0	$0	$0
931-0128.	TROPICAL SOILS - PUERTO RICO	$120	$0	$0	$0	$0	$0	$0
931-0129.	TROPICAL SOILS - HAWAII	$125	$0	$0	$0	$0	$0	$0
931-0130.	TROPICAL SOILS _ NCSU	$122	$0	$0	$0	$0	$0	$0
931-0203.	SEED PROGRAM AND INDUSTRY DEVELOPMENT	$128	$210	$0	$320	$320	$320	$320
931-0206.	WEED CONTROL UTILIZATION	$260	$235	$0	$0	$0	$0	$0
931_0236.05	PROGRESS INDICATORS _ EL SALVADOR	$200	$200	$0	$0	$200	$200	$200
931_0236.11	ADOPTATION OF CRIES	$200	$0	$0	$0	$0	$0	$0
931_0236.19	PLNG ASST: WATER RESOURCES ECONOMICS	$0	$275	$0	$0	$300	$300	$300
931-0236.29	PLNG ASST: FOOD POLICY	$200	$100	$0	$0	$0	$0	$0
931_0236.70	LAC PLANNING NETWORKS	$225	$125	$0	$0	$75	$75	$75
931_0242.	NOAA ADVISORY SERVICE	$200	$250	$0	$250	$250	$250	$250
931-0309.	INT INST FOR TROPICAL AG (IITA)	$3,750	$4,100	$4,800	$4,800	$4,800	$4,800	$4,800
931-0310.	INT LAB FOR RES ON ANIMAL DISEASES-ILRAD	$2,850	$3,300	$3,200	$3,200	$3,200	$3,200	$3,200

TABLE III - PROJECT OBLIGATIONS BY APPROPRIATION ACCOUNT
FY 1980 TO FY 1982 ($ THOUSANDS)

OFFICE: DS/AGR

931-0311.	INT LIVESTOCK CTR FOR AFRICA (ILCA)	$2,250	$2,600	$3,400	$3,400	$3,400	$3,400	$3,400
931-0463.	WEED CONTROL SYSTEMS IN LDCS	$0	$360	$0	$0	$0	$0	$0
931-0473.	CONTROL OF VERTEBRATE PESTS	$363	$345	$0	$0	$500	$500	$500
931-0560.	DEV OF IMP VARIETIES OF SOYBEANS	$840	$825	$0	$0	$0	$825	$825
931-0562.	IMP TROP BEANS\COWPEAS	$236	$0	$0	$0	$0	$0	$0
931-0582.	SOIL FAMILIES - HAWAII	$1,040	$495	$0	$0	$600	$600	$600
931-0600.	MINERAL STUDIES WITH RUMINANT ANIMALS	$250	$200	$0	$0	$0	$300	$300
931-0610.	N-FIXATION LIMITING FACTORS	$550	$400	$0	$0	$0	$0	$0
931-0613.	N-FIXATION - SYMBIOTIC	$743	$500	$0	$0	$0	$0	$0
931-0614.	PEST MGT - ROOTKNOT NEMATODE	$130	$200	$0	$0	$0	$500	$600
931-0621.	SPRING WINTER WHEAT	$400	$470	$0	$0	$0	$500	$500
931-0786.	FOOD GRAIN STORAGE AND MARKETING	$877	$950	$0	$750	$750	$750	$750
931-0826.	INT RICE RES INST (IRRI)	$3,850	$4,500	$5,400	$5,400	$5,400	$5,400	$5,400
931-0829.	PLANT AND SEED MATERIALS	$150	$140	$0	$170	$170	$170	$170
931-0832.	FERTILIZER TECHNICAL ASSISTANCE (TVA)	$230	$175	$0	$0	$275	$275	$275
931-0840.	INT MAIZE/WHEAT IMP CTR (CIMMYT)	$4,250	$4,600	$5,900	$5,900	$5,900	$5,900	$5,900
931-0865.	INT CTR FOR TROPICAL AG (CIAT)	$3,650	$4,000	$5,000	$5,000	$5,000	$5,000	$5,000
931-0887.	INTERNATIONAL AG ECONOMICS SEMINARS	$90	$0	$0	$0	$0	$0	$0
931-0930.	PEST MGT - RELATED ENV. PROTECTION	$500	$825	$0	$1,075	$1,075	$1,075	$1,075
931-0972.	INT CRP RES INST SEMI-ARID TROPS-ICRISAT	$2,100	$3,100	$4,400	$4,400	$4,400	$4,400	$4,400
931-0973.	INT POTATO CTR (CIP)	$1,700	$2,000	$2,600	$2,600	$2,600	$2,600	$2,600
931-1004.	N-FIXATION ASSOCIATIVE	$352	$0	$0	$0	$0	$0	$0
931-1005.	DETERMINANTS OF IRRIGATION PROBLEMS	$0	$100	$0	$0	$0	$0	$0
931-1007.	SYNTHESIS OF WATER MANAGEMENT	$697	$0	$0	$450	$450	$450	$1,000
931-1038.	PHYSIOLOGY AND ECOLOGY OF TICKS	$56	$0	$0	$0	$0	$0	$0
931-1050.	ICLARM - FISHERIES DEVELOPMENT	$200	$300	$0	$0	$0	$400	$400

TABLE III - PROJECT OBLIGATIONS BY APPROPRIATION ACCOUNT
FY 1980 TO FY 1982 ($ THOUSANDS)

OFFICE: OSTAGR

931-1121.	SEED: COMMERCIAL SEED INDUSTRY	$0	$245	$0	$0	$100	$100	$100
931-1149.	LIVESTOCK PRODUCTION CAPABILITY	$300	$100	$0	$0	$200	$200	$200
931-1181.	AFLATOXIN REDUCTION IN MAIZE	$0	$0	$0	$0	$0	$0	$0
931-1229.	SOILS MANAGEMENT SUPPORT SERVICES	$700	$425	$0	$0	$700	$700	$1,000
931-1254.	CRSP-SORGHUM/MILLET	$2,300	$1,800	$2,600	$2,600	$2,600	$2,600	$3,500
931-1259.	PL/CRSP - BEANS AND COWPEAS	$146	$0	$0	$0	$0	$0	$0
931-1291.	SOILS COOPERATIVE AGREEMENT - PLNG GRANT	$150	$0	$0	$0	$0	$0	$0
931-1310.	CRSP-BEANS AND COWPEAS	$715	$1,675	$0	$0	$2,000	$2,000	$2,500
931-1311.	CRSP: SOILS MANAGEMENT	$0	$750	$0	$0	$1,710	$1,710	$2,270
931-1314.	AQUACULTURE TECHNOLOGY DEVELOPMENT	$70	$200	$0	$0	$200	$200	$450
931-1318.	CONTROL OF BARLEY DISEASES FOR LDCS	$270	$100	$0	$0	$0	$340	$500
931-1322.	FARM LVL POSTHARVEST GRAIN STORAGE LOSS	$0	$0	$0	$0	$0	$150	$150
931-1323.	STORAGE\PROCESSING OF FRUITS/VEGETABLES	$200	$300	$0	$0	$300	$300	$400
931-1325.	BNF ECONOMIC EVALUATION	$0	$200	$0	$0	$0	$0	$0
931-1327.	GRAIN LEGUMES SUPPORT SERVICE	$0	$0	$0	$0	$0	$393	$393
931-1328.	CRSP-PROG: SMALL RUMINANTS	$2,391	$2,000	$2,900	$2,900	$2,900	$2,900	$3,145
931-1398.	SEED: AGRIBUSINESS DEVLPMT AND SUPPORT	$254	$160	$0	$0	$200	$200	$200
936-4002.	ICP METHODS - PLANNING GRANT	$94	$250	$0	$0	$0	$0	$0
936-4008.	CRSP-PL: LARGE RUMINANTS	$0	$0	$0	$0	$0	$0	$450
936-4009.	CRSP-PL: ANIMAL HEALTH	$0	$0	$0	$0	$0	$0	$450
936-4013.	CRSP-PL: PEANUTS	$367	$0	$0	$0	$0	$0	$0
936-4021.	DRYLAND AGRICULTURE SUPPORT SERVICE	$0	$780	$0	$0	$700	$700	$1,000
936-4023.	CRSP-FISHERIES\AQUACULTURE	$1,750	$0	$0	$0	$0	$850	$850
936-4024.	FISHERIES DEVELOPMENT PLNG ASSISTANCE	$0	$0	$0	$0	$0	$270	$270
936-4025.	MILKFISH SEED PRODUCTION	$0	$0	$0	$0	$0	$100	$100
936-4046.	CEREAL GRAINS SUPPORT SERVICE	$0	$0	$0	$0	$0	$300	$300

TABLE III - PROJECT OBLIGATIONS BY APPROPRIATION ACCOUNT
FY 1980 TO FY 1982 ($ THOUSANDS)

OFFICE: DS/AGR

936-4048.	CRSP - PEANUTS	$0	$0	$0	$0	$0	$2,222	$3,475
936-4049.	INTEGRATED CROP PROTECTION METHODS	$0	$0	$0	$0	$0	$1,800	$2,625
936-4050.	TROPICAL LEGUMES INOCULANT SERVICE	$0	$0	$0	$0	$0	$200	$200
936-4051.	MYCORRHIZA ON TROPICAL GRAINS	$0	$0	$0	$0	$0	$0	$300
936-4052.	SEEU: MANAGEMENT DEVELOPMENT TRAINING	$0	$0	$0	$0	$0	$200	$200
936-4053.	SEEU: INTERMEDIARY AGRIBUSINESS	$0	$0	$0	$0	$0	$350	$350
936-4054.	INT'L BENCHMARK SOILS NETWORK	$0	$410	$0	$0	$400	$400	$650
936-4055.	TISSUE CULTURES FOR FOOD PROD.	$600	$475	$0	$0	$0	$0	$0
936-4061.	INT SVCS FOR NATL AGR RES (ISNAR)	$250	$600	$750	$750	$750	$750	$750
936-4062.	INT FOOD POLICY RES INST (IFPRI)	$550	$800	$800	$800	$800	$800	$800
936-4063.	NEW INT CTR FOR INSECT PHYS/ECOL (ICIPE)	$0	$1,000	$1,600	$1,600	$1,600	$1,600	$1,600
936-4071.	PEST MANAGEMENT CAPABILITY (RSSA)	$81	$95	$0	$0	$125	$125	$125
936-4072.	AFRICAN SWINE FEVER CONTROLXD	$0	$0	$0	$0	$0	$100	$100
936-4073.	BABESIOSIS RESEARCH	$0	$0	$0	$0	$0	$0	$135
936-4074.	CRSP PL: SMALL FARMS SYSTEMS	$0	$0	$0	$0	$0	$0	$500
936-4076.	ANIMAL NUTRITION AND DISEASE IN LA	$0	$0	$0	$0	$0	$0	$355
936-4077.	EXTENDED MARITIME JURISDICTION	$0	$0	$0	$0	$0	$100	$100
936-4078.	INT'L SMALL BUSINESS CORP	$0	$0	$0	$0	$0	$400	$550
936-4079.	MOLLUSK CULTURE UTILIZATION	$0	$0	$0	$0	$0	$200	$200
936-4080.	AGRO-FORESTRY CROP SYSTEMS	$0	$0	$0	$0	$0	$600	$700
936-4081.	REFORESTATION OF DEGRADED SOILS	$0	$0	$0	$0	$0	$600	$700
936-4083.	IMMUNOLOGY OF TICKS	$0	$0	$0	$0	$0	$0	$300
936-4084.	AG PLANNING AND POLICY ANALYSIS	$0	$0	$0	$0	$0	$600	$800
936-4085.	CRSP-PL: SOYBEANS	$0	$0	$0	$0	$0	$0	$420
936-4086.	CRSP - FISHERIES STOCK ASSESSMENT	$0	$600	$0	$0	$0	$600	$600
936-4087.	INT'L WATER MGMT CENTER (IWMC)	$0	$0	$250	$250	$250	$250	$250

TABLE III - PROJECT OBLIGATIONS BY APPROPRIATION ACCOUNT
FY 1980 TO FY 1982 ($ THOUSANDS)

OFFICE: DS/AGR

936-4088.	CRSP - FISHERIES POST HARVEST	$0	$0	$0	$0	$0	$500	$500
936-4099.01	FARMING SYSTEMS FOR SMALL FARMERS	$0	$265	$0	$0	$200	$200	$422
936-4102.	BIOLOGICAL NITROGEN FIXATION	$0	$0	$0		$0	$1,600	$2,050
936-5313.	RURAL MARKETING SYSTEMS	$0	$0	$0	$0	$200	$200	$500
TOTALS FOR FN		$54,432	$59,735	$54,500	$57,515	$67,000	$82,000	$92,925
* * OFFICE TOTAL:		$54,432	$59,735	$54,500	$57,515	$67,000	$82,000	$92,925

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Floyd Williams

TITLE: International Agricultural Research Centers (IARCs)	FUNDS: Agriculture, Rural Development, and Nutrition	PROPOSED OBLIGATION (in thousands of dollars) FY 82: 45,000	LIFE OF PROJECT: Continuing
NUMBER: 931-A003 GRANT ☒ LOAN ☐	PRIOR REFERENCE: FY 1981 Annex IX for the Institute for Scientific and Tech. Coop. pp. 92-97	INITIAL OBLIGATION FY 68	ESTIMATED FINAL OBLIGATION FY Continuing
NEW ☐ CONTINUING ☒			ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To generate, through research, urgently needed technology for increasing production of the major food crops and livestock in developing countries.

Background and Progress to Date: This program includes twelve international agricultural research centers (IARCs) and three related programs. All but two of the IARCs are supported through the Consultative Group on International Agricultural Research (CGIAR). The IARCs link with LDC national programs to form a key element in a global research network to supply the technology needed to expand food production.

CGIAR is an organization of donors that coordinates funding and provides program guidance to the IARCs under its aegis. CGIAR was established in 1971 and first coordinated funding in 1972. Total contributions were $20 million in 1972 and rose to $119 million in 1980. AID helped establish CGIAR and has pledged about 25% of its required total annual funding. In 1979 the United States and other major donors of the CGIAR agreed to try to finance a forward plan for the IARCs that would hold the older centers to a three percent real growth, complete the currently developing centers, and take up some additional high priority activities. A.I.D. and other CGIAR members have encouraged the IARCs to focus on the problems of small farmers and poor consumers. The IARCs are now giving greater emphasis to the less favored production areas in the developing nations.

Individual IARCs, their locations, year of establishment, proposed FY 1982 AID contribution in millions of dollars, major research programs, and important accomplishments are listed below.

- International Rice Research Institite (IRRI), Philippines, 1960, $5.4, rice and rice based cropping systems. High yielding varieties of rice, developed by IRRI and national programs, were planted on about 62 million acres in the non-communist developing countries in 1976/77, or about 28% of the total rice areas of LDCs. A new cropping pattern, using improved varieties, was developed by IRRI and is being used in part of Philippines. Farmers in the area have more than tripled their rice production. In 1978, 15 lines of rice developed by IRRI were named as varieties by national programs. Varieties maturing in only 90 to 95 days (compared to 100 or more for earlier varieties) have entered trials. A plant compound was found in one rice variety which has insecticide qualities yet is non-toxic to humans. Increased contact with the People's Republic of China has given leads on hybrid rice and access to a wide cross between rice and sorghum which could be of value in upland rice production.

- International Maize and Wheat Improvement Center (CIMMYT), Mexico, 1964, $5.9, corn and wheat with some work in barley and triticale (a wheat and rye cross). High yielding varieties of wheat, developed by CIMMYT and national programs, were planted on about 73 million acres in the non-communist developing countries in 1976/77, or over 44% of their total wheat area. In 1978, 12 countries released CIMMYT-derived varieties of bread wheat. Research is underway to develop?wheat and corn varieties better suited to tropical regions. Corn populations are being selected for drought tolerance and shorter maturity. Several crosses have been made between corn and sorghum to increase drought resistance in corn.

- International Institute of Tropical Agriculture (IITA), Nigeria, 1967, $4.8, cowpeas, yams, sweet potatoes, cassava, maize, rice, and farming systems. New minimum and no tillage systems have been developed which promise to reduce both energy use and loss of topsoil. Methods of forest clearing and soil management have been developed to minimize soil degradation and erosion. Two early-maturing, high-yielding lines of corn are being tested in farmers' fields. Four high-yielding lines of cowpeas have been developed and are being tested in 30 countries. Yam varieties have been developed with resistance to major insect pests.

- International Center for Tropical Agriculture (CIAT), Colombia, 1968, $5.0, beans, cassava, forage, rice and maize. Simple agronomic practices developed at CIAT can increase cassava yield 50 to 60% at the farm level. High-yielding cassava varieties developed by CIAT are now in regional trials in Latin America and Asia. Cropping systems with cassava and beans are being tested. Sources of genetic resistance to most bean pests have been identified and bred into new lines. A new rice variety, CICA 8, was released in 1978. Five improved forages for pastures are under extensive pre-release testing. Bacteria have been isolated that will fix nitrogen in quite acid soils.

- International Potato Center (CIP), Peru, 1972, $2.6, white (Irish) potatoes. CIP is developing the use of true seed rather than tubers for the propagation of potatoes by small farmers to cut production costs and control diseases. True seed is expected to be used in one or two developing nations by 1982. CIP is also broadening the area where potatoes can be grown by developing varieties for the lowland tropics and for low temperature, high altitude regions.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	106,473	99,447	7,026		IRRI, CIMMYT, IITA, CIAT, CIP, ICRISAT, ILRAD, ILCA, ICARDA, IFPRI, WARDA, IBPGR, ISNAR, AVRDC, ICIPE, IWMC
Estimated Fiscal Year 1980	29,600	26,760		10/1/80 - 9/30/81	
Estimated through September 30, 1980	136,073	126,207	9,866		
Proposed FY 1981	36,500	33,580		10/1/81 - 9/30/82	
Estimated through Fiscal Year 1981	172,573	158,767	13,806		
Proposed FY 82	45,000	Future Year Obligations	Estimated Total Cost	10/1/82 - 9/30/83	
		Continuing	Continuing		

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India, 1972, $4.4, sorghum, pearl millet, pigeon peas, chickpea, groundnut, and farming systems. An improved soil water management system, now under test in villages, gave quite good crops even during a serious drought. Widespread testing of improved lines of chickpeas, pigeon peas, and pearl millet is underway. ICRISAT lines of sorghum are being used in the national programs of several countries. The research program in western Africa is being developed.

- International Laboratory for Research on Animal Diseases (ILRAD), Kenya, 1974, $3.2, control of trypanosomiasis and theileriosis (East Coast Fever). A major accomplishment has been the development of a method of growing trypanosomes outside a host animal, a significant step on the way to developing a cure for trypanosomiasis. ILRAD is also now able to propogate, clone, and store strains of theileria.

- International Livestock Center for Africa (ILCA), Ethiopia, 1974, $3.4, systems of livestock production. Ethiopia has stabilized somewhat and the building program is progressing well. ILCA's administrative structure has been changed to better focus resources on the problems of livestock, and field work is being expanded. In the highland program field results show that milk production can be increased threefold, and farm income increased 30 to 40 percent.

- International Center for Agricultural Research in the Dry Areas (ICARDA), Lebanon, Syria, 1976, $4.25, barley, lentils, broad beans, and dryland farming systems. Field research is well underway on a new research station in Syria. Selection and development of improved cereals, food legumes, and forages has begun. Village level studies have started, as have training programs. Practices that double farmers' yields of wheat and barley have been widely demonstrated. Promising lines of broad beans have been identified for semi-arid, rainfed conditions. Disease resistant chickpeas have been developed.

- International Food Policy Research Institute (IFPRI), Washington, 1976, $.8, identification and analysis of alternative national and international strategies and policies for meeting food needs in the world, with particular emphasis on low-income countries and on the poorer groups within those countries. IFPRI has published a number of analyses of key policy issues and is working closely with the international centers, other international groups, and governments of developing countries.

- West African Rice Development Association (WARDA), Liberia, 1971, $.85, WARDA is an inter-governmental association of 15 West African nations, established to help achieve self-sufficiency in rice. The CGIAR supports the part of WARDA's effort concerned with the introduction, initial evaluation, and coordinated trials of new varieties. In 1978, the initial evaluation tests included 136 introductions of upland rice and 180 introductions of irrigated rice. Coordinated trials were carried out in each member country.

International Board for Plant Genetic Resources (IBPGR), Rome, 1973, $1, collection, conservation and utilization of plant genetic resources. Over 50 national genetic resource centers are working with IBPGR, and a computer-based classification system has been completed. The world collection of genetic resources for wheat is being completed and analyzed; including the USSR's collection.

- International Service for National Agricultural Research (ISNAR), Netherlands, 1980, $.75. Technical assistance for detailed planning of national research systems and programs, given at the request of the developing countries. ISNAR expects to start assistance during late 1980.

- Asian Vegetable Research and Development Center (AVRDC), Taiwan, 1971, $.800. Conducts research to improve the production and quality of selected vegetable and legume crops in hot, humid, lowland tropics, particularly in Asia. Crops presently included are tomatoes, soybeans, sweet potato, Chinese cabbage and mungbean. A tropical tomato, with both heat tolerance and disease resistance, has been developed. AVRDC is not a member of the CGIAR.

- International Center for Insect Physiology and Ecology (ICIPE), 1972, $1.6, Kenya. Conducts research on aspects of insect physiology and ecology that will lead to effective and ecologically acceptable methods of pest control. Research programs are: basis of plant resistance to insects, insect mass-rearing, sorghum shootfly, stem borers, tsetse, livestock ticks, grassland termites, African armyworm, and medical vectors. ICIPE has cooperative research programs with several international centers. ICIPE is being considered for membership in the CGIAR and may come under its aegis in 1981.

- International Water Management Center (IWMC) 1981, $.25. A significant increase in the efficiency of use of irrigation water in developing nations will be needed to help assure food availability. The CGIAR is now examining the advisability of developing a training and research center for irrigation water management. A decision on the form and location is expected during 1981 and funds to start developing a center will be needed in 1982.

Host Country and Other Donors: A.I.D. provides about 25% of total core funds, the other 75% is provided by other donors. In 1980, A.I.D.'s contributions to CGIAR activities totaled $29.0 million, 24.3% of total contributions of $119.1 million. Other major donors were: World Bank, Germany, Canada, Inter-American Development Bank (IDB), United Kingdom, Japan, United Nations Development Program, Commission of the European Communities, Belgium, Sweden, Australia, International Fund for Agricultural Development, Netherlands, Norway, Switzerland, Rockefeller Foundation, Denmark, Ford Foundation, and International Development Research Center. The IDB contribution, $6.7 million, used Social Progress Trust Fund money in Mexico,

Columbia, and Peru and was directed to IARCs in those countries. The list of contributors was enlarged in 1980 with the addition of Ireland, the Leverhulme Trust (U.K.), the OPEC Special Fund, and the Philippines. Host countries have provided the sites for the IARCs. Nigeria and the Phililppines are also donors and two other developing nations may become donors in 1980 or 1981.

Beneficiaries: Farmers who will benefit from higher yields, and consumers who will have access to greater food supplies at lower unit prices.

FY 1982 Program: The IARCs will continue their work to develop improved technology for increasing food production in LDCs, with increasing attention to technology relevant to small farmers and less-advantaged production areas. Research will continue on insect and disease problems that threaten to lower current production levels. The IARCs will continue to supply practical and scientific training to key agriculturists from developing countries.

Major Outputs: New technologies suitable for use by small farmers; technologies using new high-yielding strains, disease and stress resistant varieties; farming systems that increase crop and animal production while economizing on scarce resources. The technologies developed by the IARCs come into use in the LDCs first in national testing programs and then in nationwide farm use. The IARCs will continue training personnel to further adapt and apply agricultural technology in the developing countries.

A.I.D.-Financed Inputs: Grants to International Agricultural Research Centers and Programs

($ thousands)

FY 82
45,000

Minimum	Current	Proposed	INCR I	INCR II
45,000	(0)	(0)	(0)	(0)

16 International Agricultural Research Centers receiving core support at 25% of required annual funging.

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Douglas R. Grove

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Seed Program and Industry Development	Agriculture, Rural Development and Nutrition	FY 82: 320	LIFE OF PROJECT: 4,630
NUMBER 931-0203 GRANT ☒ LOAN ☐	NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981, Annex V, Centrally Funded	INITIAL OBLIGATION FY 58 / ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To provide technical assistance in seed program and industry planning, implementation and evaluation leading to a seed production industry capable of meeting LDC farmers' needs for improved seeds.

Background and Progress to Date: Mississippi State University has developed a comprehensive international seed technology program which has had A.I.D. support since 1958. The project responds to the need for materials, techniques, methodologies, and technical assistance required to design and implement responsible seed production and supply systems capable of meeting LDC farmers' needs for improved seed. This involves providing technical assistance to LDCs on all phases of seed technology including seed production, harvesting, drying, processing, quality control and distribution. The project conducts in-country training courses and responds to requests for information on a continuous basis. The socio-economic benefits to the LDCs of efforts in crop breeding and improvement are directly proportional to the quantities of improved seed multiplied, distributed and planted by their farmers. The quality and orientation of a country's agriculture are closely related to the availability of improved seed. As of March 1980, there have been 192 consultative visits to 50 countries for 5,052 person days, 24 in-country training courses involving 773 participants, 2,165 person days devoted to responding to technical inquiries and 1,681 person days spent on preparation and documentation of technical materials for use by LDC technicians. As a result of these activities, 25 seed industries have been established in LDCs and 14 others assisted in their development. There have been 147 graduates from 29 countries from the Mississippi State University Agronomy Seed Technology degree program. There have been 59 participants from 19 countries in nondegree programs in Agronomy Seed Technology at Mississippi State University. These trained personnel have returned to their home countries where they are contributing to the development of local seed industries.

Host Country and Other Donors: None

Beneficiaries: Small and medium farmers in developing countries, whose access to improved seed increases.

FY 82 Program: Continue technical assistance and training programs expanding on request, into countries not previously served and follow-up work in countries assisted earlier but which need further help to improve efficiency of seed operations.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Provided technical assistance in seed industry development and operation in LDCs (consultancies).	300	(8)
Training programs.	47	(12)
Provided information in seed technology (responses and publications).	3,917	(.3)
Developed appropriate technology essential to seed production and seed operations in LDCs.	33	(15)

A.I.D. Financed Inputs:	FY 82
Personnel (50 person months)	150
Logistics	140
Other Costs	30
TOTAL	320

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(320)	(0)	(0)	(0)

Technical Assistance Training Given in Response to LDC Requests

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	2,580	2,134	446		Mississippi State University
Estimated Fiscal Year 1980	128	275		5/1/79-4/30/80	
Estimated through September 30, 1980	2,708	2,409	171		
Proposed FY 1981	210	280		5/1/80-4/30/81	
Estimated through Fiscal Year 1981	2,918	2,689	198		
Proposed FY 82	320	Future Year Obligations	Estimated Total Cost	5/1/80-4/30/82	
		1,392	4,630		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Douglas R. Grove

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Plant and Seed Materials	Agriculture, Rural Development and Nutrition	FY 82: 170	LIFE OF PROJECT: 3,662
NUMBER 931-0829 GRANT ☒ LOAN ☐	PRIOR REFERENCE FY 81, Annex V, Centrally Funded, page 26	INITIAL OBLIGATION FY 55	ESTIMATED FINAL OBLIGATION FY 83
NEW ☐ CONTINUING ☒			ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To provide experimental quantities of seed and plant materials and technical information on experimental germplasm to LDCs.

Background and Progress to Date: Agricultural production in many LDCs is dependent on cultivars that are indigenous or introduced many years ago and have not been improved due to lack of a broad base of germplasm from which to choose. Also there continues to be useful plants discovered that can be introduced into other countries where they can fill a need. This project provides the service of collection, maintenance, quarantine and increase of plant material and seeds and distribution of experimental amounts of these to agriculturalists in LDCs. The availability of new plant and seed material is of great importance in increasing agricultural production in LDCs. To develop new agricultural potentials, it is critical that there be a free exchange of agricultural source information and plant and seed materials among all countries. The U.S. Department of Agriculture's Science and Education Administration (USDA-SEA), through the Agriculture Research Service Germplasm Resources Laboratory, has been for the past 76 years the primary U.S. agency responsible for collection, maintenance, quarantine, increase and distribution of needed plant and seed materials. Since the inception of this project, over 4,000 shipments of nutritionally and/or economically important plant and seed materials have gone to 103 countries upon request. These 4,000 shipments represent 100,000 cultivars. The project has made a significant contribution to LDC agricultural programs.

Host Country and Other Donors: None

Beneficiaries: Farmers in developing countries who grow crops supported under this program.

FY 82 Program: Continue activities in providing plant and seed materials upon request.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Samples of seed and plant materials sent to LDCs	110,000	(.027)

A.I.D. Financed Inputs:	FY 82
Personnel (50 person months)	80
Logistics	45
Commodities	10
Other Costs	35
	170

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(170)	(0)	(0)	(0)
	1) Consultant's Services (10 person months)			
	2) Seed & Plant Samples Distributed to LDCs Upon Request			

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	2,302	2,188	114		United States Department of Agriculture - Science and Education Administration Agricultural Research
Estimated Fiscal Year 1980	150	114		9/30/79-9/29/80	
Estimated through September 30, 1980	2,452	2,302	150		
Proposed FY 1981	140	150		9/30/80-9/29/81	
Estimated through Fiscal Year 1981	2,592	2,452	140		
Proposed FY 82	170	Future Year Obligations	Estimated Total Cost	9/30/81-9/29/82	
		900	3,662		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert I. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Cereal Grain Support Service	Agriculture, Rural Development and Nutrition	FY 82 300		LIFE OF PROJECT 1,500
NUMBER 936-4046 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE FY 81 Annex V, Centrally Funded, p. 38	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To provide LDCs with cereal grain breeding and production technology.

Background and Progress To Date: Cereal Grains provide the most important source of human food. Wheat, maize, rice, barley, sorghum, millet and other major cereals supply about three-fourths of our energy and half of our protein. This project will assist in the development of programs in LDCs to adapt currently available technology and develop improved technology for increased cereal grain production and efficient processing under local LDC conditions. The activity offers the potential for enhanced nutrition and increased income for LDC poor. It will use the knowledge, technology and breeding materials developed under research contracts/grants on wheat, barley, sorghum, millet and maize. The project will provide technical assistance to LDCs on request for all phases of cereal grain production, including harvesting, crop protection, processing and storage, and assistance in country project design.

Host Country and Other Donors: None

FY 82 Program: Provide the regional bureaus and A.I.D. missions with consulting teams, library and information services, training programs including workshops, seminars, short and long-term training. Also, a worldwide network between research and technical service institutions to coordinate cereal grain support services better will be initiated.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All unit	Years (cost)
LDC cereal grain production and processing programs	10	(40)
Training (short courses)	8	(40)
LDC scientists trained in cereal grain production and processing	9	(30)
International cereal grain network operations	1	(200)
Information center activities (responses and duplications)	300	(.5)
Technical assistance to specific LDC cereal grain programs	8	(20)

A.I.D. Financed Inputs:	FY 82
Personnel (15 months)	150
Training (6 months)	20
Logistics	70
Other Costs	60
TOTAL	300

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(300)	(0)

1) Provide technical assistance to five LDCs.
2) Provide training for five LDC scientists
3) Initiate three production and processing programs in LDCs
4) Provide training through three short courses

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	–	–	–		Contractor - to be determined
Estimated Fiscal Year 1980	–	–		–	
Estimated through September 30, 1980	–	–	–		
Proposed FY 1981	–	–		–	
Estimated through Fiscal Year 1981	–	–	–		
Proposed FY 82	300	Future Year Obligations 1,200	Estimated Total Cost 1,500	–	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert T. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)		
Spring and Winter Wheat Crosses	Agriculture, Rural Development and Nutrition	FY 82: 500		LIFE OF PROJECT: 4,614
NUMBER 931-0671	PRIOR REFERENCE FY 81, Annex IX for Inst. for Scientific & Tech. Cooperation, p. 29	INITIAL OBLIGATION FY 76	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 88
GRANT ☒ LOAN ☐				
NEW ☐ CONTINUING ☒				

Purpose: To develop improved wheat varieties with disease, insect and moisture stress resistance for LDC farmers.

Background and Progress to Date: Wheat is the most widely adapted and the most efficient cereal crop source for calories and protein. Introduction of the semi-dwarf, day-length insensitive characters has made spring type wheat a major food crop in many subtropical LDCs as opposed to being a crop restricted to production in temperate zones. This benefit has made its impact on all LDC farmers who grow wheat. These improvements have been less spectacular in winter type wheats grown in less productive environments such as the Middle East, North Africa, Northern Asia and certain Latin and South American areas. The project is designed to improve the quality of life of people inhabiting these areas through introduction of the spring wheat technological breakthroughs into less favorable winter wheat growing areas. To date, systematic crossing between winter and spring cultivars has greatly increased the genetic potential for both winter and spring wheats. The International Maize and Wheat Improvement Center's (CIMMYT) International Winter Spring Wheat Screening Nursery (IWSWN) has an excellent way to disseminate germplasm to LDCs. The strong breeding program at Oregon State University has provided an ideal milieu within which to train personnel from the LDCs. Currently 28 LDC students have been or are now participating in the research program. A world-wide network of cooperators has been formed which insures that LDCs can obtain and effectively use the widely adapted wheat breeding materials developed under this program.

Host Country and Other Donors: LDC collaborators provide personnel and facilities for growing the IWSWN. There is close joint collaboration with CIMMYT and the University of Nebraska.

Beneficiaries: Small farmers and consumers in developing countries will benefit worldwide.

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(500)	(0)

1) Train four LDC scientists
2) Make 10,000 Wheat Crosses

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Germplasm and computer information bank	1	(113)
New spring x winter wheat crosses for genetic diversity	180,000	(3)
New breeding lines with superior nutritional properties	100	(1)
Early generation breeding populations	30	(1.5)
Screening nursery (IWSWSN 1-6)	6	(38)
Cropping system with management practices for water conservation	10	(25)
Trained LDC scientists, graduate programs	24	(30)
Trained LDC scientists, in-country short course graduates	200	(1.3)

A.I.D. Financed Inputs:	FY 82
Personnel (56 person months)	$155
Travel and Per Diem	95
Equipment and Supplies	85
Training Costs (150 person months)	165
	$500

U.S. FINANCING (in thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	1,244	943	301		
Estimated Fiscal Year 1980	400	501		9/15/80-9/14/81	Oregon State University
Estimated through September 30, 1980	1,644	1,444	200		
Proposed FY 1981	470	404		9/15/81-9/14/82	
Estimated through Fiscal Year 1981	2,114	1,848	266		
Proposed FY 82	500	Future Year Obligations	Estimated Total Cost	9/15/82-9/14/83	
		2,000	4,614		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert I. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Control of Barley Diseases	Agriculture, Rural Development and Nutrition	FY 82 500	LIFE OF PROJECT 3,324

NUMBER 931-1318 GRANT ☒ LOAN ☐	NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex IX for Inst. for Scientific & Tech. Cooperation, p. 29	INITIAL OBLIGATION FY 78	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To decrease yield losses caused by the major diseases of barley in the developing countries.

Background and Progress to Date: Barley is grown for food in many areas of the world, especially where the growing season is too short or the rainfall is not adequate for other cereal crops. Barley is a traditional crop for both food and cash for farmers in the LDCs. Major constraints to increased production include yield losses caused by the major diseases of barley particularly in the developing countries. The major objectives of this project are to: 1) Identify different sources of resistance to the major diseases of barley in LDCs; 2) Develop breeding populations with multiple resistance to different diseases; 3) Assist the International Agricultural Research Centers, the International Maize and Wheat Improvement Center (CIMMYT) and the International Center for Agricultural Research in the Dry Areas (ICARDA) to establish serodiagnosis programs for the detection of barley stripe mosaic virus; and 4) To develop a simple screening procedure for use with barley scald disease and other diseases. To date different sources of resistance to isolates of five different barley diseases from several different LDC countries have been identified. Two LDC students are matriculating toward a Master of Science degree and five other LDC students have participated in practical three-month training programs.

Host Country and Other Donors: Host country institutions provide facilities, staff, and labor for conducting collaborative disease screening trials.

Beneficiaries: Small farmers and consumers in developing countries will benefit.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Sources of resistance to barley diseases	22	(11)
Breeding germplasm with multiple disease resistance	10	(42)
Uniform disease screening nurseries in LDCs	10	(36)
Trained LDC researchers	30	(10)
Special procedures for serodiagnosis and gene transfers	6	(25)

A.I.D. Financed Inputs:	FY 82
Personnel (62 person months)	$164
Travel and Per Diem	89
Equipment and Supplies	77
Training Costs	170
	500

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(340)	(160)
			1) Develop five sources of resistance to barley diseases.	1) Develop five gene transfers and serodiagnosis procedures.
			2) Conduct four disease screening nurseries in LDCs.	
			3) Train two LDC research workers	

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	454	254	200		
Estimated Fiscal Year 1980	270	200		6/30/80 - 5/31/81	Montana State University
Estimated through September 30, 1980	724	454	270		
Proposed FY 1981	100	300		6/30/81 - 10/31/81	
Estimated through Fiscal Year 1981	824	754	70		
Proposed FY 82	500	Future Year Obligations	Estimated Total Cost	11/1/81 - 10/31/82	
		2,000	3,324		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert L. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP - Grain Sorghum/Pearl Millet	Agriculture, Rural Development and Nutrition	FY 82 3,500	LIFE OF PROJECT: Continuing
NUMBER 931-1254 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex IX For Inst. for Scientific &Tech. Cooperation, p. 29	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY Continuing / ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To increase sorghum/millet production, utilization and improve research capability in LDCs through collaborative research between U.S. and LDC institutions.

