

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number

DOCUMENT CODE

3

2. COUNTRY/ENTITY

AFRICA REGIONAL

4. BUREAU/OFFICE

AFR

06

3. PROJECT NUMBER

698-0467

PO-AAA-251

5. PROJECT TITLE (maximum 40 characters)

Natural Resources Management Support

151-4837

E. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
 09 30 90

7. ESTIMATED DATE OF OBLIGATION
 (Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY 87

B. Quarter 4

C. Final FY 89

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY 87			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	810		810	8,330	180	8,510
(Grant)	(810)	()	(810)	(8,330)	(180)	()
(Loan)	()	()	()	()	()	()
Other U.S. 1.						
Other U.S. 2.						
Host Country						
Other Donor(s)						
TOTALS	810		810	8,330	180	8,510

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) FN	700	850				810		8,510	
(2)									
(3)									
(4)									
TOTALS						810		8,510	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

910 | 920 | 950

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code ENV
 B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To increase the quality and level of natural resources management activity in A.I.D.'s country and related regional programs in Sub-saharan Africa, and in PVO programs supported by A.I.D.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY
 03 89 | | | | 03 90

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY

Signature

Keith W. Sherper

Keith W. Sherper

Title

Director, AFR/TR

Date Signed

MM DD YY
 07 02 87

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

Project Paper

Natural Resources Management Support

(698-0467)

Contract No. PDC 0000-I-09-4105-00

Submitted to:

Bureau for Africa
Office of Technical Resources

by

International Science and Technology Institute
1129 20th St., N.W.
Washington, D.C. 20036

July 3, 1987

EXECUTIVE SUMMARY

The Natural Resources Management Support project (NRMS) is the Africa Bureau's vehicle for fostering implementation of the Plan for Supporting Natural Resources Management in Sub-Saharan Africa (PNRM), in particular the implementation section of that plan (chapter 9). Except for chapter 9, which is under review as this is written, the Plan is approved bureau policy.

The principal themes of the PNRM which will guide NRMS actions are as follows:

- fuller integration of NRM concerns within AID's programs in Africa, based on a long-term commitment to stabilization of the region's natural resources base especially in support of agriculture;
- strengthening of African capacity to manage natural resources at both government and local levels;
- strengthening of both AID and PVO capacity to assist in that process, using all available resources including PL 480 Title II food and AID-generated local currency as well as dollar funds;
- concentration of effort on priority problem areas in the agro-ecological zones of Africa most in need of improved natural resources management, with the arid/semi-arid and tropical highlands zones constituting the top priorities; and
- focus on technical and management areas where U.S. experience and expertise can make the best contribution in close coordination with other-donor efforts.

In accordance with the PID guidelines and the detailed agro-ecological, country-related and AID-related criteria set forth in the PNRM, the NRMS project will mount a wide-ranging program of support services designed to increase capability and promote greater effort on the part of missions and PVOs to plan, design and implement NRM projects and sub-projects.

The services will include:

- support to AID missions in the form of money and expertise to conduct NRM program assessments and to design, implement and evaluate projects. Sources for the expertise include 20 S&T service projects; Bureau for Africa agreements (RSSAs) with the U.S. Department of Agriculture and the U.S. National Park Service; specialized non-governmental organizations; universities; and the general contractor community.

- technical assistance and training support to PVOs, both U.S. and indigenous, beginning with a limited activity offering S&T services to PVOs and culminating -- after a detailed needs survey -- in a broader program of support;

- NRM information support, including a newsletter, provision of technical manuals and documentation to PVOs, and a survey of mission information needs and possibilities that could form the basis for a future activity or project; and

- special studies and analyses based on needs identified in the PNRM, in agro-ecological background documents, by missions, by NRMS management and by others that will strengthen natural resources programming and implementation.

NRMS, on a one-time basis, also is providing remote sensing equipment to Cote d'Ivoire.

Finally, NRMS is prepared to serve as the vehicle for managing a program of biological diversity field activities, should a special fund be established for the purpose. With or without a special fund, the NRMS regular budget and service facilities are available to support biological diversity efforts on a par with other natural resources field programs.

For the most part, NRMS offers services that are normally provided by an AID technical resources office, but it does so in an expanded and intensified manner within a project framework. As a service project, NRMS is heavily dependent upon mission demand which in turn depends largely upon the availability of funds for field activities. The project must therefore remain flexible, and it is designed with that purpose in mind. NRMS services can be phased, modified, extended, expanded or, if necessary, eliminated as need, experience and budget availabilities dictate.

The NRMS project will be managed by a staff in AFR/TR/ARD consisting of a direct-hire AID manager, the part-time assistance of other AID staff in ARD, and a group of full- and part-time technical specialists furnished under RSSAs with USDA. This represents an augmentation of ARD staff that has long supported NRM activities in Africa and will now embark on a program of intensified, focused support pursuant to NRM Plan guidelines. In addition, where necessary and appropriate, the ARD staff will engage contract assistance to manage repetitive and labor-inten-

sive support activities. The most important means, however, for NRMS staff to manage its workload will be to rely on standard procedures and on mission and REDSO initiative and management capability wherever suitable.

Below is a summary of the project budget which covers the three obligation years of FYs 87-89 specified in the PID. The amounts represent the design team's best estimate of the regional funds required to fulfill the project purpose of promoting increased NRM activity on the part of AID missions and PVDs. At the same time, the project can absorb buy-ins from missions in order to meet special service needs or make up a shortfall in the NRMS budget.

SUMMARY COST ESTIMATE AND FINANCIAL PLAN

	(\$000s)			
	FY_87	FY_88	FY_89	Total
Support to Missions	500	1,965	1,825	4,290
Programming Support	(200)	(865)	(805)	(1,870)
Project Support	(300)	(1,100)	(1,020)	(2,420)
Support to PVDs		985	905	1,890
Special Studies		600	495	1,095
Information Support		295	430	725
EOP Evaluation			50	50
Contingency		75	75	150
TOTAL REGULAR SERVICE BUDGET	500	3,920	3,780	8,200
Remote Sensing Equipment				
Cote d'Ivoire	310	-	-	310
Biological Diversity Activities				
Special Fund - Illustrative	-	425	1,860	1,285

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I. Project Background

Efficient management* of natural resources** is fundamental to sustained agricultural productivity and food security in Africa; the Africa Bureau Strategic Plan, the Africa Bureau Energy Strategy Statement, and the Plan for Supporting Agricultural Research and Faculties of Agriculture in Africa all recognize the critical nature of this connection.

With the approval in 1987 of its Plan for Supporting Natural Resources Management in Sub-Saharan Africa (PNRM), AID has focused its response to sub-Saharan Africa's environmental problems in the light of its strategic goal of increased agricultural productivity. The PNRM identifies natural resources management as a key element of the Africa Bureau's development strategy for the region.

Missions have been alerted to the need to begin immediately to incorporate as much as possible of the PNRM's content into their country programs. Practical problems, however, confront AID in realizing this objective: staffing and funding resources are severely constrained generally; technical staff resources in the field are particularly limited in the natural resources sector; with declining DA levels, country portfolios in many cases are already heavily mortgaged; and recent efforts to focus country programs by limiting them to a few sectors and projects mean there are few immediate opportunities to extend efforts in this sector except where natural resources projects or activities are already on the books.

Nevertheless, there is a range of ways to begin putting the PNRM into effect, including, for example, reorientation of existing agriculture and rural development projects, programming of more local currency to support natural resource management activities, and bringing to bear in a systematic way resources

*Management encompasses a wide range of activities including, but not limited to, resource inventory and monitoring programs; institutional assessments and human resource development; economic evaluation and social analyses; project design, implementation and evaluation; and policy dialogue.

**Natural resources are defined as the physical and biological systems associated with agricultural lands, forests, range and water, and include energy sources.

available to AID to provide technical services to missions and PVDs, expedite research on major NRM problems, and improve the collection and dissemination of relevant data.

What is needed is a means to facilitate these tasks and concentrate the Africa Bureau's efforts in implementing the PNRM. The means proposed is the Natural Resources Management Support project (NRMS). This project will build on the bureau's present commitment of staff and funding for services in this area with a broader, more focussed and integrated effort to realign current operations and develop further country programs in natural resources management.

Organization of the Project Paper

Chapter II describes the project's various components, or outputs and related inputs, including management and funding. Given the nature of NRMS as a support project, financial and management considerations play a key role in each component. Management alternatives and details are discussed in Annex E.

- o Chapter III discusses overall project management: staffing, organization, coordination, etc.

- o Chapter IV provides the overall project budget;

- o Chapter V contains the implementation plan.

Training facilitation is not treated as a separate component but rather as integral to both mission and PVO support. A separate discussion on training considerations appears in Annex D. Training is also dealt with in the implementation plan.

The various annexes are integral to the project's design, especially the first two. Annex A summarizes identifiable demand for services and support that can be provided through the project. Annex B lists available mechanisms for providing support.

II. PROJECT RATIONALE AND DESCRIPTION

A. Introduction

1. Goal and Purpose

The project goal is to improve policies and programs to restore and maintain environmental stability and the natural resources base in sub-Saharan Africa (SSA), especially in support of agriculture.

The project purpose is to increase the quality and level of natural resources management activity in AID's country and related regional programs in SSA, and in PVO programs supported by AID.

The expected achievements of the project are:

- Country development strategies that incorporate natural resources management concerns through existing and planned projects, policy dialogue and donor coordination;
- Planning and preparation of the NRM projects and activities called for in the country strategies;
- Planning and funding of activities in Africa aimed at conserving biological diversity; and
- Improved planning and execution of NRM activities by AID mission, host-country and PVO personnel.

2. Project Framework and Guidelines

The framework and driving force for the project is the Africa Bureau Plan for Supporting Natural Resources Management in Sub-Saharan Africa (PNRM), in particular its section nine on implementation. This plan, reflecting both AID and Congressional concern about the severe threats to the fragile ecology and agricultural productive capacity of sub-Saharan Africa, will guide future AID investments in improved NRM in the region. The basic themes that will orient AID's assistance in this area and the support furnished by NRMS are:

- Fuller integration of NRM concerns within AID's overall program, particularly in regard to policy dialogue with African governments and to agricultural development;

- Fostering African capacity to manage natural resources, including energy sources, at all appropriate institutional levels, from the national to the community;

- Strong support for farmer-oriented participatory approaches, including those which facilitate the involvement of women, as the key to the full and long-term realization of the potential for natural resources management and development;

- Commitment to addressing NRM concerns within a long-term frame of reference;

- Concentration of effort on a few priority problem areas where there is a good fit between the nature of the problem and U.S. experience and expertise;

- Increased involvement and capability of the PVO community in natural resources management;

- Continued attention to improved African/donor coordination;

- Identification of opportunities to use PL 480 Title II food and program-generated local currency (from PL 480, CIP, ESF) to support NRM activities;

- Identification and development of regional or sub-regional projects where natural resources problems transcend single-country considerations; and

- Increased capability of AID mission personnel in the development and implementation of NRM programs.

The above themes are further developed in sub-section 3 below on project criteria.

This project is designed as the Africa Bureau's vehicle for systematic support to AID missions and PVOs to help them strengthen their NRM programs and projects. Technical, program and financial direction of the project will be assigned to the Agriculture and Rural Development division of the Africa Bureau's Office of Technical Resources (AFR/TR/ARD), which has long supported NRM activities in Africa and is augmenting its staff during July and August 1987 to accommodate the intensified support to be furnished under NRMS.

The project will finance a broad range of support activities, including most NRM-related service costs to missions previously chargeable to Program Development and Support (PD&S) funds.

Consolidating this responsibility under NRMS will facilitate tracking -- programmatic, procedural and financial -- of all NRM-related support activity while continuing to afford missions the same type of access to service funds they have had in the past. The increase in support funding under NRMS as compared to pre-project levels reflects the new project's (1) expanded support for NRM programming, project design, studies and information dissemination, and (2) support, not hitherto furnished by the bureau, for strengthening PVO capability in NRM.

NRMS is essentially a service project. With the exception of biological diversity activities (see below) and a one-time contribution of remote sensing equipment to Cote d'Ivoire, NRMS is not designed to finance and implement field projects. NRMS will respond to service requests consistent with the PNRM and related bureau and agency policy, help coordinate the response of S&T service projects to mission needs, foster awareness and training programs in NRM, strengthen PVOs through technical assistance and training, and sponsor studies and research to enhance the design and impact of field projects. NRMS also will provide selective grants consistent with these objectives. In sum, NRMS will function as both catalyst and response agent in providing its support.

Biological diversity activities are a subset of natural resources management and as such are eligible for NRMS services on a par with other NRM activities (e.g., forestry, watershed management, etc.). Although the subset is not treated in the PP as a separate project component, the design team was requested to include discussion in the PP of a possible future component should AID set aside special funds for biological diversity activities in Africa. In that event, NRMS would serve as the financing, programming and management vehicle for such activities in addition to providing the necessary planning and design services. Annex J provides a design concept that may serve as the basis for a biological diversity plan (recommended whether ordinary program funds or special funds are to finance activities) and for an amendment to the PP and PP authorization in the event a separate funding component for biological diversity field activities is decided upon.

The project will make broad use of existing mechanisms. For example, wherever decentralized action is appropriate, missions will receive funds to procure their own services for program assessments and technical assistance, using tested financial management and contracting procedures. Missions will be asked to provide NRMS management with necessary tracking data on use of the funds and the results obtained. S&T service projects and RSSAs already in place will be requested to furnish expertise to missions and AFR/W, with NRMS paying those costs that in the absence of the project would be chargeable to other bureau accounts (e.g., PD&S). As in the past, cost-sharing should occur where central AID service projects can contribute funds for support of African programs. There will be close coordination with the Energy Initiatives for Africa project (EIA), another

Africa Bureau source of service funds and expertise available to missions.

The project will seek to minimize the workload of NRMS management by relying upon the above standard procedures, upon mission and REDSO initiative and management capability to implement project actions wherever suitable, and upon contract facilities for relatively complex and management-intensive functions such as PVO support.

The NRMS project is set forth as a short-term effort of three years, as specified in the PID. It is a flexible instrument whose components and activities can be phased, modified, extended or eliminated as need, experience and budget availabilities dictate. New components may be added along with the necessary funds and management forces.

Since the project and its budget will be driven largely by funding availabilities and by mission and PVO demand for the services offered, NRMS managers will need to hold fairly frequent reviews to ensure that allocations among components both reflect actual demand and ensure coverage of core costs.

The funding priorities for each component should reflect the priorities set in the PNRM implementation plan (see criteria below). These priorities will become particularly important if NRMS itself faces budget constraints. Should that occur, NRMS management will need to consider such steps as postponing services to countries in lower-ranked PNRM groups and/or limiting activities. A strategy of rendering a full range of services to priority countries and postponing some services to posts ranked lower in the PNRM may be preferable to spreading services thinly among all the countries. However, a strategy involving postponement of services to some posts would require a stretch-out of the project beyond the specified three years.

The NRMS budget is based on an estimate of the regional funds needed to fulfill the project purpose of "priming the pump" for increased NRM activity in AID's Africa program. At the same time, the project can readily accommodate "buy-ins" from missions wishing to use bilateral funds to meet a special service need or to make up shortfalls in the regional budget. Missions buying in would be asked to comply with NRMS guidelines including reporting provisions to allow effective tracking.

