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FY 1982

DEVELOPMENT SUPPORT BUREAU

OFFICE OF SCIENCE AND TECHNOLOGY

MAY 1980

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

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OFFICE STRATEGY STATEMENT

A. FY 1981 and FY 1982 CPSS for the Office of Science and Technology

As stated in the Office's FY 1981 CPSS Statement, the mission of the Office of Science and Technology is to encourage and support the Agency's developing country clientele in the use of scientific and technological knowledge that impacts on their development with a special emphasis on satisfying basic human needs. To perform this role, the Strategy Statement included two important elements: the transfer of technology through training, technical assistance and applied research; and the identification of program areas which describe the substantive content of the science and technology selected for transfer.

With respect to the technology transfer process, the Office engaged in activities that increased its mastery of the subject matter through state-of-the-art studies and demonstration projects and applied that know-how through training and technical assistance to the field Missions. With respect to the major demand areas, the following eight were highlighted: Remote Sensing; Science Policy and Planning; Employment Creation through the Development of Small Industry Technology and Management Capabilities; Environment and Natural Resources; Appropriate Technology; Scientific Institutions for Development; UNCSTD Follow-Up; and Development of Technology for Low-Cost Construction. Their validity was tested among the Regional Bureaus last year and received their endorsement.

The most significant change in the Strategy Statement in this FY 1982 ABS as compared to last year's Strategy Statement is in the regrouping and reduction of the multiple program areas from eight to three. The revision was prompted by a desire to convey a better understanding of the core programs of the Office.

The three program areas of emphasis are: Science Policy; Environment, Natural Resources and Remote Sensing; and Employment and Technology. The transition is portrayed in the Program Areas Chart on page 2.

PROGRAM AREAS

FY 1981

1. Remote Sensing

   Emphasis primarily on environment and natural resources.

2. Science Policy and Planning

   Replaced by Program Area 1 in FY 82.

3. Environment and Natural Resources

   High priority core of DS/ST's activities.

4. Employment Creation through the Development of Small Industry Technology and Management Capabilities

   Subsumed under Program Area 3 in FY 82.

5. Appropriate Technology

   Subsumed under Program Area 3 in FY 82.

6. Scientific Institutions for Development

   Subsumed under Program Area 1 in FY 82.

7. UNCSTD Follow-Up

   Dropped as a distinct Program Area but responded to through the three Program Areas in FY 82.

8. Development of Technologies for Low-Cost Construction

   Dropped as a Program Area due to low priority demands.

FY 1982

1. Science Policy

   Incorporates and integrates Program Areas 2 and 6 in FY 81.

2. Environment, Natural Resources and Remote Sensing

   Incorporates and integrates Program Areas 1 and 3 of FY 81 and broadens their application especially with respect to forestry.

3. Employment and Technology

   Incorporates and integrates Program Areas 4 and 5 of FY 81.

1. Science Policy

It is perhaps a truism to state that a minimal scientific and technological infrastructure is essential to any developing nation whose national policy is to move from dependency status and achieve the scientific and technological capability to sustain economic growth. However, to achieve that basic capacity requires an understanding on the part of the LDC of the role of government policy in creating a receptive climate for such developments. The strategy to help our country clientele comprehend and appreciate the shortcomings in their science and technological strength will be implemented through S&T studies and assessments. These activities will help them enunciate policy choices that in the longer term will build greater self-sufficiency in this area.

2. Environment, Natural Resources and Remote Sensing

It has been recognized from a number of recent studies--Global Year 2000 (State and CEQ); Research Priorities in Tropical Biology (National Research Council); Environment and Natural Resource Management in Developing Countries (AID); World Conservation Strategy (International Union for the Conservation of Nature)—that the ever encroaching environmental and natural resource degradation in the LDC world is having immediate and long range negative impact on the countries' ability to satisfy the basic human needs of their populations. The most significant problems are caused by: deforestation and its impact on energy, food and water; soil erosion; desertification; and coastal zone deterioration.

The strategy of the Office in this area is to provide information and understanding about these problems and to mobilize U.S. and other expertise to assist the Regional Bureaus, Missions and the LDCs in solving them. The ultimate beneficiary is the poor whose daily existence will be improved through the better management of natural resources. This strategy translates inself into such activities as:

-- development of preliminary information on critical natural resources and environmental problems on an individual country basis.

-- expansion of information resources on such specific problem areas as resource degradation in the humid tropics and development of methodologies for collecting baseline data through natural resources inventories.

-- initiation of cooperative US/LDC applied research and training programs to assist in the transfer of scientific and technical knowledge through such avenues as, for example, the Man and the Biosphere (MAB) program.

-- providing U.S. and other expertise in environmental planning and management to the Missions and LDCs in order to institutionalize and strengthen LDC functions in this area.

3. Employment and Technology

Generating productive employment and raising the income of the employed poor are a major concern of the LDCs and AID. These problems are complicated by a scarcity of capital in the LDCs. Large scale creation of productive jobs with low capital-labor ratios is necessary. Traditionally, farming has been the prime source of productive employment in AID clientele countries and is the primary focus of AID's efforts.

However, experience has shown that the demand for non-farm goods and services grows rapidly as incomes are generated in the agricultural sector. Consequently, opportunities for manufacturing and service industries offer major sources of new employment for developing countries. Small manufacturing and service enterprises offer the most attractive prospects for capital saving employment generation. Thus the strategy of this Office is to initiate a small non-farm enterprise program that will complement the Agency's small farm agricultural program with the objective of employment generation.

B. Influential Events

A number of significant occurrences described below took place over the past year. Their impact on the Office varied but their overall influence helped to shape DS/ST's FY 1982 portfolio and program direction.

1. Environment and Natural Resources

In the field of environment and natural resources, an intensity of interest coming from the Congress, the non-Governmental Organization (NGO) Community, specialized agencies of the United Nations, and the U.S. Government itself culminated in a call to action to impede the environmental degradation

taking place in the LDCs. Some of the most influential manifestations of that interest include: the 1979 AID Report to the Congress on Environmental and Natural Resource Management in Developing Countries; the inauguration of a World Conservation Strategy sponsored by the United Nations Environment Program (UNEP); and the U.S. Interagency Task Force Report on Tropical Forests entitled "The World's Tropical Forests; A U.S. Policy, Strategy and Program" scheduled for transmittal to the President in May, 1980.

A further development was the creation of the Agency's Forest Resources Group in January 1980 which is chaired by the Office. The purpose of the Group is to provide a leadership role in the stimulation of forestry program initiatives in AID and also bring to bear its technical expertise in project choice and design.

2. UNCSTD Follow-Up

The United Nations Conference on Science and Technology for Development (UNCSTD) was held in Vienna in August 1979. The Conference adopted a Program of Action consisting of several recommendations divided into three sections: strengthening the scientific and technological capacities of developing countries; restructuring the existing pattern of international scientific and technological relations; strengthening the role of the United Nations system in the field of science and technology, including the provision of increased financial resources.

The Conference failed, however, to reach agreement on several parts of the Vienna Program of Action, notably those dealing with such issues as the role of transnational corporations; access to all types of technological know-how; restrictive business practices; the redeployment of resources from the arms race and armaments research; and the establishment of a compulsory International Science and Technology Development Financing System. The Conference requested the General Assembly of the United Nations to take the necessary steps at its ensuing sessions to provide for further discussion and negotiations on the questions outstanding.

In spite of the fact that the United Nations after UNCSTD is in a transitional mode in adapting itself to the recent prominence given to science and technology in development, there are clear directional signals from the LDC membership. Some are derived from the National Papers that each nation prepared for the Conference and others from the Conference

itself. They include the less-developed world's desire to better understand the shortcomings in its S&T capacity and then to have access to the resources to remedy the situation. Among the initiatives to respond to these needs is an assessment of those capacities in order to facilitate their transition to a point where they can make their own technological choices.

3. Capital Saving Technology and Employment Generation

In March 1980, the Administrator transmitted to the Congress the Agency's Report on Capital Saving Technology in response to the House Appropriations Committee Report on the FY 1980 foreign assistance appropriations bill. The House Report asked AID "to develop a comprehensive strategy aimed at accomplishing a quantum leap in the delivery of capital saving technology to the world's poor within five years and report to the Committee on progress made during its fiscal year 1981 budget presentation and in each year thereafter." The Committee also asked AID to help less-developed countries provide both more employment and more productive employment for poor people within a relatively short period of time as a key feature of the Agency's approach to equitable development. The delivery of capital saving technology is to be emphasized as an important means of achieving these objectives.

Concurrent with the preparation of the Capital Saving Technology Report, the Development Support Bureau (DSB) formed an Employment Generation Panel to study the question on how DSB could within its own Bureau address more fully and effectively the need for productive employment opportunities in the LDCs. The mandate was broader than employment in the context of capital saving technology. The Panel Report called for action in this vital area.

The Administrator also expressed an interest in the broader question of employment generation initiatives in AID during the Assistant Administrator level review of the Capital Saving Technology Report. He asked DSB to determine how it would organize itself to assist the Agency in dealing with the concerns of off-farm employment generation. DSB has created a Special Task Force Unit on Employment Generation which is in the process of implementing its mandate.

4. FY 1982 CDSS Reviews

The Agency has completed its review schedule for the FY 1982 CDSSs, and has been in the process of communicating overview conclusions on sectoral emphases that the documents revealed.

The information that Office analyses have provided thus far indicates that the Missions put a high priority on the environmental and natural resource aspects of land use management and small scale enterprises for employment generation. A more complete and studied effort is in order to determine the emphasis in other areas relevant to the Office's activities.

5. Transition to an Operational Satellite Program (Landsat D and Follow-On)

Under the present experimental Landsat program (Landsat-3), the Office helps participating LDCs procure satellite imagery of their respective countries from the EROS Space Center in Sioux Falls, South Dakota. It also funds the training of LDC personnel and technical assistance to institutionalize a remote sensing capacity for development purposes. On November 16, 1979, Presidential Directive NSC 54 was issued approving a civil space policy that will convert the Landsat experimental program to an operational one and assigned the management responsibility for the civil, operational land remote sensing system to the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce.

The President's expectations that user agencies of the Landsat system pay their fair share of the costs should have no foreseeable impact on AID. However, there is one area of concern that has to be addressed and that is the need for assurance that imagery data will be available to the LDCs during the transition from the experimental to the operational mode. Evidently, no one can give that assurance since it depends on the time gap between the failure of the tape recorders on Landsat-3 (now in orbit) and the launch of Landsat-D.

The positive side of the move to an operational system is the fact that AID can make longer range plans in the form of projects and other activities that use remote sensing satellite imagery in the service of the LDCs.

6. Discussion Seminar on Science and Technology

On March 12, 1980, the Office of Science and Technology sponsored a discussion seminar with the cooperation and participation of the Board for Science and Technology in Development (BOSTID) of the National Academy of Sciences. The overall purposes were: to foster an Agency-wide dialogue on science and technology; to get a reaction to the present and planned portfolio of the Office; and to identify new S&T

initiatives relevant to the AID mandate. Eleven representatives of the scientific community joined staff members of the BOSTID of the Academy and participants of AID's Regional Bureaus, PPC and DSB in the seminar.

The major conclusions of the meeting were as follows: the papers prepared for review and comment which reflected the ongoing and planned portfolio of the Office had the proper balance and choice and were responsive to the priority needs of the LDCs; the lack of S&T competence in the Missions should be compensated by similar discussion seminars held in the field on a regional basis; S&T assessments is a topic of considerable interest to the Regional Bureaus and, if conducted under proper circumstances (e.g., a follow-on host government commitment), would have the effect of raising S&T awareness among country decision-makers and organize a consensus among the S&T constituents within the country; assistance in technology choice is needed; more emphasis should be put on S&T for industry at the urban and rural levels, more stress should be put on collaborative efforts with LDC scientific and technological institutions and personnel; all new projects should be designed to address employment generation; forestry projects are doomed to failure if we do not quickly expand the LDC and AID's knowledge base; inventories of trees, fish, plants and animals are needed where they can be used for human benefits; MAB-type programs which are productive and do research on sustainable forestry systems are needed and the information resulting from the research should be quickly disseminated; a new thrust is needed on training in S&T which AID Missions do not normally consider; new initiatives in agroforestry should be supported; in view of the U.S. depending on LDCs for 50-100% of many of the minerals now imported, the Agency should study the implications of this external reliance for U.S. foreign assistance and foreign policy implications; and modest seed money should be used by DS/ST to support the development of innovative ideas and unsolicited proposals of great promise.

OFFICE NARRATIVE

The FY 1982 budget levels for the Office of Science and Technology for the Minimum, Current and Proposed levels are $7,530 million, $10,270 million and $16,600 million, respectively. Within these totals for the Office, each of its three organizational elements which coincide with the three FY 82 Program Areas described earlier were allocated the following Minimum, Current and Proposed levels ($000):

	Minimum	Current	Proposed
1. Science Policy	$ 1,000	$ 1,300	$ 1,600
2. Environment, Natural Resources and Remote Sensing	2,530	2,970	5,000
3. Employment and Technology	4,000	6,000	10,000
TOTAL	$ 7,530	$10,270	$ 16,600

The Narrative discussion will be at the Office level although Table V's are included for each Division presentation.