Background and Progress to Date: Sorghum/millet is a basic food consumed by the poorest segment of the populations in much of Africa, the Indian subcontinent and parts of Latin America. This project will develop collaborative relationships between U.S. and LDC institutions to attack constraints to increased production and utilization of sorghum/millet in LDCs. The immediate objectives are to: 1) expand the body of knowledge in sorghum/millet as part of small farmer production systems; 2) develop and test appropriate technologies and practices to improve productivity of target production systems; 3) expand the level of competence of LDC scientists to conduct research on grain sorghum/millet production systems, and to 4) improve sorghum/millet grain production capability of developing countries. This Sorghum/Millet Collaborative Research Support Program (CRSP) was authorized by A.I.D. effective July 1, 1979. Subgrants to the eight participating U.S. Land Grant institutions have been made based upon the program plan as set forth in the Basic Grant Document. Efforts are currently being made to identify and to develop the specific plans for collaborative activities with LDC collaborators in the overseas operations. Close coordination of CRSP activities with the International Center for Research in the Semi-Arid Tropics (ICRISAT) is being maintained. ICRISAT has been involved in all stages of program planning to avoid duplication and overlap of activities.

Host Countries and Other Donors: All LDC collaborative LDC institutions will provide personnel and facilities for conducting research in their respective countries. The eight U.S. universities will provide a minimum of 25% of the A.I.D. budget in matching funds.

Beneficiaries: LDC sorghum/millet research and production programs initially and the LDC small farmer and urban poor will be the ultimate beneficiaries worldwide.

MINIMUM (2,600)

1) Initiate three research programs in LDCs
2) Initiate germplasm bank
3) CRSP technical assistance capability in research problems established.

CURRENT (0)

PROPOSED (0)

FY 1982 Program: Activities will continue on applied research problems as approved by A.I.D. in FY 1979 dealing with solving constraints to increased production and utilization of sorghum/millet, i.e., cropping systems on small LDC farms, development of improved varieties, etc. The U.S. institutions will become more deeply involved in collaborative research with LDC institutions.

Major Outputs (and A.I.D. Unit Cost:	($ thousands All Years unit	(cost)
Sorghum/millet breeding and research programs in LDCs	10	(400)
High yielding varieties	200	(15.8)
Multiple disease and insect resistant varieties	40	(50)
Cropping systems and packages of management practices	20	(75)
Improved village cooking methods and family nutrition programs	50	(20)
Communication strategies for technology transfer	10	(145)
New germplasm sources for disease and insect resistance in sorghum/millet	20	(37)

A.I.D. Financed Inputs:	FY 82
Personnel (475 person months)	$2,154
Logistic Support	513
Training (475 person months)	144
Equipment and facilities	689
TOTAL	$3,500

INCREMENT I (0)

INCREMENT II (900)

1) Establish worldwide research network for sorghum and millet.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	5,000	750	4,250		
Estimated Fiscal Year 1980	2,300	2,000		7/1/79-6/30/81	Universities of Nebraska, Purdue, Kentucky, Texas A&M, Arizona, Mississippi State, Florida A&M, and Kansas State
Estimated through September 30, 1980	7,300	2,750	4,550		
Proposed FY 1981	1,800	2,500		7/1/81-6/30/82	
Estimated through Fiscal Year 1981	9,100	5,250	3,850		
Proposed FY 82	3,500	Future Year Obligations	Estimated Total Cost	7/1/82-6/30/83	
		Continuing	Continuing		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Mark A. Smith

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)
Aflatoxin Reduction in Maize	Agriculture, Rural Development and Nutrition	FY 82: 0

NUMBER 931-1181	NEW ☐	PRIOR REFERENCE	INITIAL OBLIGATION	ESTIMATED FINAL OBLIGATION	LIFE OF PROJECT	ESTIMATED COMPLETION DATE OF PROJECT
GRANT ☒ LOAN ☐	CONTINUING ☒	FY 1981, Annex IX For the Institute for Scientific & Tech. Coop. p.29	FY 77	FY 85	1,264	FY 86

Purpose: To develop maize varieties resistant to aflatoxin production for production in LDCs particularly in the tropics and subtropic areas of the world.

Background and Progress To Date: Aflatoxin is a chemical substance produced by fungi growing on corn under warm, humid conditions. Aflatoxin has been demonstrated to be a powerful carcinogen in animals and is strongly suspected of causing liver cancer and other maladies in man. A network exists in the U.S. including the USDA, State universities and private research institutions to assess the problem and develop control methods. One of the most promising control measures is the development of varieties of corn resistant to the growth of the fungus which causes aflatoxin. The project is working with existing U.S. networks and has established linkages with international agriculture research centers and LDC agriculture institutions to advance the effort on a worldwide basis.

Host Country and Other Donors: Strong working relationships has been established with the International Maize and Wheat Improvement Center (CIMMYT) in Mexico and important Central American institutions.

Beneficiaries: Rural and urban poor in the LDCs who consume maize which has been produced under warm, humid climatic conditions.

FY 82 Program: (A two-year unfunded extension of the project will be initiated in FY 81. This is due to unexpected delays in the project start which resulted in savings sufficient to fund the project two additional years from previously allocated funds.)

($ thousands)

Major Outputs (and A.I.D. unit Cost):	All Years unit	All Years (cost)
Development of research methodology for identifying aflstoxin resistant maize	1	(500)
Development of aflatoxin resistant maize	100	(5)
Development of linkages, LDCs, international agriculture centers and U.S. institutions	10	(2)

A.I.D. Financed Inputs:	FY 82 1/	1
Personnel	0	
Travel	0	
Operations	0	
TOTAL	0	

1/ See FY 82 program for explanation.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	414	55	359		University of Missouri
Estimated Fiscal Year 1980	0	151		–	
Estimated through September 30, 1980	414	206	208		
Proposed FY 1981	0	104		–	
Estimated through Fiscal Year 1981	414	310	104		
Proposed FY 82	0	Future Year Obligations	Estimated Total Cost	–	
		850	1,264		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert T. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Grain Legume Support Service	Agriculture, Rural Development and Nutrition	FY 82 393	LIFE OF PROJECT 2,305
NUMBER 931-1327 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE FY 1981 Annex V Centrally Funded p. 36	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To provide LDCs with grain legume breeding and production technology.

Background and Progress to Date: Grain legumes provide a major source of protein, cooking oil, and livestock feed in the LDCs. High yielding varieties of major cereals have reduced the competitive advantage of raising these crops, resulting in decreased production and consequently lowered nutrition level among LDC poor. This project will assist in the development of programs in LDCs to adapt currently available technology and develop improved technology for increased grain legume production and efficient processing under local LDC conditions. The activity offers the potential for enhanced nutrition and increased income for LDC poor. It will use the knowledge, technology, and breeding materials developed under research contracts on common beans, cowpeas, soybeans, and other legumes. The project will provide technical assistance to LDCs on request for all phases of grain legume production, including harvesting, crop protection, processing and storage, and assistance in country project design.

Host Country and Other Donors: None.

Beneficiaries: Ultimately the small farmer, rural poor, and village level consumers in the LDCs will benefit.

FY 82 Program: Continue providing the regional bureaus and A.I.D. missions with consulting teams, library and information services, training programs including workshops, seminars, short and long-term training. Also, a worldwide network between research and technical service institutions to coordinate grain legume support services better will be initiated.

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

INCREMENT I

(393)

1) Network Operation
2) Technical Assistance (60 person months)
3) Short Courses (2)
4) Information Services
5) Processing/Production Program (1)

INCREMENT II

(0)

($ thousands)

Major Outputs (and A.I.D. Unit Cost):	All Years unit	All Years (cost)
LDC grain legume production and processing programs	10	(50)
Training (short courses)	8	(50)
LDC scientists trained in grain legume production and processing	14	(30)
International grain legume network operations	1	(200)
Information Center Activities (Responses & Publications)	800	(.7)
Technical Assistance to specific LDC grain legume programs	11	(20)

A.I.D. Financed Inputs:	FY 82
Personnel (60 person months)	200
Training (12 person months)	20
Logistics	145
Other Costs	28
TOTAL	393

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U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	–	–	–		Contractor - to be determined
Estimated Fiscal Year 1980	–	–		–	
Estimated through September 30, 1980	–	–	–		
Proposed FY 1981	–	–		–	
Estimated through Fiscal Year 1981	–	–	–		
Proposed FY 82	393	Future Year Obligations 1,912	Estimated Total Cost 2,305	–	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John M. Yohe

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Improved Varieties of Soybeans	Agriculture, Rural Development and Nutrition	FY 82 825	LIFE OF PROJECT 7,936
NUMBER 931-0560 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex IX for Inst. for Scientific & Tech. Coop. p. 30	INITIAL OBLIGATION FY 73	ESTIMATED FINAL OBLIGATION FY 84 / ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To develop and exploit the potential of soybean edible protein and oil for diets of rural and urban poor worldwide in LDCs.

Background and Progress To Date: This is a continuation of research activities on soybeans initiated in FY 1973 by the University of Illinois. Soybeans offer a greater potential for lessening the LDC protein and calorie shortage than any other grain legume. Experience with this project indicates that the soybean is a far more widely adaptable legume than was previously thought. Satisfactory yields can be obtained over a wide range of agroclimatic conditions following good management and cultival practices. It is now known that the soybean can be developed to be a higher yielding crop at tropical latitudes. Cultivars have been developed which exhibit disease resistance. Pathogens that affect seed quality and germination have been intensively studied through cooperative efforts of the Universities of Illinois and Puerto Rico. Through interdisciplinary work between plant pathology and entomology, excellent progress has been made in the development of model insect control management systems. A key aspect of the improvement of production technology is the expansion of production and use of Rhizobium japonicum to improve soybean nodulation in the tropics. Research is underway to extend investigations from the lab to the LDC farmer's field. Three computerized information systems are utilized in the management and dissemination of knowledge about soybean production, protection, and utilization. A publication series, with 15 titles published, has been an extremely useful means of informing soybean workers about a wide range of subjects. The INTSOY quarterly newsletter published in English, French and Spanish is distributed to over 1,500 agriculturalists worldwide.

Host Countries and Other Donors: LDC collaborators provide personnel and facilities for growing the international soybean variety experiments. There is close joint collaboration with the International Institute of Tropical Agriculture (IITA), the Asian Vegetable Research and Development Center (AVRDC) and the University of Illinois.

Beneficiaries: Small farmers and consumers in developing countries will benefit worldwide.

MINIMUM	CURRENT:	PROPOSED:
(0)	(0)	(0)

INCREMENT I: (825)

1) Improved Genetic Material and Production Programs
2) Integrated Pest Control Systems
3) R.japonicum Research Program
4) Information, Knowledge Base System for Disease, Insect Control
5) Preharvest and Postharvest Seed and Grain Handling System

INCREMENT II (0)

FY 82 Program: To continue research on: 1) developing genetic materials for use in LDC research and production programs; 2) developing improved technology for Rhizobium japonicum production and management under tropical conditions; 3) on improving the knowledge base for disease, insect, and weed control in soybeans produced under tropical environments; 4) developing soybean disease, insect, and weed management systems for tropical and subtropical areas; 5) developing improved production, harvesting, handling, and storage methods for seed and grain under tropical conditions.

Major Outputs (and A.I.D. Unit Cost):

	($ thousands) All Years unit	(cost)
Improved genetic material and production programs in LDCs	10	(301)
Improved R.japonicum technology	4	(218)
Improved knowledge base in disease, insect and weed control	6	(284)
Integrated disease, insect, and weed control systems	3	(370)
Production, harvesting, handling and storage methods	6	(205)

A.I.D. Financed Inputs	FY 82
Personnel (188 person months)	598
Logistics	114
Other Costs	113
TOTAL	825

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	3,585	3,384	201		
Estimated Fiscal Year 1980	840	835		12/1/79-11/30/80	
Estimated through September 30, 1980	4,425	4,219	206		University of Illinois
Proposed FY 1981	825	875		12/1/80-11/30/81	
Estimated through Fiscal Year 1981	5,250	5,094	156		
Proposed FY 82	825	Future Year Obligations	Estimated Total Cost	12/1/81-11/30/82	
		1,861	7,936		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John H. Yohe

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)	
Collaborative Research on Beans and Cowpeas - CRSP	Agriculture, Rural Development and Nutrition	FY 82: 2,500	LIFE OF PROJECT: Continuing
NUMBER 931-1310	PRIOR REFERENCE FY 81, Annex IX for Institute for Scientific & Technology Cooperation, p.30	INITIAL OBLIGATION FY 80	ESTIMATED FINAL OBLIGATION FY Continuing
GRANT ☒ LOAN ☐			ESTIMATED COMPLETION DATE OF PROJECT FY Continuing
NEW ☐ CONTINUING ☒			

Purpose: To increase bean/cowpea production, utilization and improve research capability in LDCs through collaborative research between U.S. and LDC institutions.

Background and Progress to Date: Common beans and cowpeas are base food legume crops consumed by the poorest segment of the populations in Africa, Latin and South America. This project will develop collaborative relationships between U.S. and LDC institutions to attack constraints to increased production and utilization of beans/cowpeas. The immediate objectives are to: 1) expand the body of knowledge on beans/cowpeas as part of small farmer production systems; 2) develop and test appropriate technologies and practices to improve productivity of target production systems; 3) expand the level of competence of LDC scientists to conduct research on common bean/cowpea production systems, and to 4) improve bean/cowpea production capability of developing countries.

The CRSP grant was made during the latter half of FY 1980. Subgrants have been made to the recommended participating institutions based upon the program plan approved by A.I.D. This program plan contains specific plans for collaborative activities with LDC collaborators in overseas operations. Close coordination for planning of the CRSP activities has been maintained with the Centro Internacional De Agricultura Tropical (CIAT) and the International Institute for Tropical Agriculture (IITA). CIAT and IITA have been involved at all stages of program planning to avoid duplication and overlap of activities.

Host Countries and Other Donors: All LDC collaborative LDC institutions will provide personnel and facilities for conducting research in their respective countries. The participating U.S. universities will provide a minimum of 25% of the A.I.D. budget in matching funds.

Beneficiaries: LDC bean/cowpea research and production programs initially and the LDC small farmer and urban poor will be the ultimate beneficiaries worldwide.

FY 1982 Program: Activities will continue on applied research problems as approved by A.I.D. in FY 1980 dealing with solving constraints to increased production and utilization of beans/cowpeas, i.e., cropping systems on small LDC farms, development of improved varieties, etc. The U.S. institutions will become more deeply involved in collaborative research with LDC institutions.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Self-sustaining bean and cowpea production and breeding programs	(20)	(200)
LDC staff trained in production and processing	(200)	(20)
Worldwide network for bean/cowpea research	(1)	(500)
Cropping systems and packages of management practices	(20)	(50)
Multiple disease and insect resistant varieties	(80)	(50)
Communication strategies for technology transfer	(20)	(35)
New selection criteria for crop breeding programs	(20)	(70)
High yielding varieties	(100)	(30)
New germplasm sources for disease and insect resistance in beans/cowpeas	(30)	(30)

A.I.D. Financed Inputs:	FY 82
Personnel (325 person months)	1,125
Logistic Support	775
Training (360 person months)	300
Equipment and facilities	300
TOTAL	$2,500

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(2000) 1) Ten Country Breeding Programs 2) Two Cropping System Programs 3) One Germplasm Bank 4) Worldwide Research Network 5) Trained 40 LDC Staff 6) Two Cropping System Programs	(0)	(500) 1) Four Country Breeding Programs 2) Two Cropping System Programs 3) One Germplasm Bank

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		Universities of Cornell, Michigan State, Puerto Rico, California, Wisconsin, Mississippi State, Nebraska, Washington State, Georgia and Colorado State
Estimated Fiscal Year 1980	715	300		8/1/80 - 11/30/80	
Estimated through September 30, 1980	715	300	415		
Proposed FY 1981	1,675	1,700		12/1/80 - 11/30/81	
Estimated through Fiscal Year 1981	2,390	2,000	390		
Proposed FY 82	2,500	Future Year Obligations	Estimated Total Cost	12/1/81 - 11/30/82	
		Continuing	Continuing		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert L. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP - Peanuts	Agriculture, Rural Development, and Nutrition	FY 82 3,475	LIFE OF PROJECT Continuing
NUMBER 936-4048 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY Continuing
			ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To increase peanut production, utilization and improve research capability in LDCs through collaborative research between U.S. and LDC institutions.

Background and Progress To Date: Peanuts are one of the base food legume crops consumed by the poorest segment of the populations in Africa and Asia. This project will develop collaborative relationships between U.S. and LDC institutions to attack constraints to increased production and utilization of peanuts. The immediate objectives will be to: 1) expand the body of knowledge on peanuts as part of small farmer production systems; 2) develop and test appropriate technologies and practices to improve productivity of target production systems; 3) expand the level of competence of LDC scientists to conduct research on peanut production systems, and to 4) improve peanut production capability on developing countries. The peanut Collaborative Research Support Program (CRSP) planning will be completed by January 1982 and a detailed proposal submitted to A.I.D. The CRSP grant should be made during the latter half of FY 82. Subgrants will be made to the recommended participating institutions based upon the program plan acceptable to A.I.D. This program plan will contain specific plans for collaborative activities with LDC collaborators in overseas operations. Close coordination for planning of the CRSP activities has been maintained with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). ICRISAT is involved at all stages of program planning to avoid duplication and overlap of activities.

Host Countries and Other Donors: All LDC collaborative LDC institutions will provide personnel and facilities for conducting research in their respective countries. The participating U.S. universities will provide a minimum of 25% of the A.I.D. budget in matching funds.

Beneficiaries: LDC peanut research and production programs initially and the LDC small farmer and urban poor will be ultimate beneficiaries worldwide.

FY 1982 Program: Activities will continue on applied research problems as approved by A.I.D. in FY 1980 dealing with solving constraints to increased production and utilization of peanuts, i.e., cropping systems on small LDC farms, development of improved varieties, etc. The U.S. institutions will become more deeply involved in collaborative research with LDC institutions.

Major Outputs (and A.I.D. Unit Cost):

	All unit	Years ($ thousands) (cost)
Self-sustaining peanut production and breeding programs	15	(300)
LDC staff trained in production and processing	200	(10)
Worldwide network for peanut research	1	(500)
Cropping systems and packages of management practices	15	(200)
Multiple disease and insect varieties	60	(65)
Communication strategies for technology transfer	10	(70)
New selection criteria for crop breeding programs	10	(100)
High yielding varieties	80	(20)
New germplasm sources for disease and insect resistance in peanuts	15	(50)

A.I.D. Financed Inputs:	FY 82
Personnel (220 person months)	760
Logistic Support	540
Training (240 person months)	200
Equipment and facilities	200
TOTAL	$3,475

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(2222)	(1,253)
			1) Eight LDC Peanut Production and Breeding Program Initiated.	1) Six LDC Peanut Production and Breeding Programs Initiated
			2) One Worldwide Network For Peanut Research	2) CRSP Technical Assistance Capability on Research Established
			3) Germplasm Bank Initiated	
			4) CRSP Technical Assistance Capability on Research Established	

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		Contractor - yet to be determined
Estimated Fiscal Year 1980	-	-		-	
Estimated through September 30, 1980	-	-	-		
Proposed FY 1981	-	-		-	
Estimated through Fiscal Year 1981	-	-	-		
Proposed FY 82	3,475	Future Year Obligations: Continuing	Estimated Total Cost: Continuing	6/1/82-5/31/83	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert L. Jackson

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP Planning - Soybeans	Agriculture, Rural Development and Nutrition	FY 82 420	LIFE OF PROJECT 420
NUMBER 936-4085 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 82 / ESTIMATED COMPLETION DATE OF PROJECT FY 83

Purpose: To increase soybean production, utilization and improve research capability in LDCs through collaborative research between U.S. and LDC institutions.

Background and Progress to Date: Soybeans are an important food source as edible beans, edible protein and cooking oil. More and more LDC countries are looking to soybeans as a crop to alleviate protein and oil shortages amongst the rural and urban poor where malnutrition is so severe. This CRSP planning project will develop collaborative relationships between U.S. and LDC institutions to attack technical and socio-economic constraints to increased production and utilization of soybeans. The immediate objectives will be to develop a program which will: 1) expand the body of knowledge on soybeans as part of small farmer production systems; 2) develop and test appropriate technologies and practices to improve productivity of target production systems; 3) expand the level of competence of LDC scientists to conduct research on soybean production systems; 4) improve soybean production capability of developing countries and to develop and test appropriate technologies and practices for increased farm level and commercial level utilization of soybeans. This activity holds great potential for local agribusiness employment opportunities. When the Soybean Collaborative Research Support Program (CRSP) planning has been completed and a detailed proposal submitted to A.I.D., subgrants will be made to the recommended participating institutions based upon the program plan acceptable to A.I.D. This program plan will contain specific plans for collaborative activities with LDC collaborators in overseas operations. Close coordination for planning of the CRSP activities will be maintained with the Asian Vegetable Research Center (AVRDC) and the International Institute for Tropical Agriculture (IITA). AVRDC and IITA will be involved at all stages of program planning to avoid duplication and overlap of activities.

Host Countries and Other Donors: All LDC collaborative LDC institutions will provide personnel and facilities for conducting research in their respective countries. The participating U.S. universities will provide a minimum of 25% of the A.I.D. budget in matching funds.

Beneficiaries: LDC bean/cowpea research and production programs initially and the LDC small farmer and urban poor will be the ultimate beneficiaries worldwide.

MINIMUM	CURRENT	PROPOSED	INCREMENT I
(0)	(0)	(0)	(0)

FY 1982 Program: Activities will initiate planning a program designed to deal with solving constraints to increased production and utilization of, i.e., cropping systems on small LDC farms, development of improved varieties, etc. The U.S. planning institution will work closely with LDC research institutions in determining program major constraint research areas and overall project design.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years Unit	Cost
Global Soybean Collaborative Research Plan	1	420

A.I.D. Financed Inputs:	FY 82
Personnel (75 person months)	286
Logistic Support	88
Workshops	46
TOTAL	$ 420

INCREMENT II
(420)
1) One global CRSP CRSP Research Plan

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	--	--	--		To be determined.
Estimated Fiscal Year 1980	--	--			
Estimated through September 30, 1980	--	--	--		
Proposed FY 1981	--	--			
Estimated through Fiscal Year 1981	--	--	--		
Proposed FY 82	420	Future Year Obligations	Estimated Total Cost	12/1/81 - 5/31/83	
		--	420		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Frederick W. Whittemore

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Pest Management and Related Environmental Protection	Agriculture, Rural Development and Nutrition	FY 82 1,075		LIFE OF PROJECT 12,310
NUMBER 931-0930 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex V, Centrally Funded Programs, page 28	INITIAL OBLIGATION FY 71	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To help reduce LDC crop losses from insects, diseases and weeds by using environmentally acceptable integrated crop protection methods.

Background and Progress to Date: Under the original project, the contractor fielded six multidisciplinary regional study teams to assess pest and pesticide management problems in LDCs and to identify urgent problems requiring immediate attention. Similar teams were also sent to five specific countries. Twelve pesticide management seminar workshops were held in the Philippines, Indonesia, Thailand, Egypt, Guatemala, El Salvador, Colombia, Senegal, the Eastern Caribbean, Bolivia, Tanzania and Peru. The five short courses on pest management in small farmer cropping systems were held in Peru, the Philippines, and Costa Rica, Indonesia and Ecuador. Technical assistance has also been provided to Agricultural Development Projects in Lesotho, Tunisia, Niger, Haiti, Peru, Honduras, Colombia, Bolivia, Panama (2), Liberia (3), Rwanda, Nepal, Senegal (2) Burundi, Mali, Kenya, Upper Volta, Ivory Coast, Ghana, Philippines, Zaire, Jordan, Nicaragua, and Fiji. The original project which began in 1971 was revised and expanded in FY 80 in accordance with the recommendations of an external review team and A.I.D.'s revised policy on pesticides established in May of 1978.

Host Countries and Other Donors: Countries listed above. Similar programs are being conducted and coordinated with the Food and Agriculture Organization as well as other bilateral donors.

Beneficiaries: Small farmers - reduction of preharvest food and cash crop losses. General consumer - increased availability of food. Positive environmental impact. Improved management pesticides.

MINIMUM	CURRENT	PROPOSED
(0)	(1075)	(0)

1) Three teams
2) Three Workshop/Seminars
3) Two Pest Management Short Courses
4-8) 15 Other Short Courses
9) 12 Short-term Missions (IPM)
10) 12 Short-term Missions (Environmental Assessments)

FY 1982 PROGRAM: Conduct training courses on integrated pest management systems for small farmer food and cash crops, pesticide residue and formulation analysis, prevention, diagnosis and treatment of pesticide poisonings and seminar/workshops on pesticide management and provide guidance to missions and LDCs in the establishment of integrated pest management programs in agricultural development projects.

Major Outputs (and A.I.D. Unit Cost)	Total Units All Years	Cost per Unit ($ thousands)	($ thousand) All Years
Multidisciplinary pest management teams	25	30	750
Pesticide management workshop/seminars.	35	60	2100
Pest management short courses.	50	72	3600
Pesticide residue sampling and analysis short courses. (LDCs)	25	12	300
Pesticide residue sampling and analysis short courses. (U.S.A.)	25	24	600
Pesticide formulation analysis short courses.	10	24	240
Prevention, diagnosis, treatment of pesticide poisoning short courses.	25	24	600
Aerial and ground pesticide applicators short courses.	25	24	600
Short term missions to design IPM programs for LDC agricultural development projects.	150	11	1650
Short term technical assistance with environmental assessments.	150	11	1650

INCREMENT I	INCREMENT II
(0)	(0)

A.I.D. Financed Inputs:	FY 82
Personnel	240
Consultants	315
Travel	425
Supplies & Equipment	95
	1075

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	3,273	2,813	460		
Estimated Fiscal Year 1980	500	760		6/1/80 to 11/30/80	
Estimated through September 30, 1980	3,773	3,573	200		University of California
Proposed FY 1981	825	925		12/1/80 to 11/30/81	
Estimated through Fiscal Year 1981	4,598	4,498	100		
Proposed FY 82	1,075	Future Year Obligations	Estimated Total Cost	12/1/81 to 11/30/82	
		6,350	12,023		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER Fred W. Whittemore

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)
Pest Management Capability	Agriculture, Rural Development and Nutrition	FY 82: 125
NUMBER 936-7071 GRANT ☐ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex V, Centrally Funded, p.	INITIAL OBLIGATION FY 79 / ESTIMATED FINAL OBLIGATION FY 86 / LIFE OF PROJECT 876 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To provide technical/professional backstopping to Office of Agriculture/DSB and in turn to regional bureaus and USAIDs in the fields of pesticide and pest management.

Background and Progress To Date: A.I.D. Environmental Impact Statement, filed with CEQ on May 3, 1977 concluded that A.I.D. should de-emphasize assistance for the supply and use of pesticides in the LDCs and strengthen its assistance in the areas of integrated pest management and the proper use of pesticides only when there are no satisfactory alternatives. This in turn required additional professional staff knowledgeable in the areas of pest and disease control. Thus, in FY 80, A.I.D. added a pest management specialist to function as a project manager responsible for directing several new and existing projects in the area of plant pest and disease control. It is anticipated that the professional management capability will continue in FY 81 and beyond.

Host Country and Other Donors: None

Beneficiaries: Small Farmers in LDCs via their national governments and USAIDs through the development and strengthening of pest and pesticide management programs.

FY 1982 Program: Continue backstopping Office of Agriculture/DSB Regional Bureaus and USAIDs.

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(125)

1. Technical Management of Four A.I.D. Projects.

($ thousands)

Major Outputs (and A.I.D. Unit Cost):	All Years unit	(cost)
Management of A.I.D. pest management related projects	10	(70)

A.I.D. Financed Inputs:	FY 82
Personnel	45
Other Costs (travel, technical services)	80
TOTAL	125

INCREMENT I	INCREMENT II
(0)	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	95	7	88		U.S. Department of Agriculture
Estimated Fiscal Year 1980	81	90		8/29/79-9/30/80	
Estimated through September 30, 1980	176	97	79		
Proposed FY 1981	95	100		10/1/81-9/30/82	
Estimated through Fiscal Year 1981	271		74		
Proposed FY 82	125	Future Year Obligations	Estimated Total Cost	10/1/82-9/30/83	
		480	876		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Mark A. Smith

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)	
Integrated Crop Protection Methods	Agriculture, Rural Development and Nutrition	FY 82 2,625	LIFE OF PROJECT 14,625
NUMBER 936-4049 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE FY 81, Annex III, Centrally Funded, p. 39	INITIAL OBLIGATION FY 81 / ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To increase the quantity and quality of food available by reducing pest losses due to insects, diseases and weeds.

Background and Progress to Date: Preharvest food losses caused by plant insects, weeds and diseases are estimated to range from 10% to 80%. In many of the DCs including the USA the principles and techniques for managing crop pests (i.e., insects, weeds and diseases) with minimal use of chemical pesticides have been or are being developed. The technique is termed integrated crop protection (ICP) which maximizes the use of resistant varieties, physical, mechanical and cultural control methods and minimizes the adverse environmental impacts of chemical pesticides. A planning grant was made in FY 79 to Purdue University to identify and categorize the most important small farmer cropping systems in the LDCs, to identify the most important crop pests which cause significant economic damage in these cropping systems and to identify areas where ICP techniques could be employed to reduce pest related crop production constraints. As a result of initial activities to be conducted in FY 80 and FY 81, grants will be made under this project in late FY 81 to a limited number of collaborating LDC and U.S. institutions to initiate the ICP program. The program will be expanded in FY 82 to include more U.S. and LDC institutions in the cooperative pest management methods development program.

Host Country and Other Donors: Collaborative programs with LDC institutions and the International Agricultural Research Centers - to be identified at a later date.

Beneficiaries: Small farmers - reduction of preharvest food and cash crop losses. General consumer - increased availability of food. Positive environmental impact.

FY 82 Program: Expand collaborative pest management methods development program on selected small farmer cropping systems which were identified through a planning grant completed in FY 81.

MINIMUM	CURRENT	PROPOSED
0	0	0

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All unit	Years (cost)
Integrated pest management programs incorporated in LDC Agricultural Development Projects	40	(300)

A.I.D. Financed Inputs:	FY 82
Personnel	1,000
Travel	625
Operations	1,000
TOTAL	2,625

INCREMENT I	INCREMENT II
(1,800)	(825)
1) Seven Collaborative Programs With LDC and U.S. Institutions	1) Three More Collaborative Programs With LDC and U.S. Institutions

U.S. FINANCING (in thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		
Estimated Fiscal Year 1980	-	-		-	
Estimated through September 30, 1980	-	-	-		
Proposed FY 1981	-	-		-	Contractor - to be determined
Estimated through Fiscal Year 1981	-	-	-		
Proposed FY 82	2,625	Future Year Obligations 12,000	Estimated Total Cost 14,625	-	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Mark A. Smith

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Root Knot Nematodes	Agriculture, Rural Development and Nutrition	FY 82: 600	LIFE OF PROJECT: 3,913
NUMBER 931-0614 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex IX for Inst. for Tech & Cooperation, p. 36	INITIAL OBLIGATION FY 75	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To reduce crop losses caused by root-knot nematodes.

Background and Progress to Date: Regional and country collaborators have been identified and research is under way to characterize the principal species and host ranges of nematodes causing crop losses in the LDCs and to screen local cultivars for nematode resistance. To date, eight regions have been established worldwide including 104 cooperating scientists in 58 LDCs. A worldwide root-knot nematode assessment was conducted among participating country cooperators which indicated that approximately 15% of the principal food and fiber crops of these countries are lost to damage caused root-knot nematode. Of 41 described species of root-knot nematodes, six comprise 99% of all populations. The limited number of important species greatly enhance the probability of developing effective control measures. Based upon these results, resistant varieties and crop rotation systems are being developed for introduction into crop local crop systems.

Host Countries and Other Donors: A total of 104 regional and country collaborators in 58 LDC institutions are now participating in this collaborative research program based at North Carolina State University.

Beneficiaries: Small farmers. Nematode resistant varieties will be incorporated into small farmer cropping systems thus reducing crop losses caused by these pests.

FY 82 Program: Current collaborative research programs will be continued with major emphasis placed on the development of resistant varieties and crop rotation systems that will significantly reduce crop losses due to root-knot nematode.

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

Major Outputs (and A.I.D. Unit Cost):

	($ thousands) All unit	Years (cost)
International Root-knot Nematode Research Center at North Carolina State University	1	(1,250)
Regional Root-knot Nematode Research Centers Worldwide	8	(150)
Publications-Technical Handbooks and Scientific Articles on Root-knot Control	300	(1.0)

A.I.D. Financed Inputs:

	FY 82
Personnel	300
Training	200
Other Costs (Travel, Supplies, Equipment)	100
TOTAL	600

INCREMENT I

(500)

1) Four Regional Root-knot Research Centers Worldwide - Completed

INCREMENT II

(100)

1) One International Root-knot Research Center - Completed

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	881	943	180		
Estimated Fiscal Year 1980	130	200		6/30/80-6/29/81	North Carolina State University
Estimated through September 30, 1980	1,253	1,143	110		
Proposed FY 1981	200	310		6/30/81-6/29/82	
Estimated through Fiscal Year 1981	1,453	1,453	0		
Proposed FY 82	600	Future Year Obligations	Estimated Total Cost	6/30/82-6/29/83	
		1,860	3,913		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert Morris

TITLE: Farm Level Postharvest Grain Losses	FUNDS: Agriculture, Rural Development and Nutrition	PROPOSED OBLIGATION (In thousands of dollars) FY 82: 150	LIFE OF PROJECT: 350	
NUMBER: 931-1322 GRANT [x] LOAN [ ] NEW [x] CONTINUING [ ]	PRIOR REFERENCE: FY 81, Annex V. Centrally Funded Program, p. 34	INITIAL OBLIGATION FY: 82	ESTIMATED FINAL OBLIGATION FY: 84	ESTIMATED COMPLETION DATE OF PROJECT FY: 85

Purpose: To help host country institutions develop cost effective methods of reducing on-farm postharvest grain losses.

Background and Progress To Date: Total less developed country postharvest grain losses are estimated to exceed 10% of the harvested crop, with a monetary loss estimated at over $7 billion per year. This amount is more than the present annual bilateral donor food assistance. Although 60% to 70% of the grains produced in the developing countries remain on the farm, the extent and causes of losses and the most effective and safest methods for reducing them at the farm level have received little attention. Most donor financed activities in grain storage and handling have dealt primarily with large central grain storage handling systems. This project is designed to address the problem of farm level postharvest grain losses by providing technical assistance to help identify and assess the extent and causes of on-farm postharvest losses and develop procedures, systems and structures to limit these losses.

A preliminary examination was made of the extent and causes of food losses after harvest by the National Academy of Sciences in 1978. Their report indicates that upwards of 42 million metric tons of grain were lost in 1976, enough to feed 168 million people. The report expects losses to rise at the rate of almost a million tons per year unless action is taken to teach farmers and grain handlers how to reduce them. That is the objective of this project.

Host Countries and Other Donors: Cooperation with the Food and Agriculture Organization is anticipated on specific country programs. Many Latin American, Asian, and African countries indicate high interest in the project and several host country institutions are expected to participate actively.

Beneficiaries: The ultimate beneficiaries will be cooperating country grain farmers, and as more grain enters commercial market channels, grain consumers will benefit as well.

FY 1982 Program: Initiate assessment of on-farm grain losses in the developing countries and analyze the cost effectiveness of alternative methods to reduce these losses. Work will be started on developing methods of grain drying, storage, handling, transporting and processing cereals and dried legumes so as to protect their quality and quantity in ways compatible with host country culture, climate, tastes and stage of development. Techniques will be developed for on farm use as well as for use in commercial channels, and training materials and manuals will be drafted which are specific to the country or area where they are to be used.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Assessment of extent and causes of on-farm postharvest grain losses in five countries	5	(15)
Identification, collection, design, and testing of loss prevention procedures, systems, structures and equipment	3	(24)
Follow-up with host countries providing assistance in putting in place appropriate systems, alternative policies, administrative systems and institutional structures	8	(25)

A.I.D. Financed Inputs:	FY 82
Personnal (25 person months)	120
Commodities	10
Logistical Support	20
TOTAL	150

MINIMUM	CURRENT	PROPOSED
(0)	-0-	-0-

INCREMENT I (150)

1) Two country assessments of on-farm grain storage losses
2) Two testings of loss prevention systems
3) Two follow up visits with host countries

INCREMENT II (0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		Contractor - to be determined
Estimated Fiscal Year 1980	-	-		-	
Estimated through September 30, 1980	-	-	-		
Proposed FY 1981	-	-		-	
Estimated through Fiscal Year 1981	-	-	-		
Proposed FY 82	150	Future Year Obligations: 200	Estimated Total Cost: 350	-	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert Morris

TITLE: Food Grain Storage and Marketing

FUNDS: Agriculture, Rural Development and Nutrition

NUMBER 931-0786 | GRANT ☒ LOAN ☐ | NEW ☐ CONTINUING ☒

PRIOR REFERENCE: 1981, Annex V, Centrally Funded, p. 25

PROPOSED OBLIGATION (in thousands of dollars)

FY 82: 750

LIFE OF PROJECT: 11,117

INITIAL OBLIGATION FY 67

ESTIMATED FINAL OBLIGATION FY 86

ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To assist developing country institutions in planning and implementing programs to improve postharvest handling, storage, marketing, processing, and distribution of grain and grain products.

Background and Progress to Date: Since the project's inception in FY 1967, technical assistance has been provided to 55 countries. Over 350 individuals from 55 countries have received training at Kansas State University, 300 people have received training in twelve overseas locations and approximately 100 special purpose technical reports have been written. Assistance under the project in 1980 has ranged from in-country training, short courses conducted at Kansas State University and in LDCs, analysis at national grain storage programs and recommendations for improvement, specifically in many instances to meet the growing concern in a number of LDCs to maintain strategic reserves of grains, suggestions for processing systems and exploration for new markets to outline broad grain policy alternatives, including the feasibility of grain security and reserve systems. A program to assess potential African Development Bank investments in grain handling systems is being conducted in cooperation with the Bank. Seminars have been held in all four regions and the training programs have been extremely well attended.