3. Basic Criteria for Project Support

Pursuant to the PNRM, basic criteria for program development and activity funding -- and consequently for NRMS support -- fall into three major categories: (a) agro-ecological criteria, (b) country-related criteria, and (c) AID-related criteria.

a. Agro-ecological criteria in order of priority

- The combination of fragility of the natural resources base and population pressure. Using these criteria two agro-ecological zones emerge as high-priority target areas for continued AID support to NRM:

- The arid/semi-arid zone, where the combination of fragile lands and relatively high populations of people and livestock has given rise to Africa's major environmental problem, desertification, accompanied by periodic drought. Program priorities in this zone are continued strong support to tree planting, agroforestry, soil and water conservation, and water resources management, to counter the impacts of desertification and stabilize environmental conditions for sustainable productive agriculture and livestock husbandry.

- The tropical highlands/Madagascar/Indian Ocean Islands zone, where population increases place long-term sustainability of development in jeopardy. Priorities are increased direct support to efforts at arresting soil erosion and improving watershed management through tree planting, agroforestry, and soil and water conservation practices.

- Unique environmental features or functions:

- Watershed degradation in the Fouta Djallon highlands of Guinea, which is threatening downstream development potential on three major river systems of West Africa. Priorities are those listed above under tropical highlands.

- Jeopardy to biological diversity, particularly in Madagascar, where the destruction of a few hundred hectares of natural habitat may mean the extinction of a unique endemic species of plant or animal. In Madagascar, the tropical highlands and the arid/semi-arid zone, the bio-diversity priorities are support to PVDs and NGOs engaged in wildland conservation and protection of endangered species, with emphasis on integrating conservation objectives within rural development programs.

- The humid coastal and equatorial lowlands, where the priorities are development of sustainable crop production systems as alternatives to traditional shifting cultivation in areas under intense population pressure, and support for the protection of representative tracts of remaining humid tropical forests.

- The sub-humid tropical uplands, which require development of a better policy framework and natural resource/land use assessments to guide land use and watershed management in the zone.

b. Country-related criteria

- Host-country commitment and capability, with emphasis on active participation of the population in NRM facilitated by host governments and AID. Elements essential to participation include

a favorable policy environment, national institutions with adequate budgets and an administrative structure able to service local and private NRM efforts, an effective extension system, and realistic national and local experience in NRM.

- For activities related to tropical forest conservation and the maintenance of biological and genetic diversity, the choice for assistance will be based on international significance of the resources, host-country priorities, PVO involvement, and opportunities identified by missions through the program planning (CDSS) process.

- Need for institution-building, best accomplished through policy dialogue, hands-on experience and human resource development.

c. AID-Related Criteria (per the latest draft of chapter 9 of the PNRM)

- Long- and short-term activities designed to implement the PNRM:

- Integrating natural resources concerns into the agricultural and rural development portfolios of all missions.

- Increasing local currency support for NRM activities.

- Identifying and developing regional projects supportive of NRM in applied research and extension.

- Increasing collaboration with other-donor groups and the PVO/NGO/university community.

- Strengthening technical support staff in NRM.

- Strengthening the information, policy and institutional base (including gender implications) for NRM programs.

- Criteria for NRM groupings of Africa Bureau missions:

- Critical nature of natural resource issues as specified in the NRM Plan.

- AID country category and size of mission portfolio.

- Opportunity to link natural resource interventions with agricultural and rural development projects.

- Host-country commitment and capacity.

- To a lesser degree, host-country agricultural research capacity.

- Country NRM Program Groups

Group I - Focused Programs. AID's objective in these countries is to implement a focused program of projects and activities relating to NRM in the arid/semi-arid and highlands sub-regions. Countries in this group are Guinea, Madagascar, Mali, Niger, Rwanda, Senegal/Gambia, Somalia and Sudan.

Group II - Country Option (Priority Concerns). Each mission in this category has a choice of deciding whether it wants to be considered a significant country for natural resources development focusing on one or more priority concerns. Countries in this group are Burundi, Cameroon, Malawi, Tanzania and Uganda.

Group III - Institutional Strengthening/Training. Here AID's objective is to assist with training. Countries included are Benin, Botswana, Burkina Faso, Cape Verde, Central African Republic, Chad, Comoros, Guinea Bissau, Congo, Djibouti, Ghana, Kenya, Lesotho, Liberia, Mauritania, Mauritius, Mozambique, Sao Tome, Seychelles, Sierra Leone, Swaziland, Togo, Zambia, Zaire and Zimbabwe.

NRMS management will use the above basic criteria, along with further criteria identified under certain components below, to evaluate and determine levels of available staff and funding support to be given service requests and proposals generated by the project.

B. Support to Missions

1. Projection of Level of Activity in Natural Resource Management in Sub-Saharan Africa, and Corresponding Mission Need and Demand for NRMS Services

Both Congress and AID have expressed their determination to see increased attention to natural resource management in sub-Saharan Africa. Congress has been considering a possible annual earmark of about \$45 million for NRM and provided a draft definition against which AID can review its level of NRM activity. At this writing no final determination of the actual level has been made by AFR/W, but it appears to be in the neighborhood of \$45 million.

Given the very limited prospects for additional funds over coming years for any new program thrust, and given the increasing demand for funds in other sectors as well as NRM, there is little likelihood of a significant increase in NRM funding over present levels. This project will seek to help the missions make the most of available resources through technical and programming assistance as well as special studies and information services.

As detailed in Annex A, as of June 30, 1987 15 missions had expressed a need for a variety of design, planning and technical assistance tasks, requiring approximately 118 person/months of

NRMS services and costing an estimated \$1,770,000. As annual budget submissions are received and reviewed, as selected missions respond to bureau and agency requirements to undertake NRM program assessments (see Section 3 below), and as the facilities of the NRMS project become better known, the demand for services is likely to increase. The design team tentatively projects a life-of-project demand for services totaling \$4.02 million, plus \$550,000 to be made available separately for NRMS purposes under the Energy Initiatives for Africa project. The \$4.02 million figure covers both programming and project support, most of it in direct response to mission demand, but also including background programming support (\$270,000) initiated by NRMS management to facilitate country assessments (see sub-sections below).

The projected demand will need to be reviewed fairly frequently. Ultimately the determining factors will be overall funding levels for NRM activities, agency and bureau policy, congressional requirements, the quality, usefulness and efficiency of NRMS services and research, and mission responses to all these conditions and to country programming priorities in light of country situations and host-government perceptions.

To help refine the demand projections at an early stage of project implementation, it is recommended that NRMS management attend the REDSO scheduling conferences in September; missions should be alerted beforehand to review their service needs under the project so that firm planning and coordination with the REDSOs can take place at the meetings.

2. NRM Programming Support to Missions

The objective of this component is to assist missions to strengthen their natural resource management programs, in accordance with the draft PNRM implementation plan (chapter 9) which was current at the time this project element was developed. Should the priorities be changed in the final implementation plan, the component can be modified accordingly.

a. Background

As noted in Section II.B.3, the implementation plan divides African countries into three groups for programming purposes.

Group I - Focused Programs

The nine missions in this group -- Guinea, Madagascar, Mali, Niger, Rwanda, Senegal/Gambia, Somalia and Sudan -- are located in the arid/semi-arid and highlands sub-regions (except for Madagascar). They are expected to make detailed assessments of natural resource concerns in their countries and identify activities for a focused program within mission capabilities based on priorities and possible solutions derived from this process.

Group I countries for the most part have a sizeable U.S. assistance effort and urgent needs for NRM interventions.

Group I assessments will be conducted in FY 88 and FY 89, using REDSO, AFR/TR and S&T technical support, and PFC/WID technical support services and resources where needed. Assessments, including gender-disaggregated data where appropriate, will include:

- o examining NRM projects which are approaching project assistance completion dates (PACD) and determining whether they merit extension, continuation or expansion;
- o assessing opportunities for modifying or expanding ongoing agricultural and rural development projects to integrate natural resource concerns under the guidelines of the plan;
- o reviewing opportunities for increased reliance on existing NGO and PVO umbrella activities in support of NRM;
- o examining possibilities for use of PL 480 and local currency resources in support of NRM programs;
- o assessing opportunities for participant training in NRM-related skill areas, funded through bilateral projects or regional projects (e.g., Human Resources Development in Africa, HRDA, the successor to the African Manpower Development project);
- o describing shelf proposals that deserve consideration under plan guidelines; and
- o examining possibilities for country or regional cooperation with other donors.

Based on the assessments, Group I missions will develop new CDSS or CDSS amendments during FY 88 and FY 89 outlining plans to support the integration of NRM within their agricultural and rural development portfolios. The missions are expected to develop a range of projects and activities including several of the program elements discussed in section VIII B of the NRM Plan and listed as agro-ecological criteria in section II.B.3 above. Missions also are expected to monitor programs to determine the effects these activities have on the natural resource base and productivity, using gender-disaggregated data where possible.

Group II - Country Option (Priority Concerns)

Priority concerns in these countries have been identified in the NRM Plan. Each mission in this category has a choice of deciding whether it wishes to be considered a significant country for NRM development focusing on one or more of the identified priority concerns. Program implementation would rely heavily on Peace Corps and NGO/PVO initiatives to lessen the managerial burden on AID missions. Group II countries and priority concerns are:

<u>Country</u>	<u>Priority Concern</u>
Burundi	Soil conservation, conservation of tropical forests
Cameroon	Agro-forestry, soil conservation and revegetation
Malawi	Lake Malawi and soil conservation
Tanzania	Conservation of tropical forests and biological diversity
Uganda	Soil conservation, conservation of tropical forests

Group II missions choosing to be a significant country will be expected to undertake assessments on only priority concerns listed above. Where needed, these assessments may use the same support services as Group I countries. The assessments will be used to develop new CDSSs or CDSS amendments during FY 88 and FY 89. The CDSS documents will outline specific plans to support the integration of priority NRM concerns within the agricultural and rural development portfolios of Group II missions. The missions will be expected to develop programs to address these concerns and monitor the effects of the activities on natural resource productivity.

Assessments per Sections 118 and 119 of the Foreign Assistance Act

A related assessment requirement was sent to the missions by worldwide telegram State 118324 of April 29, 1987, entitled "Guidance on CDSS and Action Plan Requirements Included in Amendments to Section 118 and 119 of FAA." This message cites legislation requiring that CDSSs and other country plans, such as action plans, include (a) the actions necessary in the country to achieve conservation and sustainable management of tropical forests and to conserve biological diversity, and (b) the extent to which mission activity proposals in these areas meet the needs identified. By June 1, missions were either to supply an annex addressing these questions or a work plan and schedule for completing the necessary studies or analyses and an estimate of the technical assistance required for these tasks. The message listed several sources of documents and technical assistance, saying missions generally would have to fund or share costs of the latter with relevant S&T service projects. The discussion below in reference to assessment support for Groups I and II should be read to include Group III countries to the extent they also may be required under the legislation to conduct Sec. 118 and 119 assessments.

b. Background Programming Support (BPS) for the Assessment Process in Group I and II Missions

The objective of BPS is to provide background help and regional/sub-regional services that will enhance and expedite individual country NRM assessments undertaken in the context of CDSS and other program revisions. Examples of BPS services and likely implementers include the following:

(1) for NRMS management in conjunction with AFR/DP, LEG, etc.:

- ongoing interpretation for all missions of the PNRM action plan and NR legislation, disseminated by means of newsletters (see Section II.E. below), cables and, where appropriate, visits to missions;

- help in delineating policy dialogue agendas which promote improved natural resource management;

(2) for a BPS level-of-effort contractor (see paragraph e. below and Annex E):

- preparation, for Groups I and II, of annotated bibliographies or reviews of literature on existing environmental profiles and other research and project documents available in the U.S. and at other-donor headquarters and capitals, to help missions determine what has already been done or written about major natural resource management problems in their countries;

- reports on multi-donor consultations and contacts with other-donor headquarters to supplement mission information on their current activities and plans, and reports on multi-donor consultations. Particular attention should be paid to the World Bank's environmental protection initiative announced in May 1987. It includes plans for an urgent country-by-country assessment of environmental threats in the 30 most vulnerable developing nations, many of them in Africa; and a continent-wide drive against desertification and destruction of forests in Africa, with a doubling of annual lending to forestry projects;

- where appropriate, studies of regional or sub-regional interest (other studies will be contracted through existing mechanisms -- see section II.D); and

- assistance to missions in preparing assessment scopes of work.

c. NRMS Project Support for Country NRM Assessments

NRM assessments will form part of individual mission efforts to amend or update their CDSSs or program rationales. NRMS can assist by identifying suitable sources from which missions may select assessment teams to supplement the expertise available within their own staffs and from the REDSOs. NRMS will underwrite the cost of external assessment services which missions may wish to procure. (See next sub-section for access to assessment as well as other types of services.)

Prior to commencing its in-country work, each assessment team will be provided with all available information compiled through BPS as well as information on country PVO activities supplied by the PVO support entity (see PVO support sections). The team thus will arrive at the mission with a solid background in the country's specific NRM concerns, activities and possibilities.

A major problem in NR programming is that it frequently bridges development sectors managed by different ministries or agencies (e.g., forestry and agriculture) that may not be models of cooperative endeavor. A technique that, according to the evaluation of the Africa regional ETMA project, has been found effective in generating inter-agency coordination and "indigenous" solutions is a planning workshop, or a training workshop that in effect becomes a generator of planning recommendations. Not only host country government personnel but also PVO and other private sector representatives and local university researchers can be asked to participate. If a mission is interested, NRMS can include BPS support for such a workshop in its assistance package for the assessment.

d. NRMS Assistance to Group III Countries

Section II.B.3 lists the 24 countries in Group III. Missions in this group may -- if opportunities present themselves -- strengthen host country capabilities in NRM through training. These missions also may continue to address natural resources needs in which they have a history of positive involvement. Under the programming support sub-component of the NRMS project, every effort will be made to respond to Group III mission requests for NR training needs assessments and for other planning services as may be necessary.

e. Management Considerations

- **Scheduling of Assessments:** A priority listing of missions to receive assistance will be established based on the CDSS submission schedule to be set by the Africa Bureau in the months following submission of this project paper (CDSS guidance is scheduled to be sent out in October 1987) and on specific country needs; this will require close coordination by NRMS management with AFR/DF, geographic offices, missions and the REDSOs.

For NRMS programming and budgeting purposes, pending final CDSS and program rationale submission schedules, this PP assumes that NRMS will be asked to support, during each of the next two fiscal years, up to six assessments for Group I and II countries, and three training needs assessments for Group III countries. In addition, three small program assessments per year are assumed in connection with the biological diversity and tropical forest requirements of Sections 118 and 119 of the FAA.

- **BPS Contractor Selection:** Three options for securing BPS

services are analyzed in Annex E. The design team recommends engaging a level-of-effort contractor to provide intermittent services, thereby offering a measure of continuity of personnel, cost savings and flexibility in procurement of services. A maximum of 18 person/months of effort is budgeted for FY 88 and FY 89. Section 8(a) possibilities should be explored.

f. NRMS Management Requirements

The principal management requirements for NRMS staff are to participate in BPS contractor selection, supervise BPS work, provide assessment support to missions in Groups I to III, appropriate services to Group IV posts, and disseminate bureau interpretation of PNRM and relevant legislation. A more detailed exposition appears in Section V, Implementation Plan.