A. Minimum Decision Package

At the Minimum level, the Office proposes funding a total of seven (7) projects. The Deforestation Survey project is the only new start at this level in order to continue the DSB momentum with respect to the problems of deforestation.

The Deforestation Survey project broadly reflects the intensity of interest of the LDCs, the Missions, the Regional Bureaus, the Congress and environmental interest groups in taking steps to arrest the extremely serious state-of-affairs caused by the accelerating loss of forest and vegetative cover in the humid and semi-arid lands within or near the tropical latitudes. In addition, its inclusion in the FY 1982 program was stimulated by an opportunity to apply remote sensing technology to accelerate the acquisition of a macro-knowledge base that will sophisticate problem solving in this area. Coincidentally, the need to deal with the problems of land-use management, including deforestation, was identified as an area of priority concern in the FY 1982 CDSSs.

Four of the continuing projects - Forest Resources Management; Environment and Natural Resources Expanded Information Base; Environmental Planning and Management; and Environmental Training and Grants (MAB) represent the Office's ongoing core initiatives in environment and natural resources. The Enhancing S&T Capabilities project continues and expands the Agency's linkage with the National Academy of Sciences by including an effort in the development of methodologies for S&T assessments. The last project in this group--A.T.International--represents funding for the first year's budget for the second operational grant.

This minimum portfolio is responsive to the problem areas identified by the Regional Bureaus; reflects an implicit or explicit legislative mandate (for example, forestry and Section 103 (b)(3) of the FAA, as amended); and is compatible with the integrated Program Area revisions.

B. Current Decision Package

The Current portfolio adds three more new projects to the FY 1982 program: Water Resources Mapping; Coastal Resources Management; and Technology Choice.

The Water Resources Mapping project affords the Agency another opportunity to apply remote sensing technology to help the LDCs improve their capacity to anticipate the availability of water supplies and relate that knowledge to agricultural production and land-use management. Most developing countries are unable to predict with any reliability the amount of water they can expect during the growing season. Although most LDCs have hydrologic departments which can collect and analyze data, many lack the equipment and adequately trained personnel to predict surface water availability or potential ground water sources. This project will train LDC resource managers in the techniques of integrating satellite and ground-based geophysical data to locate and identify surface and subsurface water resources. In addition, selected LDCs will be equipped with data collection platforms, river and rain gauges, and minicomputers to process imagery and analyze relevant data.

The Coastal Resources Management project was included in DS/ST's FY 1981 ABS but was excluded in the FY 1981 Congressional Presentation. During the FY 1981 ABS Review, the issue of Regional Bureau interest and demand was raised, and DS/ST was instructed to determine the Missions' wishes in order to justify such an initiative. A cable dated June 14, 1979 was sent to

all Missions for their reaction to the project. Thirty-one Missions replied and their responses were classified by: strong interest; possible interest; negative interest. Fifteen Missions voiced a strong interest; six Missions a possible interest; and ten were negative. Of the ten negatives, four Missions wanted the information that would be learned from such an effort; the remainder had other priorities.

The Technology Choice project, although new in the DS/ST portfolio, has generated strong interest elsewhere and has made an impact on AID. Governments in all countries struggle with the problem of how to ensure that science and technology contribute effectively to solving national problems. In developing countries the problem is particularly pressing because local scientific and technological skills are usually limited. In the 1960s and early 1970s, policy research, mainly carried out in Latin America and India, demonstrated that the lack of local skills combined with heavy dependence on foreign technology had sometimes led to undesirable patterns of industrialization. The findings spotlighted two basic questions: What can developing country governments do to assure that their policies lead private and public enterprises to make technology choices that are consistent with national development objectives? And what ways and means are available for implementing those choices?

This is a significant area of concern for AID. AID programs have significant impact on technology choice and Agency personnel should be playing a more deliberate role in cooperation with their counterparts in exercising greater influence on the key decisions that affect technology.

An apparent consensus exists among the Regional Bureaus that a better understanding of the technology choice process would be helpful to improve the relevant decisions that are continually being made within the AID program. Agreement on this initiative was voiced in the Capital Saving Technology Report sent to the Congress in March 1980 and most recently in the Discussion Seminar on Science and Technology held on March 12, 1980, under DS/ST sponsorship with BOSTID of the National Academy of Sciences.

As new initiatives, two of the three new projects in the Current level (Water Resources Mapping and Coastal Resources Management) reflect the recognition by the Regional Bureaus of the high priority they place on responding to the problems of natural resource management. The deliberations of the Agency's Committee on Environment in Development and the Forest Resources Group as well as the Regional Bureau portfolios reflect this conclusion.

The third project, Technological Choice will help to answer a number of issues that the Agency needs to resolve to satisfy development needs. For example, what is the cost-benefit relationships of alternative product and technology programs in selected industries; and how such factors as perception of "modernity" and evolution of technology enter into decision-making by the LDCs on choice of technology?

The efforts of A.T.International are already influencing technological choice in its client countries toward a labor intensive mode as distinguished from a capital intensive one. The thrust is in the right direction although it is much too early to expect a measurable impact on governmental policy.

C. Proposed Decision Package

There are three new projects in the Proposed budget level bringing the total number of new projects for FY 1982 to seven. They are: Natural Resources Management Training; Catchment Protection and Watershed Management; and Land Capability Analysis Methods.

The motivation behind the Natural Resources Management Training project is to fill a course materials and training gap being created by the increased number of personnel in the LDCs who are needed to participate in environment and natural resources programs in their respective countries. A concerted level of effort is required to produce this competence but this will not be possible without first designing and testing technical courses for their training. The relative newness of the subject matter, even within the U.S., means that extensive course development and adaptation is a must to assure that the subject fits developing country needs.

The Catchment Protection and Watershed Management project is being initiated to help reverse the adverse effects on agricultural productivity, increased damage from flooding, erosion and sedimentation due to poor catchment protection and watershed management. Increasing numbers of rural populations in the LDCs are moving onto more fragile marginal lands where poor soils, greater slopes and adverse climatic conditions make land management more difficult and cause rapid hydrolic system disturbances.

The project will examine the basis for successes or failures in assistance project experience and will analyze past history of watershed deterioration in the face of changing social conditions and growing population pressure. Demonstration sites for

recommended approaches and promising mechanisms for advisory support and training services to AID Missions and LDCs will be provided.

Finally, the Land Capability Analysis Methods project will, in its broadest terms, support improved LDC forest land-use decisions through the development and more widespread application of land suitability analysis methods. It will begin by examining recent experience in the LDCs in the application of land capability analysis methods and then bring to bear technical assistance and training to upgrade that capability among Mission staffs and developing country personnel charged with these functions.

The remaining seven projects in the Proposed Decision Package appear at this level for increased allocations.

TABLE V - FY 1982 PROPOSED PROGRAM RANKING
06/02/80

OFFICE 032 - ESNST

RANK	DECISION PACKAGES\PROGRAM ACTIVITY		TERM\ NEW/ CONT	LOAN/ GRANT	APPROP ACCT.	PROGRAM FUNDING ($000) INCR	CUM	WORKFORCE USDH INCR	USDH CUM	ENDH INCR	ENDH CUM	RECNO
	DECISION PACKAGE - MINIMUM											
1	9311494	DS/ST-STAFF REQUIRED TO OPERATE OFFICE		G				14	14			26263
2	9365519	FOREST RESOURCES MANAGEMENT	C	G	FN	1000	1000		14			26246
3	9311209	ENVIRONMENT NATL RES EXP INFO BASE	C	G	SD	450	1450		14			26247
4	9365517	ENVIRONMENTAL PLANNING & MANAGEMENT	C	G	SD	480	1930		14			26248
5	9311113	ENVIRONMENTAL TRAINING AND GRANTS - II	C	G	SD	300	2230		14			26281
6	9365531	DEFORESTATION SURVEY	N	G	FN	300	2530		14			26284
7	9365524	ENHANCING S & T CAPABIL. II	C	G	SD	1000	3530		14			26249
8	9311071.02	APPROPRIATE TECHNOLOGY - ATI	C	G	FN	4000	7530		14			26251
	DECISION PACKAGE - CURRENT (30)											
9	9365535	WATER RESOURCES MAPPING	N	G	FN	220	7750		14			26255
10	9365524 *	ENHANCING S & T CAPABIL. II	C	G	SD	300	8050		14			26276
11	9365518	COASTAL RESOURCES MANAGEMENT	N	G	FN	220	8270		14			26253
12	9365530	SEED: APPROP + PRODUCTIVE TCHNLGY SPPRT	C	G	SD	225	8495		14			26274
13	9365532	SEED: TCHNLGY CHOICE FOR SMALL ENTRPRSE	N	G	SD	150	8645		14			26254
14	9311071.01 *	APPROPRIATE TECHNOLOGY - ATI	C	G	SD	1625	10270		14			26256
	DECISION PACKAGE - PROPOSED (50)											
15	9365534	NATURAL RESOURCES MANAGEMENT TRAINING	N	G	SD	400	10670		14			26257
16	9365519 *	COASTAL RESOURCES MANAGEMENT	C	G	FN	200	10870		14			26259
17	9365536	CATCHMENT PROTECTION & WATERSHED MGT.	N	G	FN	400	11270		14			26262
18	9365537	LAND CAPABILITY ANALYSIS METHODS	N	G	SD	400	11670	2	16			26250
19	9311113 *	ENVIRONMENTAL TRAINING AND GRANTS - II	C	G	SD	215	11885		16			26283
20	9365531 *	DEFORESTATION SURVEY	N	G	FN	200	12085		16			26268
21	9365535 *	WATER RESOURCES MAPPING	N	G	FN	215	12300		16			26260
22	9365532 *	SEED: TCHNLGY CHOICE FOR SMALL ENTRPRSE	N	G	SD	200	12500		16			26261
23	9365524 **	ENHANCING S & T CAPABIL. II	C	G	SD	300	12800		16			26277
24	9311071.02 **	APPROPRIATE TECHNOLOGY - ATI	C	G	FN	3800	16600		16			26266

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Bureau Code: Decision Code:

TABLE V - FY 1982 PROPOSED PROGRAM RANKING

DECISION UNIT
DS/ST - Science Policy Division 5/15/80

RANK	DECISION PACKAGES/PROGRAM ACTIVITY DESCRIPTION	TERM/ NEW/ CONT.	LOAN/ GRANT	APPROP. ACCT.	PROGRAM FUNDING ($000) INCR	PROGRAM FUNDING ($000) CUM	WORKFORCE (Number of Positions) USDH INCR	WORKFORCE (Number of Positions) USDH CUM	WORKFORCE (Number of Positions) FNDH INCR	WORKFORCE (Number of Positions) FNDH CUM
	MINIMUM Minimum Staff Required to Operate Office						2	2		
1	936-5524 Enhancing S&T Capabilities II	C	G	SD	1,000	1,000				
	CURRENT									
2	936-5524 Enhancing S&T Capabilities II	C	G	SD	300	1,300				
	PROPOSED									
3	936-5524 Enhancing S&T Capabilities II	C	G	SD	300	1,600				

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Bureau Code: Decision Code:

TABLE V - FY 1982 PROPOSED PROGRAM RANKING

DECISION UNIT
DS/ST - Environ. & Natural Resources 5/15/80

RANK	DECISION PACKAGES/PROGRAM ACTIVITY DESCRIPTION		TERM/ NEW/ CONT.	LOAN/ GRANT	APPROP. ACCT.	PROGRAM FUNDING ($000) INCR	PROGRAM FUNDING ($000) CUM	WORK FORCE (Number of Positions) USDH INCR	USDH CUM	FNDH INCR	FNDH CUM
	MINIMUM										
	Minimum Staff Required to Operate Office							7	7		
1	936-5519	Forest Resources Mgmt.	C	G	FN	1,000	1,000				
2	931-1209	E/NR Expanded Info. Base	C	G	SD	450	1,450				
3	931-5517	Environ. Planning & Mgmt.	C	G	SD	480	1,930				
4	931-1113	Environ. Trng. & Grants (MAB)	C	G	SD	300	2,230				
5	936-5531	Deforestation Survey	N	G	FN	300	2,530				
	CURRENT										
6	936-5535	Water Resources Mapping	N	G	FN	220	2,750				
7	936-5518	Coastal Resources Mgmt.	N	G	FN	220	2,970				
	PROPOSED										
8	936-5534	Natural Resources Mgmt. Trng.	N	G	SD	400	3,370				
9	936-5518	Coastal Resources Mgmt.	N	G	FN	200	3,570				
10	936-5536	Catchment Protection & Watershed Mgmt.	N	G	FN	400	3,970	2	9		
11	936-5537	Land Capability Analysis Methods	N	G	SD	400	4,370				
12	931-1113	Environ. Trng. & Grants	C	G	SD	215	4,585				
13	936-5531	Deforestation Survey	N	G	FN	200	4,785				
14	936-5535	Water Resources Mapping	N	G	FN	215	5,000				