As a result of this project, significant changes toward improved food handling and marketing have been made in many countries, and in many others an appreciation of the dimensions of the post harvest food loss problem has been instilled and the capability to deal with it is being developed. Growing populations, perhaps even more rapid rates of urbanization in many areas, and little hope of achieving more than modest increases in food production, mean that today's solutions are often overwhelmed and that work must continue to find the means to protect and efficiently distribute the products of LDC farmers.

Host Country and Other Donors: A four-person post harvest research and development team, stationed at Los Banos, Philippines, to provide assistance to the five southeast Asian countries, is cooperatively sponsored by the International Development Research Centre (Canada), the Canadian International and Development Association and the Government of Holland.

Beneficiaries: Farmers and consumers in the developing countries benefit from the reduction of grain losses and improvements in efficiency of the marketing system.

FY 1982 Program: Continue technical services, support program analysis, and provide technical training to help client countries store and market their grain effectively.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
Team visits to address country specific post harvest loss problems	200	(30)
In-country seminars conducted	40	(25)
LDC personnel trained in the U.S.	45	(15)
Post Harvest Food Loss Documentation Center serving LDC requests	1	(200)

A.I.D. Financed Inputs:	FY 82
Personnel (150 person months)	350
Logistics	80
Training (60 person months)	70
Other	250
TOTAL	750

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(750)	(0)	(0)	(0)
	1) Tech. Services (150 person/mo.)			
	2) Seminars in LDCs (16)			
	3) LDC Personnel Trained 60 p/mo.)			
	4) PHFL Documentation Center			

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	4,790	3,568	1,222		
Estimated Fiscal Year 1980	877	960		10/1/80-9/30/81	
Estimated through September 30, 1980	5,667	4,428	1,139		Kansas State University
Proposed FY 1981	950	1,020		10/1/81-9/30/82	
Estimated through Fiscal Year 1981	6,617	5,548	1,069		
Proposed FY 82	750	Future Year Obligations	Estimated Total Cost	10/1/82-9/30/83	
		3,750	11,117		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Robert Morris

TITLE: Storage and Processing of Fruits and Vegetables	FUNDS: Agriculture, Rural Development and Nutrition	PROPOSED OBLIGATION (in thousands of dollars) FY 82: 400	LIFE OF PROJECT: 3,500
NUMBER: 931-1323 GRANT ☒ LOAN ☐	NEW ☐ CONTINUING ☒	PRIOR REFERENCE: FY 1981, Annex V, Centrally Funded, page 35	INITIAL OBLIGATION FY: 80 / ESTIMATED FINAL OBLIGATION FY: 86 / ESTIMATED COMPLETION DATE OF PROJECT FY: 87

Purpose: To provide technical assistance to AID missions and cooperating countries, agencies and institutions for reducing postharvest losses in root, tuber, fruit, and vegetable crops.

Background: Roots, tubers, fruits, and vegetables provide the basic diet for 600-800 million people in the LDCs. Postharvest losses of 30 to 50% of the harvested crops are common. Marketing systems are often antiquated and inefficient, although readily available appropriate technologies exist to reduce losses and foster commercialization of the storage and processing for regional, national, and international markets. Losses of these perishable commodities means lost calories and important vitamins and minerals in the diet as well as wasted human effort, land, fertilizer, irrigation, and other production inputs. Assistance in perishable loss reduction can assist the small farmers advance into the marketing or commercial sector of the rural economy. As the market volume of these products grows and as small scale service agribusinesses develop, rural employment will be created.

Host Country and Other Donors: N/A

Beneficiaries: Farm families will benefit through increased net production and income, while consumers will benefit from the increased supply.

FY 82 Program: Assistance will be provided to at least 12 developing countries per year in the following areas: market grades and standards, price policies, efficient transportation and marketing systems, new products and packaging, farmer advisory services, loss reduction strategies, loss quantification, and technical information dissemination relating to insect, bacterial, and fungal causes of postharveat perishable losses. Coordination of this program with work of other multilateral development agencies and international research centers which relate to perishable losses will develop as an informal group similar to GASCA is established by the core staff. International workshops and training short courses will be held to help identify priority loss reduction intervention schemes and will evaluate appropriate technologies for quantifying and implementing loss reduction strategies. Graduate training appropriate for developing country personnel will be supervised by the core staff of the contractor. Manuals and literature searches relating to perishable losses will be developed and distributed by the contractor.

($ thousands)

Major Outputs (and A.I.D. Unit Cost):	All Years unit	All Years (cost)
Technical Responses to Missions	60	(120)
Appropriate Technology Inverventions	10	(80)
Developing Country Personnel Trained	60	(6)
Information Sharing	270	(4)

A.I.D. Financed Inputs	FY 82
Personnel	175
Logistica	125
Training	75
Other	25
TOTAL	400

MINIMUM
(0)

CURRENT
(0)

PROPOSED
(300)
1) Technical Responses to Missions
2) One Training Course In-Country
3) Technical Information Development and Document Sharing

INCREMENT I
(0)

INCREMENT II
(100)
1) Technical Responses to Missions
2) One Training Course

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		
Estimated Fiscal Year 1980	200	0		10/1/80-3/30/81	Contractor - to be determined
Estimated through September 30, 1980	200	0	200		
Proposed FY 1981	300	300		4/1/81-3/30/82	
Estimated through Fiscal Year 1981	500	300	200		
Proposed FY 82	400	Future Year Obligations	Estimated Total Cost	4/1/82-3/30/83	
		2,600	3,500		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER. OXLEY

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)		
Livestock Production Capability	Agriculture, Rural Development and Nutrition	FY 82: 200	LIFE OF PROJECT: 2,455	
NUMBER 931-1149 GRANT ☒ LOAN ☐	PRIOR REFERENCE: FY 1981, Annex V, Centrally Funded, p. 31	INITIAL OBLIGATION: FY 79	ESTIMATED FINAL OBLIGATION: FY 84	ESTIMATED COMPLETION DATE OF PROJECT: FY 85
NEW ☐ CONTINUING ☒				

Purpose: To utilize the livestock production expertise of the United States Department of Agriculture to provide problem-oriented technical services to small, low income livestock producers in developing countries as related to feed supply, diseases and pests and livestock production systems.

Background and Progress to Date: This project initiated in July, 1979, has provided expertise in animal health and animal nutrition and made possible the selection of a poultry management specialist and range livestock economist for use in Mali and Tunisia, respectively. Recent outbreaks of a subacute form of African Swine Fever in the Dominican Republic, Brazil, Haiti, and Cuba have neccessitated an immediate multifaceted information campaign, for both the general farm public and technical personnel. In cooperation with the United States Department of Agriculture and FAO, information materials are being developed to assist the Dominican Republic and other countries of Latin America/Caribbean to eradicate African Swine Fever. Also diagnostic reference antigens are being provided to lesser developed countries to assist in diagnosis. These cooperative efforts will enable A.I.D. to prepare and disseminate worldwide educational material on African Swine Fever and halt the spread of African Swine Fever. This project is participating with U.S. Department of Agriculture in testing the effectiveness of vaccines for babesiosis, a devastating blood parastic disease in cattle in the tropics. The Development Support Bureau has contracted through the U.S. Department of Agriculture for a state-of-the-art study on African Swine Fever and trypanosomiasis to identify technical and research areas that A.I.D. should address.

Host Country and Other Donors: N/A

Beneficiaries: The beneficiaries will be small livestock producers in both intensive crop/livestock systems and in extensive grazing systems and consumers in the LDCs who will benefit from increased supplies of animal products.

FY 82 Program: Information materials will continue on the prevention and control of African Swine Fever and other important livestock diseases and distributed to LDCs. Seminars and training programs will be organized to meet program needs in developing countries. Specific analytical laboratory reference services on animal nutritions and health will be provided upon request from LDCs. A regional range study seminar is proposed for Kenya for students from several East African countries. A.I.D. will contribute $200,000 in grant funds in FY 82 to all program activities.

Major Outputs (and A.I.D. Unit Costs):	All Years
1. Lesser Developed Countries assisted	15 (20.0)
2. Analytical and field testing support	3 (2.0)
3. In-service training of lesser developed countries livestock personnel	10 (25.0)
4. Lesser developed countries livestock production workshops.	2 (5.0)
5. Livestock production publications	5 (2.0)

A.I.D. Financed Inputs	Thousands (FY 82)
Services from SEA/USDA including:	
Personnel (4 person years)	125
Laboratory and field testing services	45
Training (30 person months)	25
Publication costs	5
TOTAL	200

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(200)	(0)	(0)

1) Maintain TDY personnel.
2) Complete information program.

U.S. FINANCING (in thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979	455	90	365		U.S. Department of Agriculture/Office of International Cooerpation and Development
Estimated Fiscal Year 1980	300	265		7/1/79 - 9/30/80	
Estimated through September 30, 1980	755	355	400		
Proposed FY 1981	100	265		10/1/80 - 9/30/81	
Estimated through Fiscal Year 1981	855	620	235		
Proposed FY 82	200	Future Year Obligations	Estimated Total Cost	10/1/81 - 9/30/82	
		1,400	2,455		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Walker

TITLE	FUNDS	PROPOSED AUTHORIZATION (In thousands of dollars)	
Control of Vertebrate Pests	Agriculture, Rural Development and Nutrition	FY 82 500	LIFE OF PROJECT 10,700
NUMBER 931-0473 NEW ☐	PRIOR REFERENCE	INITIAL OBLIGATION FY 67	ESTIMATED FINAL OBLIGATION FY 85
GRANT ☒ LOAN ☐ CONTINUING ☒			ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To increase the availability of food in LDCs through the control of vertebrate pests and the reduction of crop losses due to these pests.

Background and Progress to Date: The successful Vampire Bat Control project is now being applied in about 13 to 18 affected Latin American countries under their own mission auspices. Programs in operation show reduction in losses of 95-99 percent. Rodent and bird control measures developed over the past ten years have been introduced into numerous countries and significant progress has been achieved in reducing crop losses from as much as 50 percent to less than 5 percent. The development and implementation of control techniques now include Bangladesh, the Philippines, the Sudan, Haiti, the Dominican Republic, Jamaica and Indonesia. A number of countries including Nicaragua, Brazil, Colombia, Uruguay, Tanzania, and Kenya have embarked on programs under their own auspices. USAID personnel in Haiti and the Philippines provide outreach technical support to other countries in the region.

The project has provided for workshops and seminars in a number of countries as well as in countries where projects operate and has provided for formal training at academic and techician levels.

The DWRC provides overall technical support and research to projects in host countries through TDY of specialists.

Host Country and Other Donors: Philippines, Bangladesh, Indonesia, Latin America, Tanzania, Kenya, Sudan, Somalia, West Africa (Sahel). The Philippines contributes capital investment in laboratory and field facilities plus a large staff of scientific, technical and labor personnel. East Africa (Sudan) contribution is similar. Other countries provide counterpart staff and local costs. A close association exists with FAO bird control programs particularly in East and West Africa and with the German Society for Technical Cooperation (GTZ) in the Dominican Republic and the Philippines.

Beneficiaries: Beneficiaries include the small as well as the large and efficient producers of food particularly cereal grains. Perhaps the most significant beneficiaries will be food grain consumers in the LDCs.

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(500)	(0)	(0)

FY 1982 Program: Continuation of the ongoing programs and extension of programs to additional LDC's through Regional Bureau/Mission support and to develop self-help programs in LDCs. To continue to extend collaboration with other donors. Specifically crop damage will be assessed; physiological studies of reproduction and food consumption continued, training, and production of handbooks and visual aids emphasized.

Major Outputs (and A.I.D. Unit Cost):

	All Years ($ Thousands) Unit	Cost
Field trials testing methiocarb bait	4	(50)
Crown baiting of coconuts successful	10	(50)
Developed coded microparticles to mark bird population for tracing	5	(20)
Training sessions held	4	(40)

A.I.D. Financed Inputs :

	Thousands (FY 82)
Personnel	250
Travel	100
Operations	150
TOTAL	500

1) Training accomplished.
2) Visuals and hanbooks produced.
3) Research on food consumption and reproduction increased.
4) Crop damage assessed.
5) Field service.

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	6,095	5,608	487		
Estimated Fiscal Year 1980	363	613		10/1/79 - 9/30/80	U.S. Department of Interior Denver Wildlife Research Center (USDI/DWRC) - PASA-ID/TAB-473-1-67
Estimated through September 30, 1980	3,448	6,311	137		
Proposed FY 1981	345	482		10/1/80 - 9/30/81	
Estimated through Fiscal Year 1981	6,792	6,793	0		
Proposed FY 82	500	Future Year Obligations	Estimated Total Cost	10/1/81 - 9/30/82	
		3,408	10,700		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Haines

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Improved Feed Nutrition Information Systems	Agriculture, Rural Development and Nutrition	FY 82 200	LIFE OF PROJECT 2290
NUMBER 931-0050 NEW ☐ GRANT ☒ LOAN ☐ CONTINUING ☒	PRIOR REFERENCE	INITIAL OBLIGATION FY 75	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To promote more efficient utilization of conventional type and potential feedstuff materials by livestock in developing countries through the use of information collected, summarized and disseminated by trained technicians.

Background and Progress to Date: In 1975, USU was awarded an A.I.D. contract for the identification, collection, summarization and dissemination of information on livestock feedstuffs in developing countries of the free world. The program required the development of strategically located feed information centers to serve developing countries. These centers, called International Networks of Feed Information Centers (INFIC) are well established in five locations and may consist of five to thirty members. A standard international feeds vocabulary was developed. USU has coordinated the activities of the INFIC's but by-laws and a constitution were adopted to install a permanent international secretariat, who will be accountable to an international board of directors. Over 2,000 feed names with composition data have been added from the Middle East and Southeast Asia bringing the total data bank to over 16,000 feed entries. Technical/agricultural professionals of developing countries improved their skills through training programs which have been conducted in host countries and in foreign facilities. Frequent seminars and workshops are held and source books, feed composition tables and values and manuals have been published in three languages. U.S. and host agency scientists attend professional meetings and have been responsible for more than 60 scientific reports.

First phases consisted of identifying normal and potential feedstuffs, collecting information on these materials and training technicians in these skills. Later phases included the summarization of reliable data and the dissemination of generated information to the livestock producers through trained technicians and extension publications.

Host Country and Other Donors: The contractor has succeeded in establishing INFICs with assistance from FAO of the United Nations, the Australian Feed Information Center, the Canadian Department of Agriculture, the Documentation Center at the University of Hohenheim, the L'Institut D'Elevage et de Medecine Veterinaire des Pays Tropical Products Institute, the Arab Center for the Study of Arid Regions and Drylands, the Instituto Interamericano de Ciencias Agricolas, and numerous universities in developing countries such as those in the Philippines, Malaysia, and Thailand. The coordinating agency to date, the International Feed Institute, has also received support from the State of Utah and the United States Department of Agriculture.

MINIMUM	CURRENT
(0)	(0)

Beneficiaries: Developing countries will utilize the INFIC data bank by requesting specific printouts of information relative to information pertinent to country and regional problems. This information will assist in the promotion of more efficient feeding systems by small livestock producers in both intensive and extensive types of livestock handling. The increased production of livestock, due to improved feeding, will benefit both the livestock owners and the consumers of animal products by increased availability, improved quality and greater farm family incomes.

FY 82 Program: Seminars and training programs will continue to be sponsored in developing countries to insure the continuation of project objectives. Materials maintained in the international data bank will be expanded as new information is added to existing records. New manuals, feed values and extension publications on project related items will be prepared and distributed for consumption in developing countries.

Major Outputs (and A.I.D. Unit Cost):

	All Years ($ Thousands) Unit	Cost
1. Training of developing country personnel	20	180
2. Established functional analytical laboratories	5	50
3. Workshops and seminars	30	120
4. Partial support of permanent secretariat (5 sponsors)	1	20
5. Publications from generated knowledge	5	10

A.I.D. Financed Inputs

	FY 82
1. Personnel (20 scientists months)	100
2. Computer programs and materials	20
3. Printing and translations	15
4. Transportation and travel	65
TOTAL	200

PROPOSED	INCREMENT I	INCREMENT II
(100)	(0)	(100)

1) One workshop held.
2) Two short-term training sessions held.
3) One publication produced.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	600	598	2		
Estimated Fiscal Year 1980	200	126	76	10/1/79 - 11/15/80	Utah State University
Estimated through September 30, 1980	800	724			
Proposed FY 1981	90	90		10/1/80 - 9/30/81	
Estimated through Fiscal Year 1981	890	814	76		
Proposed FY 82	200	Future Year Obligations	Estimated Total Cost	10/1/81 - 9/30/82	
		1200	2290		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Walker

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)		
Tsetse Fly Control	Agriculture, Rural Development and Nutrition	FY 82 0	LIFE OF PROJECT 7,497	
NUMBER 931-0830 NEW ☐ GRANT ☒ LOAN ☐ CONTINUING ☒	PRIOR REFERENCE FY 1979, Annex A, Centrally funded, p. 933	INITIAL OBLIGATION FY 83	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To develop applied techniques of control of tsetse fly in Africa by building on knowledge and experience gained in present project. Emphasis will be placed on sterile insect technique.

Background and Progress to Date: At present there are 8,000 females and 2,000 males being maintained in the project and a back-up colony provided in Vienna until future program direction and commensurate funding can be determined. In addition, various species are being reared outside of Africa using membrane feeding technique developed through this project. Flies so reared are fully viable and competitive with the indigenous ones. Some training of junior and senior African technicians has been accomplished.

Host Country and Other Donors: Government of Tanzania is contributing land, facilities and personnel. The International Atomic Energy Agency (IAEA) in Vienna, under an AID grant is providing the fly yearing and breeding expertise. The University of Bristol is providing back-up expertise as well.

Beneficiaries: Primary beneficiaries will be the small livestock holder and low income consumers requiring meat and milk protein in the tsetse fly belt of Africa. Beef export countries adjacent to the tsetse fly zone will also benefit.

FY 82 Program: If funding is provided in FY 82 for fielding a design team and developing a project paper, anticipated research studies will include perfection of feeding flies on artifical membranes using freeze dried blood versus blood from guinea pigs and goats; developing an aerial release methodology for fly and/or pupae; engaging in cost effective methods of fly rearing; extending the training program to students from other African countries; and engaging in an ecological survey of area disigned for the demonstration site.

Major Outputs (and A.I.D. Unit Cost):

	$ Thousands Unit	Cost
A pilot fly rearing laboratory	1	(100)
Field demonstration studies	2	(200)
Training undertaken	10	

A.I.D. Financed Inputs:

	FY 82
	0
TOTAL	$0

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(0)	(0)

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated
Through September 30, 1979	4,640	4,497	143
Estimated Fiscal Year 1980	0	143	
Estimated through September 30, 1980	4,640	4,640	0
Proposed FY 1981	0	0	
Estimated through Fiscal Year 1981	4,640	4,640	0
Proposed FY 82	0	Future Year Obligations	Estimated Total Cost
		3,000	7,497

Funding Period	Principal Contractors or Agencies
	U.S. Department of Agriculture (inactive)

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Walker

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)
African Swine Fever Control	Agriculture, Rural Development and Nutrition	FY 82: 100
NUMBER 936-4072 GRANT [X] LOAN [ ] NEW [X] CONTINUING [ ]	PRIOR REFERENCE: None	LIFE OF PROJECT: 1600
		INITIAL OBLIGATION FY 82 / ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: (1) Vaccine development - To develop a vaccine for protection against African Swine Fever (ASF). (2) Latin America Regional Control of African Swine Fever - To assist countries in Latin America and Caribbean Region in becoming self reliant in presenting the entry of ASF and in minimizing economic losses from the disease.

Background and Progress to Date: ASF is a contagious viral disease of the porcine family for which there is no vaccine or treatment. Domestic swine are very susceptible and, until recently, it was not uncommon for the disease to kill more than 90 percent of an infected herd. Other members of the porcine family, such as warthogs, bushpigs and giant forest hogs also get the disease. ASF is spread by contact between infected and susceptible swine and by feeding contaminated pork in garbage. It can also be spread by certain ticks, contaminated vehicles, clothing, footwear and equipment as well as through improper disposal of infected carcasses.

As the name indicates, African Swine Fever originated in Africa. Its incursion into Portugal and Spain in 1957 and 1960 respectively, and subsequent changes in the virulence and other characteristics of the virus, illustrated the threat it posed to the rest of the world and revealed the complexities that would confront any campaign to control and eradicate the disease. Outbreaks have continued to occur in Spain and Portugal, and in late 1977 there was a marked increase in incidence in both countries.

Recently ASF has taken on a new importance having broken out anew in both the Mediterranean area and in the Latin American-Caribbean Region. These outbreaks have put in jeopardy a large number of countries in which swine production is a significant part of the agriculture economy. In 1978, outbreaks of the disease occurred in Malta, Brazil and Dominican Republic. It was reported in Haiti in 1979 and again in Brazil and was confirmed for the first time in Sao Tome et Principe, an island off the coast of W. Africa. In January, 1980 an outbreak occurred in Cuba, after having been eradicated there in 1971. The inirial phase of the ASF eradication program in the Dominican Republic startedin July 1979 with a loan from USAID and personnel support from the USDA.

MINIMUM (0) CURRENT (0)

Host Countries and Other Donors:

I. Vaccine Development - The different cooperating laboratories will extend these studies on inactivated vaccines, modifying virus sources, adjuvants, immunization schedules, etc.

(1) Instituto Nacional de Investigaciones, Spain: The Institute will repeat their experiments modifying the source of vaccine virus (an attenuated strain) and the nature of the adjuvants used. (USAID/DSB - proposed funding - $50,000).

(2) Plum Island Animal Disease Laboratory, USA: Virus used for virus preparation will be derived from infected tissue, inactivated with binary acetylethyleneimine and stablized with formalin.' Adjuvants serving as B and T-cell activators will be used. (U.S. funded.)

(3) Animal Virus Research Institute, Pirbright, UK: Selected isolates would be used

(4) Central Veterinary Institute, Netherlands: Efforts will be made to develop pig cell lines for the production of ASF virus. Using the virus grown in vitro, various inactivants and adjuvants will be studied. (Netherlands funded.)

II. Latin America Regional Control of ASF - The UNDP has made commitment to support this project along with several of the developed countries of the Amercias. (USAID/DS - Proposed funding - $50,000.)

Beneficiaries - Primary beneficiaries will be the small farmers in Latin Amercia and Caribbean as swine provide a major means of savings and cash income and the main source of protein to meet human needs.

FY 82 Program: To initiate work on the control component of the project and plan the research activity including site for vaccine development.

Major Outputs (and A.I.D. Unit Cost)

	All Years ($ Thousands) Unit	Cost
Vaccine development	1	(1,000)
Diagnostic capability & field investigations	3	(550)
Training	10	(50)

A.I.D. Financed Inputs:

	FY 82
Personnel	75
Equipment	25
TOTAL	100

PROPOSED (0) INCREMENT I (100) INCREMENT II (0)

1) Vaccine development initiated.

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-				To be determined.
Estimated Fiscal Year 1980	-				
Estimated through September 30, 1980	-				
Proposed FY 1981	-				
Estimated through Fiscal Year 1981	-				
Proposed FY 82	100	Future Year Obligations 1,500	Estimated Total Cost 1,600		

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: WALKER

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)
Mineral Studies on Ruminant Animals	Agriculture, Rural Development and Nutrition	FY 82: 300 — LIFE OF PROJECT: 1,800
NUMBER 931-0600 GRANT ☒ LOAN ☐ — NEW ☐ CONTINUING ☒	PRIOR REFERENCE: FY 1981, Annex IX for the Institute for Scientific & Technical Cooperation	INITIAL OBLIGATION FY 75 — ESTIMATED FINAL OBLIGATION FY 83 — ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To determine the mineral status of ruminants in developing countries and to develop efficient mineral supplements to overcome deficiencies or excesses for increasing livestock production.

Background and Progress to Date: The initial project started in 1974 and was extended for three years in December 1977. An in-depth project evaluation occurred in June 1979 and resulted in recommending a further extension of the project. In November 1980, the project was extended for an additional three years to continue the (1) identification of mineral deficiencies and excesses in areas of Latin America, Africa and Asia, (2) designing and conducting experiments for demonstrating the cost/benefit ratios from correct mineral supplementation via reproduction and growth rates, (3) development of the capacities and capabilities of developing institutions for performing sound mineral research programs and (4) expansion of publication activities and distribution of research information which encourages the use of mineral supplements where needed.

The contractor has identified mineral deficiencies in the feedstuffs of ruminants in Latin America and has recommended minerals supplements to correct these deficiencies and to counter balance excesses of minerals causing toxic reactions. The reconnaissance and recruitment phase in Latin America and a few host countries in Africa and Southeast Asia are essentially completed (Phase I). The experimentation programs in Latin America are well established and are being implemented in representative areas (Phase II). The actual application of knowledge generated by the project has been initiated in Latin America but recently extended in Africa and Asia so will need more attention (Phase III). Widespread deficiencies in phosphorus are common in numerous developing countries livestock populations which cause lowered reproductive and growth rates, increased susceptability to many diseases and parasites and lowered efficiency in the conversion of feed to animal products such as meat, milk, fiber, and work.

Host Country and Other Donors: Project activities will continue in 12 Latin American countries, in Malawi and Senegal of Africa and for Indonesia, Thailand, Malaysia and Philippines in Southeast Asia. It is highly feasible that other donors such as the Small Ruminant-CRSP, other CRSPs and international Feed Centers will contribute information to host country institutions.

MINIMUM	CURRENT
(0)	(0)

Beneficiaries: Primary beneficiaries will be the smallholder livestock owners (cattle, sheep, goats, and water buffalo) in both intensive and extensive production systems in the main ecological conditions of Latin America and in selected countries of Africa and Asia. Overall benefits will be improvements in production of milk, meat, fiber, hides, work, and survival which will result in greater monetary income, an increased consumption of animal products and family security.

FY 82 Program: An acceleration of programs in Asia and Africa with attention to phasing out assistance to countries in Latin America. Emphasis will be place on the continuation of established field trails, the efficient formulations of beneficial mineral mixtures and the education of livestock producers in the identificiation of proper mineral supplementation programs. The educational programs will also be instrumental in the protection of livestock producers for tradesmen with products of dubious value and questionable quality.

Major Outputs (and A.I.D. Unit Costs):	All Years ($ Thousands)	
Training of developing country scientists	15	(15)
Studies demonstrating mineral deficiencies and toxicities in selected areas	10	(10)
Publication of manuals and guides	10	(5)
Development of functional analytical laboratories, seminars and workshops	8	(40)

A.I.D. Financed Inputs:	FY 82
Personnel (30 scientist months)	40
Laboratory development and special analysis	100
Training of 15 host country scientists	120
Publication costs	15
Transportation and travel	25
TOTAL	300

PROPOSED	INCREMENT I	INCREMENT II
(0)	(300)	(0)

1) Six field trials accomplished.
2) Training accomplished.
3) Laboratory analysis completed.
4) Two seminars held.
5) Two workshops.
6) Publications completed.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	750	750			
Estimated Fiscal Year 1980	250	150		10/1/79 - 11/15/80	University of Florida
Estimated through September 30, 1980	1000	900			
Proposed FY 1981	200	200		11/16/80 - 9/30/81	
Estimated through Fiscal Year 1981	1200	1100			
Proposed FY 82	300	Future Year Obligations	Estimated Total Cost	10/1/81 - 9/30/82	
		300	1,800		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: OXLEY

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)	
CRSP - Small Ruminants	Agriculture, Rural Development and Nutrition	FY 82 3,145	LIFE OF PROJECT continuing
NUMBER 931-1328 NEW ☐	PRIOR REFERENCE FY 1981 Annex IV for the Inst. for Scientific & Techn. Cooper.	INITIAL OBLIGATION FY 78	ESTIMATED FINAL OBLIGATION FY continuing
GRANT ☒ LOAN ☐ CONTINUING ☒			ESTIMATED COMPLETION DATE OF PROJECT FY continuing

Purpose: To increase sheep and goat yields of meat, milk, and fiber in intensive crop/livestock systems in the humid tropics and in extensive grazing systems of the arid and semi-arid tropics.

Background and Progress to Date: On September 30, 1978 AID entered into a contract with and obligated funds to the University of California at Davis, which will serve as the Management Entity and will have the responsibility for managing the grant and providing subgrants to 12 universities and Winrock International who have been selected to participate in the research. Following site selection, identification of problem areas, and the establishment of future institutional contacts, sub-grants were made in mide-1979. The primary sites selected are Peru, Brazil, Kenya, and Indonesia. Detailed research plans have been prepared for the development of integrated programs for the same countries. Problem areas have been identified as: inadequate feed supplies, poor reproductive performance, cultural and economic constraints, disease, parasites, and lack of coordination and integration in imporvement efforts.

Host Country and Other Donors: Collaborating institutions are EMBRAPA in Brazil, INIA in Peru, AARD in Indonesia, Ministry of Agriculture in Kenya, and Hassan II University in Morocco.

Beneficiaries: LDC smallholder sheep and goat producers in both intensive and extensive production systems will be the primary beneficiaries with consumers of meat, milk, and fiber as the secondary beneficiaries.

FY 82 Program: Continue negotiations with Morocco to establish the fifth major research site. Research programs are expected to be fully in progress at the other sites with graduate students and site coordinators selected, vehicles and supplies purchased and in use. Seminars and regional conferences will be held.

Major Outputs (and A.I.D. Unit Cost):	All Years ($ Thousands) Unit	Cost
Intensive crop/livestock systems	10	
Extensive crop/livestock systesm	10	
Year round feeding programs	35	(250)
Management and breeding programs	50	(100)
Disease and pest control programs	50	(100)
Cost/benefit analyses	70	(5)
Cultural analyses	35	(10)
Production system models	70	(35)

A.I.D. Financed Inputs:	FY 82
U.S. University staff and support	1,300
LDC Operating Expenses	1,100
Training of LDC and U.S. scientist	400
Overhead	345
TOTAL	3,145

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(2900)	(0)	(0)	(0)	(245)
1) Program established at each foreign site and supportive activity in U.S.				1) Fully support project at level of planning and implementation.

1-85

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	7,352	860	7082		
Estimated Fiscal Year 1980	2,391	3642		9/1/79 - 8/31/80	University of California, Davis (Management Entity) AID/DSAN/XII-G-0049
Estimated through September 30, 1980	9,743	3912	5,831		
Proposed FY 1981	2,000	4973		9/1/80 - 9/30/81	
Estimated through Fiscal Year 1981	11,743	8885	2858		
Proposed FY 82	3,145	Future Year Obligations	Estimated Total Cost	10/1/81 - 9/30/82	
		continuing	continuing		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Walker

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP-Planning Animal Health	Agriculture, Rural Development and Nutrition	FY 82 450	LOP OF PROJECT 450
NUMBER 936-4009 NEW [X]	PRIOR REFERENCE	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 82
GRANT [X] LOAN [ ] CONTINUING [ ]	None		ESTIMATED COMPLETION DATE OF PROJECT FY 83

Purpose: To plan the detailed program and organizational structure upon which the Animal Health Program CRSP can be constructed. Research will be directed toward identifying and relieving constraints imposed upon Livestock and Poultry Production, including technical and socio-economic items, in developing countries where Livestock and Poultry Production are an important economic food crop of the rural and urban poor.

Background and Progress to Date: In the planning phase of the Animal Health CRSP the grantee will: (1) Recommend a steering (advisory) committee of not more than six members with concurrence of JRC. (2) Develop a state-of-the-arts report on health constraints to livestock and poultry production in the LDC's. Report should identify U.S. and LDC institutions with interest and research capability in livestock and poultry diseases and their current research programs (3) Identify the researchable problems limiting livestock and poultry production in LDC's in the subject areas of African Swine Fever; theileriasis or East Coast Fever; Babesiosis, Anaplasmosis; and velogenic New Castle Disease.

Host Country and Other Donors: The grantee will contact and invite proposals and suggestions from potential collaborators in developing countries, ministries, government corporations, private sectors, USAID Missions, AID regional bureaus, national institutions, international centers, universities eligible and non-eligible under BIFAD, USDA, private and public foundations, private organization and individuals with demonstrated research capability and interest in Livestock and Poultry diseases.

Beneficiaries: LDC :smallholder livestock and poultry producers will be the primary beneficiaries with consumers of meat and milk as the secondary beneficiaries.

Major Outputs (and A.I.D. Unit Cost):

	All Years ($ Thousands)
Detailed Plan for CRSP Program	(450)

A.I.D. Financed Inputs:

	FY 82
Personnel (20 person months)	100
Travel	200
Meetings	100
Reports	50
TOTAL	450

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(0)	(450)

1) Accomplish Primary Study.

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					To be determined
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	450	Future Year Obligations: 0	Estimated Total Cost: 450	1/1/82 to 5/30/83	

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Oxley

TITLE	FUNDS	PROPOSED OBLIGATION *(In thousands of dollars)*	
CRSP Planning - Large Ruminants	Agriculture, Rural Development and Nutrition	FY 82 450	LIFE OF PROJECT 450
NUMBER 936 4008 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 82 / ESTIMATED COMPLETION DATE OF PROJECT FY 83

Purpose: To plan the detailed program and organizational structure upon which the Large Ruminant and Water Buffalo CRSP can be developed. Research will be directed toward increasing the productivity of cattle and buffalo for meat, milk and draft purposes in crop/livestock systems and for cattle in pastoral grazing systems. Emphasis will be given to improving the research capability in LDCs.

Background and Progress to Date: In the planning phase of the Large Ruminant CRSP the grantee will: (1) Recommend a steering (advisory) committee of not more than six members with concurrence of JRC (2) Develop a state-of-the-arts report on production constraints to cattle and water buffalo in the developing countries to include the U.S. and LDC institutions with interests and research capability in cattle and buffalo and an enumeration of their current research programs (3) Identify the problems limiting production in the developing countries that are researchable and the appropriate research disciplines to assist in problem solution.

Host Country and Other Donors: Suggestions for areas of research concentration will be sought from institions in developing countries, USAID Missions, International Centers, Foundations, International Organizations, AID regional bureaus, FAO, World Bank and individuals with experience and research capability in large ruminants. Research proposals from U.S. insitutions in collaboration with institutions in developing countries will be solicited once the planning phase is completed. The participating U.S. universities will provide a minimum of 25% of the A.I.D. budget in matching funds.

Beneficiaries: LDC smallholder cattle and buffalo producers in both cropping/livestock and pastoral systems will be the primary beneficiaries with consumers of meat and milk and food crops dependent upon animal power and fertilizing as the secondary beneficiaries.

FY 82 Programs: Initiate planning efforts in cooperation with the Joint Research Committee (JRC) and the appointed advisory committee to include a state-of-the-arts report, and identification of production constraints and potential institutions for collaborative research activity. The U.S. planning institution will closely with LDC research institutions in determining program and overall project design.

Major Outputs (and A.I.D. Unit Cost):

	All Years ($ Thousands) Unit	Cost
Comprehensive plan for research program	1	450

A.I.D. Financed Inputs:

	FY 82
Personnel	100
Travel	200
Meetings and Conferences	100
Reports	50
TOTAL	450

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(0)	(450)

1) Complete research plan.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					To be determined.
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	450	Future Year Obligations 0	Estimated Total Cost 450		

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Walker

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)	
Babesiosis Research - Illinois	Agriculture, Rural Development and Nutrition	FY 82: 135	LIFE OF PROJECT: 735
NUMBER 936 4073 GRANT ☒ LOAN ☐	NEW ☒ CONTINUING ☐	PRIOR REFERENCE: None	INITIAL OBLIGATION FY 82 / ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: The Development of Immunogens against Bovine Babesiosis using cell-culture dervied Babesia bovis antigens by: (a) Isolation and characterization of protective B. bovis antigens produced in cell-culture. (b) Development of inactivated and/or live alternated vaccine against bovine babesiosis using cell-cultured derived B. bovis.

Background and Progress to Date: Babesiosis is a worldwide tick-borne protozoan disease of a wide variety of wild and domestic animals. The classical disease is characterized by hemolytic anemia, occasional hemoglobinuria and the presence of babesial organisms in host erythrocytes. Cattle are affected by 4 species of Babesia: B. bigemina, and B. bovis, B. argentina, B. major, and B. divergens. Only B. bigemina and B. bovis have been found on the American continent. In the Americas, bovine babesiosis occurs between the 32nd parallel to the north and south of the equator. Babesiosis is a serious and economically important disease of cattle in all countries with tropical and semi-tropical climates. Most of the developing countries to which AID assistance is usually directed are situated in these regions.

During the past two years, the University of Illionis research team, working jointly with Mexican scientists and supported by the Rockefeller Foundation, developed the first in vitro method (spinner flask culture) for continuous cultivation of B. bovis. This invention is considered one of the most significant developments in research on babesiosis. It provides the research with a tool for study of biologic properties of Babesia as well as for production of antigens for development of vaccines and serodiagnostic test reagents. Most recently, an improved microaerophilous stationary phase method for continuous propagation of B. bovis was developed at the University of Illinois in Urbana. The method produces 100,000 to 500,000 times the number of parasites obtainable from the spinner flask procedure.

Host Country and Other Donors: The Rockefeller Foundation has sponsored research in this field for over six years at the Univ. of Illinois and in Mexico with the Instituto Nacional de Investigaciones Pecuarios and the Nacional Politechni Instituto. Future work will also involve these institutions.

Beneficiaries: Primary beneficiaries will be the small cattle producers and low income consumers requiring meat and milk protein in the developing countries of the semi-tropical and tropical climates.

Major Outputs (and A.I.D. Unit Cost):

	All Years ($ Thousands) Unit	Cost
Preparation of parasite-free protective antigens	1	500

A.I.D. Financed Inputs:

	FY 82
Personnel (30 person months)	80
Animal and Feed	20
Supplies	30
Travel	3
Publications	2
TOTAL	$135

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(0)	(135)

1) Initial research on preparation of parasite-free protective antigens

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979					University of Illinois-Urbana
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	135	Future Year Obligations: 600	Estimated Total Cost: 735	10/1/81 - 9/30/82	

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Oxley

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
CRSP Planning - Small Farm Systems	Agriculture, Rural Development, and Nutrition	FY 82 500		FILE OF PROJECT 500
NUMBER 931-6074 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 82	ESTIMATED COMPLETION DATE OF PROJECT FY 83

Purpose: To increase the productivity of small farm swine, poultry, and crop production as integral parts of the total farming system.