Component Budget	FY_87	FY_88	FY_89
Programming Support	200	865	805
Background Support (Level-of-effort Contractor)		(130)	(140)
Country Assessments	(200)	(570)	(570)
Training Assessments		(90)	(95)
Seminars/Pilot Workshops		(75)	-

3. Technical assistance and support to missions.

a. Nature of assistance

Technical assistance and support will be underwritten or cost-shared through the NRMS project for (See Chapter 9, PNRM):

- CDSS revisions and other NRM program assessments
- project design, re-design, implementation
- project evaluations (where project funds are insufficient)
- program design, e.g., as an adjunct to a natural resources policy reform initiative
- S&T service-related workshops
- planning increased participant training in natural resources
- planning for FVO use of PL 480 local currency support
- planning for local currency support to sustain ongoing, successful D.A. funded activities ensuring the participation of women in natural resources management.
- special studies or analyses

Projects can include research and policy-oriented projects as well as those involving direct field actions.

Program assistance, e.g. indirect assistance through P.L. 480, Title III, in support of policy reforms affecting natural resources (e.g. land or tree tenure changes) may be considered by Missions. NRMS could underwrite the preparatory studies or design actions.

(The project will undertake a specific survey of mission experiences with the use of local currency accounts for natural resources management. See section D, Studies and Analyses, below).

Criteria for funding of activities are outlined in Section II.A.3 above. Prior accomplishment of CDSS revisions is not a requisite for accessing assistance through NRMS for project design, implementation or evaluation, studies, etc.

Funding levels for project-related support services are preliminarily set as follows:

FY87	\$200,000 (for USPS RSSA; in addition, services are available through the EIA extension coordinated with but financed independently of NRMS)
FY88	\$ 1,200
FY89	\$ 1,020

b. Mechanisms for obtaining assistance

Technical assistance and other support is immediately available (although in some cases not until after Oct. 1, 1987) from existing service projects or other mechanisms, namely:

- o existing RSSAs, contracts, and cooperative agreements within the Bureau for Africa (two RSSAs), the Bureau for Science and Technology (total of 20 related to NRMS), and the Bureau for Program and Policy Coordination (new project offering assistance on women in development). (See Annex B)
- o IQC contractors in
 - * environment and natural resources. (Current contracts terminate 6/30/1987; new awards expected in July, 1987),
 - * agriculture (10),
 - * energy (8 of which 4 are 8(a) firms).

REDSO/ESA will be selecting an IQC contractor for natural resources related services in its region. The RFP was sent out in early May.

Table II.1 Current (6/87) Indefinite Quantity Contractors

1. Agriculture

Contact officer: Mr. Frank Mertens,
S&T/Ag, 235-1497

Southeast Consortium
for International Development
400 Eastowne Drive
Suite 207

Chapel Hill, NC 28514

Development Assoc., International
2924 Columba Pike
Arlington, VA 22204

Chemonics International
Consulting Division
2000 M Street, NW
Washington, DC 20036

Consortium for International
Development.
5151 East Broadway
Suite 1500
Tucson, AZ 85711

Pragma Corporation
116 East Broad Street
Falls Church, VA 22046

International Resources
Consultants, Inc.
1025 15th Street, NW
Suite 500
Washington, DC 20005

Experience, Inc.
1725 K Street, NW
Washington, DC 20006

Associates in Rural Development
P.O. Box 1397
Burlington, VT

Devres, Inc.
2426 Ontario Road, NW
Washington, DC 20009

Clapp & Mayne, Inc.
5530 Wisconsin Avenue
suite 115
Chevy Chase, MD 20015

2. Energy

Contact officer: Mr. Samuel Schweitzer,
S&T/EY, 235-8918

1. Small businesses

CBY Associates
5039 Cathedral Ave., NW
Washington, DC 20016

deLucia & Associates
5 Hastings Square
Cambridge, MA 02139

Development Sciences
30 Pleasant Street
suite 4444
Sagamore, MA 02561

Energy Development
International/IT Power JV
1015 18th Street, NW
Washington, DC 20036

2. Large business

Price Waterhouse/
Mathtec/Foster Wheeler
1801 K Street, NW
Washington, DC 20006

Burns & Roe Enterprises
Inc./Hagler, Balley & Co., Inc.
2301 M Street, NW
Washington, DC 20037

GDC, Inc.
10 West 35th Street
Chicago, IL 60616

Arthur D. Little, Inc.
Acorn Park
Cambridge, MA 02140

IQC or 8(a) firms are the usual mechanisms employed for fielding design teams for the preparation of project identification documents, project papers, and project evaluations.

c. Existing AID/Washington services and support projects

(1) Bureau for Africa

The Bureau for Africa's TR/ARD has two RSSAs for obtaining long and short-term technical assistance, as well as an energy assistance project (Energy Initiatives in Africa). One is with the U.S. Park Service for environmental technical services. A second is with the USDA to supply long-term staff support and occasional short-term technical assistance. A summary description of each of them appears in Annex B. The Energy Initiatives for Africa project has been extended under NRMS funding to

December, 1988, and offers short-term assistance in biological diversity planning as well as tropical forestry and forest management, and the services of a forest economist posted in Abidjan.

Missions can access free services immediately through the EIA extension by communicating directly with the E/DI office in Abidjan or the home office in Washington, D.C. E/DI will coordinate all of its services with NRMS management in TR/ARD.

(2) Bureau for Science and Technology.

A rather complete range of specialized supporting technical assistance in natural resources and agriculture is available to missions through existing S&T projects. Twenty projects are listed in Table II.2 and their attributions are shown in Table II.3.

The yearly spending levels for field support activities in these projects are generally in the range of \$200,000 to \$300,000 for all regions, such that their work in any of the regions is measured in 5 to 10 activities per year. NRMS project funds will be tapped on behalf of missions in order to augment these projects' core funding and to supplement mission funds normally used to access these services.

The S&T service projects are quick ways for missions to obtain specific expertise for different purposes: reviews, analyses, design assistance, evaluation assistance, and implementation assistance.

The various support projects cover the topics of soils management, agricultural production methods for low resource farmers, water resources management, forestry, agroforestry, watershed management, fisheries, energy, species conservation and other aspects of biological diversity management (park and biosphere reserve planning).

Many of the projects have worked throughout Africa and are well regarded by African missions for responsiveness and competence of assistance provided, e.g. the Forestry Support Program, the Energy Policy and Conservation project, and the Human Settlements and Natural Systems Analysis project. Soil-related service projects are less well known, although well regarded by missions or researchers whom they have served. Others have only recently developed a focus and competence in Africa, e.g., Environmental Planning and Management, Farming Systems Support, and Water Management Synthesis II (and its planned successor which will focus on small scale irrigation in Africa). These latter projects are now heavily committed to work in Africa.

Some projects provide access to uniquely qualified expertise, such as agroforestry expertise in East Africa through the F/FRED project's cooperative agreement with ICRAF, or resource

tenure questions through the U. of Wisconsin's Land Tenure Center. Some have been very active in Africa, and have spent a disproportionate amount of their core funding for activities in Africa, e.g., Technologies for Soil Moisture Management (50%). Generally speaking, however, services are provided to missions on a first-come-first-served basis.

Many of the implementing organizations for S&T RSSAs or cooperative agreements also access other centers of competence through their own consortia arrangements or cooperative agreements. For instance, the U.S. Park Service has cooperative agreements with the U. of Arizona, U. of Michigan, U. of Miami and Yale University in order to access their training and research competence in different physical environments (arid and semi-arid zone, marine, tropical forests) or approaches (land use and resource planning methods).

The U. of Florida is the nexus of a large network formed around the Farming Systems project.

These and other details are noted in the service project inventory in Annex B.

There are two limitations to these various service projects which, nevertheless, have not detracted from their usefulness:

(1) spending ceilings are quickly reached if there is a surge of mission buy-ins. This problem has been obviated by either raising the spending ceiling or attaching a companion basic ordering agreement, in effect an "empty basket" for receiving mission buy-in money;

(2) these projects are not set up to achieve complete project design, although some may be competent to do so. Project design usually requires a team effort, and missions may wish to pick the team. RSSAs, PASAs and cooperative agreements do not lend themselves to this sort of "body shop" operation. Also, it appears that the team-building aspect is difficult to achieve by drawing from a variety of support projects for expertise. Since missions have recourse to IQC contractors for fielding design teams this second limitation is unimportant.

d. Technical and financial management of support projects

The NRMS project manager will route mission requests for NRMS-financed technical services to the appropriate existing Africa Bureau RSSA managers or S&T service project managers, and consult with them as needed on scopes of work and project implementation orders.

All S&T support is accessible through the PIO/Ts which can be written by missions and S&T project managers as well as the NRMS manager. Missions are encouraged to prepare the drafts where possible. The NRMS manager will review drafts and approve final PIO/Ts written against NRMS project funds. Services through

the EIA extension may also be accessed; since it is a separate project closely coordinated with NRMS.

Existing service projects already perform technical and financial management tasks. The NRMS project manager and technical advisory staff will ensure speedy action on mission requests for technical services through these projects and will facilitate the writing of PIO/Ts when necessary.

Missions will be requested to report back to AFR/TR/ARD on the outcome of actions underwritten by the project, including copies of PIO/Ts where these are written by the missions, estimates of funds used, copies of final reports and progress reports, etc. The documentation will be needed to track and report on NRMS-financed actions.

Table II.2. Existing Projects for Natural Resources Management Support Services.

Title	Mechanism
Bureau for Science and Technology	
Office of Forestry, Environment and Natural Resources	
Forestry Support Program	RSSA with US Forest Service
Environmental Planning and Management	Coop Agreement with IIED
Forestry/Fuelwood Research and Development	Cooperative agreement with ICRAF.
Office of Agriculture	
Soil Management Support Services	PASA with USDA/Soil Conservation Service
Technology for Soil Moisture Management	PASA with USDA/Agricultural Research Service
International Fertilizer Development Center	Cooperative Agreement with IFDC
Soils Management Collaborative Research Service	Cooperative Agreement with NCSU
Improved Biological Nitrogen Fixation	Cooperative Agreement with U. of Hawaii
Biotechnology, Limiting Factors	PASA with USDA's Cooperative States' Research Service
Water Mangement Synthesis II	Contract with Consortium for International Development
Agricultural Policy Analysis	Contract with Abt Associates
Farming Systems Support	Cooperative Agreement with U. of Florida
International Benchmark Site Network for Agrotechnology Transfer	Contract with U. of Hawaii
Fisheries and Aquaculture Technical Assistance	RSSA with NOAA, Dept. of Commerce

(Table II.2 continued)

Title	Mechanism
Office of Energy	
Renewable Energy Applications and Training	FASA with Oak Ridge National Lab
Energy Policy Development and Conservation	FASA with Oak Ridge National Lab
Low Cost Energy Technology	Contract with VITA
Energy Training Project	Contractor not yet named(5/87)
Office of Rural Development	
Human Settlements and Natural Systems Analysis	Cooperative agreement with Clark U. and the Institute for Development Anthropology
Research on Access to Land, Water, and Natural Resources	Cooperative agreement with U. of Wisconsin, Land Tenure Center
Bureau for Africa	
Environmental Technical Support services	RSSA with US National Park Service
Occasional Short-Term Technical Assistance	RSSA with the USDA
Energy Initiatives in Africa project (extension to 12/88)	Contract with E/DI
Bureau for Policy and Program Coordination	
Short term assistance to missions on women in development.	Cooperative agreement with CID and MUCIA

Missions will be informed in a specific and separate communication of the availability of NRMS support, areas and nature of activities to be supported, and procedures. Where possible, funds should be allowed to missions for their procurement of NRMS-supported services, with NRMS management providing back-up assistance as needed.

Requests can be divided into two groups which would entail differing management considerations.

- Funding for planning assessments, designs or evaluations contracted out to IQC or B(a) firms. NRMS may provide assistance in developing the SOWs for such work, as well as the financing of the work. Missions will play the major managerial role, however, in the conduct of such work.

- Funding for assistance from support projects or services (i.e. RSSAs), which could include some design and evaluation work, but is likely to be more focused on specialized services or particular resources. Such work may involve a greater measure of NRMS management input, especially where it involves new actions taken in response to the Plan for Supporting Natural Resources Management in sub-Saharan Africa.

At the project's inception, the manager will develop a clear communication to the missions and the REDSOs about the availability and terms of NRMS underwriting.

All project management personnel must be able or taught to work with personal computers and data base software in order to maintain the data base for tracking the services component of the project.

Once a year, in connection with the NRMS annual report on work accomplished and in progress, management personnel involved in mission support actions will prepare summaries of these actions.

Table II.3. SUMMARY OF SERVICES TO MISSIONS

Title	Services Available	Current Africa Program
Forestry Support Program FSP	Technical consultations, identification of qualified individuals (from the roster), forestry program studies and technical reference services (for AID and for Peace Corps), forestry research support forestry-agriculture with special focus on Africa; technical oversight for PL-480 funded forestry activities undertaken under AID as well as Peace Corps auspices; park planning. Short term training and planning of training.	None specified. RSSA spending levels have been adjusted downwards as numbers of forestry projects has dwindled and the need for service support diminished. Allocation for Africa services is approximately \$50,000/yr.
Forestry/Fuelwood Research and Development F/FRED	Agroforestry information; assistance for project design; research design.	Multi-purpose tree research net-working in eastern African highlands. Support technical meetings, training courses, and information dissemination, assist with research design and data base improvements, hold technical workshops.
Environmental Planning and Management EPM	Short term consultancies to missions in matters related to natural resources and environmental management. Organization and management of country environmental profiles or resources assessments. Assistance to strengthen the management capability of environmental PVO's.	Evaluation of the National Environmental Secretariat, Kenya. Assessment of environmental and natural resources NGO's in those countries with AID PVO umbrella grants. Field test integrated planning method in Kenya. Support planning of activities in biological diversity.
Soil Management Support Service SMSS	Technical assistance consultations to mission's host country soils scientists in the development of new programs in soil survey, land use, land planning, soil conservation, and soil fertility management. Participate in reviews or evaluations of proposed or on-going projects in soil survey, soil conservation, soil management. Organize workshops, seminars and training programs. Provide analytical & field testing services; assistance for classification.	The SMSS project manager proposes to * assist countries to develop soil resources inventories and strengthen institutions to produce soil inventories. * assist in the preparation of large scale surveys and interpretations of soils; * strengthen soils laboratories, * regional training; * assist countries in the use of geographical information systems to develop soil data bases.

Table II.3(cont.)