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Bureau Code: Decision Code:

TABLE V - FY 1982 PROPOSED PROGRAM RANKING

DECISION UNIT
DS/ST - Employment & Tech. Unit 5/15/80

RANK	DECISION PACKAGES/PROGRAM ACTIVITY DESCRIPTION	TERM/ NEW/ CONT.	LOAN/ GRANT	APPROP. ACCT.	PROGRAM FUNDING ($000) INCR	PROGRAM FUNDING ($000) CUM	WORKFORCE (Number of Positions) USDH INCR	USDH CUM	FNDH INCR	FNDH CUM
	MINIMUM									
	Minimum Staff Required to Operate Office						2	2		
1	931-1071 ATI	C	G	FN	4,000	4,000				
	CURRENT									
2	936-5530 Approp. & Productive Tech.	C	G	SD	225	4,225				
3	936-5532 Technology Choice	N	G	SD	150	4,375				
4	931-1071 ATI	C	G	SD	1,625	6,000				
	PROPOSED									
5	936-5532 Technology Choice	N	G	SD	200	6,200				
6	931-1071 ATI	C	G	FN	3,800	10,000				

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

OFFICE: DS/ST

APPROPRIATION ACCOUNT = EN

PROJECT#	PROJECT TITLE	FY 1980 OYB-REVISED	FY 1981 REVISED	FY-82 MINIMUM	FY-82 CURRENT	FY-82 PROPOSED	P.G #
931-1071.02	APPROPRIATE TECHNOLOGY - ATI	$3,500	$1,900	$4,000	$4,000	$7,800	24
235-5513.	COASTAL RESOURCES MANAGEMENT	$0	$0	$0	$220	$420	26
936-5519.	FOREST RESOURCES MANAGEMENT	$600	$0	$1,000	$1,000	$1,000	18
936-5531.	[illegible] ORIENTATION SURVEY	$0	$0	$300	$300	$500	22
936-5535.	WATER RESOURCES MAPPING	$0	$0	$0	$220	$435	25
936-5536.	CATCHMENT PROTECTION & WATERSHED MGT.	$0	$0	$0	$0	$400	30
TOTALS FOR EN		$4,300	$1,900	$5,300	$5,740	$10,555	

APPROPRIATION ACCOUNT = SD

PROJECT#	PROJECT TITLE	FY 1980 OYB-REVISED	FY 1981 REVISED	FY-82 MINIMUM	FY-82 CURRENT	FY-82 PROPOSED	P.G #
931-1071.01	APPROPRIATE TECHNOLOGY - ATI	$0	$2,200	$0	$1,625	$1,625	24
931-1113.	ENVIRONMENTAL TRAINING AND GRANTS - II	$0	$0	$300	$300	$515	21
931-1209.	ENVIRONMENT NATL RES EXP INFO BASE	$0	$300	$450	$450	$450	19
936-5500.	MAN & BIOSPHERE (MAB) II	$500	$0	$0	$0	$0	
936-5517.	ENVIRONMENTAL PLANNING & MANAGEMENT	$0	$300	$480	$480	$480	20
936-5519.01	FOREST RESOURCES MANAGEMENT	$0	$500	$0	$0	$0	18
936-5524.	ENHANCING S & T CAPABIL. II	$0	$900	$1,000	$1,300	$1,600	23
936-5529.	SCIENCE AND TECHNOLOGY ASSESSMENTS	$200	$0	$0	$0	$0	
936-5530.	SEED: APPROP + PRODUCTIVE TCHNLGY SPPRT	$0	$600	$0	$225	$225	27
936-5532.	SEED: TCHNLGY CHOICE FOR SMALL ENTRPRSE	$0	$0	$0	$150	$350	28
936-5534.	NATURAL RESOURCES MANAGEMENT TRAINING	$0	$0	$0	$0	$400	29

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

OFFICE: DS/ST

236-5537.	LAND CAPABILITY ANALYSIS METHODS	$0	$0	$0	$0	$400
TOTALS FOR SO		$700	$4,800	$2,230	$4,530	$6,045
* * OFFICE TOTAL:		$5,000	$6,700	$7,530	$10,270	$16,600

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Dan Deely

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Forest Resources Management	Agriculture, Rural Development and Nutrition	FY 82 1,000		LIFE OF PROJECT 3,300
NUMBER 936-5519 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981, Annex V, Centrally Funded Programs, p. 199	INITIAL OBLIGATION FY 80	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To develop a more comprehensive knowledge base and program effectiveness in forestry activities through mobilization of expert organizations and the Peace Corps (P.C.).

Background and Progress to Date: Severe social and economic problems are being caused in many LDCs by alarming increases in deforestation. This project is responsive to those problems and to the FAA calling for expanded forestry assistance efforts under Sections 103(b) and 118, and to the USG policy on tropical forests in the President's 1979 Environmental Message. This project has two basic components: 1) provision of technical expertise to assist the LDCs in the design and implementation of better forestry-related activities, and 2) funding to the P.C. for design, backstopping and material support of forestry activities supporting A.I.D. efforts in LDCs.

In order to provide better technical assistance in the LDCs, this project includes development of an international experts network and delivery of professional services to A.I.D. Missions and LDCs. Network information is being made available to A.I.D. missions and LDC governments involved in project design and environmental management. Assistance initiatives being supported include those concerned with fuelwood, natural woodlands, agroforestry, reforestation, community resource use, land use planning, forest resource planning, conservation program development, and small-scale forest industry management and enterprises.

Approaches which address socio-economic aspects of forestry, particularly those related to the role of women, are being highlighted. The contractors are providing technical personnel for long term support and short-term assistance, both in Washington and in the field. Support to the P.C. will enable it to provide design teams for several LDCs to develop appropriate forestry programs which can be carried out by the P.C. volunteers. Some ongoing P.C. projects in LDCs are being reoriented and additional ones designed on the basis of knowledge developed in this project. P.C. activities will include data gathering to expand the available forestry information base.

Host Country and Other Donors: LDC agencies cooperate in project design and make sites available. The P.C. participates in design of projects and contributes trained forestry volunteers to assist in implementation of Mission projects. International agencies such as the United Nations Food and Agriculture Organization (FAO), United Nations Environment Program (UNEP), and the International Council for Research in Agroforestry (ICRAF) will be invited to participate in selected projects.

Beneficiaries: The poor will benefit from better designed forestry activities undertaken by LDC governments to combat erosion, fuelwood shortages, desertification, flooding and unsustainable natural resource use patterns.

FY 82 Program: Continue to develop institutional capacities to design forestry programs that provide increased social benefits for the poor. Help identify opportunities in LDCs to ameliorate the forest degradation in those countries.

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

	($ Thousands) All Years unit	(cost)
Peace Corps support in 5 LDCs	5	(220)
Forestry Project Consultancies	63	(20)
Experts Network	1	(460)
Forestry Studies	6	(25)
Workshops/Conferences	3	(110)

A.I.D. Financed Input:	FY 82
Personnel (368 person months)	920
Commodities	80
TOTAL	1,000

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period
Through September 30, 1979				
Estimated Fiscal Year 1980	1,000	100		6/1/80 - 9/30/80
Estimated through September 30, 1980	1,000	100	900	
Proposed FY 1981	500	950		10/1/80 - 9/30/81
Estimated through Fiscal Year 1981	1,500	1,050	450	
Proposed FY 82	1,000	Future Year Obligations 800	Estimated Total Cost 3,300	10/1/81 - 9/30/82

Principal Contractors or Agencies

U.S. Government Agencies
Non-government Natural Resource Organizations
Environmental Consulting Firms
University Consortium
Peace Corps

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Molly Kux

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Environment & Natural Resources: Expanded Information Base	Selected Development Activities	FY 82 450	LIFE OF PROJECT 2200	
NUMBER 931-1209 GRANT [X] LOAN [ ] / NEW [ ] CONTINUING [X]	PRIOR REFERENCE FY 1981, Annex V, Centrally Funded Programs, p. 197	INITIAL OBLIGATION FY 79	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To provide A.I.D. with improved information on environment and natural resource issues related to the development of LDCs.

Background and Progress to Date: Up-to-date information and better knowledge is needed about natural resources and how they can best be managed. Increasing population pressures, soil erosion and deforestation are causing decreases in agricultural production, energy resources, and adversely affecting human health. This project was initiated in FY 1979 to provide information which can be used by A.I.D. and other development agencies to design environmentally sound programs. This project consists of four categories of work: 1)state-of-the-art review papers, 2) case studies, 3) project design aids, and 4) dissemination of the results of the three previous categories through regional workshops and special publications. Activities and topics of specific inquiry that are ongoing include.

Review papers: (initiated in FY '79 and FY '80)
- A review and analysis of methods for conducting natural resources and environmental surveys.
- A study of different legal, regulatory and institutional approaches to the conservation and management of natural resources and the environment.
- A review of methods for collecting environmental baseline data.
- A review of selected ecological problems in the humid tropics.
- A projection of future regional resource scarcities and environmental degradation.

Case studies in LDCs: (initiated in FY '81)
- Integrated resource planning, development and management.
- Public involvement in environmental protection.
- Governmental response to pollution and conservation problems.

Host Country and Other Donors: A number of international agencies, such as the World Bank, the Inter-American Development Bank, the United Nations Educational, Scientific and Cultural Organization, will cooperate in sharing their knowledge in this area by participating in workshops sponsored through the project.

Beneficiaries: The lives of the poor majority will be improved if LDC planners use the information and materials resulting from this project to design and manage environmentally sound programs.

FY '82 Program:
Initiation of selected project design aids for development activities such as:

- Irrigation project development and irrigated farming systems.
- Rain-fed farming systems in different climatic regions.
- Watershed management and conservation.
- Rural roads.
- Malaria control.

Major Outputs (and A.I.D. unit costs):	($ thousands) All Years
Review Papers	5 (115)
Case Studies	3 (213)
Project Design Aids	5 (50)
Regional Workshops	4 (40)
Special Publications and Translations	13 (29)

A.I.D. Financed Inputs:	FY '82
Personnel (125 person-months)	375
Other	75
Total:	450

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	1290	-	1290		Department of the Interior and subcontractors
Estimated Fiscal Year 1980	-	600			
Estimated through September 30, 1980	1290	600	690		
Proposed FY 1981	300	600		10/1/80-10/1/81	
Estimated through Fiscal Year 1981	1590	1200	390		
Proposed FY 82	450	Future Year Obligations 160	Estimated Total Cost 2200	10-1/81-10/1/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Molly Kux

5/13

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Environmental Planning and Management	Selected Development Activities	FY 82 480	LIFE OF PROJECT 1,850	
NUMBER 936-5517 GRANT [X] LOAN [ ] NEW [ ] CONTINUING [X]	PRIOR REFERENCE FY 1981, Annex V, Centrally Funded Programs, P. 198	INITIAL OBLIGATION FY81	ESTIMATED FINAL OBLIGATION FY84	ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To assist LDCs in developing more effective environmental protection and natural resources management institutions.

Background and Progress to Date: There has been a dramatic change in government attitudes about environmental and natural resource management in the developing world since the Stockholm Conference on the Human Environment in 1972. Many more governments are aware of the need and are setting up their own administrative and institutional mechanisms. A.I.D. has become a recognized leader in this area over the past years through its adoption of environmental procedures and the new mandate provided by Congress in the form of Sections 118 & 103(b) of the FAA on Environment and Natural Resources. A.I.D. has received an increasing number of requests for assistance in environmental planning and management (Nepal, Thailand, Indonesia, Nigeria and Ecuador among others). The Agency needs a capacity to respond systematically to these requests. This activity has built on information developed in the MAB project, which provided baseline environmental data on thirty-one (31) countries and on the FY '79 project, "Environment and Natural Resources: Expanded Information Base", which conducted a review of legal, regulatory, and institutional aspects of environmental protection, and analyzed different approaches in countries such as Costa Rica, Venezuela, the Sudan, Ghana, Israel, Indonesia, Malaysia and Korea which have experience in establishing national institutional frameworks. The initial phase of this project surveyed and analyzed sources of natural resource and environmental management expertise and experience at the international, national, state and local government levels, in the university community and in other organizations in order to identify qualified intermediaries.

Host Country and Other Donors: The United Nations Environment Programme (UNEP), United Nations Food and Agriculture Organization (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Union for the Conservation of Nature (IUCN), Organization for Economic Cooperation & Development (OECD), and the World Health Organization (WHO) as well as other bilateral and multilateral development agencies were contacted to participate in the planning and financing of this activity.

Beneficiaries: The poor majority in the LDCs will benefit due to better government planning and management of development programs which address their environmental protection and natural resources needs.