Background and Progress to Date: The need to view the farm in a holistic manner is becoming a major focus for research endeavor. Several of the International Agricultural Research Centers are giving high priority to such an approach. Nearly all crop farmers have some livestock that contribute to family subsistence. Where culturally acceptable and suitable feeds are available, swine are important in providing meat and cash income for family farms. Poultry including ducks are widely distributed on farms as a source of meat and eggs. Though in many cases non-ruminants (pigs and poultry) are considered scavenger animals, the potential for improving their productivity is extremely promising. Non-ruminants are particularly suitable to small farms because of their low initial cost, adaptability, ease of handling, efficiency in converting feedstuffs to edible products and relatively short generation interval. The major limitation to increasing poultry and swine production is the availability of suitable feeds (high energy and high protein content) in sufficient quantities at a reasonable cost. Emphasis in this CRSP will be given to small farm cropping systems in which swine and/or poultry contribute significantly to the productivity and support of the crop enterprises.

According to a recent Rockefeller Foundation publication*,"crop and livestock improvement will increasingly depend on farm-systems research (FSM) both as a guide to desired genetic manipulation and as a necessary complement to achieving adoption by farmers. Methodology needs to be further developed for the conduction of on-farm crop and livestock systems research."

This CRSP planning project will develop collaborative relationships between LDC and U.S. institutions to attack technical and socio-economic contraints to increased production within small farm-livestock-cropping systems. The immediate objectives will be to develop a program to (1) expand the body of knowledge on swine and poultry as part of small farmer production systems; (2) develop and test appropriate practices to improve productivity of target production systems, (3) expand the level of competence of LDC scientists to conduct research on small farm-livestock systems; (4) identify researchable problems limiting crop-livestock productivity.

MINIMUM	CURRENT
(0)	(0)

*Integrated Crop and Animal Production: Making the Most of Resources Available to Small Farms in Developing Countries". Working Papers, The Rockefeller Foundation, January, 1980.

When the Small Farm Systems CRSP planning has been completed and a detailed proposal submitted to A.I.D., subgrants will be made to recommend participating institutions based upon the program plan. The plan will contain specific suggestions for collaborative activities with LDC collaborators in overseas institutions.

Host Countries and Other Donors: LDC collaborative institutions will provide personnel and facilities for conducting research in their respective countries. Close coordination for planning will be maintained with International Livestock Center for Africa (ILCA) and other International Agricultural Research Centers where crop and livestock systems research is underway. ILCA will be involved at all stages of program planning to avoid duplication and overlap of activities. The participating U.S. universities will provide a minimum of 25% of the A.I.D. budget in matching funds.

Beneficiaries: LDC small farmers who produce crops and pigs or poultry will be primary beneficiaries. Consumers of meat and eggs will be the secondary beneficiaries.

Major Outputs (and A.I.D. Unit Cost):

	All Years ($ Thousands) Unit	Cost
Worldwide Small Farm Collaborative Research Plan	1	500

A.I.D. Financed Inputs:

	FY 82
Personnel (80 person months)	350
Logistic Support	100
Workshops and Conferences	50
TOTAL	500

PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(500)
		1) Accomplish primary research plan.

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					To be determined.
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	500	Future Year Obligations 0	Estimated Total Cost 500	12/1/81-5/31/83	

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER: Haines

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)	
Animal Nutrition and Disease in Latin America	Agriculture, Rural Development and Nutrition	FY 82 355	LIFE OF PROJECT 1665
NUMBER 936 4076 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To identify nutritional deficiencies and disease conditions limiting livestock production in selected areas of the Colombian Llanos and to assist the livestock producers through research to reduce losses and increase the efficiency of meat production.

Background and Progress to Date: Agriculture is extremely important to Colombia as almost 30% of the population is engaged in related activities. Many of these people are involved in livestock production because the estimated ruminant animal units in Colombia (25 M) is far greater than for any other Latin American country, except Brazil. Therefore, livestock nutrition/health considerations are economically important to the country and its livestock owners, a majority of which are small owner-operated enterprises. Specific areas of Colombia have experienced depressing health problems in cattle herds which include excessive fractures, abortions, wasting disease, falling disease, low fertility, poor weight gains and excessive death losses, particularly in calves before weaning. The livestock also show a susceptibility to other infectious diseases and parasitism due to deficient nutritional intakes. Efforts to exactly identify and correct the nutritional/health problems have been effective due to insufficient support for sound broad-range programs. However, Colombia is more fortunate than many countries in possessing several valuable technical resources for immediate utilization in solving livestock nutritional/health problems. The University of Florida has demonstrated expertise in nutritional projects for selected sites of Colombia and one well qualified international research organization (CIAT) is capable of providing technical support. Several national institutes and assoicates are adequately equipped and staffed to sponsor certain elements of a country-wide livestock production project. Small support segments should also be anticipated from other AID sponsored projects such as the Small Ruminant-CRSP and the Utah Feed Composition programs. Efforts of these several organizations would be coordinated within one projected livestock Nutritional/Health program for the entire country by a lead contractor. The application of proven beneficial practices could increase overall production by as much as 50% in regions containing excessive nutritional stress factors. Limited studies reported that complete mineral supplements reduced abortions from 9.3% to 0.7%, reduced death losses from 19% to 10% but increased calf weaning weight from 116 kg to 147 kg. Increased production will provide increased income for the livestock owner in several forms.

Host Country and Other Donors: The research will be conducted on six sites within each of the five major forage producing regions of the country. Local livestock owners will cooperate in the collection of forage, tissue, and soil samples in the conduction of supplement trials. The Fondos Ganaderos and rancher associations like the FEDEGAN, FADEGAN and FEDELLANOS have and will continue to show their support for a Nutritional/Health project by providing money, materials, equipment, facilities and labor. Colombia maintains research stations which will cooperate in research programs is available to support new projects. The ICA at the Tibaitate Center has completed analyses for farmer trials and is equipped to assist new programs. The Banco Ganadero and Caja de Credito Agrario have technical staff available for assistance to research programs. CIAT is now engaged in improving energy-protein nutrition by the development of forages for the area and thus is concerned with livestock production problems. These agencies and other institutions have assisted in sponsoring Colombia animal scientists in graduate studies at foreign universities.

Beneficiaries: The direct beneficiaries will be the ranchers and smallholder livestock owners in the tropical lowlands of Colombia. This will be followed by the transposition of knowledge obtained to other similar regions of Latin America and Africa (those with the same problems and climatic-livestock conditions). The solving of Nutritional/Health problems will result in the more efficient production of livestock which decreases the costs of meat, milk, and draft power and will cause an increased consumption of animal products by the entire population (urban and rural). With improved feeding and health programs in the llanos, the cattle industry will shift to those regions and make land now utilized for grazing available for food crop production.

Major Outputs (and A.I.D. Unit Costs):

	All Years ($ Thousands) Unit	Cost
1. Laboratory development	2	(100)
2. Feeding trials	15	(100)
3. Training of Colombian scientists	10	(100)
4. Field days and Seminars	6	(30)
5. International Meetings	2	(20)

A.I.D. Financed Inputs:

	FY 82
Personnel (48 scientists months)	290
Special analyses of samples and equipment	20
Training (24 person months)	25
Publication of Manuals and Bulletins	10
Development of teaching aids	10
TOTAL	355

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(0)	(355)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					To be determined
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	355	Future Year Obligations 1310	Estimated Total Cost 1665	12/1/81 - 10/1/82	

PROGRAM:

ACTIVITY DATA SHEET

PROJECT MANAGER. Walker

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Immunology of Ticks	Agriculture, Rural Development and Nutrition	FY 82 300	LIFE OF PROJECT 1,200
NUMBER 936-4063 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To conduct research on the immune response of host animals to feeding ticks.

Background and Progress to Date: (1) It has been observed by numerous investigators that following exposure of animals to tick infestation a resistance is acquired and the ability of ticks to feed on such animals is greatly reduced and also, (2) that mannalian antibodies ingested in the blood meal of ticks pass unchanged through the gut wall of the tick into the haemolymph. Antibodies produced in mammalian hosts against various tick antigens are ingested by feeding ticks, and adverse effects on the subsequent development of the ticks may occur. It is possible that these two phenomena may be combined and animals can be made resistant to tick infestation and immunized against tick antigens from ticks.

Host Country and Other Donors: This research will be conducted at the International Center for Insect Physiology and Ecology (ICIPE). Collaboration involves the International Laboratory for Research on Animal Diseases (ILRAD) and the Kenyan Veterinary Laboratory at Magugu - all three research laboratories are located in or near Nairobi, Kenya.

Beneficiaries: Beneficiaries are the small and large scale cattle owners of Africa, especially East Africa. Eventually cattle owners of other developing countries will also benefit.

FY 82 Program: To follow the previous research on the physiology and ecology of ticks an immunological component to determine if cattle can be immunized against tick antigens.

Major Outputs (and A.I.D. Unit Cost):

1. Develop disease diagnostic procedures and reagents.
2. Develop immunizing agents.
3. Produce cattle resistant to tick infestation.

	All Years ($ Thousands) Unit	Cost
Diagnostic procedures and reagents	2	50
Immunizing agents	4	75

A.I.D. Financed Inputs:	FY 82
Personnel	150
Laboratory and yield testing services	100
Test animals	50
TOTAL	300

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(0)	(300)

1) Development of Procedures and reagents.
2) Development of immunizing agents.
3) Testing of vaccine.

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979					International Center for Insect Physiology and Ecology; International Laboratory for Research on Animal Diseases; Kenya Veterinary Laboratory
Estimated Fiscal Year 1980	--				
Estimated through September 30, 1980					
Proposed FY 1981	--				
Estimated through Fiscal Year 1981					
Proposed FY 82	300	Future Year Obligations	Estimated Total Cost	9/30/78 to 9/30/82	
		900	1200		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: T.S. Gill

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Soil Families	Agriculture, Rural Development and Nutrition	FY 82 600	LIFE OF PROJECT 6,721
NUMBER 931-0582 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981 Annex V, Centrally Funded, p.82	INITIAL OBLIGATION FY 74	ESTIMATED FINAL OBLIGATION FY 83 / ESTIMATED COMPLETION DATE OF PROJECT FY 83

Purpose: To accelerate the adaptation and delivery of appropriate cost effective agroproduction technology to the developing countries of the tropics.

Background and Progress to Date: This project is testing the hypothesis that agroproduction technology can be transferred from its site of origin to other locations with similar agroenvironments in widely separated parts of the world. A system of soil classification called "Soil Taxonomy", developed by the Soil Conservation Service of the U.S. Department of Agriculture, contains the basis for stratifying agroenvironments into agroproduction niches. After 25 years of testing in the United States and internationally, this system of soil classification was released in 1975. The system was designed so that agroenvironments classified at the family level can be assumed to be sufficiently similar so that crops will perform similarly and respond alike to similar agroproduction practices.

To test this hypothesis, the Benchmark Soils Project has developed a network of experimental sites containing three soil families in the Philippines, Indonesia, Cameroon and Hawaii.

Standard management practices are instituted to discover whether the test crop (maize) performs and responds alike to similar treatments in sites with similar agroenvironments (soil family).

A statistical model developed by the project to analyze maize performance and response suggests that the same agroproduction technology is equally effective in the Philippines, Indonesia and Hawaii.

Host Country and Other Donors: Governments of the Philippines and Indonesia have assigned counterpart leaders to the project. Estimated contributions of the two governments are about $12,000 and $73,000, respectively, on an annual basis. FAO in Cameroon will contribute $10,000 a year. University of Hawaii's contribution is about $65,000 a year in terms of staff time.

Beneficiaries: The primary beneficiaries are rural farmers who will receive new agro-technology in a time frame considerably shortened, without the need to test each specific technology in every country.

FY 82 Program: To continue work started during 1974 and to test fully the technology transfer hypothesis for all three soil families from all experimental sites in the network. Work will focus heavily on Africa during this final phase of the project. In addition, it will continue crop and soil management experiments as well as development of a model data bank.

	($ thousands) All Years unit	(cost)
Major Outputs (and A.I.D. unit Cost):		
Studies from 18 sites for transfer modes	190	(25)
Experiments from 7 sites for management studies	70	(14)
Data bank model	1	(323)
Trained scientists	90	(7)

A.I.D. Financed Inputs:	FY 82
Personnel (75 person months)	400
Logistics	45
Training (15 person months)	52
Commodities	103
TOTAL	600

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(600)

1. Information from 18 sites obtained for triangle model
2. data from 7 sites obtained on management studies
3. Ten persons trained
4. Three publications printed
5. Four consultancies provided

INCREMENT I	INCREMENT II
(0)	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	4,026	3,373	653		
Estimated Fiscal Year 1980	1,040	900		5/30/80 - 9/30/81	University of Hawaii
Estimated through September 30, 1980	5,066	4,273	793		
Proposed FY 1981	495	1,200		10/1/81 - 5/30/80	
Estimated through Fiscal Year 1981	5,561	5,473	88		
Proposed FY 82	600	Future Year Obligations	Estimated Total Cost	6/1/82 - 1/1/83	
		560	6,721		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: T.S. Gill

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Soil Management Support Service	Agriculture, Rural Development and Nutrition	FY 82 1,000	LIFE OF PROJECT	7,000
NUMBER 931 1229	NEW ☐	PRIOR REFERENCE FY 1981 Annex V	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87
GRANT ☒ LOAN ☐	CONTINUING ☒	Centrally Funded Programs, p.32			

Purpose: To encourage the sound development of LDC land resources for agriculture and other uses.

Background and Progress to Date: Less than half of the roughly two billion hectares of potentially arable land in the tropics is currently under cultivation. In view of present trends of population growth, the world soil resources will have to be utilized more intensively and extensively in the future. This will encourage methods of land use that are not only more exploitive but also more destructive than in the past. This project will speed up technological transfer of improved crop cultural practices discovered through soil science research; help reverse and reduce the process of depletion and degradation of LDC land resources; and provide for increased food production. A coordinated technical assistance and basic support service in soil taxonomy will catalyze improved field operation activities needed for efficient management of soils in LDCs.

Host Country and Other Donors: None.

Beneficiaries: The primary beneficiaries are the farmers in the LDCs.

FY 82 Program: Will continue to provide technical assistance to LDCs in problem identification, evaluation of opportunities and development of new ideas in the area of soil survey, land use, land use planning and soil conservation; and to improve the soil classification system to make it more applicable and acceptable to tropical and sub-tropical countries.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years	
	unit	(cost)
Consultancies	200	(8.0)
Soil Samples analyzed	1,800	(.01)
Workshops	8	(60.0)
Persons trained	110	(4.0)
Publications	17	(4.0)
Improved soil classification	1	(2,571.0)

A.I.D. Financed Inputs:

	FY 82
Personnel (105 person months)	480
Logistics	340
Training (30 person months)	100
Commodities	80
TOTAL	1,000

MIMIMUM	CURRENT	PROPOSED
(0)	(0)	(700)
		1. 40 Consultancies
		2. Two workshops
		3. One training course

INCREMENT I	INCREMENT II
(0)	(300)
	1. One workshop
	2. 20 consultancies

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979	607	50	557		Soil Conservation Service of the U.S. Department of Agriculture
Estimated Fiscal Year 1980	700	700		6/1/80 - 5/31/81	
Estimated through September 30, 1980	1,307	650	657		
Proposed FY 1981	425	850		5/1/81 - 1/31/82	
Estimated through Fiscal Year 1981	1,732	1,500	232		
Proposed FY 82	1,000	Future Year Obligations	Estimated Total Cost	2/1/82 - 5/31/83	
		4,268	7,000		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: T.S. Gill

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
International Benchmark Soils Network	Agriculture, Rural Development and Nutrition	FY 82 650	LIFE OF PROJECT 5,260
NUMBER 936-4054 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981 Annex V, Centrally Funded Programs, p. 40	INITIAL OBLIGATION FY 81	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To organize, assemble and store crop and soil performance data from international and national agricultural centers in a data bank for transferring cost-effective food production technology to and among developing nations.

Background and Progress to Date: During the last two decades a substantial amount of soil management research has been initiated and is being continued by many national, regional and international institutions. This research has led many scientists to believe that vast areas of the tropics now under cultivation can be brought into a high state of productivity without major change in farming costs or practices. The immediate need is for better co-ordination and communication to improve the output and effective use of recent and current research. This communication can be effected through the use of a comprehensive classification system, the Soil Taxonomy which can describe soils on an international scale. A.I.D.'s on-going soils projects show that at the "soil family" level of classification (Soil Taxonomy), agricultural technology can be transferred to similar soils in other parts of the world, thus reducing the need for site specific soil research.

Under this project, collaborating centers will be classified according to the U.S. soil classification system by a contractor. The soil and the corresponding crop response data from these centers will be programmed by the contractor in a computerized data bank. The data will be made available to LDC researchers and planners to predict cause-and-effect relationships between crop performance and agroenvironments, i.e., problems and potentials of untested areas. The network will consist of select agricultural centers in the tropical regions. It will serve a model to demonstrate its utility and provide training for more comprehensive networks (national and international) to fulfill LDC needs for technology transfer.

Host Country and Other Donors: None.

Beneficiaries: Ultimate beneficiaries will be tropical farmers.

FY 82 Program: Soil survey work at ten agricultural centers will be initiated. Agreement on usage of standardized procedures for producing crop response data will be completed with the collaborating institutions. Programming of the soil/crop/climate Data Bank will be completed for collecting, storing and disseminating agricultural information among countries.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years unit	(cost)
Soil classification data of Agricultural centers	25	(35)
Crop response data from respective centers	25	(30)
Data bank (data storage and retrieval)	1	(940)
(Training packages)	5	(40)
Training workshops	5	(80)
People trained	50	(20)
Publications	20	(20)

A.I.D. Financed Inputs:

	FY 82
Personnel (100 person months)	350
Logistic	100
Training (30 person months)	100
Commodities	100
TOTAL	650

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(400)	(0)	(250)
		1) Data bank hardware obtained		1. Survey work at center completed
		2) Survey work at 4 centers completed		2. One publication printed
		3) One training workshop complete		
		4) Three people trained		

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		
Estimated Fiscal Year 1980	0	0			Cooperative Agreement with the University of Hawaii
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	410	355		10/30/80- 12/31/81	
Estimated through Fiscal Year 1981	410	355	55		
Proposed FY 82	650	Future Year Obligations	Estimated Total Cost	1/1/82 - 4/1/83	
		4,200	5,260		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John Malcolm

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	LIFE OF PROJECT
COLLABORATIVE RESEARCH: CRSP - SOIL MANAGEMENT	AGRICULTURE, RURAL DEVELOPMENT AND NUTRITION	FY 82 2,270	Continuing
NUMBER 931-1311 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE Insti. for Technological & Scientific Coop. FY 81 ANNEX TX p. 28	INITIAL OBLIGATION FY 81 / ESTIMATED FINAL OBLIGATION FY Continuing	ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To find economical ways to increase the productivity of tropical soils while protecting them from both short-term and cumulative damage and to enlarge the pool of scientists to work on soil problems in the developing countries.

Background and Progress to Date: This is a new project and still in the planning stage. Previous work sponsored by A.I.D. and elsewhere has shown that sustained and high levels of production can be obtained on tropical soils but most of this work was under intensive soil management and often for plantation or at least exports crops. There is an urgent need to develop a range of soil management options for use by the farmer with little land and limited money to invest.

So far the planning agent has identified five agroecological zones as priority target areas for soil research 1) Humid Tropics 2) Wet/Dry Tropics with Non-acid Soils 3) Wet/Dry Tropics with Acid Soils 4) Steep Lands 5) Dry Cycle Rice Paddy Soils. Target countries are: Peru, Indoensia, Upper Volta, Niger, Tanzania, Columbia, Brazil, Dominican Republic and Bangladesh. Technical problems identified as critical are: Erosion control, depression of active aluminum and manganese, liming where limestone is unavailable or very expensive, nitrogen efficiency, phosphate fixation and utilization of residual phosphate, the calcium, magnesium, potassium interactions, secondary and mironutrient balance, and the role of organic material in maintaining both fertility and soil physical condition. Twenty three U.S. universities have expressed serious interest in taking part in this collaborative research program.

North Carolina State University was assigned the role of planning agent in May, 1979.

Host Countries and other Donors: The U.S. collaborating universities will contribute a minimum of 25 percent to the support of this soil management research program. LDC institutions will pay counterparts and provide the physical facilities for research.

Beneficiaries: The professional staffs of the host countries and of collaborating U.S. institutions will be the direct beneficiaries of this program The results of the program will benefit the farmers of the tropics by increasing yield and conserving the soil, an irreplaceable asset.

FY 1982 Program: The principal efforts in 1981 and 1982 will be establishing research at the sites chosen, selecting counterparts and in layout of field programs. Available plant nutrients, potentially toxic levels of aluminum and manganese, abundance of weatherable minerals and potential erodibility of soils will be assessed prior to designing and starting management trials. Equipment will be selected, purchased and shipped to field sites overseas.

The program will start in the humid tropics and non-acid wet/dry tropics. Steepland work will be phased in toward the end of the year. Work on the acid soils of the wet dry tropics and on the dry cycle paddy soils will be delayed until additional funds are available.

Major Outputs (and A.I.D. Unit Cost):

	($ thousands) All Years Units	Cost
Experimental Sites Selected Characterized	40	(120
Management Systems Devised and Established	16	(25)
Scientists trained (520 person months)	22	(24)
Reports and Publications	47	(5)

A.I.D. Financed Inputs:

	FY 82
Personnel (192 work months)	1,200
Logistic Support	400
Training (165 person months)	124
Equipment and facilities overseas	546
TOTAL	2,270

	MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
	(0)	(0)	(1710)	(0)	(560)
1. Experimental Sites Characterized			6		2
2. Soil Management Trials Started			15		21
3. Training begun (persons)			16		22

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		To be selected.
Estimated Fiscal Year 1980	0	0	0		
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	750	600	150		
Estimated through Fiscal Year 1981	750	600	Future Year Obligations	Estimated Total Cost	
Proposed FY 82	2,270	Continuing	Continuing	1/15/81-1/14/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: T.S. Gill

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)		
Tissue Culture for Improved Food Crop Varieties	Agriculture, Rural Development and Nutrition	FY 82 0	LIFE OF PROJECT	1,275
NUMBER 936-4055 NEW ☐	PRIOR REFERENCE	INITIAL OBLIGATION FY 80	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 85
GRANT ☒ LOAN ☐ CONTINUING ☒	FY 1981 Annex IX for Institute for Scientific & Technological Cooperation p.41			

Purpose: To test the use of tissue culture as a cost effective technique to add stress tolerant characteristics to wheat, rice and millet.

Background and Progress to Date: This project is based on a sucessful conclusion of an earlier AID funded small research study by Colorado State University. The study demonstrated that by exposing plant cells (tobacco) to increasing levels of salt (Na Cl)), one can select cells that will tolerate much higher levels of salt than the original cells. These cells are regenerated into whole plants which retain their salt tolerance from one generation to another. In the tropical and subtropical world, over two billion hectares experience stresses such as mineral deficiencies or toxicities, low and high temperature, drought conditions, etc. Current approach to alleviate the situation is to change or amend the soil to fit the plant needs or in a few instances fit the plant to the environment. However, certain soil conditions either cannot economically be corrected with the current technology or a viable system is not available to deliver an adapted technology to the small farmer in the LDCs. These problems can be addressed and possible solutions sought via plant tissue culture technique.

Host Country and Other Donors: The project will be linked with international and national agricultural research centers with regards to germ plasm and utilization of the technique. These centers will test the stress tolerant crop varieties at no cost.

Beneficiaries: The overall thrust of the program is to advance knowledge for crop production on marginal lands. It holds great promise for increased benefits for the poor farmer, especially women, who have traditionally played a major role in such areas.

FY 82 Program: To continue work started during 1980 and obtain desired tolerance levels for slat and aluminum toxicity in rice, and salt and drought tolerant cell lines of millet. Start greenhouse testing of a salt tolerant wheat variety. Regenerate other wheat lines tolerant to salt, aluminum toxicity, high temperature and drought.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years	
	unit	(cost)
Wheat varieties tolerant to 4 stresses	6	(105)
Rice varieties tolerant to 2 stresses	3	(85)
Millet varieties tolerant to 2 stresses	2	(120)
Trained scientists	7	(7)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		
Estimated Fiscal Year 1980	600	10		9/15/80 - 11/15/81	Colorado State University
Estimated through September 30, 1980	600	10	590		
Proposed FY 1981	475	350		11/16/81 - 3/31/83	
Estimated through Fiscal Year 1981	1,075	360	715		
Proposed FY 82	0	Future Year Obligations	Estimated Total Cost	-	
		200	1,275		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: C. L. Corey

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Dryland Agriculture Support Service	Agriculture, Rural Development and Nutrition	FY 82: 1000		LIFE OF PROJECT: 7530
NUMBER 936-4021 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE: None	INITIAL OBLIGATION FY: 81	ESTIMATED FINAL OBLIGATION FY: 87	ESTIMATED COMPLETION DATE OF PROJECT FY: 88

Purpose: To assist Recipient in strengthening, refinement and maintenance of technical capacities and to provide for their use to increase productivity in LDC dry land farming systems.

Background: The project will concentrate on agricultural non-irrigated areas of deficient precipitation where average annual precipitation is from 250 to 1250 millimeters. These areas include a wide belt across central Africa, the Meditreannean, the Indian sub-continent, most of southern South America, and much of Central America.

In general, conditions have forced LDC farmers to push agriculture into zones of lower rainfall and poorer soils than is considered economical in developed countries. Survival agriculture obviously tolerates lower productivity. These "dryland" farmers are assuredly among the world's poorest and yet they manage a significantly large amount of the world's agricultural land. They are a social and economic force which must be included in the overall development of nations.

The project will be accomplished through a Cooperative Agreement whereby the recipient gains expertise in LDC dryland agriculture and A.I.D. uses project outputs to enhance its programs in dryland agriculture. Technical assistance will be provided to A.I.D. in the form of experienced personnel; country specific surveys of farmer constraints and available resources to remove constraints; and pilot tests of specific technologies for increasing productivity in dryland agriculture. In all activities project personnel, will work with LDC institutions, farmers, and with A.I.D. personnel in developing outputs.

Host Countries and Other Doners: The project will require inputs and staff time by LDC institutions collaborating in the constraint analyses and the pilot tests. This input is an essential part of the field activities.

Beneficiaries: Rural populations where dryland agriculture is practiced with annual average rainfall from 250 to 1250 mms. The ultimate beneficiaries are the small farmers from these regions. Immediate beneficiaries will be designers and implementors of assistance programs in dryland agriculture

FY 1982 Program: To conduct 4 country assessments (constraint analyses) and publish results. Revise assessment methodology and select 2 additional countries for assessment. Initiate pilot tests in first country.

Major Outputs (and AID Unit Cost):

	Unit	($ thousands) All Years (cost)
State-of-art-analysis	1	(100)
Country assessments	6	(200)
Pilot tests	3	(1500)
Handbooks	6	(200)
Advisory and consulting in months	40	(14)

A.I.D. Inputs

	FY 82
Personnel (60 person Months)	350
Logistics	200
Other Costs	450
TOTAL	1000

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
		(700)	(0)	(300)
		1) Pilot test Initiated		1) Two country assessments
		2) Two country assessments		
		3) Revised Methodology		

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		To be determined
Estimated Fiscal Year 1980	0	0			
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	780	100		7/1/81-7/31/82	
Estimated through Fiscal Year 1981	780	100	680		
Proposed FY 82	1000	Future Year Obligations	Estimated Total Cost	8/1/82-7/31/83	
		5750	7,530		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: G. L. Corey

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Synthesis of Water Management Improvement	Agriculture, Rural Development and Nutrition	FY 82: 1000	LIFE OF PROJECT: 7800	
NUMBER 931-1007	PRIOR REFERENCE FY 1981 Annex V, Centrally Funded, p. 29	INITIAL OBLIGATION FY 78	ESTIMATED FINAL OBLIGATION FY 85	ESTIMATED COMPLETION DATE OF PROJECT FY 86
GRANT ☒ LOAN ☐	NEW ☐ CONTINUING ☒			

Purpose: To promote the efficient use and conservation of water resources through improved design and management of LDC irrigation systems and farm practices.

Background and Progress to Date: This technical assistance project was initiated in September 1978. It is an outgrowth of a successful research project on farm water management in Pakistan, and is designed to adapt and disseminate worldwide the methodologies for increasing irrigated water use efficiency as developed under the research project. It will develop training courses and "how-to-do-it" handbooks which the research project had identified as necessary but currently non-existent, and will stimulate and support improved designs and operations of irrigation systems in LDCs.

Project documents from AID, World Bank and FAO have been reviewed and analyzed and a summary report is in draft. The first training course has been scheduled for India. Initial site visits have been made. Three handbooks are in draft and the fourth "low cost structures" is being planned. Country assessments of irrigation practices are planned for the summer of 1980 in 7 Asian countries.

Host Country and Other Donors: None

Beneficiaries: The ultimate beneficiaries will be LDC small farmers who depend on irrigation for agricultural production.

FY 82 Program: One training course will be taught; three handbooks will be completed; and country assessments will be published for all countries surveyed to date.

Major Outputs (and A.I.D. unit Cost):	($ thousands) All Years unit	(cost)
Analyses of country water management systems	25	(100)
Training courses with materials	6	(150)
Field technology handbook	8	(200)
Demonstration workshops	6	(120)
Regional Seminars	6	(120)
Technical Assistance provided to LDCs (months)	30	(12)

A.I.D. Inputs:	FY 82
Personnel (60 person months)	300
Logistics	200
Training (20 person months)	100
Other Costs	400
TOTAL	1000

MINIMUM	CURRENT	PROPOSED	INCR I	INCR II
(0)	(450)	(0)	(0)	(550)
	1) One training course			1) One seminar
	2) One handbook			2) One handbook
	3) Four mos. technical asst.			3) Two country analyses

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	1272	425	847		Universities of the Consortium for International Development (CID): Colorado State: Oregon State; Arizona; California; and Utah State
Estimated Fiscal Year 1980	697	700		4/1/81 - 3/31/82	
Estimated through September 30, 1980	1969	1125	844		
Proposed FY 1981	0	600		-	
Estimated through Fiscal Year 1981	1969	1725	244		
Proposed FY 82	1000	Future Year Obligations	Estimated Total Cost	4/1/82 - 3/31/83	
		4831	7800		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Lloyd R. Frederick

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)
Tropical Legume Inoculant Service	Agriculture, Rural Development and Nutrition	FY 82: 200
NUMBER 936-4050 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE: None	LIFE OF PROJECT 2150
	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85
		ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To improve the effectiveness of BNF use in agriculture by providing support and service assistance to LDC farming systems projects.

Background and Progress to Date: Research has developed a workable BNF technology for tropical legumes. Inoculation needs are being identified and inoculant production technology is desired by many LDCs. Use of plants capable of BNF can be more effective with proper inoculation, and proper use in the farming system can increase production.

Host Country and Other Donors: To be determined. Anticipate that host country and international banks, etc. will provide major support to projects.

Beneficiaries: Agr. scientists, farmers, urban dwellers due to more cost efficient food production, inoculant producers, seed dealers.

FY 1982 Program: Continue the program in a few countries, such as Thailand and Sri Lanka. Expand program to a few more countries, such as Zambia, Rwanda or Tanzania.

Major Outputs (and A.I.D. unit costs)	($ thousands) All years unit	(cost)
1) Analytical studies in country or present use of BNF and ways to improve use of BNF in farming systems.	20	(10)
2) An equipment and technical assistance "package" for quality control	10	(60)
3) Repair and maintenence "package", including small parts, some supplies & technical assistance for inoculant production	15	(50)
4) Marketing and distribution assistance "package".	24	(40)
5) Training Units for plant operators & distribution.	5	(40)
6) Workshop on inoculant production & use.	2	(50)

A.I.D. financed Inputs:	FY 82 $000
Personnel	80
Travel	10
Operations	110
	$200

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

INCREMENT I	INCREMENT II
(200)	(0)
- An equipment and technical assistance "package". Training unit for plant operation and distributors - Workshop on inoculant production and use Repair & maintennnce "package" for inoculant production	

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		To be Determined
Estimated Fiscal Year 1980	0	0		-	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0			
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	200	Future Year Obligations 1950	Estimated Total Cost 2150	7/1/82 to 6/30/83	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: L. R. Frederick

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Biological Nitrogen Fixation In Tropical Agriculture	Agriculture, Rural Development and Nutrition	FY 82 2050	LIFE OF PROJECT continuing	
NUMBER 931-A053 GRANT [X] LOAN [ ] NEW [ ] CONTINUING [X]	PRIOR REFERENCE FY 1981 Annex IX for Inst for Scientific & Technological Coop p.40	INITIAL OBLIGATION FY 75	ESTIMATED FINAL OBLIGATION FY continuing	ESTIMATED COMPLETION DATE OF PROJECT FY continuing

Purpose: To develop practical ways to enable tropical crops to capture nitrogen from the air.

Background & Progress to Date: Biological nitrogen fixation (BNF) offers alternative to expensive, chemically-produced nitrogen fertilizer. The LDC small farmers urgently need an efficient BNF technology. In temperate zones, past reliance on nitrogen fertilizers has resulted in little BNF research; even less was done in tropical LDCs. Current BNF temperate zone technology must first be specially adapted to the tropics. New knowledge & technologies for BNF are also required.

In 1975 A.I.D. started a long-term program to develop tropical BNF as a major component of LDC farming. Phase I is mobilizing scientists to develop a reliable tropical BNF technology. Phase II is testing this technology by cooperative field trials with LDC scientists. Phase III will assist country scientists & agriculturalists to develop specific BNF systems for their small farmers.

Tropical grain legumes, such as beans, cowpeas & peanuts, which constitute 10% of the food grown in LDCs, have the unique capacity to obtain their nitrogen through bacteria living in their root nodules. Often this capacity is very low. Research is being conducted to raise this capacity.

Grasses, such as corn, millet & digit grass are major LDC food items for both man & animal. Recent evidence indicates that bacteria can be stimulated to fix nitrogen in association with the roots of some grasses. This possibility is being investigated & could produce spectacular dividends, although not in near future.

Testing of BNF technology in developing countries has become a major phase of the BNF program. In 1978, trials were initiated in Chile to improve production of alfalfa. Inoculated seed of an improved variety will be distributed to farmers in 1981 through cooperative efforts of national and U.S. Scientists.

Host Country & Other Donors: Host countries provide personnel & facilities. FAO is initiating a complementary program that relies heavily on past & ongoing BNF work of A.I.D.. Five of the International Agricultural Research Centers participate in planning & implementing the program. Sub-grants have been made to 24 scientists at 18 research institutions in 17 states, (GA, MN, MS, NC, WA, AL, AZ, CA, FL, OR, TX, MT, WI, IA, NM).

Beneficiaries: Directly, Agricultural scientists, indirectly, farmers in LDCs as technology is incorporated into crop management. Chile, Nigeria, El Salvador, Brazil, Thailand, Egypt, Morocco, Senegal, Guyana, Panama, Mexico, Sudan.

FY 1982 Program: Continue research to develop tropical BNF technology, test BNF technology in developing countries with national scientists. Activities include Symbiotic Nitrogen Fixation by Tropical Legumes ($900), World Rhizobium Collection & Study Center ($150), Overcoming Factors Limiting Biological Fixation ($700), Associative Nitrogen Fixation by Tropical Grasses ($200) and Economic Evaluation of Biological Nitrogen Fixation ($100).

Major Outputs (and A.I.D. Unit Costs)

		($ thousands) All years	
		Unit	Cost)
1.	State-of-the-Art reports	17	(20)
2.	Training Courses with Materials (LDC trainee)	10	(60)
3.	Workshops and seminars, including proceedings	4	(40)
4.	Research reports and technical publications	145	(10)
5.	Cooperative research support to LDC scientists	75	(40)
6.	Evaluated rhizobial cultures for tropical legumes	100	(200)
7.	BNF technology packages for tropical legumes	5	(200)
8.	BNF technology packages for tropical grasses	1	(1,000)
9.	Inoculant production technology packages	3	(100)
10.	Technical assistance provided LDC's (months)	24	(5)

A.I.D. Financed Inputs	(FY 82)
Personnel (696 person months)	935
Logistics	109
Commodities & Equipment	369
Training (309 person months)	335
Other Costs	302
TOTAL	2050

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

INCREMENT I (1600): Outputs 2,4,5,6, 7,9,10 (as above)

INCREMENT II (450): All outputs 1-10 (above)

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979	6964	5291	1673		Universities: Hawaii, Cornell, Puerto Rico, North Carolina State & Florida. U.S. Department of Agriculture Science & Education Administration = Agricultural Research (AR) & Cooperative Research (CR).
Estimated Fiscal Year 1980	2287	1624		6/30/80 to 6/30/81	
Estimated through September 30, 1980	9251	6915	2236		
Proposed FY 1981	1250	2095		6/30/81 to 6/30/82	
Estimated through Fiscal Year 1981	10501	9010	1491		
Proposed FY 82	2050	Future Year Obligations	Estimated Total Cost	6/3//82 to 6/30/83	
		continuing	continuing		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: L.R. Frederick

TITLE: Mycorrhiza on Tropical Grains	FUNDS: Agriculture, Rural Development and Nutrition	PROPOSED OBLIGATION (in thousands of dollars) FY 82: 300	LIFE OF PROJECT: 2,500
NUMBER: 936-4051 GRANT ☒ LOAN ☐	PRIOR REFERENCE: FY 1981 Annex IX for Insti for Scientific & Technological Coop. p. 40	INITIAL OBLIGATION FY: 82	ESTIMATED FINAL OBLIGATION FY: 86
NEW ☒ CONTINUING ☐			ESTIMATED COMPLETION DATE OF PROJECT FY: 87

Purpose: To determine a practical, reliable method for using mycorrhiza to improve crop production through increased nutrient uptake, especially phosphorus (P) by agricultural crops.