Title	Services Available	Current Africa Program
<p>Technology for Soil Moisture Management</p> <p>TSMM</p>	<p>T.A. for improving dryland/rainfed production systems, by providing scientific expertise on soil moisture management, reviews of on-going and proposed research projects; develop problem-solving strategies; facilitate information dissemination, promote regional collaboration through workshops, seminars and training programs.</p>	<p>Work has been done in Niger, Mali, Burkina Faso and Sudan.</p> <p>Do case study in Mali of economics of soil moisture management; arrange similar study in Mauritania through the U. of Arizona's farming systems project there; undertake research trials on plant residue management and soil moisture; explore setting up a program in plots(Rwanda, Zimbabwe, Kenya)</p>
<p>International Fertilizer Development Center</p> <p>IFDC</p>	<p>Management assistance in fertilizer production, marketing and distribution</p> <p>IFDC coordinates research networks in East and West Africa to evaluate fertilizers and their economics.</p> <p>Training in fertilizer production, raw material evaluation, fertilizer use, and fertilizer marketing.</p>	<p>A new center for research and training is being set up in Togo, with some funding(\$3.0 million from AID/W/Afr). About one half IFDC's program is devoted to Africa.</p>
<p>Soils Management Collaborative Research Service</p> <p>Tropsoils</p>	<p>Research support not available directly to missions, but currently active in Niger with the U. of Niamey and the National Agricultural Research Agency(INRANN). Tropsoils scientists undertook land regeneration research at the site of an AID/Niger project(Forest Landuse Project at the Guesselbodi forest).</p> <p>Research at Guesselbodi forest on the effectiveness of mulching and associated termite action to increase soil porosity has immediate relevance for land regeneration efforts.</p>	<p>Proposed work through 1989 will be carried out mainly in Niger. The focus is on semi-arid zone soils. The research program aims to develop improved soil management techniques for small, low resource farmers, first through characterization of the problems and second through modification of the soil environment. A soil management research network based on the LAC model is planned.</p>
<p>Improved Biological Nitrogen Fixation (BNF)</p> <p>NifTAL</p>	<p>Technical assistance in project identification, project development, evaluation and assessment of national programs for biological nitrogen fixation; also help solve local problems. Provide publications.</p>	<p>Work has been done in Zambia with inoculants to improve legume productivity, in maize/soybean rotations. Worldwide core funding for T.A. is approx. \$145,000.</p>

Table II.3 (cont.)

Title	Services Available	Current Africa Program	
Biotechnology, Limiting Factors	Grants to LDC scientists, who work jointly with a U.S. scientist. Technical workshops on BNF and technical assistance by visiting U.S. scientists.	Research presently is underway in Swaziland, Cameroon, Kenya and Malawi. Research has been completed in Sudan and Senegal.	
Water Management Synthesis II (to be extended as Irrigation Management and Support, with main focus on Africa.)	Technical assistance to missions and host governments to strengthen abilities in irrigation systems development and operation; project design, monitoring and evaluation; sector surveys, studies and analysis; and trouble shooting on irrigation and water management problems. Training support in country and in the U.S. - short courses related to irrigation systems operations and management; diagnostic analysis workshops; policy and strategy training courses.	Three core-funded field studies of irrigation sectors are underway in Niger, Zimbabwe and Rwanda. Results will be presented at a Jan. 1988 workshop in Nairobi now being organized for multi-donor participation, which will be attended by 13 Africans sponsored by the project. These studies were funded via an OYB transfer from Bureau for Africa/RA(\$800,000).	
25	Agricultural Policy Analysis	Project design and evaluation, where policy constraints or issues are present. Training in assessing environmental impacts of economic policies and in policy analysis effects on resource use, particularly as regards limited resource farmers.	Workshop in Madagascar; networking in Anglophone and Francophone Africa; technical assistance in Cameroon, Zaire, Togo, Mali and Mauritania.
Farming Systems Support	Technical assistance to agricultural research and extension projects that employ farming systems research and extension, including project design and evaluation. Training: three week courses in methods of farming systems research; training of trainers; development of materials and training strategies.	Training workshops in Niger, Cameroon and Mali; networking in Nigeria; project evaluation assistance in Cameroon. Entire effort now focussed on	
IBSNAT	Training in-country and in U.S. in short courses in modelling, minimum data sets, decision support systems. Project design, evaluation, development of information systems and agrotechnology transfer methods.	Validation of crop models in Burundi and Zambia to test agrotechnology transfer methodology.	

Table II.3 (cont.)

Title	Services Available	Current Africa Program
Fisheries and aquaculture technical assistance	Short term technical assistance available on small scale fisheries and aquaculture.	Aquaculture project in Zaire with Peace Corps participation has been very successful. Auburn U. is also assisting PVO's in Africa in fish culture.
Renewable Energy Applications and Training	Technical field support in renewable energy activities, namely in evaluations of renewable energy project experiences, guidance for project design, information support on equipment and suppliers. Services can be provided for periods of up to one year.	
Energy Policy Development and Conservation	Technical assistance in national level energy policy and program development.	A fulltime energy advisor has been attached to AFR/TR/ARD.
EPDAC	A collaborative research grant program awards grants to U.S. and LDC researchers, on a competitive basis.	
Low Cost Energy Technology	Not organized as a service project but technical assistance for woodstove project design and assessments of low cost energy technologies could be provided.	
Human Settlements and Natural Systems Analysis	Studies and assessments of natural resources, settlements and resettlements; institutional development and training in these areas.	In Senegal, planning oversight of mission support to OMVS; for AFR/PD a multi-year comparative study of river basin development in Tanzania, Kenya, Ghana and Senegal; rural/urban marketing linkages in Somalia and Zaire. Study for Administrator of U.S. assistance during the drought.
SARSA		
Research on Access to Land, Water, and Natural Resources	Feasibility studies; project design, monitoring and evaluation; policy research; and training on various aspects of land and other resources tenure.	

Table II.3 (cont.)

Title	Services Available	Current Africa Program
<p>Environmental technical support services</p> <p>Bureau for Africa RSSA with the US Park Service.</p> <p>RSSA has been replenished with \$200,000 from the NRMS project.</p>	<p>Consultations and training in planning and management of parks, wildlands, biosphere preserves, watersheds, and landuse/development related to parks. Expertise available through the US Park Service personnel and facilities.</p> <p>For training programs cooperative agreements have been made between the Park Service and a number of universities, namely U. of Michigan(natural resources planning), U. of Arizona(Arid and semi-arid lands management),U. of Miami(marine environments) and Yale(forthcoming agreement concerning tropical forests).</p> <p>Also cooperative agreements exist between the NPS and the IUCN and the World Wildlife Fund/U.S. to expedite or carry out activities involving third world projects.</p>	<p>A conference in West Africa on coastal resources management is scheduled for October, 1987. It is financed largely by the AID RSSA. The IUCN is collaborative agreement, visits to the W. African coastal states have been made in preparation for the conference. Also the IUCN Dakar office is the secretariat for the conference.</p>
<p>Energy Initiatives for Africa extension to 12/1988.</p>	<p>Project design and analysis in fuelwood,forestry, agroforestry, and related natural resources subjects.</p>	<p>The project is a one year extension with NRMS funding, to assist in the implementation of the Plan to Support Natural Resources Management in Sub-Saharan Africa. A full-time forest economist is stationed in Abidjan, and 8 months of short-term technical assistance are available to missions.</p>

C. PVO Capability Strengthening

The objective of this component is to provide a range of technical and training services to U.S. and indigenous private voluntary organizations (PVOs) engaged in natural resources management in sub-Saharan Africa, and to develop the service program in a phased manner in cooperation with PVOs, AID missions and REDSOs. (See also sections E and F and Annex J for PVO sub-components under information support and biological diversity.)

1. Background

The Africa Bureau's NRM Plan notes that fully 25 percent of AID's forestry/natural resources portfolio in Africa is being implemented by the PVO community. AID has repeatedly signaled its intention to maintain a strong working relationship with these organizations. Because of their involvement at the local level, the PVOs are well suited to helping broker the proper integration of natural resources activities, based on people's needs, into ongoing extension and development programs.

As described in Annex C, the PVOs have varying needs for technical and management assistance in planning and carrying out NRM activities. These needs include:

- technical support (field consulting assistance, training and general response services);
- training in basic production concepts, training of trainers and general project management; and
- institutional support.

In addition, there is need for better understanding between AID and the PVOs of one another's purposes, procedures and problems.

2. Two-Phased Approach

In order to establish a proper base for a broad technical support program and a suitable structure to manage it, there is need for greater analysis than was possible during PP design of the diverse nature and needs of the PVOs carrying out NRM activities, and of their varying degrees of engagement with AID. At the same time, enough information is in hand that the bureau can begin furnishing modest levels of assistance at an early date through an existing mechanism: the S&T service projects described in section II.B.3 above and in Annex B. A two-phased effort is therefore proposed to develop a support program for PVOs:

- Phase I:

* As soon as funds become available in FY 88, the project will offer S&T-based services to U.S. PVOs involved in

natural resources management activities in PNRM priority countries. The services must be endorsed by the cognizant AID missions and will be underwritten by NRMS.

* A survey will be undertaken in early FY 88 to define the parameters of a broader support program and corresponding management structure.

● Phase II: The broader support structure will be put in place in the second half of FY 88.

3. Phase I.a. -- Provision of S&T Services

Beginning early in FY 88, NRMS will offer to underwrite S&T-based services for U.S. PVOs engaged in natural resource management and operating in the 14 countries of PNRM Groups I and II. The Group I countries are The Gambia, Guinea, Madagascar, Mali, Niger, Rwanda, Senegal, Somalia, and Sudan. Group II includes Burundi, Cameroon, Malawi, Tanzania and Uganda. The PNRM implementation section provides for heavy reliance on PVO/NGO initiatives to lessen the managerial burden on AID missions in Group II, most of which are small. For this reason, and because of the few posts comprising Group II, it is proposed that group source not be a factor in ranking applications from any of the 14 countries.

By appropriate public announcement (e.g., through the missions, InterAction and perhaps the Commerce Business Daily), NRMS management will

● advise the PVO community of the availability of a stated level of FY 88 funds (\$135,000 is proposed in the project financial plan) for assistance through S&T services,

● provide a summary description of available services (e.g., Table II.3 above),

● provide a listing of the criteria below, and

● invite applications from PVOs for technical assistance to their NRM activities that are underway or soon to be in place in the specified countries.

The announcement will specify the deadline for receipt of applications at NRMS headquarters in AFR/TR/ARD, Washington, D.C. To ensure equal treatment and avoid bureaucratic mishaps likely to occur with multiple submission points in the field, only the date on which the application is received in TR/ARD will be official. (Nevertheless, the applicants will be encouraged to send copies of their proposals to the cognizant AID mission; this will assist ARD in expediting receipt of mission endorsements -- see below.)

The announcement will further state that all applications will be reviewed and awards announced within one month of the submission deadline. At the end of that process, some funds may be left over because of insufficient requests or the failure of

some applications to meet the criteria below. Any funds remaining unallocated from the original amount will be the subject of a subsequent similar competition, say within two or three months. If necessary, the process will be repeated until the funds are fully allocated. (NB. The total amount available may be expanded to the extent that the S&T services selected to furnish TA can contribute central project funds.)

Finally, the announcement will state that FVOs receiving S&T services will be obliged to submit a brief report to NRMS management and the cognizant mission within three months of completion of the assistance stating how the assistance was used and the results achieved.

The following criteria will be applied in ranking and approving applications:

- The application is no more than three pages of single-spaced text in length and succinctly explains the current status of the project, its purpose, actual and planned outputs, actual and planned inputs (amount and source of funds, personnel, training, commodities, etc.), the nature of the problem for which assistance is requested, the type and length of assistance desired, and whether and how the assistance may increase the technical capability of FVO implementing personnel in addition to solving an immediate problem. If possible, the application should be accompanied by a precise scope of work on an additional page or two.

- The cognizant AID mission endorses the application (NRMS management will seek mission comment promptly upon receipt of the application if the endorsement or rejection is not already in hand).

- The FVO is engaged in an ongoing NRM field activity for which assistance is requested, or has an assured source of funds (AID mission, private or other-donor) to undertake the activity within six months (in the latter case, the assistance would presumably be for final project design or for pre-project training).

- The activity is consistent with the PNRM objectives for the country and ecological sub-region (see section II.B.3).

- The services will require no more than two specialists and six person/weeks of effort.

It is proposed that the review committee be chaired by the NRMS project manager and include personnel from the NRMS staff and S&T.

(NB. S&T service providers can respond only to an AID request for services, not directly to a FVO. For example, the Forestry Support Program cannot provide NRMS-funded services to a FVO competing for a mission contract and seeking assistance to

get a competitive edge. On the other hand, if a mission supports a PVO's unsolicited proposal and believes FSP help is needed to strengthen it, NRMS and FSP can provide assistance with the mission's endorsement.)

4. Phase I.b. -- Survey of PVO Needs and Service Possibilities

Shortly after launching Phase I.a., NRMS will undertake a survey, largely in the field, to define the requirements and design a program for provision of broader NRMS services to PVOs. The assumptions here are that:

- S&T services will be insufficient to meet all PVO support requirements for NRM; and

- a survey is needed to obtain adequate data about the diverse community of PVOs involved in NRM -- their capabilities, service requirements and concerns -- and about the possible need for assistance to enhance AID-PVO collaboration in NRM.

Given the broader information base that will be available as a result of the Phase I.b. consultation, the number of PVOs benefiting from NRMS support in Phase II will be broadened from U.S. entities located in Group I and II countries to include as well U.S. and indigenous PVOs active in NRM in all the countries of Africa where AID has programs. In ranking requests for services under the broader program, it is proposed that Group I and II countries be given first priority, and Group III countries second priority.

The consultants will consult with PVOs engaged in natural resources management, AID missions, the REDSOs and other knowledgeable sources in a representative sampling of countries in Africa as well as in Washington and New York to (a) determine the specific short- and longer-term needs of the PVOs, and (b) recommend a corresponding program and structure to meet them. Based upon its assessment of the consultants' report, AFR/TR will implement Phase II.

5. Phase II -- Emplacement of PVO Support Management Structure

On the assumption that the consultants will establish a wide range of support needs, the PF design team expects that NRMS staff will require external management assistance to help meet them. (An analysis of likely support entity requirements and contracting recommendations appears in Annex E.)

6. PVO Liaison Function

The PVOs participating in NRMS in each country may wish to select a spokesperson or group of representatives to deal with AID and the management entity on NRMS matters. A PVO liaison point also will be needed in the U.S. to organize meetings, gather data, and help sort out the numerous issues that are bound to arise. Depending upon the consultants' findings and the PVOs' wishes, a special PVO representative in the U.S. could be assign-

ned to work directly as part of the management entity or operate out of a PVO umbrella organization. In either case, AID will likely be asked to bear part or all of the cost of this person.

7. NRMS Management Requirements

The principal management requirements for NRMS staff will be to manage the S&T service program, arrange for the survey, select a PVO management entity and liaison representative, and meet at regular intervals with the above to coordinate and monitor activities. A more detailed discussion appears in Section V, Implementation Plan.

NB. An excellent forum for NRMS personnel to discuss the PVO support program will be the September, 1987 AID-InterAction meeting.

8. Component Budget

S&T Tech. Assistance	135	140	275
Survey	135	-	135
PVO Support Entity Core Costs; Liaison Costs	210	220	430
Services (Non-S&T)	455	490	945
Tech. Assistance	(150)	(160)	(310)
Response Services	(50)	(55)	(105)
Training	(255)	(275)	(530)
Strengthening Grants to PVOs	50	55	105
Total	<u>985</u>	<u>905</u>	<u>1,890</u>

D. Special Studies and Analyses

1. Description

This project component answers the need for studies, surveys, research and analyses, etc., and associated workshops that will be required

(a) by NRMS project managers, in order to advance the implementation of the various other components in this project under the bureau's Plan for Natural Resources Management,

(b) by REDSOs and AID/W in the further definition of sub-regional activities that could be supported by NRMS, and

(c) by missions,

- in order to refine or better define mission programs, and

- to assist project planning and implementation, as adjuncts to the normal planning and implementation work.