FY 1982 Program: The selected contractor(s) will: (1) service requests from A.I.D. Missions and LDCs for technical services, and (2) make available small grants to national and local LDC institutions to improve their capability to study and influence activities in their respective countries that promote beneficial environmental controls. Host governments will be assisted to develop, organize, and staff environmental units that will play an oversight role in their countries. This effort includes the determination of legal, fiscal, administrative and budgetary mechanisms among others to sustain such organizational entities. Environmental areas of concern include land and water resources, regulation of water and air pollution, soil conservation and management of forests, wildlife and fishery resources at national, regional and local levels.

Major Outputs (and A.I.D. unit costs):	($ thousands) All Years
Survey of capability and resources	1 (200)
Intermediary for providing technical assistance & grants	1 (550)
Organizational models and training at national and local levels	5 (220)

A.I.D.-Financed Inputs:	FY 1982
Personnel (125 person-months)	375
Grants, training, libraries, and other	105
Total:	480

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	-	-	-		U. S. Dept. of the Interior
Estimated Fiscal Year 1980	-	-		-	United States universities
Estimated through September 30, 1980	-	-			The International Union for
Proposed FY 1981	300	200		10/1/80 - 9/30/81	the Conservation of Nature
Estimated through Fiscal Year 1981	300	200	100		(IUCN)
Proposed FY 82	480	Future Year Obligations	Estimated Total Cost	10/1/81 - 9/30/82	
		1,070	1850		

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: W. D. Roseborough

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Environmental Training & Grants	Selected Development Activities	FY 82 515	LIFE OF PROJECT 1,915	
NUMBER 931-1113 GRANT ☒ LOAN ☐ NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 80 Annex V, Centrally Funded, p. 157	INITIAL OBLIGATION FY 77	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To increase LDC awareness of their environmental protection and natural resources management problems and to strengthen their competence to solve them.

Background & Progress to Date: Several recent U.S. Government and United Nations sponsored studies (CEQ's Global Year 2000 Study, NRC/NAS Study on Research Priorities in Tropical Biology; A.I.D. report to Congress, "Environmental and Natural Resource Management in Developing Countries," Interagency Task Force Report on a "U.S. Policy, Strategy and Program for Tropical Forests") and IUCN's "World Conservation Strategy" are identifying critical problem areas in environmental protection and natural resources management which require increased attention by development assistance agencies because these problems adversely affect LDC basic human needs. Most prominent are 1) deforestation and devegetation and their impacts on energy, food, health and water; 2) desertification; 3) soil erosion, and 4) coastal zone deterioration and impairment of its significant potential for food production and economic development. The severity of these problems is directly related to the population explosion and ecosystem fragility of most of the LDCs.

This project was initiated in 1977 to develop training and technical assistance material for LDCs and A.I.D. Missions based upon the following guidelines: (1) placing minimal reliance on expensive technologies; (2) developing prototype approaches to environmental issues confronting A.I.D.; (3) providing environmental information for project planning; (4) identifying critical environmental priorities; and (5) seeking problem solutions emphasizing indigenous capabilities. Examples are (1) "Environmental Profile" reports on 31 LDCs on status of their environment and natural resources indigenous management capabilities, (2) "Environmental Guidelines" for planning, designing, and implementing environmentally safe water projects, and on tropical forests critical habitat size, (3) LDC training workshops on (a) detecting carcinogenic substances, (b) LDC training in management of water, soil, vegetation and wildlife, (c) inventorying and monitoring techniques for natural resources, (d) upgrading capabilities at the College of African Wildlife in Tanzania, (4) policy-level environmental awareness seminars, (5) training programs for LDC tropical forest managers and scientists, (6) directory of environmental training institutions, (7) status of endangered species in Thailand with bibliography and methodology for similar studies elsewhere, (8) the 1978 Int'l. Conference on Tropical Deforestation which stimulated the Interagency Task Force report on U.S. Tropical Forestry Policy and Strategy, (9) a workshop on rational use of forests for energy, (10) a conference of environmental management in the smaller Caribbean islands, and (11) support for a World Conference on sea turtles.

MINIMUM (300)	
Research & Training Grants	200
Personnel (25 person-months)	75
Travel & supplies	25

PROPOSED (215)	
Research & Training Grants	100
Personnel (30 person-months)	90
Travel & Supplies	25

Examples of the research grants initiated through the MAB Consortium during 1979, 80 and 81 are: (1) Comparison of Wood Productivity between Second-Growth Forests and Plantations in Costa Rica in collaboration with CATIE, utilizing a local technician, (2) Interactions between People and their Tropical Forest Environment in Indonesia by 2 U.S. and 2 Indonesian investigators, (3) Present and Potential Utilization of a Tropical Palm Forest, in Brazil with a Brazilian collaborator, (4) A Forester's Manual on the Moraceous trees of Sarawak, Malaysia, (5) A study of a Bornean Intensive Agricultural System as a Model for Development, utilizing native field assistants, (6) Regeneration and Growth Characteristics of Brosium Alicastrum, an important source of high protein food and fodder widely distributed throughout tropical forests, and (7) Biosphere Inventory of Mangrove Forest Lands due to the importance of tropical mangrove forests in terms of fisheries, fiber, food and fuel. Several Environmental Profiles were prepared and several training courses and workshops held.

Host Country and Other Donors: Starting in 1979, the U.S. Depts. of Agriculture and Interior have participated equally with A.I.D. in the MAB Consortium.

Beneficiaries: Initially, the LDC scientific community with which cooperative research, development and training programs are being conducted, as well as participating U.S. scientists, will benefit. Ultimately, the LDC people whose health and standard of living will be improved by elimination or mitigation of environmental and natural resource problems.

FY 1982 Program: Continue and expand to other countries the US/LDC cooperative research, development, demonstration and training programs. Initiate new activities in such additional subject areas as grazing lands, arid zones, fresh water, mountains, islands, biosphere reserves and environmental quality, in cooperation with LDC scientists and technologists.

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

	($ thousands) All Years unit	(cost)
LDC Environmental Profile Reports - Phase I	36	(5)
LDC Environmental Profile Reports - Phase II	2	(50)
Applied Research, demonstration & training projects	18	(50)
Environmental & Natural Resource Guidelines	2	(55)
Training courses, workshops & seminars	12	(52)

A.I.D.-Financed Inputs:

	FY 82
Research and Training Grants	300
Personnel (50 person-months)	165
Travel and supplies	50
Total	515

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	400	298	102		
Estimated Fiscal Year 1980	500	202		7/1/80 - 9/30/82	U.S. National Committee, Man & Biosphere Program (Dept. of State RSSA)
Estimated through September 30, 1980	900	500	400		U.S. Universities
Proposed FY 1981	0	400			MAB Consortium for the Study of Man's Relationship with the Global Environment
Estimated through Fiscal Year 1981	900	900			
Proposed FY 82	515	Future Year Obligations	0 Estimated Total Cost	10/1/81 - 9/30/83	
		500	1,915		

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: Charles K. Paul

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Deforestation Survey	Agriculture, Rural Development, and Nutrition	FY 82 500	LIFE OF PROJECT 2,000	
NUMBER 936-5531 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85	ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To design a technique to remotely sense areas undergoing deforestation.

Background: The 1978 UNESCO/UNEP/FAO Report, Tropical Forest Ecosystems, described the large errors associated with present estimates of deforestation in tropical developing countries, and stated that coordination in international assistance using remote sensing was important for this purpose. The Proceedings of the U.S. Strategy Conference on Tropical Deforestation, sponsored by A.I.D./STATE in 1978, emphasized the need for more effective monitoring of deforestation, and admitted that remedial efforts to halt this problem would have to go forward with incomplete information about rates of deforestation, an action that could have disastrous effects. Dr. Gerald Barney, Staff Director of the "Global 2000" study, admitted that present satellite monitoring efforts are not providing deforestation data on a global basis. Although NASA and Texas A&M University sampled deforestation and forest canopies around the world, their remote sensing technique uses highly complex digital computers, as does the FAO Forest Inventory Data Processing System. Recently, the Department of Natural Resources of Washington State successfully applied a Landsat image stratification procedure and detailed field survey to collect not only information about deforestation, but also basal area, volume and number of stems. This technique, using simplified processing and field surveys, lends itself best to adaptation in the developing countries to permit LDC officials to carry out their own surveys.

Host Country and Other Donors: The host countries will furnish aerial photos (color-infrared-CIR) and field technicians.

Beneficiaries: LDC forest services and planning agencies will benefit by possessing current and reliable information on areas and rates of deforestation. Better planning and management for forests will benefit the poor in the LDCs who depend upon **forests for food, fuel, fodder, fiber and materials for shelter.**

FY '82 Program: A sampling methodology (field survey) will be perfected for use in developing countries. Enumeration techniques in one LDC to determine forest clearing and rates of change will be tested. A.I.D. will provide technical remote sensing specialists in forestry, computer enhancement of images and statistics to work in a cooperative mode with LDC counterparts in selected countries. A.I.D. will also provide training in techniques.

Major Outputs (and A.I.D. Unit Costs):	($ thousands) All Years unit	(cost)
Computer Stratification System	3	(167)
Sampling Methodology Report and Procedure	3	(50)
Deforestation Surveys in each LDC	3	(300)
Seminars and Training	3	(150)

A.I.D.-Financed Inputs	FY 1982
Personnel (36 person-months)	100
Software Development (Computer Time)	100
Computer Hardware Peripherals (for Display)	250
Imagery and Landsat Tapes	50
TOTAL:	500

MINIMUM
(300)

1) Personnel (36 person-months)	100
2) Software Development (Computer Time)	100
3) Computer Hardware	80
4) Landsat Tapes	20

PROPOSED
(200)

1) Computer Hardware	170
2) Landsat Tapes	30

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U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period
Through September 30, 1979				
Estimated Fiscal Year 1980				
Estimated through September 30, 1980				
Proposed FY 1981				
Estimated through Fiscal Year 1981				
Proposed FY 82	500	Future Year Obligations 1,500	Estimated Total Cost 2,000	10/1/81 - 9/30/82

Principal Contractors or Agencies

USDA Forest Service

Technology Applications Center, University of New Mexico, Albuquerque, New Mexico

Cornell University

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: John Daly

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Enhancing S&T Capabilities II	Selected Development Activities	FY 82 1,600		LIFE OF PROJECT 4,200
NUMBER 936-5524 GRANT ☒ LOAN ☐ / NEW ☐ CONTINUING ☒	PRIOR REFERENCE FY 1981 Annex V, Centrally Funded Programs, P. 201	INITIAL OBLIGATION FY 81	ESTIMATED FINAL OBLIGATION FY 83	ESTIMATED COMPLETION DATE OF PROJECT FY 84

Purpose: To strengthen the capacity of LDCs to use science and technology to meet basic human needs.

Background and Progress to Date: In August 1979 the UN Conference on Science and Technology for Development reaffirmed the interest of the developed and developing countries in strengthening LDC science and technology (S&T) capacity. S&T assistance is a well established element of A.I.D. bilateral programs in food and agriculture, health, employment generation, and energy. In Costa Rica, Indonesia, and Tunisia, A.I.D. intersectoral S&T projects have sought to strengthen research and development, appropriate technology, and technology-transfer institutions to achieve growth with equity.

The National Academy of Sciencies (NAS) has been funded for 15 years by A.I.D. and has conducted workshops in 30 developing countries, bringing together U.S. and host country experts, to provide disinterested scientific advice on the application of S&T to development. Often these workshops stimulated bilateral assistance projects. The "Enhancing S&T Capabilities I" project included, for example, a Mauritanian meeting on reforestation, a Philippine meeting on technology for rural development, and a meeting in Sudan on management of aquatic weeds.

The project also funds the publication of monographs of the NAS Advisory Committee on Technological Innovation (ACTI). Recent publications include: Tropical Legumes: Resources for the Future, Methane Generation from Human, Animal and Agricultural Wastes, and Microbial Processes: Promising Technologies for Developing Countries. 200,000 copies of these monographs are in print. They have helped start hundreds of projects to use new resources in developing countries and in the U.S. (e.g. current U.S. research in arid lands plants - guayule and jojoba - was strongly influenced by NAS reports).

NAS also has conducted a number of special studies on subjects of major importance to development assistance policy. These included the World Food and Nutrition Study and the study of Post Harvest Food Losses. The current project will fund studies in such areas as implications for A.I.D. initiatives in the international mineral situation and of revolutionary developments in electronic communication and data processing technology and molecular science.

MINIMUM	CURRENT	PROPOSED
($000)	($000)	($000)
1000	300	300
6 Workshops	One study/½ person year	One study/½ person year
2 Studies	Advisory service/one assessment	Advisory service/one assessment
3 Person years advisory services		

The current program continues the series of joint NAS-LDC workshops providing disinterested professional advice on technical issues. It also continues the publication of ACTI studies, and provides for informal discussion meetings on S&T policy issues of importance to A.I.D. Finally the project will fund country specific assessments of the gaps between existing S&T capabilities and the needs of the poor majority in order to identify priorities for A.I.D. projects.

Host Country and Other Donors: Host countries and other donors share costs for workshops, usually providing salary and expenses for most participants. An estimated 10,000 U.S. scientists have donated time and effort without pay to this program in the past, and there will continue to be a substantial voluntary effort in the future.