Background and Progress to Date: Mycorrhiza are fungal-root associations that can improve the plant's ability to obtain nutrients from problem soils. Mycorrhiza may have particular significance for tropical agriculture because P is so often limiting crop production in tropical soils. Inoculation of plants needing mycorrhiza has been done crudely by soil or root-mass transfer. Pests may also be transferred coincidentally. Studies to determine the value of mycorrhiza in field experiments is the logical application of the present knowledge. Small scale field experiments in Nigeria, Pakistan, India, and Brazil, as well as some developed countries, have shown that inoculation can markedly improve plant growth and yields. Inoculation of transplanted perennials raised in pest-free nursery soils has been shown to be of value. The question of how best to prepare, store and apply inoculum will need further study. Yield results are needed from field inoculation experiments for different annual crops, including grain legumes, grown in different areas of the world under different climatic, soil and cultural conditions.

Host Country and Other Donors: N/A

Beneficiaries: Plant scientists immediately, but, if successful, farmers everywhere, especially those not able to buy adequate P fertilizer.

FY 82 Program: To continue research on field inoculation of tropical crops, especially grains.

Major Outputs:

	($ thousands) All Years unit	(cost)
Experiments to determine crops & soils that respond to mycorrhizal inoculation	20	(40)
Develop an improved mycorrhizal inoculant	2	(60)
International trials of mycorrhizal inoculants	15	(10)
Training of scientists & technical staff	30	(10)
Technical publications	10	(1)

A.I.D. Financed Inputs:

	FY 82
Salaries & Wages	780
Travel	50
Operations	70
TOTAL	300

MINIMUM	CURRENT	PROPOSED	INCREMENT I
(0)	(0)	(0)	(0)

INCREMENT II

(300)

1. Experiments in Mycorrhiza (5)
2. Training of scientists (3)

U.S. FINANCING (in thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	–	–	–		
Estimated Fiscal Year 1980	–	–		–	
Estimated through September 30, 1980	–	–	–		To be determined.
Proposed FY 1981	–	–		–	
Estimated through Fiscal Year 1981	–		–		
Proposed FY 82	300	Future Year Obligations 2,200	Estimated Total Cost 2,500	8/30/82 – 11/29/83	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John Malcolm

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Fertilizer Technical Assistance	Agriculture, Rural Development and Nutrition	FY 82 275	LIFE OF PROJECT 5,865
NUMBER 931-0832 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE 1981 Annex V, Centrally Funded Programs, p. 27	INITIAL OBLIGATION FY 65	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To assure the supply of the right fertilizers to farmers in the developing countries.

Background and Progress to Date: Without the utilization of fertilizer for increased crop production 600 million people in the developing countries would not have food to eat. Where fertilizer is used, it is used, by farmers with small farms as well as by those with large farms. Tennessee Valley Authority (TVA) has assisted A.I.D. with all aspects of fertilizer production, distribution and use since 1965. Through 1975, most of the TVA effort was technical assistance to developing countries. Sectoral and feasibility studies were conducted for 14 countries. Indonesia was encouraged to exploit its natural gas and has done so successfully. A recommendation against an ammonia plant in Vietnam saved A.I.D. $150 million. Demonstration of the feasibility of shipping urea in bulk to India has saved that country over $60 million. Advice on U.S. and world supply trends has improved plans and avoided unsounded investment. This advice is and will be crucial with the rapidly changing price and supply situation foreseen in the 1980's.

Most of the technical assistance in fertilizers was taken over by the International Fertilizer Development Center when it began in 1975, but TVA has continued its advisory services to A.I.D. It has revised fertilizer specifications for A.I.D. financed procurement and updated the methods for quality control. It has provided recommendations for bagging and for bulk shipment of fertilizer. It reviewed engineering designs for a potash processing factory in Jordan and a fertilizer mixing plant within the past year. It provides technical representatives in engineering, economics, statistics and agronomy with special expertise in fertilizers to enable A.I.D. to take part in meetings with the World Bank, the Food and Agriculture Organization of the United Nations and the United Nations Industrial Development Organization.

Host Country and Other Donors: None

Beneficiaries: Farmers of the developing countries are the ultimate beneficiaries of this project through better access to national fertilizer programs.

($000)	MINIMUM (0)	CURRENT (0)	PROPOSED (275)	INCREMENT I (0)	INCREMENT II (0)
Technical Studies & Evaluation			5		
Representation - delegates			15		
Technical Services			10		
Policy papers/assistance			4		

FY 82 Program: TVA will continue to advise and assist A.I.D. with fertilizer and bagging specifications which encourages competition and are enforceable. It will provide A.I.D. with advice on the U.S. fertilizer supply situation and prices. It will provide assistance in planning and evaluating A.I.D. projects with a significant fertilizer component. It will provide technical specialists to represent A.I.D. at interagency and international meetings. It will, if time and budget permit, assess the impact of one or more fertilizer projects initiated by A.I.D. or its predecessors in the 1950s and 1960s.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years unit	(cost)
Country and technical studies	44	(27)
International reference library	1	(300)
Computerized international data bank	1	(250)
Professional representation	85	(2)
Program and project designs	32	(2)
Training materials and training courses	8	(25)
Technical advice	210	(11)
Policy information and advice	35	(5)

A.I.D. Financed Inputs:

	FY 82
Personnel (33 person months)	105
Logistics	125
Other costs	40
TOTAL	275

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	3,797	3,587	210		Tennessee Valley Authority - TVA
Estimated Fiscal Year 1980	230	210		10/1/80 - 9/30/81	
Estimated through September 30, 1980	4,027	3,797	230		
Proposed FY 1981	175	230		10/1/81 - 9/30/82	
Estimated through Fiscal Year 1981	4,202	4,027	175		
Proposed FY 82	275	Future Year Obligations	Estimated Total Cost	10/1/82 - 9/30/83	
		1,388	5,865		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John Malcolm

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
International Fertilizer Development Center - IFDC	Agriculture, Rural Development and Nutrition	FY 82 $4,000	LIFE OF PROJECT Continuing
NUMBER 931-0054 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981 Annex IX, Inst. for Scientific & Technological Coop. p.40	INITIAL OBLIGATION FY 75	ESTIMATED FINAL OBLIGATION FY Continuing / ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To assure a dependable supply of better fertilizer at lower cost to farmers of the developing countries.

Background and Progress to Date: Between 40 and 50 percent of the increased farm output needed in developing countries over the next 20 years will result from the use of fertilizer. For the densely populated land scarce parts of the world fertilizer use offers the only real hope to increase food production. The poor soils of sparsely populated areas require fertilizer before they can be made productive. High and rising energy costs will make conventional fertilizer too costly for many farmers. A.I.D. will probably contribute form $80 to $100 million toward the purchase of fertilizer during the current fiscal year.

Since it became functional in 1975, IFDC has been working on ways to make fertilizer more efficient. Current efforts are focused on nitrogen, phosphorus and sulfur. Sulfur-coated urea and supergranules can almost double the yield of rice per pound of nitrogen. Rock phosphates or partially treated rocks offer low cost and energy saving alternatives to fully processed fertilizers but the ore, process and end use must be fully compatible.

Means of exploiting small phosphate deposits on cottage industries demonstrated by IFDC will provide employment, and give farmers access to local sources of this important fertilizer. Granulation has produced nitrogen, phosphorus and potash fertilizers which are as easy to use as the premium grades but much less costly to prepare.

IFDC improved the operating efficiency of fertilizer factories in developing countries by training and by direct technical assistance. More than 800 engineers and managers have been trained by IFDC. The trainees have become trainers extending impact. Over 90 projects in 49 countries are in progress or have been completed by IFDC.

Host Country and Other Donors: Australia, Bangladesh, Brazil, Canada, Colombia, Israel, Netherlands, Nigeria, Philippines, Senegal, West Germany, Venezuela, and UNDP, to name a few, are all sponsoring work at IFDC which is in addition to that covered by A.I.D. grant.

Beneficiaries: Farmers, chemical factory, transport workers and retailers all benefit directly from the work of IFDC.

FY 82 Program: Research on programmed release nitrogen fertilizers and non-conventional phosphates will continue. A special effort will be made to get farm test demonstrations on new products. Technical assistance will continue on a self-financing basis wherever possible. Factory operations and maintenance courses will be repeated as well as courses on marketing.

Major Outputs (and A.I.D. unit Cost):	($ thousands) All Years unit	(cost)
New and modified fertilizers	11	(125)
Phosphate rocks characterized	110	(40)
Training (individuals)	1,970	(10)
Preinvestment surveys	19	(40)
Technical Assistance Missions	195	(25)
Publications	48	(10)

A.I.D. Financed Inputs:	FY 82
Personnel (1, 113 work months)	2,320
Operations	1,160
Logistics	220
Maintenance, Repair and Equipment Modification	300
TOTAL	4,000

($000)	MINIMUM (4000)	CURRENT (0)	PROPOSED (0)
New and modified fertilizers	2		
Phosphate rocks categorized	10		
Training individuals	300		
Preinvestment surveys	2		
Technical Assistance Missions	25		
Publications	10		

INCREMENT I	INCREMENT II
(0)	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	24,700	20,267	4,433		
Estimated Fiscal Year 1980	4,000	4,000		7/1/80 - 6/30/81	International Fertilizer Development Center - IFDC
Estimated through September 30, 1980	28,700	24,267	4,433		
Proposed FY 1981	4,000	4,000		7/1/81 - 6/30/82	
Estimated through Fiscal Year 1981	32,700	28,267	4,433		
Proposed FY 82	4,000	Future Year Obligations	Estimated Total Cost	7/1/82 - 6/30/83	
		Continuing	Continuing		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Richard Neal

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Aquaculture Technical Development	Agriculture, Rural Development and Nutrition	FY 82 450	LIFE OF PROJECT 3468
NUMBER 931-1314 NEW ☐ GRANT ☒ LOAN ☐ CONTINUING ☒	PRIOR REFERENCE FY 81 Annex V, Centrally Funded, pg 33	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To provide technical expertise on aquaculture development problems, and to maintain training services in aquaculture for less developed country fisheries workers.

Background and Progress to Date: This project, utilizing expertise developed at Auburn University under a previous 211(d) grant, supplies technical assistance and training in support of field projects. In Thailand, a cooperative program with the Department of Fisheries over a 5-year period had a significant impact on the development of local research and extension activities. In Brazil, major improvements in reservoir management, fish breeding and intensive pond culture have resulted from Auburn involvement. In the Philippines, major fisheries programs have been developed and significant increases in yields from brackish-water production ponds have occurred. In El Salvador, rural extension and demonstration activities have increased fish production by the rural poor. In Colombia, Auburn has played a major role in the formulation of government aquaculture programs and in implementing Colombia's new fisheries activities. A community fisheries program in Panama utilizes hog wastes from a piggery fattening program to feed pond fish and then utilizes the overflow to irrigate small vegetable farms. In addition, technical assistance in fisheries has been provided in Cameroon, Central African Empire, Ghana, Ivory Coast, Kenya, Liberia, Morocco, Nigeria, Rwanda, Sudan, Tanzania, Togo, Upper Volta, Zaire, Israel, Bangladesh, India, Indonesia, Philippines, Thailand, Malaysia, Pakistan, Taiwan, Vietnam, Brazil, Columbia, Costa Rica, Ecudor, Dominican Republic, Guatemala, Guyana, El Salvador, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay and Peru.

Host Country and Other Donors: The State of Alabama provides the facilities of the Auburn University, Department of Fisheries on which this project piggybacks.

Beneficiaries: Small-scale fish farmers and low income consumers of fish and fishery products in the less developed countries.

FY 82 Program: Grant support will be provided to Auburn to maintain their graduate school educational capacity in aquaculture; to produce manuals, texts and newsletters for use in the developing countries; to provide assistantships to less developed country scientists; to present short courses and special training in developing countries and at Auburn for less developed country scientists, extensionists and fish farmers; and to provide short-term consult services on a variety of technical aspects of aquaculture.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years
Professional aquaculturists receiving graduate training	unit (cost) 150 (8.5)
Professional aquaculturists receiving practical training	750 (1.0)
Manuals, texts and newsletters	14 (5.0)
Assistantships	20 (2.0)
Short Courses	30 (25.0)
Consultant Services	50 (8.5)

A.I.D. Financed Inputs:	FY 82
Personnel (120 person months)	300
Other Costs	150
TOTAL	450

MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(0)	(200)	(0)	(250)
		1) Facilities for 15 long term graduate students 2) One practical short course in US 3) Two person months of technical assistance to LDCs		1) Facilities for 25 additional LDC Graduate students 2) Six additional person months tech. assist to LDCs 3) Four manuals 4) One short course in a LDC

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	998	405	593		
Estimated Fiscal Year 1980	70	400		5/79 - 4/80	Auburn University
Estimated through September 30, 1980	1068	805	263		
Proposed FY 1981	200	275		5/80 - 4/81	
Estimated through Fiscal Year 1981	1268	1080	188		
Proposed FY 82	450	Future Year Obligations	Estimated Total Cost	5/81 - 4/82	
		1750	3468		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Charles A. Breitenbach

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
NOAA Advisory Service	Agricultural Rural Development and Nutrition	FY 82 250	LIFE OF PROJECT 2691
NUMBER 931-0242 GRANT ☑ LOAN ☐	PRIOR REFERENCE FY 1981 Annex V Centrally Funded pg 22	INITIAL OBLIGATION FY 76	ESTIMATED FINAL OBLIGATION FY 87
NEW ☐ CONTINUING ☑			ESTIMATED COMPLETION DATE OF PROJECT FY 88

Purpose: The purpose of this project is to assist less developed countries in assessing fisheries development opportunities, analyzing fisheries sector problems, and formulating and implementing solutions which will lead to increases in food fish availability and better income and employment opportunities for poor people in the fishery sector.

Background and Progress to Date: This project was initiated with the National Oceanographic and Atmospheric Administration in 1976 as a means of procuring services of capable fisheries advisors and experts to assist LDCs in program management, field support and technical representation responsibilities. A wide variety of services are being provided to developing countries through field missions and regional bureaus. Technical assistance has included surveys of fisheries and aquaculture development potential, project feasibility studies, design of fisheries projects, and assistance with implementation of projects when fisheries expertise is required. Assistance has been provided in Egypt, Sudan, Nigeria, Senegal, Mauritius, Mauritanis, Morocco, Guinea-Bissau, Cameroon, Djibouti, The Sahel, Panama, Colombia, Peru, Jamaica, Indonesia, Philippines and Thailand.

Host Country and Other Donors: None.

Beneficiaries: Small-scale fishermen, fishing communities, fish farmers and low-income consumers of fish and fishery products in the less developed countries are the beneficiaries.

FY 81 Program: Advisory assistance will continue in a variety of countries and regions, including several African republics. New approaches will be initiated to help recipient countries regulate fish harvests in their new 200-mile fishing zones, to assist with economic aspects of aquaculture, to address problems of personal income and nutrition in small scale fishing communities and to assist with management of the coastal zone and its fisheries.

Major Outputs (and A.I.D. unit cost):

	($ thousands) All Years unit	(cost)
Country and Technical Studies	15	(5)
Professional Representation	25	(2)
Program and Project Design	30	(6)
Technical Advice	450	(3)
Analyses of Traditional Fisheries Programs	35	(5)
Workshops	20	(4)
Publications and Reports	40	(8)

A.I.D. Financed Inputs:	FY 82
Personnel (42 person months)	200
Logistic Support	35
Other Costs	15
TOTAL	250

MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(250)	(0)	(0)	(0)

1) 12 mos technical services one senior fisheries advisor
2) 12 mos technical services one fisheries advisor (coastal fisheries)
3) 12 mos technical services one aquaculturist
4) 6 mos short term fisheries technical services for consultative assistance overseas

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	891	623	268		
Estimated Fiscal Year 1980	200	240		9/79 - 3/80	Department of Commerce - National Oceanic and Atmospheric Administration
Estimated through September 30, 1980	1091	863	228		
Proposed FY 1981	250	275		9/80 - 8/81	
Estimated through Fiscal Year 1981	1341	1138	203		
Proposed FY 82	250	Future Year Obligations	Estimated Total Cost	9/81 - 8/82	
		1100	2691		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Richard Neal

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Milkfish Seed Production	Agriculture, Rural Development and Nutrition	FY 82 100	LIFE OF PROJECT 250	
NUMBER 936-4025 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To develop a pilot scale demonstration hatchery for controlled spawning and rearing of milkfish and to train LDC technicians in hatchery procedures.

Background and Progress to Date: Basic research on physiological techniques to induce maturation and spawning of milkfish is near fruition. An A.I.D. supported research project with the Oceanic Institute has resulted in successful methods for inducing maturation and spawning experimentally under controlled conditions. The next step is to adapt experimental methods to field conditions and develop a pilot hatchery for commercial fry production in a LDC.

Host Country and Other Donors: Indonesia will be host country; however, impact will range throughout Southeast Asia, the South Pacific and probably other regions.

Beneficiaries: Primarily small-scale fish farmers in LDCs and low income consumers who will have access to increased quantitites of low-priced fish.

FY 82 Program: Initial steps will be taken to train Indonesian scientists, conduct workshops and transfer existing knowhow. A wide range of assistance in research planning and facility design will also be undertaken.

Major Outputs (and A.I.D. Unit Costs):	($ thousands) All Years unit	(cost)
Training of LDC scientists in Hawaii	4	(25.0)
Seminars and workshops in LDCs	2	(20.0)
Design of facility	1	(110.0)

A.I.D. Financed Inputs:	FY 82
Personnel	50
Travel	40
Commodities	10
TOTAL	100

MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(0)	(0)	(100) 1) 4 LDC students trained in Hawaii	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		Private Contractors and
Estimated Fiscal Year 1980	0	0		–	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0		–	
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	100	Future Year Obligations	Estimated Total Cost	10/81 - 9/82	
		150	250		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Kenneth Osborn

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Fishery Development Planning Assistance	Agriculture, Rural Development and Nutrition	FY 82 270		LIFE OF PROJECT 2090
NUMBER 936-4024 GRANT [X] LOAN [ ]	NEW [X] CONTINUING [ ]	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To assist the University of Rhode Island in the refinement and maintenance of a technical capability in fishery management and development and to provide the use of such capability for enhancing the fisheries sector to serve the needs of LDCs.

Background and Progress to Date: This project utilizes expertise developed at the University of Rhode Island under a previous 211(d) grant. Under the grant, Rhode Island was involved in a number of successful projects that were dependent upon utilization of the training, research, information, dissemination and state-of-the-art capabilities developed under the 211(d) grant. Outstanding examples of countries assisted include: Costa Rica, Guatemala, El Salvador, which benefited from a five-year cooperative program of research with respective departments of fisheries and national universities in stock assessment, post harvest loss reduction, catch and effort measurement, fisheries economics of harvest, wholesaling, retailing and transport, sociocultural impacts of fisheries projects and fisheries administration policy formulation. Ghana-design and testing of alternative smoking and drying techniques. Guinea Bissau development and evaluation of a special designed training program in fisheries technology boat, gear, refrigeration, etc. Malaysia, Tanzania, Indonesia -- development of university level marine curriculae. Azores -- stock assessment, training and fisheries extension training.

Host Country and Other Donors: Host country requests are services as needs arise. Countries to be served are not known at this time. The universities own resources supplement funds under this project.

Beneficiaries: Small scale fishermen, fishing communities and low income consumers of fish in LDCs.

FY 82 Program: To continue the Cooperative Agreement started in FY 81, in order to provide support to assist the university in maintaining a resource center to provide advisory and consulting services; training, research and other activities; applied research; and state-of-the-art work in fisheries development and to provide assistance to LDCs in these areas as requested.

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years unit	(cost)
Consultant services	70	(9.0)
Applied research reports for selected countries	24	(25.0)
State-of-the-art papers	12	(10.0)
LDC personnel in academic (long term) training	45	(9.0)
LDC personnel in practical (short term) training	300	(1.0)
Responses to requests for information	7000	(0.02)
Manuals on various aspects of fisheries development	18	(10.0)

A.I.D. Financed Inputs:

	FY 82
Personnel Services (31 person months)	200
Commodities	30
Miscellaneous	40
TOTAL	270

INCR. I	INCR. II
(270)	(0)
1) Facilities for 5 long term graduate students 2) Maintenance of information service 3) Two short courses for LDC students: One in US and one in a LDC 4) Three manuals	

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		University of Rhode Island
Estimated Fiscal Year 1980	0	0		-	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0		-	
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	270	Future Year Obligations	Estimated Total Cost	9/81 - 8/82	
		1820	2090		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Richard Neal

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Mollusk Culture and Utilization	Agriculture Rural Development and Nutrition	FY 82 200	LIFE OF PROJECT 1530	
NUMBER 936-4079 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86	ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To increase commercial production of molluscan shellfish in LDCs wherever their production can provide additional employment and high protein food for the poor.

Background and Progress to Date: An enormous potential exists for production of low-priced shellfish in natural bays and estuaries in the LDCs. The basic technology for this production has been developed and demonstrated at selected sites in the tropics. This project will provide a means for transferring existing technology efficiently and effectively to a large number of new sites where benefits in terms of food and income to LDC poor are greatest.

Host Country and Other Donors: Worldwide project impact with selected demonstration sites in all regions.

Beneficiaries: Primarily small-scale fishermen and fish farmers in LDCs and low income consumers who will have access to increased quantities of low-priced shellfish.

FY 82 Program: A new molluscan culture extension and demonstration center will be established within a U.S. institution from which organized technology transfer to LDCs can be organized and implemented.

Major Outputs (and A.I.D. Unit Costs):	($thousands) All Years) unit	(cost)
U.S. response capability	1	(150.0)
Workshops and training courses	15	(60.0)
Working demonstration farms	8	(40.0)
Establishment of new local industries	6	(30.0)

A.I.D. Financial Inputs:	FY 82
Personnel	140
Travel	30
Commodities	30
TOTAL	200

MINIMUM (0) CURRENT (0) PROPOSED (0) INCR. I (200) INCR. II (0)

1) Establishment of 2 demonstration farms in LDCs
2) One LDC workshop
3) One US response capability

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		US Seagrant Universities National Marine Fisheries Servie
Estimated Fiscal Year 1980	0	0		–	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0		–	
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	200	Future Year Obligations 1330	Estimated Total Cost 1530	10/81 - 9/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Philip M. Roedel

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Extended Maritime Jurisdiction	Agriculture, Rural Development and Nutrition	FY 82 100	LIFE OF PROJECT 1400
NUMBER 936-4077 GRANT ☑ LOAN ☐ / NEW ☑ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To assist developing countries in carrying out their new responsibilities for the wise utilization and rational management of their living aquatic resources under a regime of extended jurisdiction, with special respect to the requirements of small scale fishermen and fish culturists.

Background and Progress to Date: Extended Economic Zones (EEZ) (most commonly but not always 200-miles in width) are a fact of life, regardless of the outcome of the Law of the Sea negotiations. This means that many developing nations along with such developed ones as the US, have or soon will have exercised their authority over the living resources in the EEZ. For countries such as India, Somalia, and many of the archipelago nations it means gaining control over a huge area with equally huge resources. At the other end of the spectrum are countries, such as Thailand whose fishing operations off neighboring countries may be cut back to zero as those nations implement control over their EEZ's. For all countries it will require an accommodation to a new legal regime, whether the EEZ means a net gain (as for India) or a net loss (as for Thailand). This is an accommodation with which few, if any are truely prepared to cope but which all recognize as a serious problem. The LDCs through various international fora have expressed their need for assistance in carrying out major new responsibilities of ocean management. The LDCs want help; FAO is making a major response, but the magnitude of the problem is such as to require help from bilateral donors. The US has all the talent to make a significant contribution, and we can take advantage of the opportunity to fill a real need.

Host Country and Other Donors: Work will be carried out globally, the specific countries to be determined by requests for assistance and in coordination with other donors to the program, primarily FAO.

Beneficiaries: The developing world currently produces about 25 million metric tons of fish per year. The most recent estimates of supply, prepared by the National Academy of Sciences, in its World Food and Nutrition Study (1977), are that the LDCs can increase their catches by 20-30 mmt per year by harvesting the resources near their shores at an optimal rate under proper management. Much of the current LDC harvest is taken by small scale (artisanal) fishermen and much of the increase could be taken by them. They are numbered in the millions - 20-30 million according to FAO (1976). The problem of upgrading the rural fishing communities is thus one of major importance to the developing world and to one of the most impoverished segments of their population, the small scale fishermen. The success of programs designed to be of help to this group will in the long run depend in a large measure on the ability of the LDCs to manage their zones and the resources in them.

FY 82 Program: The details of the program will be developed as part of studies now in progress in the Fisheries Division. It will include a series of regional or national workshops and training both in-country and abroad, as well as responses to specific needs expressed by LDCs. This latter will build on experiences gained in FY 80 in West Africa and the South Pacific.

Major Outputs (and A.I.D. unit Cost):	($ thousands) All Years unit	(cost)
Workshops	6	(75.0)
Training in LDCs	100	(4.0)
Training of LDC Nationals Abroad	30	(8.0)
Responses to LDC requests for assistance	25	(9.0)

A.I.D. Financed Inputs:	FY 82
Personnel Services (15 person months)	80
Commodities	20
TOTAL	100

MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(0)	(0)	(100) 1) Workshop in a LDC 2) One short course in a LDC	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		Not known at this time
Estimated Fiscal Year 1980	0	0		-	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0		-	
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	100	Future Year Obligations	Estimated Total Cost	11/81 -10/82	
		1300	1400		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Richard Neal

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP - Fisheries/Aquaculture	Agriculture Rural Development and Nutrition	FY 82 850	LIFE OF PROJECT Continuing
NUMBER 936 4023 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81 Annex IX for Inst. for Scientific & Tech. Cooperation pg 34	INITIAL OBLIGATION FY 80 Continuing	ESTIMATED FINAL OBLIGATION FY Continuing / ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To develop and refine pond production technology which will lead to increased food fish availability and better income and employment opportunities for poor people in LDCs.

Background and Progress to Date: A review of fishery sector research needs has identified efficiency of pond aquaculture systems as a high priority for Title XII research activity. An effort is underway to develop a research program which will focus the resources and capabilities of U.S. universities on pond culture problems which constrain production increases in LDCs. A detailed research agenda is being developed and partial program funding is expected during FY 80. Emphasis will be on describing principles and refining practices of aquaculture systems.

Host Country and Other Donors: Cooperating host countries will be determined as the full research program takes shape. Participating U.S. universities (Auburn University, University of California, Davis, and the Consortium for International Fisheries and Aquaculture Development) will provide supporting resources equal to 25% of the cost.

Beneficiaries: Primarily small scale fish farmers in LDCs and low income consumers who will have access to increased quantities of low-priced fish.

FY 82 Program: This project will provide incremental funding for the Title XII Collaborative Research Program currently being planned.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years Unit	(cost)
Research findings leading to major improvements in culture methods	20	(100)
Research findings of basic significance	10	(120)
New techniques for improving production	40	(25)
Technical Reports	25	(20)
Research training for professional LDC scientists	6	(50)

A.I.D. Financed Inputs:

	FY 82
Personnel	200
Travel	150
Commodities	50
Sub grants	450
TOTAL	850

MINIMUM (0)

CURRENT (0)

PROPOSED (0)

INCR. I (850)

1) Maintenance of Aquaculture Network System
2) Updating of State of the Arts
3) Adaptive Research Programs in 6 LDCs

INCR. II (0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		Auburn University
Estimated Fiscal Year 1980	1750	300		2/80 - 9/80	University of California, Davis
Estimated through September 30, 1980	1750	300	1450		Consortium for International Fisheries and Aquaculture Development
Proposed FY 1981	00	1200		10/80 - 9/81	
Estimated through Fiscal Year 1981	1750	1500	250		
Proposed FY 82	850	Future Year Obligations	Estimated Total Cost	10/81 - 9/82	
		Continuing	Continuing		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Kenneth Osborn

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP Fisheries/Stock Assessment	Agriculture Rural Development and Nutrition	FY 82 600	LIFE OF PROJECT Continuing
NUMBER 936-4086 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81 Annex IX for Inst. for Scientific & Tech. Cooperation pg 34	INITIAL OBLIGATION FY 81	ESTIMATED FINAL OBLIGATION FY Continuing / ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To develop and refine fishery management and exploitation practices thereby increasing harvests of food fish and employment in LDCs.

Background and Progress to Date: In an analysis of fisheries sector needs, and the U.S. university capabilities to assist with those needs, it was found that stock assessment is a priority area for the Title XII Research Program. A workshop has been conducted involving leading fisheries authorities from around the world to identify priority research topics and to plan a research program. This CRSP is a result of the planning and the potential contributions to food and employment possible from improved management of fishery stocks in the LDCs. Research will be conducted on a collaborative basis with LDC institutions and will include studies of improved methods for measuring stock abundance, monitoring impact of fishing, and impact of management techniques and other specific topics related to increasing use of multi-species, tropical stocks.

Host Country and Other Donors: Cooperating host countries will be determined as the full research program takes shape. Participating U.S. universities yet to be identified, will provide supporting resources equal to about 25% of the cost.

Beneficiaries: Primarily small-scale fishermen in LDCs and low income consumers who will have access to increased quantities of low-priced fish.

FY 82 Program: This project will provide incremental funding for the Title XII Collaborative Research Program currently being planned.

Major Outputs (and A.I.D. unit cost):	($ thousands) All Years unit	(cost)
Analysis of sector needs	12	(40)
Basic research findings of broad significance	8	(100)
Improved management practices	40	(20)
Publications	20	(5)
Strengthened management capability	12	(60)

A.I.D. Financed Inputs:	FY 82
Personnel	250
Travel	60
Commodities	80
Sub grants	210
TOTAL	600

MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(0)	(0)	(600)	(0)

1) Establishment of Stock Assessment Network
2) Preparation of State of The Arts
3) Development of 4 Stock Assessment Models
4) Implementation of Assessment Programs in 2 LDCs

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		U.S. Seagrant Universities
Estimated Fiscal Year 1980	0	0		-	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	600	0		10/80 - 9/81	
Estimated through Fiscal Year 1981	600	500	100		
Proposed FY 82	600	Future Year Obligations	Estimated Total Cost	10/81 - 9/82	
		Continuing	Continuing		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Kenneth W. Osborn

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
CRSP Fisheries/Post Harvest Utilization	Agriculture, Rural Development and Nutrition	FY 82 500	LIFE OF PROJECT Continuing
NUMBER 936-4088 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE FY 81 Annex IX for Inst. for Scientific & Tech. Cooperation pg 34	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY Continuing / ESTIMATED COMPLETION DATE OF PROJECT FY Continuing

Purpose: To increase the availability of food fish to poor consumers, to provide additional employment for low income coastal fishermen and to develop small rural fish processing industries.

Background and Progress to Date: In many LDCs there is a shortage of food in coastal and inland areas, coincidental with a potential high demand for high quality fish products and an actual loss of fishery products between time of capture and consumption. This loss results from the spoilage of the product through microbiological and/or chemical processes and actual consumption by insects. Although difficult to document, these losses have been estimated to be 30% and higher in certain selected situations. This results in the losses of hundreds of thousands of tons of food annually. Yet, virtually nothing is known about the mechanisms involved in the deterioration of seafood products nor what processes could be employed to reverse these losses and provide a significant amount of additional food for consumption by poor consumers, without increasing the catch of fish. To explore the possibilities of utilizing these presently wasted fishery products in a beneficial manner a long-term research program in a numbers of areas that seem possible of improvement will be carried out.

Host Country and Other Donors: Research institutions in a number of LDCs will be involved as cooperating institution in this research. The countries and institutions have not been identified at this time.

Beneficiaries: Low income consumers, fishery shore workers and small-scale coastal fishermen in LDCs.

FY 82 Program: The details of this program will be developed through joint efforts of A.I.D. (DS/AGR), JRC and BIFAD, which are working on this Title XII initiative on a continuing basis.

Major Outputs (and A.I.D. Unit Costs):	($ thousands) All Years unit	(cost)
Research on Raw Fish Handling & Marketing	4	(125.0)
Research on Improvement of Traditional Harvesting	3	(210.0)
Research on Innovations and New Systems	8	(90.0)
Research on Health Hazards	5	(110.0)

A.I.D. Financed Inputs:	FY 82
Personnel Services (45 person months)	300
Commodities	200
Miscellaneous	100
TOTAL	500

MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(0)	(0)	(500) 1) Preparation of State of the Art Study 2) Initiation of 4 Research Studies, each with 1 LDC	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		Not known at this time
Estimated Fiscal Year 1980	0	0		-	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0		-	
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	500	Future Year Obligations: Continuing	Estimated Total Cost: Continuing	10/81 - 9/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Charles A. Breitenbach

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
ICLARM - Fisheries Development	Agriculture, Rural Development and Nutrition	FY 82: 400		LIFE OF PROJECT: 3500
NUMBER 931 1050 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81 Annex IX for Inst. for Scientific & Tech. Cooperation pg 34	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To support research on fisheries and aquaculture in the LDCs, improve the flow of technological information to small scale fish farmers and fishermen, and provide training opportunities to junior LDC scientists who will support improved fishery sector performance.

Background and Progress to Date: The International Center for Living Aquatic Resource Management is a relatively new international research and development center with headquarters in Manila. It is seeking a broad base of international funding to support its objectives of increasing fishery sector output and efficiency in the LDCs. AID's initial contribution of $800,000 for three years has been authorized. It is expected that, ultimately, financial support to ICLARM can be provided through the Consultative Group for International Agricultural Research or some similar convention. A.I.D. has agreed in principle to long-term funding for The International Center for Living Aquatic Resource Management, providing international support is obtained and other Agency expectations are met. A minimum funding of $700,000 for an additional 2-year period is proposed as part of this project or up to 25% of the core budget contingent upon the realization of international support from other donors.

Host Country and Other Donors: The International Center for Living Aquatic Resource Management's mandate is a global one and the center works with targets of opportunity in a number of LDCs. Initial program efforts have been concentrated in Asia. The International Center for Living Aquatic Resource Management receives financial support, either in the form of unrestricted core support or specific project financing from the Rockefeller Foundation, USAID, Australia, West Germany, Philippines. Other private foundation grants are optimistic.

Beneficiaries: Small scale fish farmers, artisanal fishermen and low income consumers of fish and fishery products in the LDCs.

FY 1982 Program: Fourth year funding for unrestricted core program support will be provided.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All years
Unrestricted core support co-mingled with other donor funds	1300 (initial 800 approved for 3-yr period + 400 in FY 82)

Outputs will be research results, strengthened fisheries research, training and extension capacity in LDCs, and improved international communication on fisheries sector development problems.

A.I.D. Financed Inputs:

	($ thousands) (FY 82)
Unrestricted core support	400

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MINIMUM	CURRENT	PROPOSED	INCR. I	INCR. II
(0)	(0)	(0)	(400) 1) Core Budget	(0)

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979	300	70	230		
Estimated Fiscal Year 1980	200	230		7/79 - 5/80	International Center for Living Aquatic Resources Management (ICLARM)
Estimated through September 30, 1980	500	300	200		
Proposed FY 1981	300	300		7/80 - 6/81	
Estimated through Fiscal Year 1981	800	600	200		
Proposed FY 82	400	Future Year Obligations	Estimated Total Cost	7/81 - 6/82	
		2300	3500		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Michael Benge

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Agro-forestry Crop Systems	Agriculture, Rural Development and Nutrition	FY 82 700	LIFE OF PROJECT 10,700
NUMBER 936-4080 GRANT ☒ LOAN ☐ NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To counter the adverse effects of deforestation; i.e. soil erosion and degeneration and environmental degradation, while increasing agricultural output.

Background and Progress to Date: It is virtually impossible to overstate the adverse effect that deforestation is having by reversing gains made in agricultural production throughout the LDCs.

- Some 36 million square kilometers (25% of the earth's land surface) are cultivated by shifting cultivation.
- 630 million or 35% of the total population of the developing countries depend upon forested areas for their food and livelihood.
- 10 million hectares of high forest are destroyed each year due to slash-and burn agriculture.
- Shifting cultivators produce food for more than 300 million people.

There are a number of plants used in soil erosion control systems throughout the LDCs. Emperical evidence indicates that they can be effectively used in cropping systems to reduce soil erosion, as a source fertilizer, as forage for animals, as human food windbreaks, as fences and as a ready sourced wood fuel.

There are a number of legumenous plants/trees that need to be investigated as to their utilization in cropping systems to increase crop yields and/or for soil erosion control. Non legumenous plants, are also used in cropping systems with degrees of success.

Research is needed to develop low cost Agro-forestry technology and to identify and exploit underutilized tropical plants to reduce environmental degradation, the high rate of erosion and the low productivity of hillyland farms in once forested areas.

The project will be accomplished by providing viable alternatives (to present practices) and appropriate technology through applied research/demostration cropping systems that incorporate trees, modified forms of trees or other plants as living barriers to reduce soil erosion and increase crop yields. In addition, a portion of the on-farm fuelwood needs will be met through such cropping systems.

Host Country and Other Donors: It is anticipated that host countries and other donors will participate in this project.

MINIMUM (0) CURRENT (0) PROPOSED (0)

Beneficiaries: The ultimate beneficiaries of this project will be the marginal hilly land farmers in the LDCs. However, the immediate beneficiaries will be the designers and implementors of soil erosion, crop improvement, water management project planners and implementors worldwide.

FY 82 Program: The project will be initiated by the selection of (an) experimental site(s), obtaining necessary base line date and establishing experimental plot(s) and seed nurseries.