In the PID reporting cable and previous cables on the Natural Resources Management Plan, missions were not asked to identify their needs for studies. Consequently, this design could not take into account possible mission needs in this category of activity. However, a few missions did note the lack of certain information as a constraint on responding to natural resources problems, for example the economic returns on conservation work.

Many suggestions for studies or surveys, etc., were advanced by project managers in the Bureau for Science and Technology and in the Bureau for Africa, as well as by REDSO staff involved in energy and environmental management. These and other possibilities noted in the background documentation for the Plan for Natural Resources Management are presented as an indicative list of possible studies and surveys (Table II.4).

An explicit canvassing of missions' ideas and needs in this category should be carried out in connection with the FP reporting message. Also, the REDSO scheduling conferences, in September or October, 1987, will be an opportunity for NRMS management to obtain further definition of mission and REDSO needs or suggestions. Subsequent annual scheduling conferences can also be opportunities for joint planning of studies and surveys.

Table II.4. Indicative List of Studies, Analyses, and Related Workshops.

Study or Analysis	Possible implementing entity	Estimated cost		
		FY87	FY88	FY89
1. Studies for NRMS project programming				
Assessment of needs and ways to improve information systems for natural resources management to support mission and REDSO activities.				
Preliminary definition	S&T project or IQC		25	
In-depth analysis and PID design				148
Background study for an Africa bureau strategy for supporting the management and conservation of biological diversity in priority sub-regions and sites, as per PNRM.	National Park Service/IUCN		50	
Comparative review of experiences with mission "umbrella" projects for supporting grants to African PVO's in Senegal, Chad, Niger, Somalia and Kenya, with special focus on needs for strengthening assistance in natural resources management.	IQC or International Institute for Environment and Development (See IIED's Africa program, Annex B)		60	
2. Studies in support of missions or REDSO's programs.				
Examine a number of AID missions which have managed large local currency programs (generated through PL 480 and related sections), to review experiences in using such currency for NRM actions. Generate report with recommendations for missions and PVO's on ways to more effectively and expeditiously use local currency for NRM.	IQC		40	
Explore extension of support for agro-forestry research support F/FRED to Semi-arid and Sub-humid Uplands sub-regions.	S&T/F/FRED project		10	
Study to determine application of IBSNAT methodologies to agro-forestry research and development.	F/FRED and IBSNAT with REDSO/EA management support			10

Table II.4. (cont.)

Study or Analysis	Possible implementing entity	Estimated cost		
		FY87	FY88	FY89
Survey and capability assessment of selected regional African institutions able to undertake studies, research and actions in natural resources management, including governmental and non-governmental organizations.	REDSO's co-manage and IQC contractor executes.		40	
Review erosion research needs in E. African Highlands.	S&T/TSMM project		25	
Review experiences and benefits of soil erosion control and moisture conservation and management in semi-arid Africa, plus workshop.	S&T/TSMM		100	
Convene technical conference on soil mapping in support of agricultural and forestry development.				
Preparation & review Technical conference	IQC S&T/SMSS		25 75	
Sponsor workshop in Africa to review the status of biological nitrogen fixation (BNF) technologies, and plan research for packages of technology for dryland farming using BNF				
Preliminary planning	AFR/TR + S&T			
Review of research findings to date	S&T or IQC		50	
Workshop	S&T or IQC		50	
Publications of review and proceedings	S&T		35	
Survey of tenure constraints on natural resources management, including special attention to gender defined tenure.	S&T/Land Tenure Center		50	
Review and evaluation of needs for strengthening African institutions involved in water pumping/water lifting, as AID's contribution to a multi-donor action plan resulting from the April 1987 Conference in Gaborone on Water Pumping/Water lifting.	S&T/Energy Policy Development and Conservation or EDI			40

Table II.4. (cont.)

Study or Analysis	Possible implementing entity	Estimated cost		
		FY87	FY88	FY89
Studies, workshop and information dissemination on fuelwood economics and management to increase institutional capability in managing urban fuelwood use and the fuelwood resources in common lands. Follow-up to work begun by FAO in Mali, Burkina Faso and Senegal (reported at May 1987 technical conference in Abidjan)	EDI (in FY88) and S&T/Energy Policy Development and Conservation		100(a)	100(a)
Survey and assessment of needs and potentials for strengthening natural resources institutions in selected countries (as per mission concurrence), possibly all of Group IV countries.	S&T's Human Settlements and Natural Resources Systems Analysis		50	50
One "pilot" phase II environmental profile in a Group I or II country	International Institute for Environment & Development		175	50
	Totals		995	398

(a) Could be partially or mostly funded through the current contract between EDI and the Bureau for Africa for support services related to energy development.

2. Management

The studies, etc. will be proposed to and reviewed by the technical oversight committee, with representatives as appropriate from AFR/DP, AFR/PD, S&T/FA, S&T/EN, S&T/HR, and PPC/CDIE. Final approval will be by NRMS project management within AFR/TR.

a. Studies for NRMS project implementation

Studies or surveys required to implement the various components of NRMS will be contracted directly by NRMS management, using IQC contractors or S&T service projects.

b. Studies in support of REDSOs

Studies requested or proposed by REDSOs will undergo the same review process. REDSOs may have the option of technical and financial management of the NRMS funded studies, where they may contract local consultants or institutions for the work. In this instance, the NRMS project manager will transfer the necessary funds to the REDSO office, which will thereafter be responsible for approval of vouchers and work submitted.

c. Studies for missions

Studies requested by missions will be funded through NRMS in their entirety or partially depending upon the mission's need and the degree to which the study matches the Plan for Supporting Natural Resources Management and related directives. These studies proposals will be reviewed and acted upon by the authority of the project manager. However, the manager will keep the technical oversight committee informed of studies funded on behalf of missions.

NRMS project managers can suggest possible executing entities to the missions and arrange for or execute the necessary PIO/Ts, amendments, or task orders. If possible, however, the missions should prepare and process the documents.

3. Preliminary budget and allocation

Only a preliminary identification of studies and analyses can be set forth at this time. A preliminary budget follows which reflects the proposals listed in Table II.4.

FY 87	-
FY 88	600,000
FY 89	495,000

E. Information support

This project activity will seek to develop an information environment supportive of programming and project activities in natural resources management undertaken by AID, or supported by AID.

Within the broad scope of NRMS, the project's information activities will address information needs of (1) missions and REDSOs and (2) PVOs.

(The unique information needs of NRMS managers, namely for project tracking and reporting are discussed in Section III.E "Project tracking and monitoring".)

The nature, level of communications and objectives of information activities for each category of user vary considerably. In general, however, the field of information is a complex and multi-faceted area of activity that requires an extended dialogue between users, managers and suppliers of information in order to fashion appropriate information systems.

Information support systems include the acquisition, classification and storage of published and unpublished information; its summarization; development of annotated or simple bibliographies; reviews of literature; publication and dissemination of reviews and other works; the development of specialized data bases for computerized storage and retrieval; the development of geographic information systems which store spatial data on various topics in a form permitting combined analysis of various topics and parameters; and the publication of special studies, reports, etc. Information management becomes increasingly important with the advent of computers and data bases.

This NRMS activity will review mission and REDSO needs for natural resources management information systems, or information support, and examine alternatives for satisfying these needs. The study will serve to develop future information support as a project or activity. In the interim NRMS can keep missions updated through a newsletter. Lastly, NRMS will underwrite the special information needs of PVOs.

1. Support Activities

a. Assessment of mission and REDSO information needs

Missions and REDSOs require a wide range of technical information specific to their country or region, or analogous environments, for CDSS and program work, project design, and project implementation. The need for improved information support for natural resources management, and project design in this area is not yet defined well enough to design a specific activity.

Missions in Africa have not requested country environmental profiles for these purposes, but at the same time, considerable technical information generated by AID and other donors is accumulating in various countries. The utility of the existing data bases on natural resources for AID programming and planning is unclear. However, the potential for radical improvements in information management through the use of personal computers and geographic information systems programs scaled for use with personal computers is great, as the FEWS project has recently demonstrated. This development as well as the increasing number of specialized data bases and software programs of potential use to missions indicates the need for an assessment of how these tools and other advances in information systems management can be used, or better used, to satisfy mission and REDSO needs for information in the field of natural resources.

A preliminary survey will be conducted to more clearly articulate needs and possibilities, and develop the scope of work for additional work. It is projected that a more detailed effort aimed at designing the needed systems would follow. Field visits to missions will be required. A team comprised of an information management expert, a geographic information systems expert, an expert in library sciences with knowledge of existing information support services available to missions, and a natural resources expert will be required. The latter could be the team leader.

Indicative budget

(1) Preliminary definition of needs and possibilities

During Jan.-July, 1988.

Consultant on purchase order
or through S&T project or IQC.

total of 2 1/2 months @ \$10,000 \$25,000

(2) In-depth analysis and concept design

August to January, 1989

Four-person team, 2 1/2 months \$150,000

b. Newsletter on natural resources management in Africa.

NRMS will augment existing information resources available to missions by initiating a monthly newsletter devoted to activities in Africa concerned with natural resources, undertaken by AID, PVO's and other donors, as well as African entities.

The newsletter will also keep missions informed of current advances in the science, technology and management of natural resources. Keeping current with technical literature and

development experiences elsewhere in the world is difficult at the mission level of operation.

(Note: S&T project-related newsletters are infrequent in production and specialized, with the exception of the Forestry Newsletter generated by the Forestry Support Program. Many newsletters are designed to create networks of researchers or development workers devoted to a specific problem or area. Also, the Natural Resource Bulletin, produced by S&T's Expanded Environmental Information Base project, is no longer published).

Audience: AID personnel; project personnel, AID contractors and BIFAD universities, PVO's.

Circulation: approximately 500/month

Indicative budget, Newsletter

	FY88	FY89
Editor(s)/reporter(s)	40	42
Production and circulation @\$2000 each	20	20
Travel	10	15
Other	20	20
Overhead	30	35
Totals	120	132

c. Information support for PVOs in Africa

This PVO information support activity will (1) generate specialized publications or underwrite the distribution of such publications to PVOs working in Africa in the areas of forestry, agroforestry, soils management, low input agricultural techniques, etc. and (2) a specialized data base on natural resources management for sustainable development for the kind of small-scale projects undertaken by PVOs.

The need for a development information service for PVOs in Africa was identified in the review of PVO needs for assistance (Annex C) and has been frequently voiced at meetings. A two-year effort to develop a special agroforestry information service for PVOs has not yet borne fruit, and CARE foresters acquainted with the project are not hopeful. The Forestry Support Program is currently re-examining the possibility of an agroforestry information network for PVOs.

Hundreds of European and North American private and voluntary organizations are attempting to assist Africans to recover from the drought, degrading environments, and poverty. Their

efforts are largely uncoordinated, and not shared, often with weak technical orientation. Experiences, whether successful or not, go largely unnoticed or are unknown, especially outside of national or regional boundaries.

Much valuable information is stored not in Africa but in the European and North American cities, in a wide variety of repositories, official and unofficial. Existing data bases do not accommodate the needs of PVDs, and seldom index information by discrete environments.

In Africa extension services do not exist, with few exceptions, or exist only skeletally without good communications. Africa's vastness and diversity also limit the flow of information. Finally, under some modern African governments there has been a two-fold loss of information: actual documents, and at the grass roots, information from rural administrators, surveyors and researchers who have been removed but their functions not carried on.

Rural development workers, whether governmental or non-governmental, are therefore severely handicapped by lack of information and information services, often being ignorant of promising development solutions in progress within short distances, and with little or only haphazard access to information on environmentally appropriate development solutions.

PVO programming staff in capital cities and in North America are also handicapped...by too much information rather than too little. Current information systems do not classify information according to ecological conditions pertaining to development technologies, hence large amounts of information must be reviewed and analyzed to discover data useful to specific localities.

An inventory of existing useful publications will be commissioned to establish gaps or needs for re-printings or new editions, which can then be underwritten by NRMS.

In the development of a computerized data base and related service the collaboration of a number of PVDs would be sought, so as to shape the data base according to precise needs, by focusing on their ongoing projects and programming tasks. It is anticipated that the result would be a data base, an information management system and service, a users and suppliers network, and the production of written and computerized technical responses to various needs.

NRMS project managers should invite proposals for accomplishing this sub-component.

2. Management of information support activities

Much of the information support work would be contracted out.

Management by NRMS staff would involve one individual, one day per week, average, but tasks will be concentrated in clusters

of 5 to 10 days, except for routine monitoring. The most important initial task will be to plan and initiate the assessment of natural resources information needs.

The PVO information support service can be developed through existing cooperative agreements or could be let out for competitive bidding. A number of proposals are known to exist which address this need, e.g. Development Ecology Information Service (an IIED proposal) and a proposal from the Rodale Institute. These should be reviewed.

The newsletter should also be contracted out.

3. Budget Summary

Activity	FY88	FY89
Assessment of needs and design	25	150
Newsletter	120	132
PVO information service	150	150
totals	295	430

F. Support for Biological Diversity Activities

This NRMS component includes support to missions as well as support to PVOs. The project design accommodates two possible funding scenarios: (1) without a special fund for biological diversity and (2) with a special fund for financing field-level activities undertaken by missions or by PVOs/NGOs.

Biological diversity activities focus on the objective of species diversity conservation and management. Although the objective may be attained through development activities or related natural resources management, the species conservation goal orients the work and distinguishes it from other projects.

Regardless of whether a special fund is established, NRMS will:

- (1) provide technical assistance in this field, and
- (2) underwrite a background study for a more specific plan for supporting biological diversity in Africa than now exists. The study is itemized in Table II.4 and will cost an estimated \$50,000.

The plan will be developed within the Africa Bureau, possibly with the assistance of short-term advisory services from the USPS RSSA or the USDA RSSA, not entailing additional costs to the project.

1. Without a special fund.

Should there be no special fund, technical advisory services concerned with biological diversity would be managed along with all other advisory support services, as described in section II.B.3 above (support to missions) and section II.C above (support to PVOs). A separate biological diversity support component would not exist in the project. The project tracking and monitoring system would still enable an accounting of project funds devoted to biological diversity, but the level of activity would be too modest to merit a separate management account.

NRMS will provide technical assistance support services to missions, or, on behalf of missions to PVOs, NGOs or host government organizations, through at least three "low management effort" avenues:

(a) the existing Bureau for Africa RSSA with the US Park Service (which will be augmented with \$200,000 from the NRMS project in FY 1987);

(b) the current biological diversity support services component being prepared (in May, 1987) as an addition to the Environmental Planning and Management Cooperative Agreement between S&T/FENR and IIED; and

(c) the Forestry Support Program RSSA between the U.S. Forest Service and S&T/FENR.

In addition, S&T/FENR is developing a new project, "Biological Diversity Support," which may be funded by FY88 and could be a source of technical expertise for missions.

2. With a special fund

Support for biological diversity would become a discrete project component if there were a special fund for supporting field activities. In this case the NRMS project would provide both technical assistance as described above and financing for the management and conservation of biological diversity. This would distinguish the component from others in this project in that field activities would be funded.

With a special fund, all activities in the Africa region concerned with biological diversity would be managed by or through the NRMS project.