Beneficiaries: LDC S&T institutions benefit directly from this program. The goal is to focus their improved capabilities on needs of the poor. Appropriate capital savings technology is being emphasized to increase income and employment

FY 82 Program: Workshops will be conducted in six countries and two ACTI studies will be conducted. Four person years of additional advisory services will be provided to AID missions and LDC's, and two S&T assessments will be funded.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years unit (cost)
Country S&T assessments	3 (150)
Workshops and seminars	16 (100)
Reports and studies	10 (125)
S&T policy advisory services (person-years)	9 (50)
Core support	3 (150 per year)

A.I.D. Financed Inputs:	FY 82
Personnel (264 person months)	800
Other costs	800
TOTAL	1,600

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	1,200	600		4/1/81 - 3/30/82	National Academy of Sciences and other Contractors to be selected.
Estimated through Fiscal Year 1981	1,200	600	600		
Proposed FY 82	1,600	Future Year Obligations	Estimated Total Cost	4/1/82 - 3/30/83	
		1,400	4,200		

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Roger D. Moeller

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
A.T. International (ATI)	Agriculture, Rural Development and Nutrition; Selected Development Activities	FY 82 $9,425	LIFE OF PROJECT continuing
NUMBER 931-1071 GRANT [X] LOAN [ ]	NEW [ ] CONTINUING [X]	PRIOR REFERENCE FY 1981, Annex V, Centrally Funded Programs, p. 210	INITIAL OBLIGATION FY 78 / ESTIMATED FINAL OBLIGATION FY continuing / ESTIMATED COMPLETION DATE OF PROJECT FY continuing

Purpose: To assist poor people of developing countries improve their ability to choose among alternate technologies and to make better use of local resources.

Background and Progress to Date: This project provides funding to A.T. International to develop, adapt, and disseminate appropriate technologies as well as to support indigenous LDC organizations in these efforts. A.T. International (ATI) was organized in December 1976 and was funded in June 1977 with a grant of $1,000,000 to organize, staff, and start their program. Under the first grant, ATI financed a small program with Volunteers in Technical Assistance (VITA) to train local people in the techniques and methods of disseminating appropriate technology. ATI also negotiated subgrants for a small-scale cement plant project in india, a small-enterprise financial service fund in northeast Brazil, and a Haitian appropriate technology development project.

A second grant for three years was made on August 31, 1978, with initial funding of $5,000,000. In FY 1979 an additional $4,000,000 was obligated with additional funding in FY 1980 and 1981 anticipated to total $7,400,000. ATI implements its program principally through subgrants and technical assistance to local development organizations in the LDC's. During the first two years of the new grant ATI increased its portfolio to about 100 subgrants in about 25 developing countries. The main focus of ATI's program is on improving the appropriate technology dissemination process at the local level. Its main purpose is to assist, in conjunction with local resources, in developing self-sustaining appropriate technology dissemination capability by providing a 2-3 year grant and technical assistance. The principal technology focus is on energy, rural technologies, construction and the software technologies associated with the development of small-enterprises.

A review of ATI's current status and operations was completed and issued in report form in July 1979. The report made a number of constructive recommendations dealing with present and future operations that are presently being implemented. A full program evaluation will be completed before the end of the grant.

Host Country and Other Donors: ATI subgrants are generally predicated on the concurrent availability of other funding sources both local and external. To date ATI subgrants have attracted $1 to $2 from other sources for each dollar of grant from ATI. This additional support comes from private, host country government, foundation, private voluntary organizations, and international financial sources.

Beneficiaries: The beneficiaries will be the poor in developing countries whose basic human needs are met through the appropriate use of capital-saving technology to generate income and employment. LDC appropriate technology organizations also benefit from demonstration projects and advisory services.

FY 82 Program: Funds for FY 1982 continues ATI's activities beyond the second grant period.

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

	($ thousands) FY 78 thru FY 82 unit	(cost)
Subgrants (including technical assistance and administrative costs in 35-45 developing countries).	210	(125.00)

A.I.D. Financed Inputs:	FY 82
Direct Grants	$5,000
Technical Assistance	2,600
Administration	1,825

Functional Accounts:

Agriculture, Rural Development and Nutrition
Selected Development Activities

Minimum	Current	Proposed
4,000 FN	1,625 SD	3,800 FN

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979	$ 9,600	$ 2,693	$ 6,907		
Estimated Fiscal Year 1980	3,300	5,500		6 mos. FY 81	
Estimated through September 30, 1980	12,900	8,193	4,707		A.T. International
Proposed FY 1981	4,100	7,500		7 mos. FY 81 + 82	
Estimated through Fiscal Year 1981	17,000	15,693	1,307		
Proposed FY 82	9,425	Future Year Obligations Continuing	Estimated Total Cost Continuing	12 mos FY 82 + 83	

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: Charles F. Withington

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Water Resources Mapping	Agriculture, Rural Development, and Nutrition	FY 82 435	LIFE OF PROJECT 1,185
NUMBER 936-5535 GRANT [X] LOAN [ ] NEW [X] CONTINUING [ ]	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 84 / ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To develop techniques by which LDCs can better anticipate water supplies available in their countries and relate them to agricultural production and range conditions.

Background: Most developing countries are unable to predict reliably the amount of water which they can expect to be available during the growing season. Although most LDCs have hydrologic departments which can collect and analyze data, many lack the equipment and adequately trained personnel to predict surface water availability or potential groundwater sources. Most LDCs rely on the U.S. National Oceanic and Atmospheric Administration (NOAA) assessment of their climatic conditions, based upon weather satellite data and limited reports of rainfall from ground collection stations. It is almost impossible to make accurate predictions using these widely scattered data. Areas such as Lesotho and Yemen, which are partially dependent upon runoff from mountain snow for their water supplies, have limited means for determining water reserve in the snow cover. When there is a rainfall deficiency, as was the case in the spring of 1980, the situation becomes desperate.

This project will train LDC resource managers in the techniques of integrating satellite and ground-based geophysical data to locate and identify water sources, both surface and subsurface. In addition, selected LDCs will be equipped with data collection platforms, river and rain gauges, and with minicomputers to process imagery and analyze relevant data.

Host Country and Other Donors: LDCs will provide personnel to be trained in techniques of analyzing data collected from both satellites and ground surveys for water resource evaluation. NOAA and/or the World Meteorological Organization will be approached to teach their techniques of climate analysis and to contribute to the training costs.

Beneficiaries: LDC farmers will benefit due to better water supply forecasts and identification and development of additional groundwater sources.

CURRENT (220)

1) Personnel (12 person-months)	35
2) LDC students (one only)	20
3) Data and maps	20
4) Instrumentation	15
5) Modeling and analysis	130

FY 1982 Program: Four LDCs, located in one geographical region (such as the southern African front-line states) will be selected for the project, with a complete water budget (supply-demand) prediction modeled for one LDC as a demonstration. Two LDC water resource planners will be enrolled for graduate-level training in a U. S. university, and several more will undergo short-term training in remote sensing. Data from Landsat and meteorological satellites, geological maps, rain gauges, river flow meters and geophysical instruments will be analyzed to test models for predicting water supply. LDC locally collected data will be used to predict water demand so that water sufficiency or deficit can be determined. A regional seminar will be held to introduce concept and methodology to the other three LDCs participating in the project.

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

($ thousands)
All Years

	unit	cost
Training and seminars	4	(89)
Data, maps, imagery and instrumentation	4	(125)
Modeling and analysis of water budget	4	(82)

A.I.D.-Financed Inputs:

	FY '82
Personnel (24 person-months)	70
LDC student costs (in U.S.)	35
Satellite data and maps	20
Geophysical instrumentation (ground-based)	180
Water budget modeling and analysis	130
TOTAL:	435

PROPOSED (215)

1) Personnel (12 person-months)	35
2) LDC students (one additional)	15
3) Instrumentation	165

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period
Through September 30, 1979				
Estimated Fiscal Year 1980				
Estimated through September 30, 1980				
Proposed FY 1981				
Estimated through Fiscal Year 1981				
Proposed FY 82	435	Future Year Obligations 750	Estimated Total Cost 1,185	10/1/81 - 9/30/82

Principal Contractors or Agencies

To be selected from:
South Dakota State University
NOAA
Spectral Data Corporation

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Dan Deely

TITLE	FUNDS	PROPOSED OBLIGATION *(In thousands of dollars)*		
Coastal Resources Management	Agriculture, Rural Development and Nutrition	FY 82 420		LIFE OF PROJECT 2,500
NUMBER 936-5518 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 develop a model for and to improve the management and utilization of coastal resources in developing countries.

Background: Roughly 70 percent of the world's population lives in or within reasonable proximity to coastal zones. Together with the estuaries, lagoons, marshes, beaches, bays and harbors, these areas are an important resource. They provide the basis for commercial and industrial development as well as being one of the most important sources of food. The productivity and stability of coastal areas are being undermined due to inadequate land-use planning and management. Coastal zone deterioration is a major environmental problem in all four geographic regions in which A.I.D. operates. Specific problems cited by over 31 A.I.D. Missions include: depletion of fish stocks due to over-fishing and loss of breeding grounds; desertification; devegetation and destruction of mangrove forests; coastal erosion caused by destruction of coral reefs and mining of sand and other minerals; unplanned urban and commercial development and conflicts between industrial and tourist development; impact of pesticides and silt, mining and industrial wastes on coastal regions from inland development; construction of dams which result in modification of river flows; and severe pollution of coastal waters by oil from tanker traffic and domestic and industrial wastes. Despite much effort the problems are growing. Developing countries lack coordinated planning and management capacity and authority as well as sufficient numbers of trained scientists and managers and adequate data to mobilize adequate and timely responses.

Host Country and Other Donors: Countries selected to participate in this project will be those which have identified coastal problems as a priority area and where host government initiatives, including contributions, will be expected. Close coordination will be maintained with other international or regional programs and opportunities for cooperative activities explored.

Beneficiaries: LDC governmental and educational institutions in the countries that participate in this project will have increased capability to manage their coastal areas. The basic human needs of the people living in coastal areas will be better satisfied through the control of environmental degradation.

FY 82 Program: Surveys will be undertaken to (1) determine LDC needs in coastal resources management and (2) identify U.S. expertise in coastal resources management which can be tapped to satisfy those needs. An analysis of U.S. experiences potentially useful to LDCs will be prepared and a concurrent review of LDC efforts and needs in coastal resources management will be matched to U.S. capability for assistance. A second phase of the project will include cooperative research, training and institution building activities with LDC counterparts in several countries.

Major Outputs (and A.I.D. unit cost):	($ Thousands) All Years unit	(cost)
Survey/study of U.S. capability and experience and impact on LDC needs	1	(310)
Development and testing of approaches to institutionalize management capacity in 3 LDCs	3	(550)
Coastal Zone Management Training Programs	3	(60)

A.I.D. Financed Inputs:	FY 82
Personnel (168 person months)	420

CURRENT
(220)
- Study U.S. Capability in Relation to LDC Needs

PROPOSED
(200)
- Launch One (1) LDC Management and Improvement Program

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			
Estimated through September 30, 1980	0	0	0		Not-for-profit Research Institute
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	420	Future Year Obligations 2,080	Estimated Total Cost 2,500	10/1/81 - 9/30/82	

PROGRAM: Centrally funded

ACTIVITY DATA SHEET

PROJECT MANAGER: Roger Moeller

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
SHED - Appropriate Productive Technology Support	Selected Development Activities	FY 82 225	LIFE OF PROJECT 1,825
NUMBER 936-5530 GRANT [X] LOAN [ ] NEW [ ] CONTINUING [X]	PRIOR REFERENCE FY 1981 Annex V, Centrally Funded Programs, p 200	INITIAL OBLIGATION FY 81	ESTIMATED FINAL OBLIGATION FY 84 / ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To promote conditions in LDCs that lead to the adaptation and use of productive technologies appropriate to the needs and resources of the poor, emphasizing those technologies that have low capital requirements and provide productive employment opportunities to the poor.

Background and Progress to Date: In keeping with Section 107 of the Foreign Assistance Act, A.I.D. has expanded and coordinated efforts "to promote the development and dissemination of technologies appropriate to developing countries." This project funds U.S. organizations to carry out support functions in that effort. The support needed differs from country to country. Specific interventions are chosen for the country's circumstances. Activities include:

1.) Workshops to motivate host-country officials to incorporate capital-savings appropriate technology concepts in their planning.

2.) Case studies, catelogues and similar activities to organize a body of information on proven, field tested capital-savings technologies, and efforts to assure that this information is widely shared among A.I.D. missions.

3.) Short advisory missions on technology policy, assessments of requirements for program assistance or project design and evaluation.

The expectation is that these efforts will lead to new or improved capital savings technology projects in 20 countries by the end of the project.

Where applicable, U.S. appropriate technology organizations will be involved in supplying expertise to Missions and in developing the capabilities of LDC indigenous organizations to implement Mission projects.