Major Outputs (and A.I.D. unit Cost):

	($ thousands) All Years unit	(cost
Pilot projects	3	(2000)
Train LDC technologists in Agro-forestation system techniques	300	(4)
Soil erosion/water management seminars	10	(100)
Field service activities to LDCs	50	(15)

A.I.D. Financed Inputs:

	FY 82
Salaries (60 person months)	350
Travel	200
Operations	150
TOTAL	700

INCREMENT I (600)
1. Two sites selected
2. Two month support service
3. One seminar

INCREMENT II (100)
1. Work initiated on site

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	–	–	–		To be determined.
Estimated Fiscal Year 1980	–	–		–	
Estimated through September 30, 1980	–	–	–		
Proposed FY 1981	–	–		–	
Estimated through Fiscal Year 1981	–	–	–		
Proposed FY 82	700	Future Year Obligations 10,000	Estimated Total Cost 10,700	1/1/82 - 10/31/82	

PROGRAM: GRANT/LOAN FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Michael Benge

TITLE: Reforestation of Degraded Soils	FUNDS: Agriculture, Rural Development and Nutrition	PROPOSED OBLIGATION (In thousands of dollars) FY 82: 700	LIFE OF PROJECT: 10,200
NUMBER: 936-4081 GRANT ☒ LOAN ☐	NEW ☒ CONTINUING ☐	PRIOR REFERENCE: None	
INITIAL OBLIGATION FY: 82	ESTIMATED FINAL OBLIGATION FY: 86	ESTIMATED COMPLETION DATE OF PROJECT FY: 87	

Purpose: To develop, test, compare and demonstrate capital saving technologies that can be used to establish a more balanced ecological system and reclaim vast areas of under-utilized-unproductive-marginal lands that are degraded and have soils that are eroded and leached and leached of nutrients essential for productive plant growth.

Background and Progress to Date: These lands are dominated by noxious grasses, weeds and plants of low value. This applied research and demonstration will field test and compare different methods and systems of establishing trees and other plant cover such as: direct seeding vs seedling transplanting, soil amelioration with fungi, bacteria and application of various nutrients, and combining complementary plant and tree species. Vast areas of the LDCs have been deforested and rains are no longer absorbed by the soil, thus surface run-off results in severe flooding of low-lying agricultural lands. This causes millions of dollars of destruction of agricultural crops, destroyed infrastructure, loss of personal property and lives, and the siltation of streams and dams, thus reducing aquatic life and energy production. Fuelwood necessary to maintain basic human needs is becoming scarce in many of the LDCs. Vast sums of money is being spent in attempts to establish tree cover on these degraded lands because of the high atrition rate of transplanted seedlings. Additionally, those that survive grow poorly due to the lack of adequate soil nutrients. Some of these denuded areas are so vast that trained manpower sources and managerial skills, and funding levels are inadequate to reclaim these lands through traditional planting methods. Indonesia has come 16 million hectares of this degraded land, the Philippines 6 million ha and Thailand 5 million ha. Nepal's deforestation problem is well known. Haiti is almost totally deforested, Jamaica is well on its way, and it is predicted that the forests of Honduras and Costa Rica may be wiped out by the year 2000. Africa's fuelwood problem, as well as deforestation, is well documented and in some areas women spend from 2-300 days a year collecting firewood. Leguminous trees such as, Leucaena, Prosopis Robinia Sesbania, and plants such as clovers, lupins, lucerne, crown vetch lotus and Stylosanthes are very tolerant to poor soils and adverse conditions. The vast areas affected in the LDCs render traditional methods of reforestation (transplanting seedlings) too costly. Therefore, new methods of reforesting large areas with relative low cash outlays need to be developed in order to reclaim as much area as soon as possible to reduce the proportions of present day environmental degradation in the LDCs.

MINIMUM	CURRENT	PROPOSED	INCREMENT I
(0)	(0)	(0)	(600)

1. One training program
2. Select pilot site
3. One seminar

Host Country and Other Donors: It is anticipated that the Missions, the host countries and other donors will participate in this project.

Beneficiaries: The immediate beneficiaries of this project will be the designers and implementors of soil erosion - reforestation - water management project planners and implementors world wide. However, indirectly, the small farmers in the low lying areas (whose crops are perennially destroyed), local governments (expending large amounts of money on destroyed to infracture), those persons who suffer loss of property and life in floods, and low income groups (who will gain from jobs generated by reforestation), lumbering - wood production and a lower cost of fuel and wood products) will benefit.

FY 82 Program: The project will be initiated by the selection of (an) experimental site(s), obtaining necessary base line data, carry out preliminary trials and establish treatments.

Major Outputs (and A.I.D. unit Cost):	($ thousands) All Years unit	(cost)
Development of a technology to reclaim unproductive lands through the aerial seeding of tree legumes for reforestation.	1	(1000)
Pilot projects	2	(2000)
Train technologists in aerial seeding of tree legumes technology.	100	(10)
Desseminate information on aerial seeding.	1	(50)
Develop and hold seminars on the reclamation of underutilized lands through aerial seeding with LDCs.	10	(100)
Field service activities to LDCs.	50	(15)

A.I.D. Financed Inputs:	FY 82
Salaries (60 person months)	350
Travel	200
Operations	150
TOTAL	700

INCREMENT II
(100)

1. Initial program at one site

1861

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		To be determined
Estimated Fiscal Year 1980	0	0		-	
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0		-	
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	700	Future Year Obligations	Estimated Total Cost	1/1/82 - 10/31/82	
		9,500	10,200		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: S. K. Boyd

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Progress Indicators - El Salvador	Agriculture, Rural Development and Nutrition	FY 82 200	LIFE OF PROJECT 800	
NUMBER 931-0236.05 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981, Annex V, Centrally Funded, P. 18	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 82	ESTIMATED COMPLETION DATE OF PROJECT FY 83

Purpose: To develop and utilize measures of levels of living in order to improve the ability of national agricultural and rural development planning units to better define, evaluate and solve rural development problems.

Background and Progress to Date: This project had its origins in the 1974 meetings of the Central American Ministers of Agriculture at which time they agreed to give increased attention to improving the quality of life in the rural sector through providing improved employment opportunities and more equitable income distribution. The five Central American presidents also stressed that priority was to be given to the region's agricultural development. The Secretariat for Economic Integration for Central America (SIECA) was then requested to prepare a background study on the quality of life of the rural person in Central America. After extensive design work, a joint project proposal for measuring and comparing the levels of living of the rural poor was approved by the government of El Salvador, AID and SIECA/ECID in FY 1979.

The investigative work for this project has now begun. The basic core set of progress indicators is being defined so that this set can be generated by El Salvador multi-purpose household survey. The analytical methodology is also being developed, selecting the most relevant indicators from the large number of possible measures of progress.

Host Country and Other Donors: El Salvador and the Secretariat for Economic Integration for Central America.

Beneficiaries: The rural poor of El Salvador and other Central American countries. Intermediate beneficiaries include planning units, particularly the Ministry of Planning in El Salvador.

FY 82 Program: Analyses will be carried out with observations available from the initial core set of indicators to measure the levels of living of the rural poor will be selected. Methods of comparing differences in levels of the accuracy of the indicators will be determined by comparing the indicators to information available from the census data and other surveys.

Major Outputs:

	($ thousand) All Years unit	(cost)
Method for the analysis of progress indicators	1	(200)
Socio-economic progress indicators data set	1	(455)
Technical Reports	7	(11)
Major Workshops/Seminars	3	(24)

A.I.D. Financed Inputs:

	FY 82
Personnel (36 person months)	88
Operating Expenses	55
Administrative Expenses	35
Consultants	22
TOTAL	200

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(200)	(0)	(0)

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979	200	20	180		Secretariat for Economic Integration for Central America -- Special Studies unit
Estimated Fiscal Year 1980	200	300		5/21/80-5/20/81	
Estimated through September 30, 1980	400	320	80		
Proposed FY 1981	200	200		5/21/81-5/20/82	
Estimated through Fiscal Year 1981	600	520	80		
Proposed FY 82	200	Future Year Obligations	Estimated Total Cost	5/21/82-5/20/83	
		-0-	800		

1-87

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John C. Bay

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Basic Planning-Water Resources	Agriculture, Rural Development and Nutrition	FY 82: 300	LIFE OF PROJECT: 2,000
NUMBER 931 0236.91 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81 Annex V Centrally Funded, p. 13	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 86 / ESTIMATED COMPLETION DATE OF PROJECT FY 87

Purpose: To assist in the determination of alternative methods of problem analysis and the data requirements for an improved understanding of water use in the LDCs, and to provide technical assistance to AID/W, USAID missions and the various LDC governments in analyzing policies for water resources development and utilization.

Background and Progress to Date: Priority functional areas that are major constraints to development in LDCs were selected, including water resource pricing policies, and on farm allocation. Colorado State University (CSU) and University of Minnesota (UM) were selected to assist in further design work under an A.I.D. Cooperative Agreement, which included a review of DS/AGR Water Management projects analysis, A.I.D. documents and preliminary classification of water policy problem areas. A workshop was conducted by CSU/UM with AID/W technical personnel to discuss problems and issues of water policy concern.

Information packages were sent to 28 USAID missions which had been identified by the regional bureaus as potentially in need of technical assistance. Collaboration in development of project design was pursued with CSU and UM. Reconnaissance visits were made to eight LDCs to identify specific irrigation system issues and ascertain USAID mission/host country interest in project participation. A water policy seminar was held in Egypt. A workshop was conducted by CSU/UM in AID/W to review findings from the field reconnaissance trips and to design field studies.

Host Country and Other Donors: Potential cooperating countries include Thailand, India, Sudan, and Egypt.

Beneficiaries: Small farmers in LDCs are the ultimate beneficiaries. Intermediate benefits to selected LDC planning institutions, USAID missions, and regional bureaus of AID/W, will accrue in the form of improved project planning, design, implementation, and evaluation.

FY 82 Program: Field work for in-depth applied research will be undertaken in at least two countries and analysis of data for one country will be completed during the year. A workshop will be conducted in a host country and in AID/W to report findings and conclusions of project studies. Direct technical assistance to USAID missions with collaborative irrigation projects will be continued and expanded.

Major Outputs (and A.I.D. Unit Cost):

	($ thousands) All unit	Years (cost)
An information bank on water policies and pricing	1	(110)
Technical assistance in water policies and pricing utilized by LDC planning units, USAID missions, and AID/W regional bureaus	24	(26)
Applied Research, Issues papers and reports	32	(15.65)
Conferences and Workshops	24	(31.87)

A.I.D. Financed Inputs:

	FY 82
Personnel (33 person months)	130
Support, Travel, and Other direct costs	143
Workshops and Seminars	27
TOTAL	300

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(300)	(0)	(0)

U.S. FINANCING (In thousands of dollars)				Funding Period	Principal Contractors or Agencies
	Obligations	Expenditures	Unliquidated		
Through September 30, 1979	541	- 0 -	541		
Estimated Fiscal Year 1980	0	200		10/1/79-9/30/80	Colorado State University (CSU)
Estimated through September 30, 1980	541	200	341		University of Minnesota (UM)
Proposed FY 1981	275	400		10/1/80-9/30/81	
Estimated through Fiscal Year 1981	816	600	216		
Proposed FY 82	300	Future Year Obligations	Estimated Total Cost	10/1/81-9/30/82	
		884	2,000		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Rex Rehnberg

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
LA Planning Network	Agriculture, Rural Development and Nutrition	FY 82: 75	LIFE OF PROJECT: 1,182
NUMBER 931-0236.70 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE: FY 81 Annex V Centrally Funded, p.	INITIAL OBLIGATION FY 77	ESTIMATED FINAL OBLIGATION FY 82 / ESTIMATED COMPLETION DATE OF PROJECT FY 82

Purpose: To improve and build institutional capabilities for agricultural and rural sector planning and policy analysis in Latin America and Caribbean (LAC) countries through the facilities of the InterAmerican Institute of Agricultural Sciences (IICA).

Background and Progress to Date: The project was initiated in late 1977. Following the development of a conceptual model of the planning process, a general survey of the state of the art in planning was conducted in 23 LAC countries. In addition, case studies which probed special aspects of planning were conducted in five countries. These activities resulted in seven publications.

These materials provided the background for a series of three seminars held for officials engaged in the planning process; in San Jose, Costa Rica for the countries of Central America; in Lima, Peru for South America; and in Kingston, Jamaica for the English speaking countries of the Caribbean. The results of each seminar were published for wide distribution. In addition, English versions of the conceptual framework and the general survey were published.

The ultimate aim of the project is to provide planning assistance through IICA, on a request basis, to planning agencies in the region. Examples of such assistance include drastically changing the organization of the units concerned with planning in the Government of Costa Rica in order to improve its effectiveness. Training activities were conducted in Peru, Guyana, El Salvador and Honduras. IICA in-country personnel have responded to requests for assistance in Chile, Colombia, Guatemala, Mexico, Peru and Venezuela.

Training materials are now being prepared to facilitate further training activities.

Host Country and Other Donors: IICA is using part of its core budget to expand activities beyond that portion financed by A.I.D. In addition $1.5 million are being expended on other planning projects within the IICA program. Countries benefitting will ultimately include all countries of the LAC region.

Beneficiaries: The immediate beneficiaries are the planning personnel in the countries receiving assistance with the ultimate beneficiaries being the food producers and consumers who are directly affected by improved policies and planning in their respective countries.

FY 82 Program: The program during this year will consist of additional assistance to specific countries in response to individual requests. Major activities will consist of workshops, short courses and individual consultations.

Major Outputs (and A.I.D. Unit Cost):

	($ thousands) All Years unit	(cost)
Country Assessments	23	(4)
Training Courses and Workshops	20	(22)
Country Level Technical Assistance Programs	15	(7)
Network Development Programs	23	(6)

A.I.D. Financed Inputs:

	FY 82
Personnel (7 person months)	45
Support, Travel, and other direct costs	10
Seminars and Workshops	20
TOTAL	75

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(75)	(0)	(0)

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	757	443	313		InterAmerican Institute of Agricultural Sciences (IICA) Iowa State University (ISU) Michigan State University (MSU)
Estimated Fiscal Year 1980	225	438		10/1/80-9/30/80	
Estimated through September 30, 1980	982	882	100		
Proposed FY 1981	125	150		10/1/81-9/30/81	
Estimated through Fiscal Year 1981	1,107	1,032	75		
Proposed FY 82	75	Future Year Obligations	Estimated Total Cost	10/1/81-9/30/82	
		- 0 -	1,182		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Rex Reimberg, DS/AGR Paul Fritz, DS/RAD

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Farming Systems for Small Farmers	Agriculture and Rural Development and Nutrition A	FY 82: 422	LIFE OF PROJECT: 3,500
NUMBER 936-4099 NEW ☐	PRIOR REFERENCE	INITIAL OBLIGATION FY 81	ESTIMATED FINAL OBLIGATION FY 85
GRANT ☒ LOAN ☐ CONTINUING ☒	NONE		ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: The purpose of the project will be to marshall intellectual resources which A.I.D. Missions and LDC Institutions can draw upon for work in preparing and improving farming systems research and development strategies. These strategies will be aimed at increasing the responsiveness of agricultural research and extension activities in LDCs to the needs of small farm families.

Background and Progress to Date: The apparent lack of success in improving the livelihood of small farmers has led to increasing pressure to seek improved methods of developing relevant technology which when combined with appropriate developmental policies will lead to an enhanced living condition for the small farmer.

Additionally, there is an increasing realization that an understanding of the problems farmers face is required to ascertain research priorities that could result in relevant improved technology. This understanding is also essential in designing appropriate developmental policies.

The proposed project will assist missions and LDC institutions design, operate and evaluate farming systems research and development strategies by providing the following services from a cooperating university or consortium of cooperating universities: state of the art papers, consulting and applied research in LDCs in close cooperation with missions and LDC researchers, development of a roster of expert multidisciplinary teams of farm systems consultants available for work in this area; and dissemination of information through publications, workshops and seminars involving mission and LDC practitioners and members of the network with emphasis on promoting dialogue on farming systems research and development strategies and experiences.

Host Country and Other Donors: Worldwide.

Beneficiaries: The direct beneficiaries of this project will be the farm families on small farms. It should be noted that this type of project and this type of research is one of the few mechanisms available to target a stream of benefits directly to this target group efficiently in that the investments made will address their programs and constraints directly and specifically. Few other development efforts have such a precise effect on this group.

DS/AGR Inputs	MINIMUM	CURRENT	PROPOSED
	(0)	(0)	(200)
			1 short term consultant
			2 state of the art papers prepared
			2 short term consulting teams dispatched

FY 82 Program: In FY 82, the following activities will be begun: Assisting Missions and LDC institutions with improved understanding of Farm Systems Approach with emphasis on program design, implementation and evaluation. Assembling and synthesizing historical and contemporary knowledge on the farming systems approach in a convenient and useful form for planners and practitioners, generating new knowledge through special studies and applied research in countries with national farm systems research and development programs. Developing and operating a network of specialists with expertise in the design, operation and evaluation of the farming systems approach in LDCs.

These activities will be designed to increase the flow of information and the analytical and consulting resources needed for decision making on the design and implementation of improved national farms systems research and development strategies.

Major Outputs:

	($ thousands) All Years unit	(cost)
A consulting and resource roster of farm systems research and development experts	1	(100)
Consulting and applied research on the critical problem of developing improved technologies for the small farmer through the farming systems research and development approach	20	(75)
State of knowledge papers and case studies of farming systems research and development experience and special short term studies requested by Missions and LDC governments.	8	(50)
Dissemination of information on farming systems research and development experience to LDC, AID, and other practitioners and members of the consulting network.	25	(55)

A.I.D. Financed Inputs: (DS/AGR Funds)	FY 1982
Personnel (76 pm)	300
Travel and other costs	122
TOTAL	422

INCREMENT I	INCREMENT II
(0)	(222)
	1 long term consultant
	2 short term consultants
	1 Research Extension System Design
	1 Field testing of system design

U.S. FINANCING (In thousands of dollars)						Funding Period	Principal Contractors or Agencies
	RAD Inputs	AGR Inputs		Obligations	Expenditures	Unliquidated		
Through September 30, 1979	–	–		–				
Estimated Fiscal Year 1980	–	–		–				
Estimated through September 30, 1980	–	–		–				
Proposed FY 1981	–	+	265 =	265	–		9/81 - 3/82	To be determined
Estimated through Fiscal Year 1981	–	+	265 =	265	–	265		
Proposed FY 82	500	+	422 =	922	Future Year Obligations 2313	Estimated Total Cost 3500	3/82 - 3/83	

*Combined DS/AGR + DS/RAD Inputs

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Rollo Ehrich, DS/AGR John Lewis DS/RAD

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Rural Market Systems	Agriculture, Rural Development and Nutrition*	FY 82 500	LIFE OF PROJECT 3,000
NUMBER 936-5313 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 81, Annex V, Centrally Funded, p. 64	INITIAL OBLIGATION FY 81	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To assist developing countries overcome the critical bottlenecks impeding small scale farmers and other rural producers from marketing their goods for equitable returns.

Background and Progress to Date: The priority given to marketing by USAID field missions as manifested through responses to DS/RAD and DS/AGR surveys, country project portfolios, country development strategy statements and sector assessments is very high--second only to their concern for rural employment issues. There is also a growing conviction that assistance in marketing must be focused directly on the small farmers and markets serving them, rather than concentrating on the broader questions of agricultural marketing efficacy. A key element in the process of improving small farmer access to marketing services is a better understanding of the larger economic environment affecting markets and market prices. Focus on smaller farmers and economic factors affecting their markets requires a new, interdisciplinary methodology for obtaining and analyzing data on (1) small farmer access; (2) questions of market structure, conduct and performance; and (3) price policy and cost effectiveness and relating these to the condition of the small farmer.

Preparation of this project was begun by undertaking three separate case studies in Thailand, Guatemala and Cameroon. Each of these studies was carried out by research teams with differing research methodologies and disciplinary emphases. All, however, examined the socio-economic characteristics of both the farmers and the marketers. The case studies indicate that successful market-related rural development objectives should emphasize equity, access, and rural employment; and that where efficiency goals conflict with those three elements, efficiency must be sacrificed. In short, the strategy to be followed in this project is to improve small farmer access to marketing services, not to develop the most efficient agricultural marketing system

Host Country and Other Donors: The project will work closely with the UN Food and Agriculture Organization, the InterAmerican Institute for Agricultural Sciences, the Institute for Crop Research in the Semi-Arid Tropics and the Nutrition Institute of Central America and Panama. During the implementation of the project every effort will be made to obtain joint funding from LDC governments and USAIDs to insure high priority of and commitment to the individual sub-projects assisted by this centrally funded project.

Beneficiaries: The primary beneficiaries are the poor of the rural and non-metropolitan areas of recipient countries, including small rural producers, landless laborers, and small entrepreneurs who are not penalized by market inequities.

FY 82 Program: This project will carry out applied research and provide technical services to LDC governments and USAIDs to assist in: 1) Identification of the range of constraints which inhibit the small farmer from marketing his produce for equitable returns, 2) Designing of marketing strategies that directly address the equity needs of the small farmer, 3) Carrying out in-depth case studies and 4) Evaluating the impact of interventions. Information dissemination under the project will include two state-of-the-art papers, a worldwide workshop which will explore comparative problems on the subject of small farmer marketing systems, and distribution of research publications.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit	(cost)
In-depth Applied Research and Long term consultants	8	(200)
State-of-the-art papers	4	(25)
Short term consultants	10	(75)
Workshops and information dissemination	5	(25)

A.I.D. Financed Inputs: (DS/AGR Funds)	FY 82
Personnel (71 person months)	375
Travel and Other costs	125
TOTAL	500

Note: Jointly funded and managed by the Office of Rural Development (RAD) and Agriculture (AGR).

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(200) 2 short-term consultants 2 workshops	(0)	(300) 3 short-term consultant 1 state-of-the-art paper 2 workshops

Funding source: DS/AGR

U.S. FINANCING (In thousands of dollars)						Principal Contractors or Agencies
Combined DS/.	RAD	AGR	Obligations	Expenditures	Unliquidated	Funding Period	
Through September 30, 1979			-	-	-		To be determined
Estimated Fiscal Year 1980			-	-		-	
Estimated through September 30, 1980			-	-	-		
Proposed FY 1981	200 +	0	200 *	200		6/81 - 5/82	
Estimated through Fiscal Year 1981	200	+ 0	200	200	300		
Proposed FY 82	150	+ 500	650 *	Future Year Obligations 2150	Estimated Total Cost 3,000	6/82 - 5/83	

*Combined DS/AGR + DS RAD Inputs

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Rollo L. Ehrich

TITLE: Ag. Sector Planning & Support Services	FUNDS: Agriculture, Rural Development and Nutrition	PROPOSED OBLIGATION (In thousands of dollars): FY 82 500	LIFE OF PROJECT: 4,400
NUMBER 931-0060 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE: FY 1980, Annex V, Centrally Funded, p. 13	INITIAL OBLIGATION FY 74 / ESTIMATED FINAL OBLIGATION FY 85	ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To provide agricultural economists and other agricultural specialists for assisting LDC's through AID missions on project design activities, evaluations, special studies, country development strategy statements and sector analyses.

Background and Progress to Date: This project has continued to provide assistance in project design, evaluation and analysis activities. Design, evaluation and other work has been carried out in Latin America, Asia and Africa in response to regional bureau requests. Activities supported under this project have included: farm management assistance for the small farmer systems program in the Philippines; pre-project design for an agricultural planning project in Thailand; an intensive survey of secondary food crops in Indonesia for policy planning purposes; an economic analysis of the benefits and costs of Tsetse fly control methods in Tanzania; project design of a marketing program in Ghana; and an updated publication of the Agency's activities in agriculture as identified and classified according to functional areas. This assistance has been favorably received by mission and host government officials as indicated by the continually increasing demand for services.

Host Country and Other Donors: Worldwide.

Beneficiaries: This project will ultimately benefit the rural poor in LDCs through improved project design and evaluation activities. Intermediate beneficiaries are primarily planning units in LDC governments.

FY 82 Program: Substantial assistance will continue to be provided in project development, evaluation, special studies, country development strategy statements and sector analyses to LDCs through A.I.D. missions and AID/W. Plans also call for the assignment of two full time staff members to the Economic Policy and Planning Division who will be responsible for providing analytical services to the Division as it executes its design, implementation and evaluation responsibilities. These staff members and short-term assistance will provide the broad range of expertise necessary for new project development initiatives in small farmer production, marketing and food policy analysis.

This project will also provide two additional full time economists to staff the Production and Renewable Natural Resources Division, as proposed in the recent Office of Agriculture reorganization. These specialists will be responsible for providing economic inputs in the project design, evaluation and implementation activities of the two divisions. A third senior-level specialist will be provided to DS/AGR to assist the Research Unit in work pertaining to the International Agricultural Research Centers. This specialist will have the responsibility for activities including the evaluation of the effects of international agricultural research.

Major Outputs (and A.I.D. Unit Cost):

	($ thousands) All Years unit	(cost)
Project Design Activities	25	(54)
Evaluations	2	(68)
Special Projects, including country analyses	17	(69)

A.I.D. Financed Inputs:

	FY 82
Personnel (66 person months)	307
Logistical Support	164
Printing and other costs	29
TOTAL	500

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
- 0 -	- 0 -	(400)	- 0 -	(100)
		48 person months personnel and technical assistance 2 project design 1 evaluation 1 country sector assessment		15 person months technical assistance 1 project design 2 evaluations 1 country sector assessment

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	1430	1030	400		U.S. Department of Agriculture Office of International Cooperation and Development
Estimated Fiscal Year 1980	485	400		10/1/80 - 9/30/81	
Estimated through September 30, 1980	1915	1430	485		
Proposed FY 1981	485	485		10/1/81 - 9/30/81	
Estimated through Fiscal Year 1981	2400	1915	485		
Proposed FY 82	500	Future Year Obligations	Estimated Total Cost	10/1/82 - 9/30/83	
		1500	4400		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Richard Sutter

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Agricultural Planning and Policy Analysis	Agriculture, Rural Development and Nutrition	FY 82 800	LIFE OF PROJECT 5,100
NUMBER 936-4084 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 84 / ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To strengthen the agricultural planning and policy analysis capacities of the less developed countries.

Background and Progress to Date: All countries in which there is an A.I.D. program have some capability to analyze agricultural policies and plan their development activities. Agricultural planning and policy analysis includes: (1) The development, analysis and evaluation of projects, (2) budget analysis, (3) research and analysis of alternative policies, (4) data collection and processing and (5) management of the planning and policy advisory system. In some countries agricultural planning and policy analysis is rudimentary, while in others it is quite sophisticated and effective. In all cases there is considerable scope for improvement with a high potential payoff in terms of better performance of the agriculture sector. Toward that end this project will: (1) assist missions in the design and implementation of their agricultural planning and policy analysis projects, (2) enhance the general knowledge of agricultural planning and policy analysis among A.I.D. personnel, contractors and host country counterparts by developing and disseminating educational materials and sponsoring workshops and seminars.

The project will be designed to provide technical support to the full range of agricultural planning and policy analysis activities in the missions. The experience gained in five current or recently completed projects will help in this design effort. The Lesotho Agricultural Sector Analysis was a comprehensive approach to agricultural planning; the lessons learned will be relevant to other small countries, particularly in Africa. The Comprehensive Resource Inventory and Evaluation System (CRIES) project has tested several techniques for assembling and analyzing natural resource information as part of the planning process. The Rural Poor Survey in El Salvador generates the type of information needed to design projects that more effectively benefit the poor. The Agricultural Sector Analysis in Tunisia, which terminated in December 1979, has produced, among other things, an assessment of the role of sector models in the agricultural planning and decision making process. The Latin American Caribbean Agricultural Planning and Policy Analysis project (LACPLAN) has institutionalized within the Inter-American Institute of Agricultural Sciences (IICA) the capacity to provide planning assistance through the staff in the Central office in San Jose Costa Rica and the field offices in 23 countries.

Host Country and Other Donors: Several missions have and will further fund technical assistance and training in agricultural planning and policy. This project will provide in-depth assistance to at least two countries and short term consulting services to six countries.

Beneficiaries: Farmers and consumers in the less developed countries will benefit from better performance of the agricultural sector. LDC planning units will be the intermediate beneficiaries of the technical assistance.

FY 82 Program: Assist missions in design and implementation of planning projects develop and disseminate educational materials, and sponsor workshops.

Major Outputs (and A.I.D. Unit Costs):

	($ thousands) All Years unit	(cost)
Mission project development intervention	12	(200)
Training packages developed and distributed	12	(100)
Workshops and Seminars	10	(150)

A.I.D. Financed Inputs:

	FY 82
Personnel (62 person months)	400
Training	300
Commodities	40
Other Costs	60
TOTAL	800

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

INCREMENT I	INCREMENT II
(600)	(200)
3 Seminars	1 Seminar
40 person months of technical assistance	10 months technical assistance
2 training programs	

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	- 0 -	- 0 -	- 0 -		Tentative/potential contractors - U.S. Department of Agriculture and U.S. Universities.
Estimated Fiscal Year 1980	- 0 -	- 0 -		-	
Estimated through September 30, 1980	- 0 -	- 0 -	- 0 -		
Proposed FY 1981	- 0 -	- 0 -		-	
Estimated through Fiscal Year 1981	- 0 -	- 0 -	- 0 -		
Proposed FY 82	800	Future Year Obligations 4300	Estimated Total Cost 5,100	10/1/81 - 9/30/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: William L. Rodgers

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Agribusiness Development and Support	Agriculture, Rural Development, and Nutrition	FY 82 200	LIFE OF PROJECT	1228
NUMBER 931-1390 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981 Annex V, Centrally Funded, p.	INITIAL OBLIGATION FY 77	ESTIMATED FINAL OBLIGATION FY 85	ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To expand agriculture production and at the same time increase incomes and employment opportunities of the rural target group through the economic development of the private sector in rural areas.

Background and Progress to Date: Increasingly the role of the rural private entrepreneur is gaining recognition as an important element in the development of economically viable agricultural systems in many LDCs. This project has as its objectives the expansion of employment opportunities for the rural poor in rural agribusiness through labor-intensive and capital-saving technologies and at the same time increase the purchasing power of the rural areas through the promotion of these rural agribusinesses. These enterprises process and distribute farm produce, manufacture implements, and provide goods and services for local consumption. Collaborative programs in several LDCs of Latin America, Africa and Near East are under various stages of development.

Other work under way focuses on agribusiness design strategies, evaluation and improvement of existing agribusiness/rural enterprises, and assistance to less developed countries in establishing new rural industries based on agriculture. Impact evaluations are being conducted in Paraguay and Peru to ascertain the effect of rural enterprise projects on small farmers and rural employment. Results will be used to improve the design and implementation of future projects.

Host Country and Other Donors: Worldwide. With programs of their own; The World Bank, the Food and Agricultural Organizaiton, and the United Nations Development Program have developed projects incorporating the small rural enterprise. Many LDCs have recognized the potential contribution of the rural private sector to their development efforts and have allocated resources in the form of manpower and credit to the promotions of new rural enterprises.

Beneficiaries: Small enterpreneurs and persons gaining employment as a result of the growth of new, rural agricultural businesses and agriculturally based market town enterprises, will benefit.

FY 82 Program: FY 82 activities under this project will include the design of agribusiness strategies for selected developing countries; evaluation of agribusiness projects; surveys to ascertain agribusiness and rural enterprise needs, and the design and development of projects to address those needs. Field support will increase during the year to meet demand in design of agribusiness projects.

Major Outputs (and A.I.D. unit cost):	($ thousands) All Years Unit	(Cost)
Agribusiness Design Strategies	10	(30)
Impact Evaluations	10	(10)
Agribusiness Promotion Intervention Designs	15	(25)
Feasibility Studies	10	(15)
Agribusiness Surveys	5	(25)
Training Material	2	(10)

A.I.D. Financed Inputs	FY 82
Personnel (24 person months)	156
Logistic Support	44
Total	200

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(200)	(0)	(0)

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	310	182	128		
Estimated Fiscal Year 1980	254	190		10/1/79 -9/30/80	
Estimated through September 30, 1980	564	372	192		U.S. Department of Agriculture (USDA)
Proposed FY 1981	160	300		10/1/80 -9/30/81	
Estimated through Fiscal Year 1981	724	672	52		
Proposed FY 82	200	Future Year Obligations	Estimated Total Cost	10/1/81 -9/30/82	
		304	1228		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: William L. Rodgers

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Commercial Seed Industry	Agriculture, Rural Development, and Nutrition	FY 82 100		LIFE OF PROJECT 825
NUMBER 931-1121 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981 Annex V, centrally funded, p.	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 82	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To promote development of commercial seed industries in less developed countries utilizing private sector personnel as advisors.

Background and Progress to Date: Quality seed of adapted, improved crop varieties is the lowest-cost major input used to increase crop production. In developed countries, effective commercial seed enterprises, whether in the public or private sector, ensure a reliable supply of this input to agricultural producers. In developing countries, seed systems often are totally absent or are not capable of delivering high quality seeds on a timely and economic basis to a majority of small farmers.

The commercial seed industries of developed countries could be an important source of expertise and service for seed program development in other countries, but have not been effectively utilized for this purpose by most development agencies. A major constraint to such utilization has been the lack of an effective mechanism to link activities of development agencies with the commercial seed trade, on one hand, and developing country institutions on the other.

The existence of the Industry Council for Development provides an effective mechanism for establishing direct linkages between commercial seed firms in developed countries and appropriate agencies in the developing countries. A.I.D., through a five year grant funded service project with the Industry Council as the executing agent, supports an effort designed to establish, strengthen and utilize such linkages.

Host Countries and Other Donors: The United Nations Development Program and the Food and Agricultural Organization are incorporating the private sector seed technology transfer concept into their programs. The Council has a working agreement with the United Nations system and the Canadian International Development Agency (CIDA) to further this concept.

Beneficiaries: Small farmers in specific developing countries will benefit from increased access to quality seed. Persons gaining employment as a result of the various projects, and market town agribusiness entrepreneurs who will be assisted in improving their enterprises will benefit also.

FY 1982 Program: This activity will continue to assist developing countries in the identification, selection and development of seed projects and programs and to provide training and technical assistance to their seed enterprises. An initial survey has started in the Caribbean Region and work is underway to provide training and managerial assistance to seed enterprises in the countries of the Caribbean Common Market (CARICOM). During FY 1982 the project will be expanded to include the delivery of inoculent services to seed distributing firms in cooperating LDCs.

Major Outputs (and A.I.D. Unit Cost)	($ thousand) All Years Unit	(cost)
Seed enterprise surveys	50	(6.0)
In-country training programs	6	(15.0)
Participants trained	50	(5.0)
Seed enterprises initiated	10	(15.0)

A.I.D. Financed Inputs	F.Y. 82
Personnel (9 person months)	46
Training (18 person months)	54
TOTAL	100

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(100)	(0)	(0)

Core support for seed industry programs of the Industry Council for Development

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	240	80	160		Industry Council for Development
Estimated Fiscal Year 1980	-	80		9/30/79-10/1/80	
Estimated through September 30, 1980	240	160	80		
Proposed FY 1981	245	180		9/30/80-10/1/81	
Estimated through Fiscal Year 1981	485	340	145		
Proposed FY 82	100	Future Year Obligations	Estimated Total Cost	9/30/81-10/1/82	
		240	825		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: William L. Rodgers

TITLE	FUNDS	PROPOSED OBLIGATION (in thousands of dollars)	
Agribusiness Intermediary	Agriculture, Rural Development, and Nutrition	FY 82 350	LIFE OF PROJECT 1000
NUMBER 936-4053 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To supply selected LDC economic development projects the management expertise of U.S. agribusiness firms and to also assess and promote the potential contributions to LDC development efforts by small and medium U.S. agribusiness firms.

Background and Progress to Date: This project resulted from an increased awareness on the part of donor agencies and their LDC counterparts that private sector firms have an important role to play in the effective transfer of food delivery system management skills and technology. In most, if not all, LDCs the expansion of agribusinesses and other rural enterprises is constrained more by the lack of available technical and managerial assistance than any other set of constraints. This constraint along with the Agency's shortage of specialists who can devote the required time to adequately supervise the delivery of services to the field led to the development of the Intermediary Agribusiness Promotional Organization. This grant funded intermediary which will have access to both private and public resources will be charged with: organizing special task forces and study teams, performing feasibility studies, promoting viable agribusiness projects in target countries, identifying potential agribusiness projects for field missions, and serving as a liaison between U.S. small agribusiness, agro-industrial, and agri-service firms and their LDC counterparts.

Host Country and Other Donors: Worldwide.

Beneficiaries: Primary beneficiaries will be small rural entrepreneurs and rural laborers who will have access to increased amounts of goods and services as well as greater employment opportunities.

FY 82 Program: Project implementation will be initiated in FY 82 at which time the Intermediary Agribusiness Promotional Organization will begin servicing small rural agribusinesses in selected LDCs.

Major Outputs (A.I.D. unit cost):	($ thousands) All Years Unit	(cost)
Rural Enterprise Surveys	10	(15.0)
Agribusiness Management Systems	20	(20.0)
Feasibility Studies and Project Designs	20	(15.0)
Evaluations	10	(15.0)
A.I.D. Financed Inputs	**FY 82**	
Personnel (40 months)	275	
Logistics	75	
TOTAL	350	

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(350)	(0)

35 person months technical assistance
1 training program developed
1 training manual

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	0	0	0		Contractor to be selected
Estimated Fiscal Year 1980	0	0			
Estimated through September 30, 1980	0	0	0		
Proposed FY 1981	0	0			
Estimated through Fiscal Year 1981	0	0	0		
Proposed FY 82	350	Future Year Obligations 650	Estimated Total Cost 1000	10/1/80-9/30/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: William L. Rodgers

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Agribusiness Training	Agricultural, Rural Development, and Nutrition	FY 82 200	LIFE OF PROJECT 1,250
NUMBER 936-4052 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To provide practical managerial agribusiness training to LDC participants to prepare them to plan, implement, administer national and private sector agribusiness, agro-industrial development projects and programs.