The activities that could be assisted or financed with special funds are described in Annex J. A mechanism for providing grants to PVOs active in this area is proposed. Also

included is a special program supplement to the AID contribution to the International Board for Plant Genetics Research, aimed at accelerating work in germplasm collection and characterization in Africa. Lastly, funds are programmed for contracting sub-regional actions that the Bureau may wish to support.

3. Management

With no special fund to manage, activities involving technical assistance to missions and the conduct of a background study and formulation of a plan would be subsumed under NRMS support to mission programming and projects. In this case, a distinct NRMS project component concerned with biological diversity would not exist.

Technical management would be the responsibility of the long term Natural Resources Advisor supplied through the USDA RSSA.

A special fund could be best managed, and activities tracked, by combining all related activities under a single NRMS component, with a discrete management focus. The component would be prepared as a sub-project. Additional management would be accomplished as detailed in Annex J.

Indicative Budget biological diversity activities

	(000's)	
	FY88	FY89
(1) without a special fund		
Technical assistance to missions	75	75
Background study for a plan	50	
Preparation of plan.		(no additional cost)
total	125	75
(2) additional actions with a special fund		
Biological diversity grants to PVOs	200	560
Sub-grants/contracts to regional organizations	125	200
Germplasm conservation/collection etc.	100	100
Total	425	860

III. Project Management

This chapter treats overall project management: organization and structure, staffing, liaison and coordination, contracting, project monitoring, and reporting. Specific management tasks involved in each of the project's components are summarized in the corresponding sections in Chapter II above, and detailed in Annex E.

A. Overall Management Considerations

Management of the activities to be undertaken in the NRMS project is a major design consideration, given the nature of the project, i.e., a funding and service facility of a wide array of actions aimed at implementing the Bureau's Plan for Supporting Natural Resources Management in Africa (PNRM). Management of the totality of the project's activities will shape the way the PNRM is implemented, and at this level involves a programmatic orientation to technical management.

The project will be provide a focal point and, as a result, management coherence to the implementation of the Plan. Also NRMS staff and advisors will be situated to provide overall technical orientation to the Plan's implementation through various actions underwritten or supported by NRMS.

Management tasks fall under five broad categories: (1) technical (2) programming, (3) financial, (4) reporting, and (5) coordination. The project manager should be competent to undertake and/or oversee tasks in all these areas.

Technical management will cover a diversity of tasks, and will entail direct management of work commissioned by NRMS management staff as well as indirect management, or oversight, of work underwritten by NRMS on behalf of missions, REDSOs or FVOs. Financial management and tracking of money are of special importance for this project given its nature.

S&T project managers will assume many of these tasks, in the normal operation of their service projects, when these are used by missions with NRMS underwriting.

Programming will be a challenging task given the number of components, the evolving nature of demands for assistance underwritten by NRMS, and the need to adjust the budget to demand for services and availability of funds.

B. Management Organization

1. Structure and staffing

The project's management structure is shown in Figure III.1. The manager is a direct-hire employee. The manager will be officially responsible for all project activities. He will be assisted by the Chief of the Planning and Analysis Branch, who will devote 40% of his time to natural resources questions. Management is organized so as to make maximum use of RSSA or other non-direct hire advisors, who also perform other program and analysis tasks in S&T/TR/ARD.

Three non-direct hire employees working for the Office of Agriculture and Rural Development will provide technical advisory services, as follows. The estimated amount of time they will devote NRMS is indicated in parentheses.

- A forestry advisor, who is also an agronomist with expertise in agroforestry (USDA RSSA) (75% of the time to NRMS).
- A natural resources officer with expertise in forestry research and biological diversity (USDA RSSA) (75% of the time to NRMS).
- An energy advisor (made available through the S&T project Energy Policy Development and Conservation) (25% of the time to NRMS).

Their scopes of work specific to NRMS are annexed (Annex I). The RSSA budgets include money for TDY travel, so that these advisors would be able to undertake field visits to Africa, without cost to the NRMS account.

A USDA RSSA program assistant will be assigned 50% of the time to the project to help the RSSA advisors.

The manager will be responsible for administrative actions and approvals not within the competence of the RSSA employees.

The NRMS project manager can also access short-term advisory services through the USDA RSSA in the form of purchase orders up to a level of \$25,000 each.

Lastly, a one year fellowship intern sponsored through the American Academy for the Advancement of Science with a Ph.d. in natural resources management will be attached to AFR/TR/ARD and can accomplish technical backstopping tasks.

A direct-hire clerk/secretary will be assigned to the project 25% of the time, and secretarial help from ARD's typing pool is available to the project.

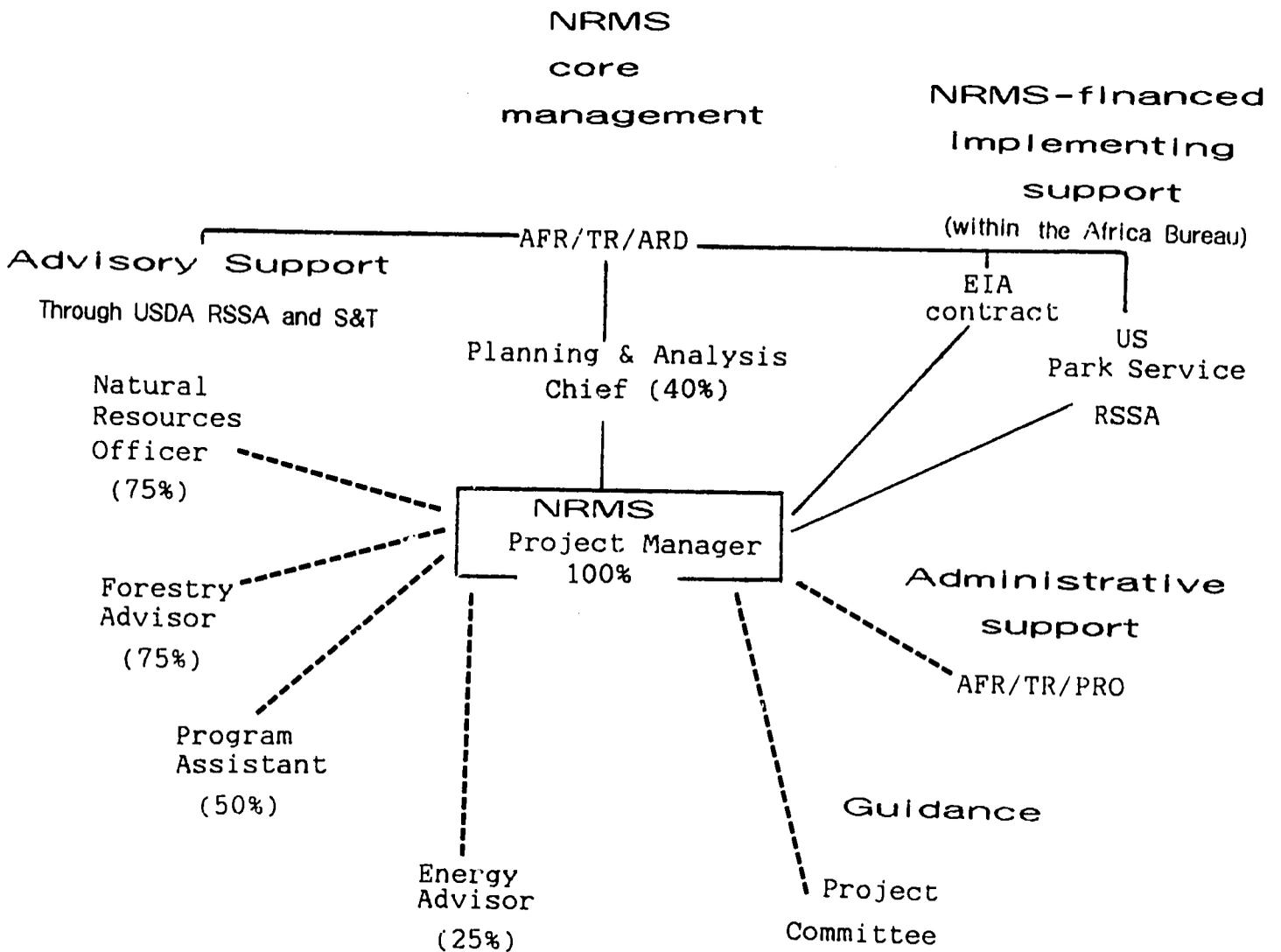


Fig. III.1 NRMS Management Structure.

(Dashed lines indicate advisory relationship.)

The project's management workload will be particularly heavy during the first six to nine months (see Figure V.1, Implementation Schedule). The project manager will need help the first six months from another AID officer within TR/ARD, and the Chief of the Planning and Analysis Branch (to whom the project manager reports) will be available to assist him. When and if that source of assistance or other temporary assistance is not available, it is possible that management actions would be slowed or postponed.

2. Project Committee

A Project Committee will be set up to provide oversight and guidance when needed. Included will be:

- AFR/TR/ARD
- AFR/TR/PRO
- AFR/DP
- AFR/geographic offices as appropriate
- PPC/WID
- PPC/CDIE
- PPC/DC
- S&T/FENR
- S&T/AGR
- S&T/RD
- PVA

The Project Committee will meet as needed to review major actions. It will be asked to review all proposals for special studies and assist the project manager in selecting priority studies. It will also be asked to comment on proposals, whether solicited or unsolicited.

3. Coordination and liaison

The project's combined technical, program and financial management nature indicates a need for very close coordination between AFR/TR/ARD and AFR/TR/PRO. NRMS managers will need to submit project activity descriptions and budgets to PRO as needed (for preparation of the annual budget submission) and negotiate the annual NRMS budget within the context of TRs annual budget. Also PRO along with other offices as appropriate must clear all action documents (PIOs, CNs, PIDs or PPs), hence close coordination will be required with PRO so as to expedite project implementation.

Project management will also entail close coordination of various kinds of information support, particularly in the subsequent design of information systems resulting from the FEWS effort (which was undergoing PID level planning in June, 1987). Coordination with parallel World Bank country assessments in Africa should also be pursued (see section II.B.2).

A permanent liaison person will be named within the Bureau for Science and Technology to assist in coordination and communi-

cation with the Bureau for Africa, with respect to shared technical and financial management tasks. Each Directorate in S&T may also find it useful to establish a NRMS project liaison person.

C. Contracted work

For providing support to missions, various projects or IQC vehicles for the management of money and work already are in place and available to the Bureau and the missions. These are the preferred management solutions for implementing project activities.

However, several activities that require specialized management are included in the project:

- * the compilation of background materials for mission program assessments.

- * production of a newsletter.

- * the awarding of grants in biological diversity to PVOs and NGOs, in the event of a special fund.

- * a variety of technical and training services to PVOs and NGOs aimed at enhancing their capabilities to work with natural resources (to be defined on the basis of an initial survey).

To assist NRMS management in carrying out activities not within the possibilities of existing mechanisms, the need for the following management entities is anticipated:

- (1) A level-of-effort contractor for much of the background work for assisting missions to adjust their programs (CDSSs, etc.) (Section II.B.2);

- (2) An outside "manager" (i.e. grantee) for grant management to PVOs for work in biological diversity conservation (Section II.E), assuming a special fund will be set up and assuming the possibility of numerous small to medium-sized grants, many of which might be awarded to indigenous NGOs;

- (3) A contractor to produce a newsletter in connection with information support services. (Section II.F);

- (4) Subject to further consultant study, a management support entity under contract or cooperative agreement to coordinate much of the technical and training support for PVOs.

These management proposals are treated in detail in the corresponding sections in Chapter II and Annex E.

The management needs of these activities, although anticipated, cannot be detailed sufficiently to recommend management solutions, e.g. a core contractor, a single cooperative agree-

ment, or a number of contracts. NRMS project managers will, however, be able to assess various management alternatives by month nine of the project, by which time project activities and demand for services will be clearer.

Mission demands and programming schedules of country assessments will ultimately shape the requirements for assistance in the preparation of background materials. A special fund for supporting biological diversity activities may not be included in the NRMS project, which would obviate the need for the corresponding management entity. The eventual definition of a program for enhancing PVO and NGO capabilities in the field of natural resources management cannot be known until the results of the survey are in.

However, it may be sensible to commission the production of a newsletter and the provision of background support services for mission programming from a single entity. Grant management to PVOs should not be combined with the management of services to PVOs and NGOs, so as to avoid possible conflicts of interest. Also, to combine in one contract strengthening services to PVOs and background information services to missions could result in a conflict of priorities and interests.

D. Management of Support Services Within AID

1. Management of services through the Bureau for Africa

The NRMS manager will coordinate and approve all actions undertaken through (1) the RSSA with the US Park Service, which is financed with NRMS project monies, (2) the Energy Initiatives for Africa extension, and (3) short term advisory services acquired by purchase order through the AFR/TR/ARD RSSA with the USDA.

The Washington, D.C. manager of the EIA extension should be requested to prepare a long-term work plan for the technical assistance to be provided through the project, based upon mission responses to a cabled announcement of available EIA services. Subsequently, all project actions and assistance to missions should be cleared through the NRMS project with a prior recommendation for approval from REDSO/WCA. The ARD energy advisor can provide guidance to the project manager in this area.

2. Accessing S&T services

For services from S&T projects to missions, PIO/T's will be written against the NRMS account rather than against a mission project or mission PD&S funds. The PIO/T's could be written by the mission or by the NRMS project managers -- where possible by the former.

If written or initiated by the mission, the mission officer

will have to receive the necessary fiscal data and provide the obligation number. Missions will be required to forward copies of PIO/T's to the NRMS project staff, to permit monitoring of project activities(see below).

Mission or Africa Bureau buy-ins to cooperative agreements become amendments to the agreements, executed by means of PIO/T's drawn up by the Cooperative agreement project manager and/or client mission. Costs and scope of work are negotiated beforehand with S&T managers, who then accept the management burden of writing or completing PIO/Ts and monitoring the work.

Cooperative agreements with companion basic ordering agreements (BOA) obviate the ceiling on spending and the need to seek amendments to raise it when buy-ins are great. Mission buy-ins become task orders to the BOAs, again implemented by means of the PIO/T.

Companion BOAs are presently used in several Office of Agriculture projects.

3. Programming and scheduling

Yearly REDSO scheduling conferences, held in September/October, can be used as occasions to program NRMS supporting activities to missions and activities with REDSOs.

Programming of services should take into account the various deadlines on actions in AID/W/Contracts Office, and seek to allot money and shift contracting tasks to the mission or REDSO level to the extent possible during March through August.

The PIO/T deadlines for various actions are as follows:

April 15	Competitive grants
May 31	Non-competitive grants, PASAs and RSSAs
June 30	Amendments to contracts, grants, cooperative agreements, PASAs and RSSAs
July 31	IQCs, Purchase Orders and Personal Services Contracts
Aug. 31	Amendments to IQCs, POs and PSCs.

E. Project tracking and monitoring

Currently, AFR/TR/ARD does not utilize a project tracking system that could be employed by the NRMS project management staff. A new system must be installed.

The project will utilize a menu-driven project control sys-

tem developed on DBase software. The software was developed in 1986 for the Bureau of Science and Technology's Office of Energy by Development Sciences, Inc. That office is successfully using the system to monitor the activities of eight worldwide energy projects. In mid-1987 the project control system software program was being adapted by the Office of Information Resources Management for the Bureau of S&T's Program Office, for eventual use by all project managers in the bureau. The adapted project information software will also be menu-driven.