Specific countries to be involved in this program will probably include Indonesia, India, Ecuador, Costa Rica, Honduras, Haiti, Kenya, Upper Volta, Mauritania, and Yemen. A workshop on capital-savings technology strategy will be held in Latin America. Initial field visits will be made to identify and review appropriate technology field trials, and an initial catalogue of income and employment generating technologies is to be developed. Advisory missions will be made to approximately 8 A.I.D. countries.

Host Country and Other Donors: None

Beneficiaries: The beneficiaries will be the poor in developing countries whose basic human needs are met through the appropriate use of technology that will generate income and employment. LDC appropriate technology organizations and A.I.D. missions will also benefit from advisory services, from increased mission and host-country funding and from the information organized and disseminated through this project.

FY 82 Program: One workshop will be held for the Asian region, work will continue on cateloging and disseminating capital savings technology information, and advisory missions will be made to approximately eight A.I.D. countries.

Initial experience with resources, models and methods to promote the development and diffusion of capital-saving technologies will be documented.

Major Outputs (and A.I.D. Unit Cost):	($ thousands) All Years Unit	(cost)
Workshops	4	(50)
Cataloging of Productive Techniques (person months)	150	(5)
Direct Field Support (person months)	150	(5)

A.I.D. Financed Inputs:	($ thousands) FY 82
Personnel (45 person months)	135
Other Costs	90
	225

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period
Through September 30, 1979	-			
Estimated Fiscal Year 1980	-			
Estimated through September 30, 1980	-			
Proposed FY 1981	300	150		4/81 - 10/82
Estimated through Fiscal Year 1981	300	150	150	
Proposed FY 82	225	Future Year Obligations	Estimated Total Cost	10/82 - 4/83
		1,300	1,825	

Principal Contractors or Agencies

Principal contractors selected from PVO's, universities and private industry.

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: John Daly

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
936-5532 - Technology Choice for Small Enterprises	Selected Development Problems	FY 82: 350		LIFE OF PROJECT: 1,100
NUMBER 936-5532 GRANT [X] LOAN [ ] NEW [X] CONTINUING [ ]	PRIOR REFERENCE	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 84	ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To improve A.I.D. and host government understanding of impacts of overall development policies and of small business policies on technology choice in small enterprises. This should lead to more effective capital-savings technology strategies.

Background: In the capital-savings-technology strategy presented to the Congress AID recognized the need to better understand the impact of LDC national macroeconomic policies on technology choice by small enterprises. For example, labor legislation, international trade policies, and national economic policies can each tend to encourage or discourage small enterprises from adopting employment generating light-capital technological innovations. Similarly the strategy recognized that lack of credit, insurance, properly trained labor, equipment, work space, markets, input materials, or infrastructure could constrain entrepreneurs from adopting capital savings technologies, and that appropriate government projects attacking the key constraints could thus promote self-sustaining technological improvement. However better understanding is required of the interplay of these factors, and of the precise linkages between LDC Government projects to remove constraints and actual technological improvement.

Other agencies are studying this topic such as the Canadian IDRC (especially in 5-year, 10-nation S&T Policy Instruments study), the World Bank, A.T. International and the National Science Foundation (NSF). Specifically, NSF funded three US groups in 1979 to begin studies on technology choice in developing countries and planned in FY 80 to fund a 3-year study. We estimate NSF will fund US institutions in their complementary project at $1,400 over its four year duration. The current AID project is proposed to fund LDC institutions in AID supported countries to work in collaboration with NSF's grantee, on the subject of technological choice in small enterprises.

Host Country and Other Donors: It is expected host country institutions will contribute personnel and facilities to the analysis.

Beneficiaries: Direct beneficiaries will be policy analysts in LDCs. Indirectly the project is intended to benefit the proprietor enterprises.

FY 82 Program: The project will begin with the selection of a US coordinating institution and with initial grants to participating LDC institutions.

Major Outputs (and A.I.D. Unit Costs)	($ thousands) All Years unit	(cost)
-Country studies of "technology choice"	3	(300)
-Field tested methods for the study of technology choice (report)	1	(150)
-LDC capacity to better understand dynamics of small enterprise technology choice	3	(byproduct)

A.I.D. Financed Inputs	FY 82
Personnel (110 person months)	300
Materials and miscellaneous	50

Current	Proposed
(150)	(200)
One country study	Two country studies

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	-				To be determined
Estimated through Fiscal Year 1981	-				
Proposed FY 82	350	Future Year Obligations 750	Estimated Total Cost 1,100	1/15/82 - 1/15/83	

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: Molly Kux

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)		
Natural Resources Management Training	Selected Development Activities	FY 82 400	LIFE OF PROJECT 1,500	
NUMBER 936-5534 NEW [ ] GRANT [ ] LOAN [ ] CONTINUING [ ]	PRIOR REFERENCE	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 84	ESTIMATED COMPLETION DATE OF PROJECT FY 85

Purpose: To train LDC planners, economists, scientists and technicians in natural resources management.

Background: One of the major impediments to sound national natural resources management in developing countries is the lack of adequately trained personnel at both managerial and technical levels and a lack of course material to train them. These inadequacies have been documented in studies conducted by A.I.D. in its 1979 Report to Congress on "Environmental and Natural Resources Management in Developing Countries", and by the International Union for the Conservation of Nature (IUCN) in the recently released "World Conservation Strategy" prepared in cooperation with the United Nations Environment Program (UNEP), the United Nations Educational, Scientific and Cultural Organization(UNESCO) and the United Nations Food and Agricultural Organization(FAO).

In response to the problem, A.I.D. is planning regional environmental protection and natural resources management training programs to begin in Africa in FY 1980 and in Latin America in FY 1981 in cooperation with regional and national institutions within those geographic regions to begin to provide some of the most urgently needed training. No major training programs in the natural resources management area are presently planned in the Near East and Asia regions.

Greater efforts are urgently needed worldwide to train adequate cadres of people in the areas encompassed within the broad definition of environmental protection and natural resources management. This project will use existing training program management groups to design, test and demonstrate short technical and management courses in natural resources and environmental protection issues most important to LDCs which will be offered overseas as well as in the United States and will be complementary to the proposed regional training programs.

The relative newness of the subject matter, even within the United States, means that extensive course development and adaptation are needed to assure that subject matter is relevant to developing country needs. A.I.D.'s experience in design of environmental training programs is that course design, development, field testing and evaluation are not receiving adequate attention. The regional training programs will provide one mechanism for overseas training. In the United States a group such as the International Training Division of the U.S. Department of Agriculture(USDA) can be utilized. The initial project investment can be multiplied through support of trainees by A.I.D. Missions, the World Bank(IBRD), FAO, UNESCO, UNEP and others to courses which will be offered each year by the USDA. This approach has already been effective in broadening the types of training offered by the USDA beyond traditional agricultural subjects. Courses are now underway or planned on Watershed Management, Ecological and Environmental Monitoring, Natural Resources Inventories and Land-use Planning.

Host Country and Other Donors: International agencies such as IBRD, FAO, the U.N. Development Program(UNDP), UNESCO and LDC governments as well as A.I.D. Missions will contribute by funding participants to the training sessions.

Beneficiaries: The poor majority in the LDCs will benefit due to better planning and management of development programs which involve environmental protection and natural resources management problems.

FY 1982 Program: Five training courses, including curricula and syllabi, will be designed and presented. Subject areas will be selected from among the following: forestry, watershed management, soil conservation, land-use planning, wildlife management, natural resources economics, agricultural ecosystems analysis, collection of environmental baseline data, methods of natural resources inventory and taxonomy, management of protected areas to preserve genetic resources and public awareness and education techniques.

Major Outputs(and A.I.D. unit costs):	($thousands) All Years
Design of training programs	15 (20)
Presentation of training programs	15 (58)
Preparation and printing of course curricula and syllabi	15 (20)

A.I.D.-Financed Inputs:	FY '82
Personnel (120 person-months)	360
Equipment, books, subscriptions, etc:	40
TOTAL	400

U.S. FINANCING (In thousands of dollars)	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					U.S. Department of Agriculture
Estimated Fiscal Year 1980					U.S. Universities
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	400	Future Year Obligations 1100	Estimated Total Cost 1500	10/1/81 - 9/31/82	

PROGRAM: CENTRALLY FUNDED

ACTIVITY DATA SHEET

PROJECT MANAGER: Dan Deely

TITLE	FUNDS	PROPOSED OBLIGATION (In thousands of dollars)	
Catchment Protection and Watershed Management	Agriculture, Rural Development and Nutrition	FY 82 400	LIFE OF PROJECT 3,000
NUMBER 936-5536 GRANT ☒ LOAN ☐ / NEW ☒ CONTINUING ☐	PRIOR REFERENCE None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY85 / ESTIMATED COMPLETION DATE OF PROJECT FY86

Purpose: To improve the effectiveness of LDC and A.I.D. projects dealing with catchment protection and watershed management.

Background: Catchment protection and watershed management are being recognized increasingly as a vital area of need in development assistance programs. Increasing rural populations in LDCs are moving onto more fragile marginal lands where poor soils, greater slopes and adverse climatic conditions make land management more difficult and cause rapid hydrologic system disturbance. Even though many years of experience have been gained in watershed management programs, numerous recent examples of hydrologic function impairment can be cited, with serious adverse effects on agricultural productivity, and increased damages from flooding, erosion and sedimentation.

As an example of the problems inherent in watershed management, damages from flooding, erosion, sedimentation and land productivity decline have increased seriously in Pakistan through poorly managed and improperly planned upland area development &land-use patterns. This has occurred in spite of well-meaning actions taken in the past with only limited success to address the problems. As early as 1880, the British colonial government became concerned about erosion and imposed restrictions on tree cutting and grazing in upland areas. Legislation in 1900 restricted land-use in the Punjab region. Soil conservation activities were assigned to the Pubjab Forest Department in 1935, and by 1947, reforestation, grazing controls, and structural erosion controls had been implemented in several catchment areas. Inspite of the efforts of the Pakistan government, foreign advisors and international assistance organizations (involving rehabilitation projects, inventories, surveys, research and education), remedial measures to solve these problems have not been taken on many of the problem watersheds and an overall solution has not been acheived.

This project will examine the successes and failures in assistance project experience and will analyse past history of watershed deterioration in the face of changing social conditions and growing population pressure. Guidelines and information on project design will be developed and the most effective approaches and the most promising mechanisms will be identified. Teams will be sent to selected LDCs to examine watershed conditions and look at program effectiveness. Technical information, deficiencies and social problems limiting success will be identified and research and training priorities established. Demonstration sites for recommended approaches and promising mechanisms will be developed and capabilities for advisory support and training services to A.I.D. Missions and LDCs will be provided.

Host Country and Other Donors: It is expected that A.I.D. Missions will share costs of promising approach project designs, advisory services and watershed management training.

Beneficiaries: LDC government organizations will benefit from improved understanding of effective approaches to watershed management and the basic human needs of the poor in upland marginal areas will be better met through more effective assistance programs.

FY 82 Program: The FY 82 program will concentrate on examination of assistance experience in watershed management and on conducting field team examinations of selected sites in LDCs.

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

	($thousands) All Years unit	(cost)
Experience Examination	15	(50)
Information/Guidelines	5	(50)
Analyses of Social and Technical Information and Training Needs	3	(50)
Demonstration Designs	10	(100)
Consultancies	40	(20)

A.I.D. Financed Inputs:	FY 82
Personnel (160 person months)	400
TOTAL	400

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					To be selected from: University Consortia with Professional Organization Advisor (American Society of Civil Engineers Watershed Management Committee)
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	400	Future Year Obligations 2600	Estimated Total Cost 3000	10-1-81 - 9-30-82	

PROGRAM: Centrally Funded

ACTIVITY DATA SHEET

PROJECT MANAGER: Dan Deely

TITLE	FUNDS	PROPOSED OBLIGATION *(In thousands of dollars)*		
Land Capability Analysis Methods	Selected Development Activities	FY 82: 400	LIFE OF PROJECT: 2,500	
NUMBER 936-5537 / GRANT [X] LOAN [ ] / NEW XX / CONTINUING [ ]	PRIOR REFERENCE: None	INITIAL OBLIGATION FY 82	ESTIMATED FINAL OBLIGATION FY 85	ESTIMATED COMPLETION DATE OF PROJECT FY 86

Purpose: To support improved LDC forest land-use and allocation decisions through development and more widespread application of objective land-use capability and suitability analysis methods.

Background: Unsustainable land use development patterns in many LDCs have become increasingly apparent over the past several years. Both planned colonization/settlement schemes and various forms of unplanned development can be improved through the introduction of objective information on capability and suitability of land for numerous agriculture, range, forestry, water and other uses. Land allocation for sustainable long-term use must consider both commodity and non-commodity output possibilities and environmental services.

This project will examine recent experience in land capability analysis methods for a wide range of uses and applications. Rapid, low-cost approaches best suited to particular LDC needs will be stressed. Approaches and methods will be described for a broad spectrum of purposes from national or regional surveys such as those done in support of colonization programs, to such larger scale small-area applications as selection of sites for community woodlots at the local level.