Background and Progress To Date: The lack of trained managerial talent capable of planning, organizing and managing commodity food systems is a major deficiency in the LDCs. Specialized, practical training is needed in business management, finance, marketing, evaluation of technical, economic and commercial feasibility of agribusiness projects. The USDA Graduate School for the past several years has offered such specialized training. The course in Agribusiness Management Development is designed specifically for students from developing countries and utilizes professionals with international experience and practicing experts in their respective fields. AID missions have sent some participants to the course each year. It is proposed that a grant be made to the school to: (1) substantially increase number of LDC participants; (2) increase capacity of school to develop and conduct in-country training; (3) provide funds to develop short term regional workshops and specialized courses. The school has the facilities and staff to accomodate more students. Special in-country short course and workshops will be developed to meet regional needs in agribusiness management, accounting, budget making, marketing and other special needs of small entrepreneurs.

Host Countries and Other Donors: Anticipated that some host country and private sector funding will be available.

Beneficiaries: Small/medium entrepreneurs, consumers, farmers who will benefit from improved input deliveries and expanded markets, rural poor through increased off-farm employment opportunities.

FY 1982 Program: New Project. It is anticipated that project will be initiated in FY 82.

Major Outputs (and Unit Cost)	($ thousand) All Years Unit	(cost)
Agribusiness curricula developed	5	(10)
Seminars developed and presented	10	(50)
Participants trained	50	(10)

A.I.D. Financed Inputs:	FY 82
Personnel (24 person months)	140
Logistical support	35
Material	15
TOTAL	200

MINIMUM	CURRENT	PROPOSED	INCREMENT I	INCREMENT II
(0)	(0)	(0)	(200)	(0)

Two seminars presented
Five participants trained
Two training programs developed

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		To be determined
Estimated Fiscal Year 1980	-	-		-	
Estimated through September 30, 1980	-	-	-		
Proposed FY 1981	-	-		-	
Estimated through Fiscal Year 1981	-	-	-		
Proposed FY 82	200	Future Year Obligations 1050	Estimated Total Cost 1250	9/30/81 - 9/29/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: William L. Rodgers

TITLE: Int'l Small Business Investment Corp. (ISBIC)	FUNDS: Agriculture, Rural Development, and Nutrition	PROPOSED OBLIGATION (In thousands of dollars) FY 82: 550	LIFE OF PROJECT: 2000	
NUMBER: 936-4078 GRANT ☒ LOAN ☐	NEW ☐ CONTINUING ☐	PRIOR REFERENCE: None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85 / ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To make available equity financing and managerial/technical assistance to LDC small/medium rural enterprises directly from the U.S. private sector.

Background and Progress To Date: There is a need to improve and stimulate the LDC economy in general and the small business segment in particular by establishing a program to stimulate and supplement the flow of private equity capital and long term loan funds which small business concerns need for the sound financing of their business operations and for their growth and expansion which are not now available in adequate supply.

The rural small business enterprise in LDCs is an important source for employment as well as a supplier of inputs to the agricultural sector.

The ISBIC would be modeled on the Small Business Administration SBIC program. AID would licence the ISBIC which would be formed by private capital, supplemented under restricted circumstances by public funds and leveraged with private sector loans guaranteed by AID. Each ISBIC would be licensed to operate in specific geographical areas by AID and would be restricted to holding minority equity positions located in and operating under the laws of a particular LDC.

Host Country and Other Donors: The LDCs will provide loans through their commercial and development banking systems. Other donors might be World Bank, OPIC, Ex-Im, private banks in U.S. and host countries.

Beneficiaries: Small entrepreneurs of rural enterprises, small/medium agro-industries, rural unemployed who will find jobs in these enterprises.

FY 82 Program: The FY 82 program calls for the implementation of the ISBIC program in a pilot mode in each of the following four geographic areas; Africa, Asia, Latin America, and the Near East. Funding requirements for the program will require outlays of $2.0 million for operational support during the initial five year period with a commitment of $15-20 million to the guarantee authority during the same period.

MINIMUM	CURRENT	PROPOSED
(0)	(0)	(0)

Major Outputs (and AID Unit Cost):	($ thousands) All Years Unit	(cost)
Assessment and Surveys	20	(15.0)
Feasibility Studies	20	(15.0)
Project Designs and Strategies Formulated	20	(15.0)
In-country Programs Initiated	15	(50.0)
Evaluations	10	(16.0)

A.I.D. Financed Inputs:	FY 92
Personnel (76 person months)	361
Equipment and supplies	50
Travel transportation and per diem	100
Other direct cost	39
TOTAL	550

INCREMENT I	INCREMENT II
(400)	(150)
Two assessments Two feasibility studies Two projects designs Two in-country programs initiated	Two in-country programs initiated

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		
Estimated Fiscal Year 1980	-	-		-	
Estimated through September 30, 1980	-	-	-		To be determined
Proposed FY 1981	-	-		10/1/80-9/30/81	
Estimated through Fiscal Year 1981	-	-	-		
Proposed FY 82	550	Future Year Obligations: 1450	Estimated Total Cost: 2000	10/1/81-9/30/82	

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(By Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	Title	FY 1980 Total $000	FY 1980 FS $000	FY 1980 FS Mnths	FY 1981 Total $000	FY 1981 FS $000	FY 1981 FS Mnths	FY 1982 Minimum Total $000	FY 1982 Minimum FS $000	FY 1982 Minimum FS Mnths	FY 1982 Current Total $000	FY 1982 Current FS $000	FY 1982 Current FS Mnths	FY 1982 Proposed Total $000	FY 1982 Proposed FS $000	FY 1982 Proposed FS Mnths	Additional Requirements Increment I Total $000	Increment I FS $000	Increment I FS Mnths	Increment II Total $000	Increment II FS $000	Increment II FS Mnths
International Agriculture Research Centers Cluster																						
A003	IARC's-Int'l Agr. Res.Centers	29600	2960	268	36500	3650	290	45000	4500	345	45000	4500	345	45000	4500	345	45000	4500	345	45000	4500	345
	Subtotal- IARC's	29600	2960	268	36500	3650	290	45000	4500	345	45000	4500	345	45000	4500	345	45000	4500	345	45000	4500	345
Cereal Grains Cluster																						
0203	Seed Industry Development	128	52	13	210	52	13	0	0	0	320	100	25	320	100	25	320	100	25	320	100	25
0829	Plant & Seed Material	150	44	11	140	44	11	0	0	0	170	68	17	170	68	17	170	68	17	170	68	17
4046	Cereal Grain Support Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	48	12	300	48	12
0621	Spring & Winter Wheat	400	16	4	470	16	4	0	0	0	0	0	0	0	0	0	500	20	5	500	20	5
1318	Control of Barley Diseases	270	12	3	100	8	2	0	0	0	0	0	0	0	0	0	340	16	4	500	16	4
1181	Aflatoxin Reduction in Maize	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1254	CRSP-Sorghum/Millet	2300	48	12	1800	96	24	2600	120	30	2600	120	30	2600	120	30	2600	120	30	3500	160	40
	Subtotal- Cereal Grains	3248	172	43	2720	216	54	2600	120	30	3090	288	72	3090	288	72	4230	372	93	5290	412	103
Grain Legumes Cluster																						
1327	Grain Legume Support Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	393	180	30	393	180	30
0562	Improved Trop. Beans/Cowpeas	236	36	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0560	Improved Varieties of Soybeans	840	-	-	825	-	-	0	0	0	0	0	0	0	0	0	825	-	-	825	-	-
1359	CRSP Planning-Beans/Cowpeas	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1310	CRSP - Beans/Cowpeas	715	30	5	1675	100	17	0	0	0	0	0	0	2000	125	20	2000	125	20	2500	180	30
4013	CRSP Planning-Peanuts	367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4048	CRSP-Peanuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2222	100	17	3475	205	34
4085	CRSP Planning-Soybeans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	420	-	-
	Subtotal- Grain Legumes	2304	66	11	2500	100	17	0	0	0	0	0	0	2000	125	20	5440	405	67	7613	565	94

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(by Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	Title	FY 1980 Total $000	FY 1980 FS $000	FY 1980 FS Mnths	FY 1981 Total $000	FY 1981 FS $000	FY 1981 FS Mnths	FY 1982 Minimum Total $000	FY 1982 Minimum FS $000	FY 1982 Minimum FS Mnths	FY 1982 Current Total $000	FY 1982 Current FS $000	FY 1982 Current FS Mnths	FY 1982 Proposed Total $000	FY 1982 Proposed FS $000	FY 1982 Proposed FS Mnths	Additional Requirements Increment I Total $000	Increment I FS $000	Increment I FS Mnths	Increment II Total $000	Increment II FS $000	Increment II FS Mnths
Pests and Pesticide Management Cluster																						
4071	Pest Mgmt. Capability	81	10	1	95	10	1	0	0	0	0	0	0	125	10	1	125	10	1	125	10	1
0206	Weed Control Utilization	260	260	65	235	235	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0463	Weed Control Systems in LDC's	0	0	0	360	70	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0930	Pest Mgmt. Relat. Envir.Prot.	500	250	25	825	525	50	0	0	0	1075	775	75	1075	775	75	1075	775	75	1075	775	75
4002	ICP Methods - Planning	94	-	-	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4049	Integrated Crop Protect.(ICP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1800	900	90	2625	1425	143
0614	Rootknot Nematodes	130	5	1	200	10	1	0	0	0	0	0	0	0	0	0	500	50	10	600	60	11
	Subtotal- Pest Management	1065	525	92	1965	850	123	0	0	0	1075	775	75	1200	785	76	3500	1735	176	4425	2270	230
Post Harvest Food Losses Cluster																						
0786	TA Food Grain-Dry,Stor,Market	877	450	90	950	500	100	0	0	0	750	400	80	750	400	80	750	400	80	750	400	80
1323	Store/Process-Fruits/Veg.	200	100	20	300	150	30	0	0	0	0	0	0	300	150	30	300	150	30	400	200	40
1322	Farm Level PH Grain Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	30	6	150	30	6
	Subtotal- Post Harvest Losses	1077	550	110	1250	650	130	0	0	0	750	400	80	1050	550	110	1200	580	116	1300	630	126

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(by Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	Title	FY 1980			FY 1981			FY 1982									Additional Requirements					
								Minimum			Current			Proposed			Increment I			Increment II		
		Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths
Livestock Production Cluster																						
1149	Livestock Prod. Capability	300	120	30	100	40	8	0	0	0	0	0	0	200	80	16	200	80	16	200	80	16
0030	Tsetse Fly Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0473	Control of Vertebrate Pests	363	145	29	345	138	28	0	0	0	0	0	0	500	200	36	500	200	36	500	200	36
0050	Improved Feed Nutrition Info	200	120	24	90	60	12	0	0	0	0	0	0	100	70	14	100	70	14	200	160	32
4072	African Swine Fever Control	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	0	0	100	100	10
0600	Mineral/Ruminant Animals	250	200	50	200	180	45	0	0	0	0	0	0	0	0	0	300	260	65	300	260	65
4076	Animal Nutrition & Disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	355	355	50
1038	Physiology/Ecology of Ticks	56	56	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4083	Immunology of Ticks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	300	50
4073	Babesiosis-Illinois	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135	90	10
1328	CRSP-Small Riminants	2391	950	200	2000	1150	230	2900	1800	300	2900	1800	300	2900	1800	300	2900	1800	300	3145	2000	333
4009	CRSP Planning/Animal Health	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450	180	30
4074	CRSP Plan.-Small Farm Sy'tm.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500	200	50
4008	CRSP Plan.-Large Ruminants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450	180	36
	Subtotal-Livestock	3560	1591	347	2735	1568	323	2900	1800	300	2900	1800	300	3700	2150	366	4100	2410	431	6635	4105	718

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(by Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	Title	FY 1980			FY 1981			FY 1982									Additional Requirements					
								Minimum			Current			Proposed			Increment I			Increment II		
		Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths
Tropical Soils Management Cluster																						
1229	Soils Mgmt. Support Service	700	420	42	425	155	16	0	0	0	0	0	0	700	420	42	700	420	42	1000	720	72
0582	Soils Families - Hawaii	1040	125	14	495	60	7	0	0	0	0	0	0	600	72	9	600	72	9	600	72	9
4054	Int'l Benchmark Soils Network	-	-	-	410	82	10	0	0	0	0	0	0	400	80	10	400	80	10	650	130	15
4055	Tissue Cultures	600	30	4	475	25	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1291	CRSP Planning-Soils Mgmt.	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1311	CRSP-Soils Management				250	250	28	0	0	0	0	0	0	1710	530	59	1710	530	59	2270	1000	110
	Subtotal - Tropical Soils	2490	575	60	2555	572	64	0	0	0	0	0	0	3410	1102	120	3410	1102	120	4520	1922	206
Water Management Cluster																						
1007	Synthesis of Water Management	697	300	36	0	0	0	0	0	0	450	100	12	450	100	12	450	100	12	1000	600	72
4021	Dryland Agr. Support Service	-	-	-	780	100	12	0	0	0	0	0	0	700	400	48	700	400	48	1000	600	72
1005	Determinants of Irrigation	0	0	0	100	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal - Water Management	697	300	36	880	100	12	0	0	0	450	100	12	1150	500	60	1150	500	60	2000	1200	144

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(by Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	PROJECT Title	FY 1980			FY 1981			FY 1982														
								Minimum			Current			Proposed			Additional Requirements					
																	Increment I			Increment II		
		Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths	Total $000	FS $000	FS Mnths
Biological Nitrogen Fixation Cluster																						
4050	Trop. Legume Innoculent Serv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	150	20	200	150	20
0613	N-Fixation-Symbiotic	743	200	50	500	100	25	0	0	0	0	0	0	0	0	0	900	300	60	900	300	60
0610	N-Fixation-Limiting Factors	550	200	84	400	150	56	0	0	0	0	0	0	0	0	0	500	250	70	700	350	100
1004	N-Fixation-Non Symbiotic	352	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	20	4
0095	World Rhizobium Collection	150	25	11	150	25	15	0	0	0	0	0	0	0	0	0	0	0	0	150	25	12
1325	BNF Economic Evaluation	-	-	-	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	5	1
4051	Mycorrhiza on Trop. Grains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	5	1	300	5	1
0127	Trop. Soils/BNF Cornell	125	50	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0128	Trop. Soils/BNF-Puerto Rico	120	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0129	Trop. Soils/BNF-Hawaii	125	40	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0130	Trop. Soils/BNF-NCSU	122	50	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal-Biological N-Fixatio	2287	580	179	1250	275	96	0	0	0	0	0	0	0	0	0	1800	705	151	2550	855	198
Fertilizer Development Cluster																						
0832	Fertilizer Technical Ass't	230	85	15	175	75	12	0	0	0	0	0	0	275	125	20	275	125	20	275	125	20
0054	IFDC-Int'l Fertilizer Center	4000	850	325	4000	930	375	4000	900	350	4000	900	350	4000	900	350	4000	900	350	4000	900	350
	Subtotal- Fertilizer Develop.	4230	935	340	4175	1005	387	4000	900	350	4000	900	350	4275	1025	370	4275	1025	370	4275	1025	370

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(by Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	PROJECT Title	FY 1980 Total $000	FY 1980 FS $000	FY 1980 FS Mnths	FY 1981 Total $000	FY 1981 FS $000	FY 1981 FS Mnths	FY 1982 Minimum Total $000	FY 1982 Minimum FS $000	FY 1982 Minimum FS Mnths	FY 1982 Current Total $000	FY 1982 Current FS $000	FY 1982 Current FS Mnths	FY 1982 Proposed Total $000	FY 1982 Proposed FS $000	FY 1982 Proposed FS Mnths	Additional Requirements Increment I Total $000	Increment I FS $000	Increment I FS Mnths	Increment II Total $000	Increment II FS $000	Increment II FS Mnths
Fisheries Cluster																						
1314	Aquaculture Tech. Dev.	70	14	2	200	35	5	0	0	0	0	0	0	200	35	5	200	35	5	450	77	11
0242	NOAA Advisory Service	200	100	15	250	150	20	0	0	0	250	150	20	250	150	20	250	150	20	250	150	20
4024	Fisheries Dev. Planning Ass't	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270	35	5	270	35	5
4079	Mollusk Culture Utilization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	21	3	200	21	3
4025	Milkfish Seed Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	14	2	100	14	2
4077	Extended Maritime Juris.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	35	5	100	35	5
1050	IQLARM- Fisheries Development	200	0	0	300	0	0	0	0	0	0	0	0	0	0	0	400	0	0	400	0	0
4023	CRSP-Fisheries/Aquaculture	1750	350	50	0	0	0	0	0	0	0	0	0	0	0	0	850	300	20	850	300	20
4086	CRSP-Fisheries/Stock Assess.	-	-	-	600	150	20	0	0	0	0	0	0	0	0	0	600	150	20	600	150	20
4088	CRSP-Fisheries/Postharv. Util	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500	150	20	500	150	20
	Subtotal- Fisheries	2220	464	67	1350	335	45	0	0	0	250	150	20	450	185	25	3470	890	100	3720	932	106
Agroforestry Cluster																						
4080	Agroforestry Crop Systems	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600	200	24	700	250	28
4081	Reforestation/Degraded Soils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600	200	24	700	250	28
	Subtotal- Agroforestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200	400	48	1400	500	56

Office of Agriculture - DS/AGR
FIELD SUPPORT (FS) TABLE

(by Total Cost, Field Support Costs and Field Support Worker Months)

PROJECT #	Title	FY 1980 Total $000	FY 1980 FS $000	FY 1980 FS Mnths	FY 1981 Total $000	FY 1981 FS $000	FY 1981 FS Mnths	FY 1982 Minimum Total $000	FY 1982 Minimum FS $000	FY 1982 Minimum FS Mnths	FY 1982 Current Total $000	FY 1982 Current FS $000	FY 1982 Current FS Mnths	FY 1982 Proposed Total $000	FY 1982 Proposed FS $000	FY 1982 Proposed FS Mnths	Additional Requirements Increment I Total $000	Increment I FS $000	Increment I FS Mnths	Increment II Total $000	Increment II FS $000	Increment II FS Mnths
Agriculture Economics and Analysis Cluster																						
0060	Agr. Sector Plan. & Support	485	243	39	485	243	39	0	0	0	0	0	0	400	200	33	400	200	33	500	250	40
0236.01	CRIES	200	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0236.05	Progress Indicat.-El Salvador	200	120	24	200	120	24	0	0	0	0	0	0	200	120	24	200	120	24	200	120	24
0236.71	LA Planning Network	225	135	21	125	75	12	0	0	0	0	0	0	75	45	7	75	45	7	75	45	7
0236.91	Basic Plan.-Water Resources	0	0	0	275	220	30	0	0	0	0	0	0	300	275	33	300	275	33	300	275	33
0236.92	Basic Plan.-Food Policy	200	100	8	100	50	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0887A	Int'l Agriculture Seminars	90	75	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4084	Agr. Planning/Policy Analysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600	400	40	800	600	60
4099	Farming Sy'tms/Small Farmers	-	-	-	265	100	15	0	0	0	0	0	0	200	125	20	200	125	20	422	300	45
5313	Rural Market Systems	-	-	-	0	0	0	0	0	0	0	0	0	200	160	25	200	160	25	500	375	85
	Subtotal- Agr. Economics	1400	673	97	1450	808	124	0	0	0	0	0	0	1375	925	142	1975	1325	182	2797	1965	294
Agribusiness Cluster																						
1398	Agribusiness Dev. & Support	254	153	9	160	96	7	0	0	0	0	0	0	200	120	8	200	120	8	200	120	8
1121	Commercial Seed Industry	0	0	0	245	221	16	0	0	0	0	0	0	100	90	10	100	90	10	100	90	10
4053	Agribusiness Intermediary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	315	24	350	315	24
4052	Agribusiness Training	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	160	20	200	160	20
4078	Int'l Small Business Corp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	200	15	550	275	20
	Subtotal- Agribusiness	254	153	9	405	317	23	0	0	0	0	0	0	300	210	18	1250	885	77	1400	960	82
	TOTAL- OFFICE OF AGRICULTURE	54432	9544	1659	59735	10446	1684	54500	7320	1025	57515	8913	1254	67000	12345	1724	82000	16834	2336	92925	21841	3072

Office Of Agriculture - DS/AGR

OFFICE STAFF LISTING

	Position	Field Support (in Worker Months) FY 80	FY 81	Provided FY 82
Unit: Office of the Director - Direct Hire Employees (FTEPP)				
1.	Director	1	1	1
2.	Deputy Director	1	1	1
3.	Associate Director for Field Support	3	3	3
4.	Associate Director for Research	1	2	2
5.	Agricultural Research Advisor	1	1	1
6.	Program Analyst	0	0	0
7.	Program Operations Assistant	0	0	0
8.	Program Operations Assistant	0	0	0
9.	Secretary	0	0	0
10.	Secretary	0	0	0
Unit	Subtotal-Direct Hire Employees	7	8	8
	- Other Personnel (Non-DH) for Field Support			
	Agricultural Economist (RSSA)	1/2	1/2	1/2
Unit	Subtotal - Other Personnel for Field Support	1/2	1/2	1/2
Unit: Agricultural Production Division - Direct Hire Employees (FTEPP)				
11.	Division Chief	2	3	3
12.	Sr. Agronomist for Cereal Grains	5	4	4
13.	Sr. Agronomist for Grain Legumes	3	3	3
14.	Livestock Specialist	3	4	5
15.	Postharvest Food Loss Specialist	4	4	4
16.	Environmental Coordinator	8	8	8
17.	Pesticide Management Specialist	6	6	6
18.	Program Assistant	0	0	0
19.	Secretary	0	0	0
20.	Secretary	0	0	0
Unit	Subtotal-Direct Hire Employees	31	32	33

Position	Field Support Provided (in Worker Months) FY 80	FY 81	FY 82
- Other Personnel (Non-DH) for Field Support			
Sr. Horticulturalist (IPA)	4	4	4
Jr. Horticulturalist (IPA)	5	5	5
Livestock Specialist (IPA)	3	4	4
Livestock Nutritionist (RSSA)	5	5	4
Veterinary Officer (RSSA)	3	4	5
Veterinary Specialist (RSSA)	4	4	4
Pesticide Management Specialist (RSSA)	1 1/2	2	2
Postharvest Food Loss Specialist (RSSA)	5	5	5
Postharvest Food Loss Specialist (IPA)	5	5	5
Agricultural Economist (RSSA)	4	4	4
Unit Subtotal-Other Personnel for Field Support	39 1/2	42	42
Unit: Natural Resources Management Division - Direct Hire Employees (FTEPP)			
21. Division Chief	2	2	2
22. Sr. Agronomist for Soils	1	1	1
23. Sr. Agronomist for Fertilizer	1	1	1
24. Sr. Soils Microbiologist	1	2	3
25. Sr. Water Management Engineer	3	3 1/2	4
26. Agricultural Economist	6	6	6
27. Sr. Fisheries Specialist	4	4	4
28. Program Analyst	0	0	0
29. Program Assistant	0	0	0
30. Secretary	0	0	0
Unit Subtotal-Direct Hire Employees	18	19 1/2	21
- Other Personnel (Non-DH) for Field Support			
Sr. Fisheries Advisor (RSSA)	4	4	4
Fisheries Advisor (RSSA)	3	3 1/2	4
Fisheries Specialist (Complement)	1	1 1/2	0
Aquaculture Advisor (RSSA)	4	4	4
Aquaculture Advisor (IPA)	4	4	4
Fisheries Advisor	3	3	3
Agro Forestry Specialist (Complement)	1	1	1
Soils Conservationist (RSSA)	4	4	4
Agr. Extension and Rural Sociologist (IPA)	4	4	4
Unit Subtotal-Other Personnel for Field Support	28	29	28

Position	Field Support Provided (in Worker Months) FY 80	FY 81	FY 82
Unit: Economic Policy and Planning Division - Direct Hire Employees (FTEPP)			
31. Division Chief	1 1/2	2	2
32. Agricultural Economist	3	3	3
33. Agricultural Economist	3	3	3
34. Program Analyst	0	0	0
35. Secretary	0	0	0
36. Clerk Typist	0	0	0
Unit Subtotal-Direct Hire Employees	7 1/2	8	8
- Other Personnel (Non-DH) for Field Support			
Agricultural Economist (RSSA)	3	3 1/2	4
Agricultural Economist (RSSA)	8	8	8
Agricultural Economist (IPA)	1 1/2	-	-
Unit Subtotal-Other Personnel for Field Support	12 1/2	11 1/2	12
Unit: Rural Enterprise and Employment Division- Direct Hire Employees (FTEPP)			
37. Division Chief	5	6	8
38. Program Assistant	0	0	0
39. Secretary	0	0	0
Unit Subtotal-Direct Hire Employees	5	6	8
- Other Personnel (Non-DH) for Field Support			
Agribusiness Economist (RSSA)	12	12	12
Agribusiness Economist (RSSA)	4	4	4
Agribusiness Analyst (Part-Time)	2	2	2
Foreign Affairs Specialist (Work Study)	1	1	1
Unit Subtotal-Other Personnel for Field Support	19	19	19
GRAND TOTAL - DS/AGR-Direct Hire Employees (FTEPP) Field Support in Worker Months	68 1/2	73 1/2	78
GRAND TOTAL - DS/AGR-Other Personnel's (Non-DH) Field Support in Worker Months	99 1/2	102	101 1/2

Implication of a 10% Direct Hire Staff Reduction
(by identified positions = 4)

a. Clerk Typist (position number 36 above) - Would probably have to hire a part-time clerk typist. No effect on the program.

b. Program Operation Assistant (position number 8 above) - Would probably have to hire a part-time program operations assitant. Possible reduced efficiency in the flow of project documentation and written communications both within and beyond the office.

c. Agricultural Economist (position number 26 above) - Would force the Sr. Water Managment Engineer (position number 25 above) to assume management of the project "Basic Planning - Water Resources (No. 931-0236.91)" with corresponding reduction of an average of one (1) field support month per year by the this Water Management Engineer and loss of another six (6) Field Support months per year projected for the Agricultural Economist.

d. Agricultural Research Advisor (position number 5 above) - Would result in a loss of one (1) field support month per year and increase workload for the Associate Director for Research (position number 4 above). The desired level of management attention and responsibility for the International Agricultural Research Centers would be reduced.

Implications of a 10% Direct Hire Staff Increase
(by identified positions = 4)

a. AgroForestry Specialist (position to be assigned to the Natural Resource Management Division) - Would provide an additional three (3) months of field support per year. Would provide the desirable degree of personnel stability considered essential for the proper FY 82 implementation of the initial DS/AGR Agroforestry projects - "Agroforestry" (936-4080) and "Reforestation of Degraded Soils" (936-4081); and future development of DS/AGR's Agrofestry program.

b. Range Management/Dryland Agricultural Specialists (position to be assigned to the Natural Resource Management Division) - Would provided an additional four (4) field support months per year in his technical field which has received inadequate staff attention in past. Would assist the Sr. Water Management Engineer in the management and technical direction of the project "Water Management Support Service-Rainfed" (936-4021) and future development of a program for Range Management and Dryland Agriculture - an important technical area neglected in the past by personnel constraints.

c. Sr. Horticulturalist (position to be assigned to the Agricultural Production Division) - Would provide an additional four (4) Field support months per year to meet the frequent USAID Mission request for technical expertise in Roots/Tubers and Fruits/Vegetables-requests which are now being inadequately met by existing staff due to other workloads and specialized nature of the technical subject involved. Would also provide for the development of a much needed Roots/Tubers and Fruits/ Vegetable program in the future.

d. Agricultural Economist (position to be assigned to the Economic Policy and Planning Division) - Would provide an additional four (4) field support months per year. Would provide adequate staff level for the division in managing its project portfolio especially in terms of the new FY 82 project for "Agriculture Planning and Policy Analysis" (936-4084).

AID PROGRAM IN FY 1982
ANNUAL BUDGET SUBMISSION
TABLE IV - PROJECT BUDGET DATA

021 - OFC. OF AGRICULTURE — BUREAU FOR DEVELOPMENT SUPPORT — 05/30/80

PROJECT NUMBER	TITLE	G L	OBLIG DATE INIT	OBLIG DATE FIN	NEXT EVAL DATE	ESTIMATED U.S. DOLLAR COST ($000) FY 79 PIPELINE	FY 79 OBLIGATIONS	FY 79 EXPENDITURES	FY 1980 PIPELINE	FY 1980 OBLIGATIONS	FY 1980 EXPENDITURES	FY 1981 PIPELINE	FY 82 CAPL	FUNDED TO:	FUTURE YR OBLIGATIONS	ITEM NO
AGRICULTURE, RURAL DEV. AND NUTRITION																
9310030	STERILITY METHOD FOR TSETSE FLY CONTROL	G	63	86		143	---	143	---	---	---	---	---	12/79	3000	578
9310044	WEST AFRICAN RICE DEV ASSN (WARDA)	G	71	CONT.		---	---	---	---	700	400	300	850	09/83	CONT.	548
9310050	IMP FEED NUTRITION INFO	G	75	86		2	200	126	76	90	90	76	200	09/82	1200	547
9310054	INTL FERTILIZER DEVELOPMENT CENTER	G	75	CONT.		4433	4000	4000	4433	4000	4000	4433	4000	06/83	CONT.	546
9310056	INT BOARD OF PLANT GENETIC RESRCES-IBPGT	G	75	CONT.		125	750	125	750	800	750	800	1000	09/83	CONT.	545
9310060	AGRIBUSINESS RSSA	G	74	85		400	485	400	485	485	485	485	500	09/83	1500	62
9310069	INT CTR FOR AG RES IN DRY AREAD (ICARDA)	G	76	CONT.		726	3050	3050	726	3700	3050	1376	4250	09/83	CONT.	544
9310075	ASIAN VEGETABLE RES/DEV CTR (AVRDC)	G		CONT.		165	600	600	165	700	700	165	800	09/83	CONT.	543
9310095	WORLD RHIZOBIUM COLLECTION CENTER	G	76	84		---	150	50	100	150	150	100	150	06/83	300	542
9310127	TROPICAL SOILS - CORNELL	G	76	80		156	125	125	156	---	130	26	---	12/81	---	541
9310128	TROPICAL SOILS - PUERTO RICO	G	76	80		151	120	120	151	---	130	21	---	12/81	---	540
9310129	TROPICAL SOILS - HAWAII	G	76	80		219	125	125	219	---	150	69	---	06/82	---	539
9310130	TROPICAL SOILS - NCSU	G	76	80		151	122	122	151	---	130	21	---	12/81	---	538
9310203	SEED PROGRAM AND INDUSTRY DEVELOPMENT	G	58	86		446	128	275	299	210	280	229	320	04/82	1392	63
9310206	WEED CONTROL UTILIZATION	G	76	81		772	260	450	582	235	319	498	---	05/82	---	64
9310236	EXPANDED PROGRAM OF ECONOMIC ANALYSIS	G	76	84		1009	825	1039	795	700	630	865	575		844	65
9310242	NOAA ADVISORY SERVICES	G	76	87		268	200	240	228	250	275	203	250	08/82	1100	66
9310309	INT INST FOR TROPICAL AG (IITA)	G	67	CONT.		920	3750	3750	920	4100	4100	920	4800	09/83	CONT.	537
9310310	INT LAB FOR RES ON ANIMAL DISEASES-ILRAD	G	74	CONT.		600	2850	2850	600	3300	3300	600	3200	09/83	CONT.	536
9310311	INT LIVESTOCK CTR FOR AFRICA (ILCA)	G	74	CONT.		425	2250	2250	425	2600	2600	425	3400	09/83	CONT. ---	535

9310463	WEED CONTRL SYSTEMS IN THE DEV CTRYS-RES													
	G	66	81	465	---	310	155	360	300	215	---	05/82	---	67
9310473	CONTROL OF VERTEBRATE PESTS													
	G	67	85	387	463	419	137	345	402	---	500	09/82	3408	534
9310525	AGRO-ECON RESEARCH ON TROPICAL SOILS													
	G	69	79	552	---	440	112	---	112	---	---	12/80		68
9310560	DEV OF IMPROVED VARIETIES OF SOYBEANS													
	G	73	84	201	840	835	206	825	875	156	825	11/82	1861	533
9310562	IMPROVED TROPICAL BEANS/COWPEAS													
	G		80	---	236	---	236	---	---	236	---	09/80	---	532
9310582	SOIL FAMILIES - HAWAII													
	G	74	83	653	1040	900	793	495	1200	88	600	01/83	560	69
9310600	GRAZING RUMINANTS													
	G	75	83	---	250	150	100	200	200	100	300	09/82	300	70
9310601	BENCHMARK SOILS - PUERTO RICO													
	G	75	79	522	---	522	---	---	---	---	---	12/80	---	71
9310610	FIXATION PROBLEMS AND LIMITING FACTORS													
	G	76	85	252	550	452	350	400	550	200	700	04/83	1700	511
9310613	N-FIXATION - SYMBIOTIC TROPICAL LEGUMES													
	G	75	84	585	743	750	578	500	800	278	900	06/83	2363	515
9310614	PEST MGT - ROOTKNOT NEMATODE													
	G	75	85	180	130	200	110	200	310	---	600	06/83	1860	516
9310621	SPRING WINTER WHEAT													
	G	76	86	301	400	501	200	470	404	266	500	09/83	2000	521
9310786	FOOD GRAIN STORAGE AND MARKETING													
	G	67	86	1222	877	960	1139	950	1020	1069	750	09/83	3750	72
9310826	INTERNATIONAL RICE RESEARCH INST (IIRR)													
	G	60	CONT.	---	3850	---	3850	4500	---	8350	5400	09/83	CONT.	522
9310829	PLANT AND SEED MATERIALS													
	G	55	83	114	150	114	150	140	150	140	170	09/82	900	73
9310832	FERTILIZER TECHNICAL ASSISTANCE													
	G	65	85	210	230	210	230	175	230	175	275	09/83	1388	74
9310840	INTL MAIZE/WHEAT IMPROVEMENT CENTER													
	G	64	CONT.	200	4250	4250	200	4600	4600	200	5900	09/83	CONT.	526
9310865	INTERNATIONAL CTR FOR TROPICAL AG (CIAT)													
	G	68	CONT.	825	3650	3650	825	4000	400	4425	5000	09/83	CONT.	528
9310887	INTERNATIONAL AG ECONOMICS SEMINARS													
	G	70	80	437	90	437	90	---	90	---	---	06/81	---	75
9310930	PEST MGT AND RELATED ENV PROTECTION													
	G	71	86	460	500	760	200	825	925	100	1075	06/86	6350	76
9310972	INT CRP RES INST SEMI-ARID TROPS-ICRISAT													
	G	72	CONT.	352	2100	2100	352	3100	3100	352	4400	09/83	CONT.	530
9310973	INTERNATIONAL POTATO CENTER (CIP)													
	G	72	CONT.	375	1700	1700	375	2000	2000	375	2600	09/83	CONT.	693
9311004	N-FIXATION NONSYMBIOTIC ASSOCIATIVE													
	G	77	84	248	352	343	257	---	250	7	200	10/82	640	695
9311005	DETERMINANTS OF IRRIGATION PROBLEMS													
	G	77	81	114	---	80	34	100	90	44	---	06/82	---	697
9311007	SYNTHESIS OF WATER MANAGEMNT IMPR													
	G	78	85	847	697	700	844	---	600	244	1000	03/83	4831	77
9311038	PHYSIOLOGY AND ECOLOGY OF TICKS													
	G	78	80	121	56	121	56	---	56	---	---	12/82	---	698
9311050	ICLARM - FISHERIES DEVELOPMENT													
	G	79	83	230	200	230	200	300	300	200	400	06/82	2300	699
9311121	COMMERCIAL SEED INDUSTRY													
	G	79	82	160	---	80	80	245	180	145	100	10/82	240	78
9311149	LIVESTOCK PRODUCTION CAPABILITY													
	G	79	84	365	300	265	400	100	265	235	200	09/82	1400	79
9311181	AFLATOXIN REDUCTION IN MAIZE													
	G	77	85	359	---	131	208	---	104	104	---	12/82	850	577
9311229	SOIL MANAGEMENT SUPPORT SERVICE													
	G	79	86	557	700	600	657	425	850	232	1000	05/83	4268	80
9311254	CRSP: SORGHUM/MILLET													
	G	79	CONT.	4250	2300	2000	4550	1800	2500	3850	3500	06/83	CONT.	701
9311259	CRSP-PL: BEANS AND COWPEAS													
	G	78	80	84	146	210	20	---	20	---	---	10/80	---	703