The software and whatever adapted version that the Bureau for Science and Technology may adopt will permit tracking of project activities and funds as well as reporting on total or selected project activities. Being menu driven, it does not require sophisticated knowledge of the DBase program. It could be quickly taught by the S&T/Energy secretary/administrative assistant charged with maintaining the project control system. That person is Carol Kiser (235-8918).

Specifications and instructional material on the software are attached in Annex F.

There are three separate data bases in the project control system: (1) project activity descriptive data, (2) obligations record, and (3) expenditure record. Each PIO/T, contract amendment or other action is tracked individually on these three data bases. Reports can combine information from the three data bases as well as from many actions.

To set up a file for a single PIO/T requires approximately 1/2 hour. To program the parameters for a report printout also requires about 1/2 hour. Subsequent entries into the various fields are quickly done once the PIO/T file is set up.

Operation requires a Wang PC with IBM emulation or an IBM PC or compatible MS-DOS computer. A hard disk is required, however capacity need not be great. At the Office of Energy a 640K "C" drive hard disk has proved adequate.

This project control system has several advantages. First, it exists and is being used successfully and effectively. Also S&T service or support projects face the same management and tracking tasks as the NRMS project, hence the system design addresses the needs of a support project. Another advantage of the system is its close relationship to the project management information system being developed for all of the Bureau of Science and Technology. The likelihood of many NRMS actions being accomplished through different S&T projects raises the possibility of a shared data base, since both bureaus will be interested in tracking the same PIO/T or other action.

This project tracking and monitoring system will be set up and operated within the Bureau for Africa by the project management staff. Assuming 4 to 6 new PIO/Ts or similar actions requiring tracking per month, and an equal or greater number that

are being tracked, management effort to maintain the data base will be relatively light: an estimated total of five person days per month, not counting report preparation work, which would periodically require extra effort.

Data base management responsibilities could be distributed among the TR/ARD staff involved in different components of the project.

F. Reporting

In addition to periodic reporting on the status and progress of various project components, done through the project's tracking and monitoring function, substantive reporting will be accomplished. This level of reporting will gather into a technical compendium once a year, the results of the various actions underwritten or assisted through NRMS. Two objectives will be accomplished:

(1) an overview of the project for communicating to Congress, other donors and various interested parties.

(2) a means of measuring progress in the implementation of the Plan for Supporting Natural Resources Management in Sub-Saharan Africa.

These annual reports will consist of a presentation and synthesis in a single document of the results of a wide array of actions on diverse topics related to natural resources management, supported by NRMS. Abstracts of summaries of principal findings will be included, to make these more widely available.

It is proposed that short term advisory services can be purchased through the USDA RSSA to compile and edit these documents. Another alternative could be to commission the production of the reports to the entity that produces the newsletter. However, since these will be AID reports, close collaboration with the NRMS staff will be necessary, whoever may be the compiler and editor.

IV. COST ESTIMATE AND FINANCIAL PLAN

Annex E.2 analyzes questions of budget planning and factors related to Sec. 611(a) and payment and audit verification. Items in the Table IV.1 marked with an asterisk are deemed as not meeting Sec. 611(a) requirements pending further planning efforts.

The financial plan for this project differs from most such AID project plans in that it is not based on the estimated cost of a firmly planned output of a given magnitude. Rather it is based largely on estimates of demand for services whose volume depends on a variety of factors, particularly the level of funding that missions will receive for NRM activities to be serviced by this project. Hence, as detailed in Annex E.2, the NRMS staff must remain continuously watchful and flexible in administering the budget.

A. FY 87 Obligations

The following items are planned for obligation during the remainder of FY 87 (\$000):

* Natural resource planning activity to be obligated by limited scope grant agreement with Rwanda government	\$200
* Remote sensing equipment for Cote d'Ivoire to be obligated by REDSO-GOCI agreement	310
* Amendment to TR/ARD RSSA with U.S. Park Service for various services to the field	200
* Soil Resources Inventory and Land Evaluation in Uganda - to be obligated by mission through limited scope grant agreement	100

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B. FY 88-89 planning

Obligation planning should begin in the months preceding each FY through active participation by NRMS management in ABS reviews and REDSO scheduling conferences, and early in the new FY

Table IV.1

SUMMARY COST ESTIMATE AND FINANCIAL PLAN
(U.S. \$000)

Project Paper

	<u>FY_87</u>	<u>FY_88</u>	<u>FY_89</u>	<u>Total</u>
I. Support to Missions				
A. Programming Support	200	865	805	1,870
1. Background Support (Level-of-effort Contract)		(130)	(140)	(270)
2. Country Assessments	(200)	(570)	(570)	(1,340)
3. Training/Assessments		(90)	(95)	(185)
4. Seminars/Pilot Workshops		(75)	-	(75)
B. Project Support (S&T, IQC's, TR RSSAs)	300	1,100	1,020	2,420
Subtotal	<u>500</u>	<u>1,965</u>	<u>1,825</u>	<u>4,290</u>
II. Support to PVOs				
A. S&T Tech. Assistance		135	140	275
B. Survey		135	-	135
C. PVO Support Entity Core Costs; Liaison Costs		210	220	430
D. Services (Non-S&T)		455	490	945
1. Tech. Assistance		(150)	(160)	(310)
2. Response Services		(50)	(55)	(105)
3. Training		(255)	(275)	(530)
E. Strengthening Grants to PVOs		50	55	105
Subtotal		<u>985</u>	<u>905</u>	<u>1,890</u>
III. Special Studies		<u>600</u>	<u>495</u>	<u>1,095</u>
IV. Information Support		<u>295</u>	<u>430</u>	<u>725</u>
V. EOP Evaluation			<u>50</u>	<u>50</u>
VI. Contingency		<u>75</u>	<u>75</u>	<u>150</u>
TOTAL REGULAR SERVICE BUDGET	<u>500</u>	<u>3,920</u>	<u>3,780</u>	<u>8,200</u>
Remote Sensing Equipment Cote d'Ivoire	<u>310</u>	-	-	<u>310</u>
Biological Diversity Activities Special Fund-Illustrative	-	425	1,860	1,285

through regular contact with the REDSOs and missions to tie down service and study needs. The information, PVO and biological diversity components will require special planning as outlined. Early planning is vital given the large number of obligations and the contracting deadlines that begin to take effect in Washington each April.

If the African Development Fund, eliminating separate accounts for functional categories and for the Sahel, is not approved by Congress for future AID funding, it will be necessary for NRMS to secure both Development Assistance and Sahel funds in order to serve both Sahelian and non-Sahelian posts.

C. Other Considerations

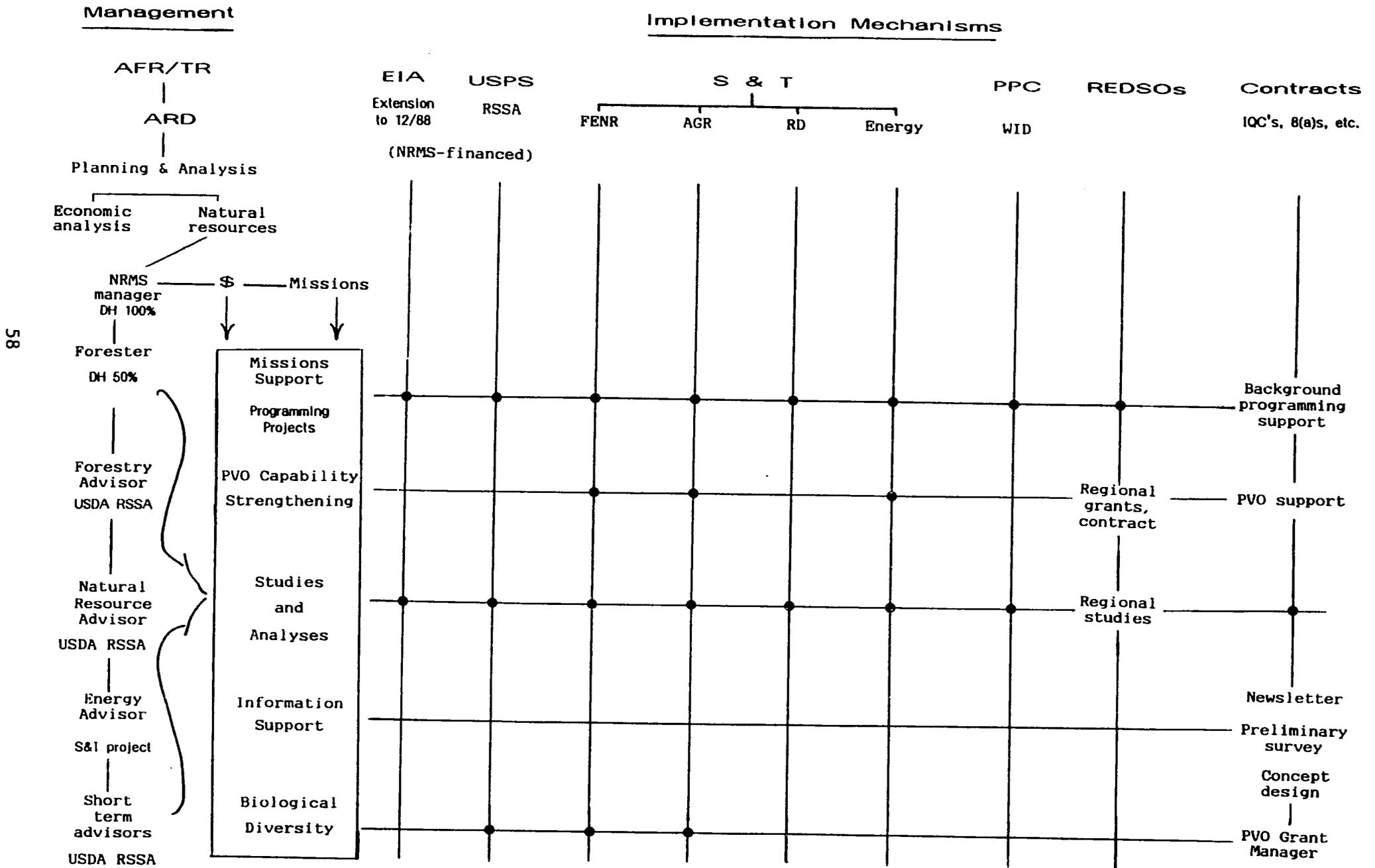
NRMS funds for administration by the REDSOs: No such funds have been earmarked in the regular NRMS budget. However, it is recommended that NRMS staff determine jointly with the REDSOs the extent to which they can assume fiscal and management responsibility for activities under the various components. If carefully planned, such decentralization could prove beneficial to the field while relieving NRMS staff in AID/W of some of the management burden.

o Biological Diversity Activities Special Fund: This component is treated as an illustrative category subject to further planning and the establishment of a special fund. Services related to biological diversity are included in the regular NRMS budget and will be rendered as needed with or without a special fund for field activities.

o Funding of RSSA personnel: The financial plan does not include funding for long-term RSSA personnel assigned to NRMS management in AFR/TR. They are covered under existing TR/ARD RSSAs with USDA and USNPS which include personnel for both agriculture and natural resources management.

Fig. III-2

NRMS Management & Implementation



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V. Implementation Plan

A. Introduction

During the start-up period of NRMS the demand for services will be refined as (1) missions respond to the project and other implementation actions of the PNRM, and (2) the results of various NRMS planning studies become available.

Being largely a demand-driven, service-oriented project, this implementation schedule focuses on steps needed to organize and program responses to mission requests or needs. In addition, a procurement schedule is provided in Table V.1.

Other than the studies needed to initiate project actions, an implementation schedule is not detailed for studies and analyses (described in Sec. II.D); rather action on these is subsumed below under programming and project support to missions.

B. Project management implementation

- * Complete the process of direct-hire and RSSA staffing for NRMS headquarters in TR/ARD.

- * Name S&T liaison officer and define functions.

- * Brief contract officers for S&T and AFR.

- * Brief USDA/OICD staff.

- * Set up project monitoring system and develop baseline data for evaluations.

- * Develop preliminary work plan for staff for first 6 months.

All above accomplished in first month of project.

- * During first three months, develop scopes of work for the procurement actions noted in Table V.1.

- * Through consultation with REDSOs, define their role in NRMS management and implementation. July through September, 87.

- * Attend REDSO scheduling conferences in Fall, '87.

* During July through September, set up study review committee; review suggestions and demands for special studies, analyses, and related workshops from AID/W, missions and REDSOs; prioritize and schedule these for the period October 87 through June 88.

C. Mission programming and project support

* Send information cable to African missions and follow-up with communication on the project and its role in the implementation of the Plan for Supporting Natural Resources Management in SSA. July and August, 87. Include indicative list of studies, analyses and related workshops.

* Interpret developments in PNRM and, with help of AFR/DP and LEG, relevant legislation, communicating same to missions via cable or newsletter discussed in Section II.E. on information support. Timing: Continuous.

* During July through October 87, when buy-ins are restricted because of AID/W contracting or funding limitations, plan and schedule program assessments and design or other services to missions for the period October 1, 1987 through June, 1988, if possible.

(Timing of assessments will depend in part on AFR/DP schedule for submission of CDSSs, and partly on mission plans. Coordinate with DP and geographic offices during late FY 87/early FY 88.)

D. PVO Support Implementation

* Hold liaison and coordination meeting with Bureau for Food for Peace and Voluntary Assistance (FVA).

1. Initiation of S&T services for PVOs.

* Meet with PVO representatives to inform of NRMS and invite suggestions for implementation; excellent opportunity for this is planned AID-InterAction meeting in September 1987.

* Late in FY 87 or beginning of FY 88, coordinate with S&T service project managers, exchange cables with Group I and II missions to work out program details and obtain identities of likely participant PVOs, and inform the latter of the program and its criteria. Informal contact with the PVOs in the field and at headquarters should precede formal notification to ensure compatibility with PVO procedures.

* Process PVO applications for S&T services in accordance with the procedures and criteria set forth in Section II.C.

* Coordinate with IIED on its planned survey of PVO grantees under AID mission umbrella projects.

* Review results of survey of agroforestry information needs among PVOs in Africa, commissioned by the Forestry Support Project, and carried out by E/DI during June and July, 1987.

* When PVO support mechanism is fully in place, set up liaison and coordination protocols and procedures, including periodic meetings with the PVO support entity's manager and the PVO liaison representative to review progress, problems and plans. Call in S&T project managers and specific PVO representatives as needed.

E. Implementation of Information Support

* Commission preliminary study to define mission and REDSO information needs in NRM.

* Contract in-depth survey and concept design, if merited.

* Develop general plan and editorial focus for the newsletter noted in Table V.1 ("Natural Resources Management News in SSA").

* Develop RFP for 8(a) firms or general competitive bidding, and advertise for bids.

* Award contract for newsletter.

F. Support for Biological Diversity Activities.

* Coordination meeting with the AID biological diversity working group.

* Provide technical assistance to missions as needed for biological diversity activities, with or without a special fund for the latter.

In the event of establishment of a special fund for biodiversity activities and approval of a sub-project along the lines of Annex J:

* Identify (with possible assistance of consultant) a grantee to manage the biological diversity grant fund for PVOs (and NGOs), and develop preliminary plans for fund operation.

* Develop interim PVO grant criteria (pending finalization on the basis of the background study and plan).