Social, cultural, and demographic data and data projections, as well as physical information, will be included. Methods of data acquisition will extend from background data compilation to remote sensing and field data collection. Information on recommended approaches for specific applications will be widely circulated and transferred, training courses focused on the most common applications needs will be developed and a capability for on-call advisory services will be developed and provided to LDCs and A.I.D. Missions.

Host Country and Other Donors: None

Beneficiaries: LDC development and natural resources planning and management organizations will be provided with increased capability for serving the long-term interests of the poor majority, through sustainable land-use allocation.

FY 1982 Program: The FY '82 Program will concentrate on analyzing recent LDC land-use capability applications experience in a wide spectrum of user situations.

	($ Thousands) All Years	
Major Outputs (and A.I.D. Unit Costs):	unit	(cost)
Applications Analyses	20	(40)
Applications Guidelines	20	(43)
Training Courses	6	(40)
Advisory Consultancies	40	(15)

A.I.D.-Financed Inputs:	FY '82
Personnel (160 person-months)	400
TOTAL:	400

U.S. FINANCING (In thousands of dollars)

	Obligations	Expenditures	Unliquidated	Funding Period	Principal Contractors or Agencies
Through September 30, 1979					To be selected from University Consortia Nonprofit Institutions
Estimated Fiscal Year 1980					
Estimated through September 30, 1980					
Proposed FY 1981					
Estimated through Fiscal Year 1981					
Proposed FY 82	400	Future Year Obligations: 2,100	Estimated Total Cost: 2,500	10/1/81 - 9/30/82	

DS/ST

OFFICE STAFF LISTING

Position	Direct Hire Field Support Provided (in months) FY 80	FY 81	FY 82
1. Office Director	1.0	1.5	1.5
2. Program Analyst	0	0	0
3. Physical Scientist	.5	1.0	1.5
4. Physical Scientist (Remote Sens.)	3.0	3.5	3.5
5. Physical Scientist	3.0	3.0	3.5
6. Environ. Protection Specialist	3.0	3.0	3.0
7. Physical Scientist (Nat. Resources)	2.5	3.5	3.5
8. Physical Scientist	1.5	2.0	2.0
9. Business/Ind. Technologist	.5	.5	.5
10. Secretary	0	0	0
11. Secretary	0	0	0
12. Secretary	0	0	0
13. Secretary	0	0	0
14. Secretary	0	0	0
15. Physical Scientist (Nat. Resources)	0	0	2.5
16. Secretary	0	0	0
17. Deputy Director	0	0	0
18. Coordinator for UNCSTD	1.0	0	0
19. Construction Engineer	.5	0	0
20. Secretary	0	0	0
Totals	16.5	18.0	21.5

Reductions

10% less: (than 16)

- Eliminate the additional Physical Scientist (Natural Resources) (15). This step will prevent the Office from developing and managing two new projects in the Proposed Decision Package.
- Eliminate the Secretary (16). Will not permit adequate support if the Proposed Decision Package is approved.

Additions

10% more (than 16)

This exercise would require a justification for 18 positions. Under the present circumstances, such a target appears to be unrealistic.

Note: (1) Positions 1 thru 14 represent FY 82 combined Minimum and Current level.

(2) Positions 1 thru 16 represent FY 82 combined Minimum, Current and Proposed level.

(3) Positions 17 thru 20 apply to FY 80 only.

DS/ST

FUNDING AND STAFF PROJECTIONS

($ thousands)

	FY 80				FY 81				FY 82 Minimum				FY 82 Current				FY 82 AAPL				FY 83				FY 84				FY 85				FY 86			
	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA	DH	PT	RSSA	IPA
AFF (Total)	18	5	0	1	14	5	0	1	14	1	0	0	14	3	0	0	16	3	0	1	18	3	0	1	18	3	0	1	18	3	0	1	18	3	0	1

ollar Amount by Appropriation (i.e., Health)

	80	81	FY 82 Min.	FY 82 Cur.	FY 82 Prop.	83	84	85	86	
SD	700	4,800	2,230	4,530	6,045	7,000	7,000	7,000	7,000	
FN	4,300	1,900	5,300	5,740	10,555	10,000	10,000	10,000	10,000	
Total	5,000	6,700	7,530	10,270	16,600	17,000	17,000	17,000	17,000	

* FY 83 through FY 86 is based on approval of FY 82 at AAPL.

CONTRACT/GRANT
FIELD SUPPORT
($000)

Project	FY'80 Total Cost	FY'80 Field Support (Dollars)	FY'80 Fld. Sup. Pers. Mos.	FY'81 Total Cost	FY'81 Field Support (Dollars)	FY'81 Fld. Sup. Pers. Mos.	FY'82 Minimum Total Cost	FY'82 Minimum Field Support (Dollars)	FY'82 Minimum Fld. Sup. Pers. Mos.	FY'82 Current Total Cost	FY'82 Current Field Support (Dollars)	FY'82 Current Fld. Sup. Pers. Mos.	FY'82 Proposed Total Cost	FY'82 Proposed Field Support (Dollars)	FY'82 Proposed Fld. Sup. Pers. Mos.
931-1223 Enhancing S&T Capabilities	200	200	40												
931-1071 ATI	3,300			4,100			4,000			1,625			3,800		
936-5519 Forest Resources Mgmt.	1,000	750	300	500	400	160	1,000	750	300						
931 1113 Environ. Trng. & Grants (MAB)	500	80	16				300	40	8				215	80	16
936-5524 Enhancing S&T Capabilities II				1,200			1,000			300			300		
936-5530 Approp. & Productive Tech.				300	300	60				225	225	45			
931-1209 E/HR Expanded Info. Base				300	30	3	450	60	6						
936-5517 Environ. Planning & Mgmt.				300	50	5	480	300	30						
936-5531 Deforestation Survey							300	100	3				200	0	0
936-5535 Water Resources Mapping										220	150	2	215	0	0
936-5518 Coastal Resources Mgmt.										220	50	20	200	100	40
936-5532 Technology Choice										150			200		
936-5534 Natural Resources Mgmt. Trng.													400	400	80
936-5536 Catchment Protection & Watershed Mgmt.													400	250	100
936-5537 Land Capability Analysis Methods													400	250	100
Total	5,000	1,030	356	6,700	780	228	7,530	1,250	347	7,740	425	67	6,330	1,080	336

PROJECT NUMBER	TITLE	G L	OBLIG DATE INIT	OBLIG DATE FIN	NEXT EVAL DATE	FY 79 PIPELINE	FY 1980 OBLIGATIONS	FY 1980 EXPENDITURES	FY 1981 PIPELINE	FY 1981 OBLIGATIONS	FY 1981 EXPENDITURES	FY 1981 PIPELINE	FY 82 AAPL	FUNDED TO:	FUTURE YR OBLIGATIONS	ITEM NO
AGRICULTURE, RURAL DEV. AND NUTRITION																
9311071.02	APPROPRIATE TECHNOLOGY - ATI	G	77			4500	3300	5500	2300	1900	4200	---	7800	02/83	---	433
9311166	REMOTE SENSING RESOURCE ASSESSMENT	G	76	79		902	---	902	---	---	---	---	---		---	156
9311224	REMOTE SENSING IN AGRICULTURE	G	79	79		1364	---	450	914	---	914	---	---	09/81	---	159
9365518	COASTAL ZONE MANAGEMENT	G	82	85		---	---	---	---	---	---	---	420	09/82	2080	442
9365519	FOREST RESOURCES MANAGEMENT	G	80	83		---	1000	100	900	---	900	---	1000	09/82	800	161
9365531	REFORESTATION SURVEY	G	82	85		---	---	---	---	---	---	---	500	09/82	1500	435
9365535	WATER RESOURCES MAPPING	G	82	84		---	---	---	---	---	---	---	435	09/82	750	686
9365536	CATCHMENT PROTECTION AND WATERSHED MGT	G	82	85		---	---	---	---	---	---	---	400	09/82	2600	682
	APPROPRIATION	TOTAL				6766	4300	6952	4114	1900	6014	---	10555		7730	
		GRANT				6766	4300	6952	4114	1900	6014	---	10555		7730	
		LOAN				---	---	---	---	---	---	---	---		---	
SELECTED DEVELOPMENT ACTIVITIES																
9311071.01	APPROPRIATE TECHNOLOGY - ATI	G	77			2407	---	---	2407	2200	3300	1307	1625	02/83	---	437
9311113	ENVIRONMENTAL TRAINING AND GRANTS - II	G	77	83		102	500	202	400	---	400	---	515	09/83	500	155
9311209	ENVIRONMENT NATL RESEARCH EXP INFO BASE	G	79	83		1290	---	600	690	300	600	390	450	10/82	160	157
9311223	ENHANCING S AND T CAPABILITIES OF LDCS	G	77	79		1718	200	1250	668	---	668	---	---	09/81	---	158
9365517	ENVIRONMENTAL PLANNING AND MANAGEMENT	G	81	84		---	---	---	---	300	200	100	480	09/82	1070	160
9365519	FOREST RESOURCES MANAGEMENT	G	80	83		---	---	---	---	500	50	450	---	09/82	---	162
9365524	ENHANCING SCIENCE AND TECH CAPABILITIES	G	81	83		---	---	---	---	1200	600	600	1600	03/83	1400	164
9365530	APPROPRIATE AND PROD TECH SUPPORT	G	81	84		---	---	---	---	300	150	150	225	04/83	1300	446
9365532	TECHNOLOGY CHOICE	G	82	84		---	---	---	---	---	---	---	350	01/83	750	448
9365534	NATURAL RESOURCES MANAGEMENT TRAINING	G	82	84		---	---	---	---	---	---	---	400	09/82	1100	680
9365537	CAPABILITY ANALYSIS METHODS	G	82	85		---	---	---	---	---	---	---	400	09/82	2100	684
	APPROPRIATION	TOTAL				5517	700	2052	4165	4800	5968	2997	6045		8380	
		GRANT				5517	700	2052	4165	4800	5968	2997	6045		8380	
		LOAN				---	---	---	---	---	---	---	---		---	
	FUNCTIONAL ACCOUNT	TOTAL				12283	5000	9004	8279	6700	11982	2997	16600		16110	
		GRANT				12283	5000	9004	8279	6700	11982	2997	16600		16110	
		LOAN														

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

NEAR EAST

COUNTRY: EGYPT

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF PTP
ENVIRONMENT NATL RES EXP INFO BASE 931-1209.									B	50	0	2 0
COASTAL RESOURCES MANAGEMENT 936-5518.									B	20	0	3 0
ENHANCING S & T CAPABIL. II 936-5524.									B	0	0	10 0
SEED: TCHNLGY CHOICE FOR SMALL ENTRPRSE 936-5532.									B	100	0	5 0

COUNTRY: JORDAN

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF PTP
ENHANCING S & T CAPABIL. II 936-5524.									B	0	0	10 0

COUNTRY: YEMEN ARAB REPUBLIC

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF PTP
SEED: APPROP + PRODUCTIVE TCHNLGY SPPRT 936-5530.									B	30	0	5 0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

SOUTH ASIA

COUNTRY: NEPAL

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
ENVIRONMENT NATL RES EXP INFO BASE															
931-1209.	B	0	0	0	0										
ENHANCING S&T CAPABILITIES OF LDCS															
931-1223.		0	0	2	0	B	2	0	2	0					
NATURAL RESOURCES MANAGEMENT TRAINING															
936-5534.											B	30	0	3	0

COUNTRY: SRI LANKA

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
ENVIRONMENTAL TRAINING AND GRANTS - II															
931-1113.	B	25	0	4	10										
REMOTE SENSING RESOURCE ASSESSMENT															
931-1166.	A	0	0	1	0										
ENHANCING S&T CAPABILITIES OF LDCS															
931-1223.	B	28	0	15	0										
		0	0	1	9										
ENHANCING S & T CAPABIL. II															
936-5524.											B	0	0	10	0
NATURAL RESOURCES MANAGEMENT TRAINING															
936-5534.											B	30	0	3	0

COUNTRY: INDIA

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
ENHANCING S&T CAPABILITIES OF LDCS															
931-1223.	B	40	0	15	0										
		0	0	1	2										
ENHANCING S & T CAPABIL. II															
936-5524.											B	0	0	10	0
SEEDS APPROP + PRODUCTIVE TCHNLGY SPPRT															
936-5530.											B	30	0	5	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

SOUTH ASIA

PROJECT TITLE	FY 1980 STA	FY 1980 AMT ($000)	FY 1980 STAF #OF TDYS	FY 1980 #OF PTP	FY 1981 STA	FY 1981 AMT ($000)	FY 1981 STAF #OF TDYS	FY 1981 #OF PTP	FY 1982 STA	FY 1982 AMT ($000)	FY 1982 STAF #OF TDYS	FY 1982 #OF PTP
NATURAL RESOURCES MANAGEMENT TRAINING 936-5534.									B	30	0	3	0