9311291	SOILS COOPERATIVE AGREEMENT PLANNING GRT													
	G	79	80	136	150	256	30	---	30	---	---	12/80	---	704
9311299	COMPREHENSIVE PLANNING FOR RURAL DEV													
	G	77	77	340	---	166	374	---	206	168	---	09/82	---	81
9311302	SMALL FARMER TECH AND MARKET ANALYSIS													
	G	77	77	479	---	150	329	---	150	179	---	09/82	---	82
9311310	CRSP: BEANS AND COWPEAS													
	G	80	CONT.	---	715	300	415	1675	1700	390	2500	11/82	CONT.	705
9311311	CRSP-PROGRAM: SOILS													
	G	81	CONT.	---	---	---	---	750	600	150	2270	01/82	CONT.	83
9311314	AQUACULTURE TECHNOLOGY DEVELOPMENT													
	G	78	86	593	70	400	263	200	275	188	450	04/82	1750	84
9311318	CONTROL OF BARLEY DISEASES FOR LDCS													
	G	78	86	200	270	200	270	100	300	70	500	08/83	2000	734
9311322	FARM LEVEL POSTHARVEST GRAIN LOSSES													
	G	82	84	---	---	---	---	---	---	---	150	06/83	200	85
9311323	STORAGE AND PROCSSG OF FRUITS AND VEGS													
	G	80	86	---	200	---	200	300	300	200	400	03/83	2600	86
9311325	BNF ECONOMIC EVALUATION													
	G	80	82	---	---			200	100	---	100	08/83	---	707
9311327	GRAIN LEGUME SUPPORT SERVICE													
	G	82	86	---	---	---	---	---	---	---	393	06/83	1912	89
9311328	CRSP-PROGRAM: SMALL RUMINANTS													
	G	78	CONT.	7082	2391	3642	5831	2000	4973	2858	3145	09/82	CONT.	709
9311398	AGRIBUSINESS DEVELOPMENT AND SUPPORT													
	G	77	85	128	254	190	192	160	300	52	200	09/82	304	90
9364002	CRSP-PL: BASIC CROPS													
	G	79	81	---	94	---	94	250	---	344	---	12/81	---	711
9364008	CRSP-PL: LARGE RUMINANTS													
	G	82	82	---	---	---	---	---	---	---	450	12/83	---	712
9364009	CRSP-PL: ANIMAL HEALTH													
	G	82	82	---	---	---	---	---	---	---	450	05/83	---	714
9364013	CRSP-PL: PEANUTS													
	G	80	80	---	367	---	367	---	367	---	---	09/81	---	716
9364021	WATER MANAGEMENT SUPPORT SERVICES													
	G	81	87	---	---	---	---	780	100	680	1000	07/83	5750	91
9364023	CRSP: FISHERIES/AQUACULTURE													
	G	80	CONT.	---	1750	300	1450	---	1200	250	850	09/82	---	717
9364024	FISHERIES DEVELOPMENT PLANNING ASST													
	G	82	86	---	---	---	---	---	---	---	270	08/82	1820	729
9364025	MILKFISH SEED PRODUCTION TECHNOLOGY													
	G	82	83	---	---	---	---	---	---	---	100	09/82	150	721
9364046	CEREAL GRAIN SUPPORT SERVICE													
	G	82	86	---	---	---	---	---	---	---	300	06/83	1200	92
9364048	CRSP: PEANUTS													
	G	82	CONT.	---	---	---	---	---	---	---	3475	05/83	CONT.	549
9364049	INTEGRATED CROP PROTECTION METHODS IMPR													
	G	81	86	---	---	---	---	---	---	---	2625	06/83	12000	93
9364050	TROPICAL LEGUMES INOCULANT SERVICE													
	G	82	85	---	---	---	---	---	---	---	200	06/83	1950	550
9364051	MYCORRHIZA ON TROPICAL GRAINS													
	G	82	86	---	---	---	---	---	---	---	300	11/83	2200	551
9364052	AGRIBUSINESS TRAINING													
	G	82	85	---	---	---	---	---	---	---	200	09/82	1050	552
9364053	INTERMEDIARY AGRIBUSSINESS													
	G	82	85	---	---	---	---	---	---	---	350	09/82	650	553
9364054	INTERNATIONAL BENCHMARK SOILS NETWORK													
	G	81	86	---	---	---	---	410	355	55	650	04/83	4200	94
9364055	TISSUE CULTURES FOR FOOD PRODUCTION													
	G	80	83	---	600	10	590	475	350	715	---	03/83	200	554
9364061	INTL SERVICES FOR NATIONAL AG RESEARCH													
	G	80	CONT.	---	250	50	200	600	600	200	750	09/83	CONT.	555
9364062	INTL FOOD POLICY RESEARCH INSTITUTE													
	G	80	CONT.	---	550	50	500	800	800	500	800	09/83	CONT.	556

9364063	NEW INTL CENTER FOR INSECT PHYS/ECOL												
	G 81 CONT.	---	---	---	---	1000	500	500	1600	09/83	CONT.	557	
9364071	PEST MANAGEMENT CAPABILITY (RSSA)												
	G 77 86	88	81	90	79	95	100	74	125	09/83	490	558	
9364072	AFRICAN SWINE FEVER CONTROL												
	G 92 95	---	---	---	---	---	---	---	100	06/83	1500	559	
9364073	BABESIOSIS RESEARCH												
	G 82 86	---	---	---	---	---	---	---	135	09/82	600	560	
9364074	CRSP-PL: SMALL FARMS SYSTEMS												
	G 82 82	---	---	---	---	---	---	---	500	05/83	---	561	
9364076	ANIMAL NUTRITION DISEASE IN LA												
	G 82 86	---	---	---	---	---	---	---	355	10/82	1310	562	
9364077	EXTENDED MARITIME JURISDICTION												
	G 82 86	---	---	---	---	---	---	---	100	10/82	1300	563	
9364078	INTERNATIONAL SMALL BUSINESS CORP												
	G 82 85	---	---	---	---	---	---	---	550	09/82	1450	564	
9364079	MOLLUSK CULTURE UTILIZATION												
	G 82 86	---	---	---	---	---	---	---	200	13/30	1300	565	
9364080	AGRO-FORESTRY CROP SYSTEMS												
	G 82 86	---	---	---	---	---	---	---	700	10/82	10000	566	
9364081	REFORESTATION OF DEGRADED SOILS												
	G 82 86	---	---	---	---	---	---	---	700	10/82	9500	567	
9364083	IMMUNOLOGY OF TICKS												
	G 82 85	---	---	---	---	---	---	---	300	09/82	900	568	
9364084	AG PLANNING AND POLICY ANALYSIS												
	G 82 84	---	---	---	---	---	---	---	800	09/82	4300	569	
9364085	CRSP-PL: SOYBEANS												
	G 82 82	---	---	---	---	---	---	---	420	05/83	---	570	
9364086	CRSP: FISHERIES STOCK ASSESSMENT												
	G 81 CONT.	---	---	---	---	600	500	100	600	09/82	CONT.	572	
9364087	INTERNATIONAL WATER MGT CENTER (IWMC)												
	G 81 CONT.	---	---	---	---	---	---	---	250	09/83	CONT.	573	
9364088	CRSP: FISHERIES POST HARVEST UTILIZATION												
	G 82 CONT.	---	---	---	---	---	---	---	500	09/82	CONT.	574	
9364099.01	FARMING SYSTEMS FOR SMALL FARMERS												
	G 81 85	---	---	---	---	265	---	265	422	03/83	2313	575	
9365313	RURAL MARKET SYSTEMS												
	G 81 85	---	---	---	---	---	---	---	500	05/83	2150	576	
	APPROPRIATION	TOTAL	35985	54432	50378	40039	59735	58438	41336	92925		127344	
		GRANT	35985	54432	50378	40039	59735	58438	41336	92925		127344	
		LOAN	---	---	---	---	---	---	---	---		---	
	FUNCTIONAL ACCOUNT	TOTAL	35985	54432	50378	40039	59735	58438	41336	92925		127344	
		GRANT	35985	54432	50378	40039	59735	58438	41336	92925		127344	
		LOAN	---	---	---	---	---	---	---	---		---	

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

NEAR EAST

COUNTRY: EGYPT

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
N-FIXATION - SYMBIOTIC															
931-0613.	A	6	0	5	1	B	0	0	0	0	B	0	0	0	0
CRSP_SORGHUM\MILLET															
931-1254.	A	0	0	1	0	A	0	0	3	0	A	0	0	6	1
CONTROL OF BARLEY DISEASES FOR LDCS															
931-1318.	A	1	0	2	0	A	1	0	2	2	A	1	0	2	1

COUNTRY: ISRAEL

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
CONTROL OF BARLEY DISEASES FOR LDCS															
931-1318.	A	1	0	2	0	A	1	0	2	0	A	1	0	2	0

COUNTRY: SYRIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
IMPROVED FEED NUTRITION INFORMATION															
931-0050.	A	5	0	2	2	A	5	0	2	18	A	5	0	2	23

COUNTRY: TURKEY

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
SPRING WINTER WHEAT															
931_0621.	A	0	0	2	1	A	0	0	2	1	A	0	0	2	1
CONTROL OF BARLEY DISEASES FOR LDCS															
931_1318.	A	1	0	2	1	A	1	0	2	1	A	1	0	2	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

NEAR EAST

COUNTRY: JORDAN

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
INTEGRATED CROP PROTECTION METHODS 936-4049.											B	250	0	10	25

COUNTRY: YEMEN ARAB REPUBLIC

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
CRSP-SORGHUM/MILLET 931-1254.	A	0	0	1	0	A	0	0	1	0	A	0	0	3	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

SOUTH ASIA

COUNTRY: SRI LANKA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	6	0	2	0	A	9	0	3	0	A	29	0	3	4
N-FIXATION - SYMBIOTIC															
931_0613.	A	1	0	1	0	B	0	0	0	0	B	0	0	0	0
SYNTHESIS OF WATER MANAGEMENT															
931_1007.											B	50	0	6	0
SOILS COOPERATIVE AGREEMENT - PLNG GRANT															
931-1291.	A	4	0	2	0										
INTEGRATED CROP PROTECTION METHODS															
936 4049.						B	15	0	2	1	B	15	0	2	1

COUNTRY: INDIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	80	0	10	10	A	80	0	10	10	A	80	0	10	10
PLNG ASST: WATER RESOURCES ECONOMICS															
931-0236.19	A	30	0	2	0	A	50	0	3	0	A	70	0	3	0
N-FIXATION - SYMBIOTIC															
931-0613.	A	4	0	3	1	B	0	0	0	0	B	0	0	0	0
SYNTHESIS OF WATER MANAGEMENT															
931-1007.	A	80	0	1	0	A	30	0	5	0	A	10	0	2	0
IMPROVEMENT OF PEARL MILLET															
931_1040.	A	0	0	2	1										
CRSP-SORGHUM/MILLET															
931_1254.	A	0	0	7	0	A	0	0	25	1	A	0	0	10	1
CRSP - PEANUTS															
936_4048.											B	100	0	6	2
INTEGRATED CROP PROTECTION METHODS															
936_4049.						B	15	0	3	1	B	15	0	2	1
TISSUE CULTURES FOR FOOD PROD.															
936_4055.	B	0	0	0	0	B	5	0	1	1	B	5	0	1	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

SOUTH ASIA

COUNTRY: BANGLADESH

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	292	2	4	8	A	298	2	6	8	A	318	2	6	10
CONTROL OF VERTEBRATE PESTS															
931-0473.	A	0	0	1	0	A	0	0	1	0	A	0	0	1	0
N-FIXATION - SYMBIOTIC															
931-0613.	A	1	0	1	0	B	0	0	0	0	B	0	0	0	0
PEST MGT - RELATED ENV. PROTECTION															
931-0930.											B	75	0	10	300

COUNTRY: PAKISTAN

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
N-FIXATION - SYMBIOTIC															
931-0613.	A	1	0	1	0	B	0	0	0	0	B	0	0	0	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

EAST ASIA

COUNTRY: SINGAPORE

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	12	0	4	0	A	6	0	2	0	A	6	0	2	0

COUNTRY: MALAYSIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	2	0	2	1	A	2	0	1	1	A	2	0	1	1
N-FIXATION - SYMBIOTIC															
931-0613.	A	30	0	7	4	B	0	0	0	0	B	0	0	0	0

COUNTRY: KOREA, REPUBLIC OF

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
CONTROL OF BARLEY DISEASES FOR LDCS															
931-1318.	A	1	0	0	2	A	1	0	0	1	A	1	0	0	2
TISSUE CULTURES FOR FOOD PROD.															
936-4055.											B	5	0	1	0

COUNTRY: PHILIPPINES

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
IMPROVED FEED NUTRITION INFORMATION															
931-0050.						B	5	0	2	20	B	5	0	2	25
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	108	1	4	0	A	118	1	4	2	A	118	1	4	2

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

EAST ASIA

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
WEED CONTROL SYSTEMS IN LDCS 931-0463.	A	125	3	1	0	A	150	3	2	0					
CONTROL OF VERTEBRATE PESTS 931-0473.	A	50	2	2	1	A	75	2	2	1	A	75	2	2	1
SOIL FAMILIES - HAWAII 931-0582.	A	150	1	10	2	A	150	1	8	2					
						A	150	1	8	2					
MINERAL STUDIES WITH RUMINANT ANIMALS 931-0600.	A	5	0	2	1	A	4	0	1	0	A	4	0	1	0
DETERMINANTS OF IRRIGATION PROBLEMS 931-1005.						A	60	1	4	0	A	10	1	1	0
AGRICULTURAL MECHANIZATION 931-1026.	A	75	8	4	0	A	75	8	4	0	A	75	8	4	0
ICLARM - FISHERIES DEVELOPMENT 931-1050.	A	200	2	2	0	A	300	3	2	0	A	400	4	2	0
INTEGRATED CROP PROTECTION METHODS 936-4049.						B	15	0	2	1	B	250	0	10	25
											B	15	0	2	1
TISSUE CULTURES FOR FOOD PROD. 936-4055.	B	5	0	1	0	B	5	0	1	1	B	5	0	1	1
REFORESTATION OF DEGRADED SOILS 936-4081.											B	50	1	5	0

COUNTRY: THAILAND

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
TROPICAL SOILS - HAWAII 931-0129.	A	10	0	3	0	B	2	0	2	0					
PLNG ASST: WATER RESOURCES ECONOMICS 931-0236.19	A	30	0	2	0	A	50	0	3	0	A	70	0	3	0
WEED CONTROL SYSTEMS IN LDCS 931-0463.	A	0	0	0	0	A	15	0	0	0					
MINERAL STUDIES WITH RUMINANT ANIMALS 931-0600.	A	4	0	2	0	A	3	0	1	0	A	3	0	1	0
N-FIXATION - SYMBIOTIC 931-0613.	A	6	0	3	2	B	0	0	0	0	B	0	0	0	0
AGRICULTURAL MECHANIZATION 931-1026.	A	25	6	2	0	A	25	6	2	0	A	25	6	2	0
INTEGRATED CROP PROTECTION METHODS 936-4049.						B	15	0	2	1	B	15	0	2	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

EAST ASIA

COUNTRY: INDONESIA

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	58	0	6	8	A	224	1	8	10	A	224	1	8	10
						B	75	2	5	3	B	75	2	5	3
CONTROL OF VERTEBRATE PESTS															
931-0473.						B	0	0	1	1	B	0	0	1	1
SOIL FAMILIES - HAWAII															
931-0582.	A	150	1	12	2	A	150	1	8	2	A	150	1	8	2
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	2	0	2	0	A	3	0	1	0	A	3	0	2	0
PEST MGT - RELATED ENV. PROTECTION															
931-0930.						B	75	0	10	250					
AGRICULTURAL MECHANIZATION															
931-1026.	A	25	6	2	0	A	25	6	2	0	A	25	6	2	0
SOILS COOPERATIVE AGREEMENT - PLNG GRANT															
931-1291.	A	10	0	3	0	A	6	0	2	0					
CRSP: SOILS MANAGEMENT															
931-1311.						B	100	1	2	3	B	200	3	3	6
						B	100	1	2	3	B	200	3	3	6
FARM LVL POSTHARVEST GRAIN STORAGE LOSS															
931-1322.											B	25	0	3	0
CRSP_PROG: SMALL RUMINANTS															
931-1328.	A	120	1	10	1	A	120	1	10	1	A	120	1	10	2
INTEGRATED CROP PROTECTION METHODS															
936-4049.						B	15	0	2	1	B	250	0	10	25
											B	15	0	2	1
TISSUE CULTURES FOR FOOD PROD.															
936-4055.						B	5	0	1	1					
AGRO-FORESTRY CROP SYSTEMS															
936-4080.											B	10	0	3	2

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: GEO-NAME5D7*********

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
TROPICAL SOILS - NCSU 931-0130.						A	2	0	1	1					

COUNTRY: GUYANA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
LAC PLANNING NETWORKS 931-0236.70	A	2	0	6	0										
IMP TROP BEANS/COWPEAS 931-0562.	A	1	0	2	0										
PL/CRSP - BEANS AND COWPEAS 931-1259.	A	3	0	3	0										
CRSP-BEANS AND COWPEAS 931-1310.						B	80	0	9	1	B	100	0	6	2

COUNTRY: SURINAME

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
MINERAL STUDIES WITH RUMINANT ANIMALS 931-0600.	B	0	0	1	0	B	1	0	1	0	B	1	0	1	0

COUNTRY: ARGENTINA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
TROPICAL SOILS - NCSU 931-0130.	A	2	0	1	0	B	0	0	0	0					

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: BOLIVIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
LAC PLANNING NETWORKS															
931_0236.70											A	3	0	3	0
AGRO-ECON RESEARCH ON TROPICAL SOILS															
931_0525.	A	10	0	4	0	A	5	0	2	0					
MINERAL STUDIES WITH RUMINANT ANIMALS															
931_0600.	A	0	0	2	0	A	2	0	2	0	A	2	0	2	0
PEST MGT - RELATED ENV. PROTECTION															
931-0930.	A	50	0	10	150										
SYNTHESIS OF WATER MANAGEMENT															
931-1007.						B	50	0	6	0					

COUNTRY: BRAZIL

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931_0054.						A	60	0	10	6	A	60	0	10	6
TROPICAL SOILS - NCSU															
931_0130.	A	2	0	1	0	B	2	0	1	0					
AGRO-ECON RESEARCH ON TROPICAL SOILS															
931_0525.	A	10	0	4	0	A	5	0	2	0					
MINERAL STUDIES WITH RUMINANT ANIMALS															
931_0600.	A	0	0	1	0	A	1	0	1	0	A	1	0	1	0
BENCHMARK SOILS _ PUERTO RICO															
931-0601.	A	200	1	5	0										
N_FIXATION LIMITING FACTORS															
931-0610.	A	10	0	3	2	A	10	0	4	1	B	10	0	4	1
N_FIXATION _ SYMBIOTIC															
931-0613.	A	5	0	2	1	B	0	0	0	0	B	0	0	0	0
SOILS COOPERATIVE AGREEMENT _ PLNG GRANT															
931_1291.	A	2	0	2	0										
CRSP-PROG: SMALL RUMINANTS															
931-1328.	A	100	1	10	2	A	100	1	10	2	A	100	1	10	3
INTEGRATED CROP PROTECTION METHODS															
936-4049.						B	15	0	2	1	B	15	0	2	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: CHILE

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
N-FIXATION LIMITING FACTORS															
931-0610.	A	2	0	1	0										

COUNTRY: COLOMBIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	242	2	6	4	A	252	2	6	6	A	242	2	6	4
LAC PLANNING NETWORKS															
931-0236.70											A	3	0	3	0
AGRO-ECON RESEARCH ON TROPICAL SOILS															
931-0525.	A	4	0	2	0	A	2	0	0	0					
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	4	0	15	1	A	6	0	15	0	A	4	0	15	0
N-FIXATION - SYMBIOTIC															
931-0613.	A	5	0	2	0	A	5	0	2	0	B	0	0	0	0
SOILS COOPERATIVE AGREEMENT - PL480 GRANT															
931-1291.	A	2	0	2	0										
ANIMAL NUTRITION AND DISEASE IN LA															
936-4076.											A	300	4	3	2

COUNTRY: COSTA RICA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
IMPROVED FEED NUTRITION INFORMATION															
931-0050.	A	5	0	2	5	A	5	0	2	25	A	5	0	2	20
WEED CONTROL SYSTEMS IN LDCS															
931-0463.	A	100	2	1	0	A	100	2	1	0					
IMP TROP BEANS/COWPEAS															
931-0562.	A	1	0	1	0										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	4	0	1	0	A	4	0	1	0	A	4	0	1	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
N-FIXATION - SYMBIOTIC															
931-0613.						B	0	0	0	0	B	0	0	0	0
PL/CRSP - BEANS AND COWPEAS															
931-1259.	A	3	0	3	0										
CRSP-BEANS AND COWPEAS															
931-1310.						B	80	0	9	1	B	100	0	6	2
FARM LVL POSTHARVEST GRAIN STORAGE LOSS															
931-1322.											B	25	0	3	0
AGRO-FORESTRY CROP SYSTEMS															
936-4080.											B	10	0	3	2

COUNTRY: DOMINICAN REPUBLIC

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
CRIES, DOMINICAN REP./HONDURAS/NICARAGUA															
931-0236.01	A	60	1	5	0										
IMP TROP BEANS/COWPEAS															
931-0562.	A	1	0	2	0										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	4	0	1	1	A	4	0	1	1	A	4	0	1	1
SMALL FARMER CREDIT (COLORADO ST)															
931-1134.02	A	200	2	15	0	A	200	1	20	0					
PL\CRSP - BEANS AND COWPEAS															
931-1259.	A	3	0	2	0										
SOILS COOPERATIVE AGREEMENT - PLNG GRANT															
931-1291.	A	2	0	2	0	A	2	0	2	0					
CRSP-BEANS AND COWPEAS															
931-1310.						B	80	0	9	1	B	100	0	6	2
CRSP: SOILS MANAGEMENT															
931-1311.						B	3	0	3	6	B	125	2	5	10
TISSUE CULTURES FOR FOOD PROD.															
936-4055.	B	0	0	0	0	B	4	0	1	0	B	4	0	1	0

COUNTRY: ECUADOR

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
IMP TROP BEANS/COWPEAS															
931-0562.	A	1	0	2	1										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	1	0	1	0	A	1	0	1	0	A	1	0	1	0
CRSP-SORGHUM\MILLET															
931-1254.	A	0	0	0	0	B	0	0	2	0	B	0	0	4	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
PL/CRSP - BEANS AND COWPEAS															
931-1259.	A	3	0	1	0										
CRSP-BEANS AND COWPEAS															
931-1310.						B	80	0	9	1	B	100	0	6	7

COUNTRY: EL SALVADOR

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
PROGRESS INDICATORS - EL SALVADOR															
931-0236.05	A	120	4	3	0	A	120	4	3	0	A	120	4	3	0
LAC PLANNING NETWORKS															
931-0236.70						A	4	0	4	0					
N-FIXATION LIMITING FACTORS															
931-0610.	A	5	0	2	2						B	1	0	1	0
	A	5	0	0	1										

COUNTRY: GUATEMALA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
IMP TROP BEANS\COWPEAS															
931-0562.	A	1	0	2	0										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	1	0	1	1	A	1	0	1	0	A	1	0	1	0
CRSP-SORGHUM/MILLET															
931-1254.	A	0	0	3	0	B	0	0	4	0	B	0	0	4	0
PL/CRSP - BEANS AND COWPEAS															
931-1259.	A	3	0	7	0										
CRSP-BEANS AND COWPEAS															
931-1310.						B	80	0	9	1	B	100	0	6	2
INTEGRATED CROP PROTECTION METHODS															
936-4049.											B	250	0	10	25

COUNTRY: HAITI

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
CRSP-SORGHUM/MILLET															
931-1254.	A	0	0	2	0	B	0	0	4	0	B	0	0	4	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: HONDURAS

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
CRIES, DOMINICAN REP.\HONDURAS\NICARAGUA															
931-0236.01	A	20	0	10	0										
LAC PLANNING NETWORKS															
931-0236.70						A	4	0	4	0					
IMP TROP BEANS/COWPEAS															
931-0562.	A	1	0	2	0										
SMALL FARMER CREDIT (OKLAHOMA ST)															
931-1134.01	A	125	2	15	0										
CRSP-SORGHUM\MILLET															
931-1254.	A	0	0	2	0	B	0	0	4	0	B	0	0	4	0
PL/CRSP - BEANS AND COWPEAS															
931-1259.	A	3	0	2	0										
CRSP-BEANS AND COWPEAS															
931-1310.						B	80	0	9	1	B	100	0	6	2

COUNTRY: MEXICO

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	106	0	3	20	A	206	0	3	50	A	208	0	4	50
TROPICAL SOILS - HAWAII															
931-0129.	A	2	0	1	0										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	B	0	0	1	0	B	0	0	2	1	B	0	0	2	1
N-FIXATION - SYMBIOTIC															
931-0613.	A	1	0	1	0	A	30	0	2	1	B	0	0	0	0
SPRING WINTER WHEAT															
931-0621.	A	0	0	4	0	A	0	0	4	0	A	0	0	4	0
TISSUE CULTURES FOR FOOD PROD.															
936-4055.	B	0	0	0	0	B	5	0	1	0	B	5	0	1	0
BABESIOSIS RESEARCH															
936-4073.											B	10	0	3	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: PANAMA

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.						B	50	1	7	2	B	50	1	7	2
LAC PLANNING NETWORKS															
931-0236.70											A	3	0	3	0
IMP TROP BEANS/COWPEAS															
931-0562.	A	1	0	2	0										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	0	0	2	1	A	1	0	1	1	A	1	0	1	0

COUNTRY: PERU

PROJECT TITLE	FY 1980 STATUS	FY 1980 AMT ($000)	FY 1980 STAF	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STATUS	FY 1981 AMT ($000)	FY 1981 STAF	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STATUS	FY 1982 AMT ($000)	FY 1982 STAF	FY 1982 #OF TDYS	FY 1982 #OF PTP
TROPICAL SOILS - HAWAII															
931-0129.	A	5	0	2	0	B	2	0	1	0					
TROPICAL SOILS - NCSU															
931-0130.	A	20	0	8	3										
LAC PLANNING NETWORKS															
931-0236.70	A	2	0	4	0										
AGRO-ECON RESEARCH ON TROPICAL SOILS															
931-0525.	A	216	3	8	0	A	108	3	4	0					
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	3	0	1	0	A	4	0	1	0	A	4	0	1	0
N-FIXATION - SYMBIOTIC															
931-0613.	A	5	0	2	1	B	0	0	0	0	B	0	0	0	0
PEST MGT - RELATED ENV. PROTECTION															
931-0930.	A	75	0	8	100										
SOILS COOPERATIVE AGREEMENT - PLNG GRANT															
931-1291.	A	8	0	3	0	A	4	0	2	0					
CRSP: SOILS MANAGEMENT															
931-1311.						B	134	2	3	4	B	200	3	4	8
CRSP-PROG: SMALL RUMINANTS															
931-1328.	A	160	1	10	1	A	160	1	10	1	A	160	1	10	2
DRYLAND AGRICULTURE SUPPORT SERVICE															
936-4021.											B	50	0	3	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: URUGUAY

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	1	0	1	0	A	1	0	1	0	A	1	0	1	0

COUNTRY: VENEZUELA

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	6	0	3	0	A	8	0	4	0	A	8	0	4	6
TROPICAL SOILS - NCSU															
931-0130.	B	1	0	1	0										
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	A	2	0	1	2	A	2	0	1	1	A	2	0	1	1

COUNTRY: TRINIDAD & TOBAGO

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP
TROPICAL SOILS - CORNELL															
931-0127.	A	30	1	4	0	A	30	1	4	0					

COUNTRY: BARBADOS

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF	#OF TDYS	#OF PTP
PEST MGT - RELATED ENV. PROTECTION															
931-0930.	A	50	0	10	100										

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: REG OFFICE CEN AMER & PANAMA_ROCAP

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
PEST MGT - RELATED ENV. PROTECTION															
931-0930.	A	25	0	5	100										

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

COUNTRY: MOROCCO

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
CONTROL OF BARLEY DISEASES FOR LDCS 931-1318.	A	1	0	2	2	A	1	0	2	2	A	1	0	2	2
CRSP-PROG: SMALL RUMINANTS 931-1328.	B	0	0	3	0	B	160	1	12	1	B	160	1	12	3
DRYLAND AGRICULTURE SUPPORT SERVICE 936-4021.											B	300	1	6	0

COUNTRY: MALAWI

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
MINERAL STUDIES WITH RUMINANT ANIMALS 931-0600.	A	1	0	1	0	A	1	0	1	0	A	1	0	1	0
N-FIXATION - SYMBIOTIC 931-0613.	A	2	0	2	0	B	0	0	0	0	B	0	0	0	0
PL/CRSP - BEANS AND COWPEAS 931-1259.	A	12	0	6	0										
CRSP-BEANS AND COWPEAS 931-1310.						B	80	0	9	1	B	100	0	6	2

COUNTRY: KENYA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
CONTROL OF VERTEBRATE PESTS 931-0473.						B	10	0	1	0	B	10	0	1	0
N-FIXATION - SYMBIOTIC 931-0613.	A	20	0	5	2										
PEST MGT - RELATED ENV. PROTECTION 931-0930.											B	75	0	10	300
PHYSIOLOGY AND ECOLOGY OF TICKS 931-1038.	A	56	1	1	0										
CRSP-BEANS AND COWPEAS 931-1310.						B	80	0	9	1	B	100	0	6	2

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
FARM LVL POSTHARVEST GRAIN STORAGE LOSS 931-1322.											B	30	0	4	25
CRSP-PROG: SMALL RUMINANTS 931-1328.	A	170	1	12	1	A	170	1	12	2	A	170	1	12	3
DRYLAND AGRICULTURE SUPPORT SERVICE 936-4021.						B	300	1	6	0	B	300	2	6	0
BABESIOSIS RESEARCH 936-4073.											B	10	0	3	1
AGRO-FORESTRY CROP SYSTEMS 936-4080.											B	10	0	3	2
IMMUNOLOGY OF TICKS 936-4083.											B	300	2	1	0

COUNTRY: TANGANYIKA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
N-FIXATION - SYMBIOTIC 931_0613.						B	0	0	0	0	B	0	0	0	0

COUNTRY: UGANDA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
N-FIXATION - SYMBIOTIC 931_0613.	A	2	0	2	0										

COUNTRY: NIGERIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER 931_0054.	A	8	0	3	0	A	15	0	6	0	A	58	0	3	10
N-FIXATION LIMITING FACTORS 931_0610.	A	6	0	2	0	A	6	0	2	0	A	6	0	3	0
PL/CRSP - BEANS AND COWPEAS 931-1259.	A	3	0	3	0										
CRSP-BEANS AND COWPEAS 931-1310.						B	80	0	9	1	B	100	0	6	2

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF TDYS	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF TDYS	FY 1982 #OF PTP
INTEGRATED CROP PROTECTION METHODS 936-4049.						B	10	0	1	1					
TISSUE CULTURES FOR FOOD PROD. 936-4055.						B	4	0	1	0					
						B	4	0	1	0					

COUNTRY: TANZANIA

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF TDYS	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF TDYS	FY 1982 #OF PTP
CONTROL OF VERTEBRATE PESTS 931-0473.						B	25	0	1	1	B	25	0	1	1
N-FIXATION - SYMBIOTIC 931-0613.	A	1	0	1	0	B	0	0	0	0	B	0	0	0	0
CRSP-SORGHUM/MILLET 931-1254.	A	0	0	3	0	A	0	0	4	1	A	0	0	4	1
PL\CRSP - BEANS AND COWPEAS 931-1259.	A	3	0	3	0										
SOILS COOPERATIVE AGREEMENT - PLNG GRANT 931-1291.	A	5	0	2	0	A	6	0	2	0					
CRSP-BEANS AND COWPEAS 931-1310.						B	80	0	9	1	B	100	0	6	2
CRSP: SOILS MANAGEMENT 931-1311.						B	5	0	2	4	B	175	2	3	6

COUNTRY: CAMEROON

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF TDYS	FY 1980 #OF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF TDYS	FY 1982 #OF PTP
SOIL FAMILIES - HAWAII 931-0582.	A	100	5	4	1	A	150	1	8	2	A	150	1	8	2
CRSP-SORGHUM\MILLET 931-1254.	A	0	0	0	0	B	0	0	2	0	B	0	0	6	0
PL\CRSP - BEANS AND COWPEAS 931-1259.	A	3	0	2	0										
CRSP-BEANS AND COWPEAS 931-1310.						B	80	0	9	1	B	80	0	9	1
CRSP - PEANUTS 936-4048.											B	100	0	6	2
INTEGRATED CROP PROTECTION METHODS 936-4049.						B	15	0	2	1	B	15	0	2	1

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

COUNTRY: BOTSWANA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	B	0	0	1	0	B	0	0	1	0	B	1	0	1	0

COUNTRY: GHANA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
TROPICAL SOILS - PRAIRIE VIEW															
931-0126.	A	100	1	5	0										

COUNTRY: SOMALIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
CONTROL OF VERTEBRATE PESTS															
931-0473.	B	0	0	1	0	B	15	0	1	0	B	15	0	1	0

COUNTRY: SUDAN

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
PLNG ASST: WATER RESOURCES ECONOMICS															
931-0236.19	A	30	0	3	0	A	50	0	3	0	A	70	0	3	0
CONTROL OF VERTEBRATE PESTS															
931-0473.	A	35	1	2	1	A	35	1	2	1	A	35	1	2	1
MINERAL STUDIES WITH RUMINANT ANIMALS															
931-0600.	B	0	0	0	0	B	0	0	1	0	B	1	0	1	0
IMPROVEMENT OF PEARL MILLET															
931-1040.	A	0	0	2	0										

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

CRSP SORGHUM\MILLET

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
931-1254.	A	0	0	3	0	A	0	0	6	1	A	0	0	10	0
INTEGRATED CROP PROTECTION METHODS 936-4049.											B	250	0	10	25

COUNTRY: TUNISIA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
SPRING WINTER WHEAT															
931-0621.	A	0	0	2	0	A	0	0	2	0	A	0	0	2	0
PEST MGT - RELATED ENV. PROTECTION 931-0930.						B	75	0	10	200					
CONTROL OF BARLEY DISEASES FOR LDCS															
931-1318.	A	1	0	2	1	A	1	0	2	2	A	1	0	2	2

COUNTRY: NIGER

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
SOILS COOPERATIVE AGREEMENT - PLNG GRANT															
931-1291.	A	6	0	2	0	A	6	0	2	0					
CRSP: SOILS MANAGEMENT 931-1311.						B	4	0	2	4	B	150	2	3	6
CRSP - PEANUTS 936-4048.											B	100	0	6	2

COUNTRY: SENEGAL

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
INTL FERTILIZER DEVELOPMENT CENTER															
931-0054.	A	20	0	4	2	A	30	0	4	4	A	30	0	4	4
MINERAL STUDIES WITH RUMINANT ANIMALS 931-0600.	A	1	0	1	0	A	1	0	1	0	A	1	0	1	0
IMPROVEMENT OF PEARL MILLET 931-1040.	A	0	0	2	0										
CRSP-SORGHUM\MILLET 931-1254.	A	0	0	0	0	B	0	0	6	0	B	0	0	6	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
PLNCRSP - BEANS AND COWPEAS															
931-1259.	A	3	0	4	0										
CRSP-BEANS AND COWPEAS															
931-1310.						B	80	0	9	1	B	100	0	6	2
CRSP - PEANUTS															
936-4048.											B	100	0	6	2

COUNTRY: UPPER VOLTA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
CRSP-SORGHUM/MILLET															
931-1254.	A	0	0	2	0	B	0	0	6	0	B	0	0	8	0
SOILS COOPERATIVE AGREEMENT - PLNG GRANT															
931-1291.	A	6	0	2	0	A	6	0	2	0					
CRSP: SOILS MANAGEMENT															
931-1311.						B	4	0	2	4	B	150	2	3	6
CRSP - PEANUTS															
936-4048.											B	100	0	6	2

COUNTRY: MALI

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
N FIXATION ASSOCIATIVE															
931-1004.	A	4	0	2	0										
CRSP-SORGHUM/MILLET															
931-1254.	A	0	0	2	0	B	0	0	2	0	B	0	0	3	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

COUNTRY: SOUTH PACIFIC REGIONAL

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
PEST MGT - RELATED ENV. PROTECTION															
931-0930.						B	75	0	10	300					

COUNTRY: LIMITED WORLDWIDE

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF	#OF TDYS	#OF PTP
DEV OF IMP VARIETIES OF SOYBEANS															
931-0560.	A	56	0	25	0										
PEST MGT - ROOTKNOT NEMATODE															
931-0614.	A	10	0	3	30	B	20	0	4	40	B	150	0	10	150
CRSP-PL: PEANUTS															
936-4013.	B	350	0	0	0	B	0	0	55	0					

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

DSB PROJECTS WHICH PROVIDE SERVICES AT MISSION OR REGIONAL BUREAU REQUEST

PROJECT TITLE	FY 1980 STA FUS	FY 1980 AMT ($000)	FY 1980 STAF #OF TDYS	FY 1980 #OF PTP	FY 1981 STA FUS	FY 1981 AMT ($000)	FY 1981 STAF #OF TDYS	FY 1981 #OF PTP	FY 1982 STA FUS	FY 1982 AMT ($000)	FY 1982 STAF #OF TDYS	FY 1982 #OF PTP
AGR. SECTOR PLANNING AND SUPPORT												
931-0060.03	A											
WORLD RHIZOBIUM COLLECTION CENTER												
931-0095.	A											
TROPICAL SOILS - PUERTO RICO												
931-0128.	A											
SEED PROGRAM AND INDUSTRY DEVELOPMENT												
931-0203.	A											
WEED CONTROL UTILIZATION												
931-0206.	A											
PLNG ASST: FOOD POLICY												
931-0236.29	A											
NOAA ADVISORY SERVICE												
931-0242.	A											
FOOD GRAIN STORAGE AND MARKETING												
931-0786.	A											
FERTILIZER TECHNICAL ASSISTANCE (TVA)												
931-0832.	A											
LIVESTOCK PRODUCTION CAPABILITY												
931-1149.	A											
SOILS MANAGEMENT SUPPORT SERVICES												
931-1229.	A											
AQUACULTURE TECHNOLOGY DEVELOPMENT												
931-1314.	A											
STORAGE/PROCESSING OF FRUITS/VEGETABLES												
931-1323.	A											
GRAIN LEGUMES SUPPORT SERVICE												
931-1327.	A											
SEEU: AGRIBUSINESS DEVLPMT AND SUPPORT												
931-1398.	A											
CRSP-PL: ANIMAL HEALTH												
936-4009.	A											
FISHERIES DEVELOPMENT PLNG ASSISTANCE												
936-4024.	A											
MILKFISH SEED PRODUCTION												
936-4025.	A											
CEREAL GRAINS SUPPORT SERVICE												
936-4046.	A											
TROPICAL LEGUMES INOCULANT SERVICE												
936-4050.	A											
PEST MANAGEMENT CAPABILITY (RSSA)												
936-4071.	A											
EXTENDED MARITIME JURISDICTION												
936-4077.	A											

A - ACTIVE B - PENDING MISSION APPROVAL

SERVICES

MOLLUSK CULTURE UTILIZATION
936-4079. A

AG PLANNING AND POLICY ANALYSIS
936-4084. A

A - ACTIVE B - PENDING MISSION APPROVAL