COUNTRY: BANGLADESH

PROJECT TITLE	FY 1980 STA	FY 1980 AMT ($000)	FY 1980 STAF #OF TDYS	FY 1980 #OF PTP	FY 1981 STA	FY 1981 AMT ($000)	FY 1981 STAF #OF TDYS	FY 1981 #OF PTP	FY 1982 STA	FY 1982 AMT ($000)	FY 1982 STAF #OF TDYS	FY 1982 #OF PTP
ENVIRONMENTAL PLANNING & MANAGEMENT 936-5517.									B	40	0	5	0

COUNTRY: PAKISTAN

PROJECT TITLE	FY 1980 STA	FY 1980 AMT ($000)	FY 1980 STAF #OF TDYS	FY 1980 #OF PTP	FY 1981 STA	FY 1981 AMT ($000)	FY 1981 STAF #OF TDYS	FY 1981 #OF PTP	FY 1982 STA	FY 1982 AMT ($000)	FY 1982 STAF #OF TDYS	FY 1982 #OF PTP
ENHANCING S & T CAPABIL. II 936-5524.									B	0	0	10	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

EAST ASIA

COUNTRY: SINGAPORE

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
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

COUNTRY: JAPAN

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
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.		0	0	1	1										

COUNTRY: PHILIPPINES

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
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.		0	0	2	3										
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0	3	3		0	0	2	2					
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0
CATCHMENT PROTECTION & WATERSHED MGT. 936-5536.											B	20	0	3	0

COUNTRY: THAILAND

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
ENVIRONMENTAL TRAINING AND GRANTS - II 931-1113.	B	25	0	4	10										

A - ACTIVE B - PENDING MISSION APPROVAL

G

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

EAST ASIA

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
ENVIRONMENT NATL RES EXP INFO BASE															
931-1209.	B	5	0	2	0							50	0	2	0
ENHANCING S & T CAPABIL. II															
936-5524.											B	0	0	10	0
CATCHMENT PROTECTION & WATERSHED MGT.															
936-5536.											B	20	0	3	0

COUNTRY: INDONESIA

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
ENVIRONMENT NATL RES EXP INFO BASE															
931-1209.	B	5	0	2	0										
REMOTE SENSING IN AGRICULTURE															
931-1224.	A	0	0	4	5		0	0	4	3					
ENHANCING S & T CAPABIL. II															
936-5524.											B	0	0	10	0
SEEU: APPROP + PRODUCTIVE TCHNLGY SPPRT															
936-5530.											B	30	0	5	0
SEEU: TCHNLGY CHOICE FOR SMALL ENTRPRSE															
936-5532.											B	100	0	5	0
LAND CAPABILITY ANALYSIS METHODS															
936-5537.											B	15	0	2	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: GUYANA

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
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

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
ENVIRONMENTAL TRAINING AND GRANTS II 931-1113.											B	25	0	4	0
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0	3	2		0	0	3	3		0	0	1	0
LAND CAPABILITY ANALYSIS METHODS 936-5537.											B	15	0	2	0

COUNTRY: CHILE

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
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.		0	0	1	1										
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

COUNTRY: COLOMBIA

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
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: COSTA RICA

PROJECT TITLE	STA	FY 1980 AMT ($000)	STAF	#OF TDYS	#OF PTP	STA	FY 1981 AMT ($000)	STAF	#OF TDYS	#OF PTP	STA	FY 1982 AMT ($000)	STAF	#OF TDYS	#OF PTP
ENVIRONMENTAL TRAINING AND GRANTS - II 931-1113.						B	10	0	4	10					
REMOTE SENSING RESOURCE ASSESSMENT 931-1166.	A	0	0	3	0										
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.	B	33	0	15	0										
		0	0	1	1										
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0	3	3										
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	60	1	4	10	B	60	1	4	10
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0
SEEU: APPROP + PRODUCTIVE TCHNLGY SPPRT 936-5530.											B	30	0	5	0
SEEU: TCHNLGY CHOICE FOR SMALL ENTRPRSE 936-5532.											B	100	0	5	0
LAND CAPABILITY ANALYSIS METHODS 936-5537.											B	10	0	1	0

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COUNTRY: DOMINICAN REPUBLIC

PROJECT TITLE	STA	FY 1980 AMT ($000)	STAF	#OF TDYS	#OF PTP	STA	FY 1981 AMT ($000)	STAF	#OF TDYS	#OF PTP	STA	FY 1982 AMT ($000)	STAF	#OF TDYS	#OF PTP
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0	3	3		0	0	4	1		0	0	1	0
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

COUNTRY: ECUADOR

PROJECT TITLE	STA	FY 1980 AMT ($000)	STAF	#OF TDYS	#OF PTP	STA	FY 1981 AMT ($000)	STAF	#OF TDYS	#OF PTP	STA	FY 1982 AMT ($000)	STAF	#OF TDYS	#OF PTP
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.	B	200	0	10	0		0	0	10	0					

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

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
REMOTE SENSING IN AGRICULTURE												
931-1224.	A	0	0	3	2							
FOREST RESOURCES MANAGEMENT												
936-5519.	B	0	0	0	0	B	60	1	4	10	B	60	1	4	10
SEED: APPROP + PRODUCTIVE TCHNLGY SPPRT												
936-5530.											B	30	0	5	0
DEFORESTATION SURVEY												
936-5531.											B	150	0	4	3
NATURAL RESOURCES MANAGEMENT TRAINING												
936-5534.											B	30	0	3	0

COUNTRY: EL SALVADOR

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
COASTAL RESOURCES MANAGEMENT												
936-5518.									B	20	0	3	0
FOREST RESOURCES MANAGEMENT												
936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5

COUNTRY: GUATEMALA

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
FOREST RESOURCES MANAGEMENT												
936-5519.					B	100	1	4	10	B	100	1	4	10
ENHANCING S & T CAPABIL. II												
936-5524.										B	0	0	10	0

COUNTRY: HAITI

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
REMOTE SENSING RESOURCE ASSESSMENT												
931-1166.	A	0	0	3	0							
SEED: APPROP + PRODUCTIVE TCHNLGY SPPRT												
936-5530.										B	30	0	5	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 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
ENVIRONMENTAL PLANNING & MANAGEMENT															
936-5517.											B	40	0	5	0
FOREST RESOURCES MANAGEMENT															
936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5
NEED: APPROP + PRODUCTIVE TCHNLGY SPPRT															
936-5530.											B	30	0	5	0

COUNTRY: NICARAGUA

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
ENVIRONMENTAL TRAINING AND GRANTS - II															
931-1113.						B	25	0	4	10	B	10	0	2	0
ENVIRONMENTAL PLANNING & MANAGEMENT															
936-5517.											B	40	0	5	0
FOREST RESOURCES MANAGEMENT															
936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5
NATURAL RESOURCES MANAGEMENT TRAINING															
936-5534.											B	30	0	3	0

COUNTRY: PANAMA

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
ENVIRONMENT NATL RES EXP INFO BASE															
931-1209.	B	0	0	0	0						B	50	0	2	0
FOREST RESOURCES MANAGEMENT															
936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5
CATCHMENT PROTECTION & WATERSHED MGT.															
936-5536.											B	20	0	3	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

LATIN AMERICA

COUNTRY: PERU

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

COUNTRY: JAMAICA

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0	3	3		0	0	5	3		0	0	1	0

COUNTRY: REG OFFICE CEN AMER & PANAMA-ROCAP

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

COUNTRY: MOROCCO

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF PTP
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.		0	0 2	0	B	28	0 15	0				
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0 3	0		0	0 5	5		0	0 1	0

COUNTRY: MALAWI

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF PTP
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0 0	0	B	10	0 4	5	B	10	0 4	5

COUNTRY: FED. OF RHODESIA AND NYASALAND

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF PTP
WATER RESOURCES MAPPING 936-5535.									B	150	0 5	2

COUNTRY: KENYA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF PTP
ENVIRONMENT NATL RES EXP INFO BASE 931-1209.	B	5	0 2	0								
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.		0	0 1	2								
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0 0	0	B	160	2 8	0	B	160	2 8	0

A = ACTIVE B = PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

SEED: APPROP & PRODUCTIVE TCHNLGY SPPRT

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
936-5530.											B	30	0	5	0

COUNTRY: UGANDA

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5

COUNTRY: NIGERIA

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
ENVIRONMENT NATL RES EXP INFO BASE 931-1209.	B	5	0	2	0										

COUNTRY: TANZANIA

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0
LAND CAPABILITY ANALYSIS METHODS 936-5537.											B	15	0	2	0

COUNTRY: CAMEROON

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	60	1	4	10	B	60	1	4	10

A = ACTIVE B = PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

ENHANCING S & T CAPABIL. II
936-5524.

		FY 1980				FY 1981				FY 1982			
	STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP		STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP
										B	0	0	10 0

COUNTRY: SIERRA LEONE

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP
REMOTE SENSING IN AGRICULTURE 931-1224.	A	0	0	3 0								

COUNTRY: GHANA

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP
ENVIRONMENT NAIL RES EXP INFO BASE 931-1209.	B	5	0	2 0								
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.		0	0	3 8	B	25	0	15 0				
ENHANCING S & T CAPABIL. II 936-5524.									B	0	0	10 0

COUNTRY: SWAZILAND

PROJECT TITLE	FY 1980 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	FY 1981 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP	FY 1982 STA TUS	AMT ($000)	STAF TDYS	#OF #OF PTP
REMOTE SENSING RESOURCE ASSESSMENT 931-1166.	A	0	0	2 0								
ENVIRONMENTAL PLANNING & MANAGEMENT 936-5517.									B	40	0	5 0
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0 0	B	0	0	4 4				

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

COUNTRY: SUDAN

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
ENHANCING S & T CAPABIL. II 936-5524.											B		0	0	10 0

COUNTRY: TUNISIA

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
REMOTE SENSING IN AGRICULTURE 931-1224.	A		0	0	1	1									

COUNTRY: LIBERIA

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.			0	0	1	2									
REMOTE SENSING IN AGRICULTURE 931-1224.	A		0	0	3	0									

COUNTRY: GUINEA

PROJECT TITLE	FY 1980 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1981 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP	FY 1982 STA	AMT ($000)	STAF TDYS	#OF TDYS	#OF PTP
FOREST RESOURCES MANAGEMENT 936-5519.	B		0	0	0	0	B		0	0	1	4	B		0 0 1 4

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

COUNTRY: CHAD

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	0	0	2	5	B	0	0	2	5

COUNTRY: MAURITANIA

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
ENHANCING S&T CAPABILITIES OF LDCS 931-1223.	B	27	0	15	0										
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	0	0	1	5					
ENHANCING S & T CAPABIL. II 936-5524.											B	0	0	10	0
SEEU: APPROP. + PRODUCTIVE TCHNLGY SPPRT 936-5530.											B	30	0	5	0

COUNTRY: NIGER

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	0	0	1	5	B	0	0	2	5

COUNTRY: SENEGAL

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
REMOTE SENSING RESOURCE ASSESSMENT 931-1166.	A	0	0	2	8										

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 PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF PTP
ENVIRONMENT NATL RES EXP INFO BASE 931-1209.									B	50	0	2 0
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0 0	B	60	1	4 10	B	60	1	4 10
	B	0	0	0 0	B	60	1	4 10	B	60	1	4 10

COUNTRY: UPPER VOLTA

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF PTP
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0 0	B	0	0	2 5				
S T/D: APPROP + PRODUCTIVE FORESTRY SPPRT 936-5530.									B	30	0	5 0

COUNTRY: MALI

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF PTP
ENVIRONMENTAL PLANNING & MANAGEMENT 936-5517.									B	40	0	5 0
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0 0	B	0	0	2 5	B	0	0	2 5
									B	0	0	2 5
ENHANCING S & T CAPABIL. II 936-5524.									B	0	0	10 0
LAND CAPABILITY ANALYSIS METHODS 936-5537.									B	15	0	2 0

COUNTRY: MISC. FRENCH AFRICA

PROJECT TITLE	FY 1980 STA TUS	FY 1980 AMT ($000)	FY 1980 STAF TDYS	FY 1980 #OF PTP	FY 1981 STA TUS	FY 1981 AMT ($000)	FY 1981 STAF TDYS	FY 1981 #OF PTP	FY 1982 STA TUS	FY 1982 AMT ($000)	FY 1982 STAF TDYS	FY 1982 #OF PTP
FOREST RESOURCES MANAGEMENT 936-5519.									B	0	0	2 5

A - ACTIVE B - PENDING MISSION APPROVAL

COUNTRY ACTIVITY REPORT
BY GEOGRAPHIC AREA

AFRICA

COUNTRY: TOGO

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
COASTAL RESOURCES MANAGEMENT 936-5518.											B	20	0	3	0
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	0	0	1	4	B	0	0	1	4

COUNTRY: BURUNDI

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	60	1	4	10	B	60	1	4	10

COUNTRY: RWANDA

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
FOREST RESOURCES MANAGEMENT 936-5519.	B	0	0	0	0	B	10	0	4	5	B	10	0	4	5

A - ACTIVE B - PENDING MISSION APPROVAL