* Develop life-of-project plan for supporting activities to conserve biological diversity in SSA, with guidelines and

criteria for PVOs and missions.

* In coordination with S&T communicate with IBPGR and ILCA re project intention to provide supplemental funding for SSA programs.

* Review proposals from IBPGR and ILCA for special SSA germplasm conservation activities, and fund accordingly.

* Establish a fund for supporting PVO activities aimed at conserving biological diversity.

* Contract or finance through a grant sub-regional activities as indicated by the Plan for Supporting Biological Diversity Conservation in SSA.

G. Actions to Facilitate NRM Training

* Ensure that Department of Labor-developed "Training Needs Assessment Guide" is distributed to missions when issued (due late FY 87).

* Determine whether training directories listed in Annex D have been distributed to missions; if not, request TR/HRD or S&T/IT assistance in doing so. Timing: Early FY 88.

* In coordination with AFR/TR/HRD, send cable encouraging missions to identify candidates for short and long term training in natural resources and related subjects, including biological diversity conservation and management, and for funding through existing mechanisms(e.g. Human Resources Development in Africa or Sahel Human Resources Development projects).

* Arrange for NR orientation seminars for agricultural degree participants studying in the United States. Coordinate with USDA's Office of International Training.

* Arrange seminars for agricultural and project development officers to bring them up to date. Possible implementing agents: S&T's Farming Systems Support and Agricultural Policy Analysis projects. Timing: Coordinate with ADO conference or REDSO scheduling conferences if possible.

* Consult ETMA project records and evaluation on possible source for joint training/planning workshops as described in Section II.B.3.d. If missions show interest, they can procure with limited funds in NRMS budget for this purpose or with own funds.

Implementation Scheduling: Figure V.1, following the procurement plan (table V.1), is a draft of a Timeline Implementation Plan that will be used to help track and schedule project events. It is based on a matrix with numbered items and descriptions (not attached). The Timeline Plan is a computerized program that permits new events and changes to be readily recorded.

Table V.1. Procurement Schedule

FY 87

- Purchase remote sensing commodities (Cote d'Ivoire) REDSO/WCA
- National Park Service RSSA amendment AFR/TR/ARD
- Rwanda natural resources planning studies USAID/Kigali
- Uganda soils resource inventory and land evaluation USAID/Kampala, NRMS, S&T/AGR

FY 88, first six months

- BPS level-of-effort contractor award NRMS
- Mission-level services procurement (assessment, design, implementation T.A., evaluation assistance, etc.) missions, NRMS, S&T/AGR
- Consultancy for preliminary definition of mission, REDSOs information needs NRMS
- Survey of PVO/NGO capability strengthening needs and possibilities. NRMS
- Special studies as needed NRMS, S&T REDSOs
- Background study for Plan to Support Biological Diversity Conservation NRMS
- S&T services for PVOs NRMS, S&T
- Contract newsletter production (separate contract or as part of BPS level-of-effort contract) NRMS

FY 88, second six months

- Issue work orders for background programming reviews and other-donor contacts as needed NRMS
- Mission level support services (continuous) Missions, NRMS, S&T
- Special studies as needed NRMS, REDSOs,

	S&T
● Select PVO support contractor	NRMS
● RFP and award contract or grant for PVO information service	NRMS
FY 89 (entire year)	
● Work orders for background programming support	NRMS
● Services to missions	Missions, NRMS, S&T
● Special studies as needed	NRMS
● Contract mid-term evaluation (month 21)	NRMS
FY 90	
● Continuing procurement of assessments, mission level services, special studies	Missions, REDSOs, S&T, NRMS
● Contract final evaluation (month 36)	NRMS

FIGURE V.1

Draft Timeline Implementation Plan

Schedule Name:
 Project Manager:
 As of date: 30-Jun-87 3:30pm Schedule File: B:TEST1

		88	89	90	91	92	93	94	95	96
		Jan								
Who	Status	4	3	2	2	2	4	4	3	2
<u>0.00 PROJECT STARTUP</u>		M	.	.	.	.	.	.	.	.
0.1 IMPLEMENTATION	AID/AFR	===	.	.	.	.	.	.	.	.
0.1.1 PROJECT OFFICE	AID/AFR	===	.	.	.	.	.	.	.	.
0.1.2 S&T LIAISON	S&T/FENR	+++++	.	.	.	.	.	.	.	.
0.1.3 BRIEF OFFICERS	AID/AFR	===	.	.	.	.	.	.	.	.
0.1.4 BRIEF OICD	AID/AFR	===	.	.	.	.	.	.	.	.
0.1.5 PROJ MONITORING	AID/AFR	===	.	.	.	.	.	.	.	.
0.1.6 PROJ COMMITTEE	AID/W	+++++	.	.	.	.	.	.	.	.
0.1.7 6 MO WORKPLAN	E/IA	=====	.	.	.	.	.	.	.	.
0.1.8 MEET W/ PVOs	AID/AFR	===	.	.	.	.	.	.	.	.
0.1.9 SCOPES OF WORK	CNTR	+	.	.	.	.	.	.	.	.
0.1.9.1 BGRND STUDY	CNTR	+	.	.	.	.	.	.	.	.
0.1.9.2 INFO SUPPORT	CNTR	===	.	.	.	.	.	.	.	.
0.1.9.3 PVO REVIEW	CNTR	+++	.	.	.	.	.	.	.	.
0.1.9.4 PVO NEEDS	CNTR	=	.	.	.	.	.	.	.	.
0.1.10 SEND CABLE	AID/AFR	+	.	.	.	.	.	.	.	.
0.2 ISSUE PIOs		=	.	.	.	.	.	.	.	.
0.2.1 NPS PIO/T	AID/AFR	+++	.	.	.	.	.	.	.	.
0.2.2 REDSO PIO/C	CNTR1	=====	.	.	.	.	.	.	.	.
0.2.3 USAID1 PIO/T	CNTR2	=====	.	.	.	.	.	.	.	.
0.2.4 USAID2 PIO/T	CNTR3	=====	.	.	.	.	.	.	.	.
0.3 CREATE PROJECT TEAM		===	.	.	.	.	.	.	.	.
0.3.1 PROJ.TEAM CONF.	AID/AFR	===	.	.	.	.	.	.	.	.
0.4 REDSO CONF.	AID/AFR	+++	.	.	.	.	.	.	.	.
0.5 INTERACTION MEETING	AID/AFR	===	.	.	.	.	.	.	.	.
<u>1.0 PROJECT MGT</u>		M	.	.	.	.	.	.	.	.
1.1 PLANNING & SCHEDULING	E/IA	=====	.	.	.	.	.	.	.	.
1.1.1 SUPPORT MISSIONS	E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.1 PROGRAM.ASSIST.	AID/AFR, E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.1.1 REDSOS COORD	AID/AFR, E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.1.2 ARDO CONFERENCE	AID/AFR, E/IA	+++++	.	.	.	.	.	.	.	.
1.1.1.1.3 BACKGROUND	AID/AFR, E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.1.4 MISSIONS	AID/AFR, E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.2 P6/PJ DEVEL.	E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.2.1 P6/PJ DESIGN	E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.2.2 TECH SERV	AID/W, E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.2.3 TRAINING	AID/W, E/IA	=====	.	.	.	.	.	.	.	.
1.1.1.2.4 STUDIES	AID/W, E/IA	=====	.	.	.	.	.	.	.	.
1.1.2 PVO SUPPORT	AID/W, E/IA	=====	.	.	.	.	.	.	.	.
1.1.2.1 SURVEY	AID/W, E/IA	+++	.	.	.	.	.	.	.	.
1.1.2.1.1 PUBLIC ANNOUNCE	AID/AFR	===	.	.	.	.	.	.	.	.
1.1.2.1.2 GROUP1 COMPETIT	AID/W	=====	.	.	.	.	.	.	.	.
1.1.2.1.3 GROUP2 COMPETIT	AID/AFR	=====	.	.	.	.	.	.	.	.
1.1.2.2 CONTRACT TECH ASS	E/IA, AID/W	=====	.	.	.	.	.	.	.	.
1.1.2.3 CONTRACT TRAINING	E/IA, AID/W	=====	.	.	.	.	.	.	.	.

VI. Evaluation Plan

A. Baseline Data

The baseline for this project may be constructed from a survey of present conditions under the items listed in the financial plan and the first two columns of the logframe (table F.1). This information will be available from a review of

- current AFR/TR staffing and support for NRM (source: TR/ARD leadership);

- current S&T staffing and support for NRM (source: service project listings in the PP);

- current NRM activity in mission and regional programs (sources: annexes to this PP, current CDSSs and ABSs);

- current PVO activity in NRM (source: proposed survey of PVO support needs and possibilities, and applications for S&T services under the project); and

- current biological diversity and information support activity (sources: TR/ARD, FEWS staff, respectively).

These data should be referenced or directly entered in the data base system proposed in Section III as part of the project's tracking and monitoring system.

B. Targets

The targets at the output, purpose and goal levels of the project are both quantitative and qualitative. They are quantitative in terms of the numbers of (a) policy, program and project documents developed, (b) PVO personnel trained or assisted, (c) policy dialogues conducted, and (d) coordinated donor actions taken that will be attributable entirely or in part to the support furnished by NRMS.

The targets are more qualitative in terms of the improvements that the project will seek to engender in the NRM performance of AID missions, PVOs and host countries. Here evaluators will have to tread into the more elusive area of measuring impact. Qualitative assessments may be attempted on a

sample before-and-after basis for each of the project components or clienteles served. For example, a representative sampling of host governments, missions and PVOs may be selected for review of (a) levels of improvement in NRM project management, coordination of effort, integration of NRM concerns with agricultural development activities, etc., and (b) actual achievements in terms of additional trees planted, higher output through erosion control, reductions in loss of soil moisture, etc.

It should be possible to make meaningful quantitative assessments at the end of three years; some qualitative results per (a) above may be ascertainable by that time, but results under (b) may not be apparent that soon. A detailed evaluation plan will need to be developed that is sensitive to these distinctions.

C. Inputs

The evaluation of inputs should focus on

(a) the impact of external factors such as levels of funding made available for both NRMS and NRM field activities, the timeliness and firmness of program decisions made by the bureau and the agency, and the level of cooperation received from missions, REDSOs, S&T and other offices in the Bureau for Africa; and

(b) the responsiveness, flexibility and competence displayed by NRMS staff and their superiors in managing this complex project.

D. Timing of Evaluations and In-House Reviews

A mid-term evaluation is proposed at month 21 of the project, or March 1989. A full-scale evaluation is scheduled at month 36, or June 1990; this is six months before the PACD, allowing time to plan for a possible extension or follow-on project without interruption. Funds are budgeted within the project for the first evaluation; the second one falls after the final obligation year, requiring external funds. Careful monitoring throughout the life of the project should yield the quantitative data needed to indicate whether the project is reasonably on track or not, and allow for meaningful in-house reviews at suitable intervals before and after the first evaluation.

All aspects of this project -- technical, PVO, programming, managerial and financial -- should be reflected in the expertise of the evaluation team.

ANNEXES

Natural Resources Management Support

Project No. 698-0467

- A. Natural resource management activities of USAID in sub-Saharan Africa and projections of related needs for support.
- B. Directory of support services in the Bureau for Science and Technology and the Bureau for Africa.
- C. Review of PVO support needs and possibilities.
- D. Training considerations.
- E. Project Analyses
 - 1. Management analysis.
 - 2. Financial analysis
 - 3. Economic and social soundness analysis.
- F. Logical framework
- G. Environmental analysis.
- H. Project control system documentation.
- I. Scopes of work.
- J. Concept design for biological diversity support.
- K. PID approval cable.

Annex A

**Natural Resources Management Activities of USAID
in Sub-Saharan Africa
and Projections of Related Needs for NRMS Support**

ANNEX A

Natural Resource Management Activities of USAID in Sub-Saharan Africa and Projections of Related Needs for NRMS Support

1. Introduction

Out of 35 missions and AID offices in sub-Saharan Africa, 14 expressed a need for NRMS services as of May 31, 1987, including most of the posts in PNRM Group I. Demand is likely to increase as further program documents are submitted to AID/W and reviewed but cannot be accurately predicted at this time. The expressed need is estimated at \$1,410,000; life-of-project need is tentatively projected at \$3,550,000 including \$550,000 covered by the Energy Initiatives project. The ultimate level of demand will be determined by overall funding levels for natural resource management activities, agency and bureau policy, congressional requirements, the quality, usefulness and efficiency of NRMS services and research, and -- last but far from least -- mission responses to these conditions and to country programming priorities as perceived by mission leadership and host country governments.

2. Listing of NRM Activities and Expressed Service Requirements

Tables A.1 and A.2 summarize AID mission needs for support services and their current and planned projects related to NRM. Table A.2 shows data for selected countries. The data were drawn from (a) mission responses to various cables sent by AID/W between November 1986 and May 1987 on the development of the PNRM and the NRMS project, (b) program documents available to the design team, (c) AFR/TR/ARD analyses, and (d) REDSO/ESA personnel. Though incomplete and subject to change, the data do show current trends in NRM activity and planning.

Both the summary listing of service needs and the tables are designed to permit revision and updating as new information is obtained.

3. Nature and Level of Currently Expressed Demand for Services

Missions responded to cabled inquiries from AID/W, the most detailed such cable being State 070177 of March 11, 1987. As of May 31, 1987, the data show an expressed need by 14 missions covering a variety of design, planning and technical assistance tasks, requiring approximately 94 person/months of NRMS services, and costing an estimated \$1,410,000. Of the eight missions in

PNRM Group I, six have requested substantial services; only one (Madagascar) stated its needs were well-covered by REDSO/ESA. The other eight missions requesting services are spread through Groups II, III and IV. The remaining 21 missions have either expressed no need for services or have not responded to the question.

3. Projected Demand for Services

One can assume some increase in demand for services as the PNRM action plan -- under review in AID/W and the field as this is written -- takes final shape, particularly in regard to the plan's requirement that certain missions conduct NRM program assessments. The ABSs due June 1, 1987 also may indicate further mission demand that will be refined over subsequent months as programs are reviewed and future budget allocations become clearer. Further, State cable 118324 of April 20, 1987 required missions to report by June 1 on the technical assistance, if any, they would need to comply with Sections 118 and 119 of the Foreign Assistance Act concerning mission plans to (a) help achieve conservation and sustainable management of tropical forests and (b) conserve biological diversity.

The annual service scheduling conferences to be held at the two REDSOs in September will be an excellent opportunity for NRMS management to refine service requirements. It is suggested that NRMS management personnel attend the meetings and ask missions beforehand to define their NRMS needs if not already done. At the meetings it will also be possible to coordinate NRMS services with the REDSOs.

Since it will take several months for these programming processes to run their course, it is too early to predict accurately the levels of services that will be requested by missions during the first year of the project, let alone subsequent years. For budgeting purposes the design team assumes that a total of \$2.5 million will be required for country-level technical services chargeable to NRMS. (This will be in addition to the \$550,000 being made available beginning June or July 1987 for NR-related service needs under the Energy Initiatives for Africa project.) The team further assumes that AID/W and the missions will depend upon NRMS to fund NR-related support services. (There may, however, be cases where missions choose to draw on available PD&S funds for activities that involve both natural resources and agriculture.)

A principal factor determining the level of demand for services will be the amount of funding made available by the agency and the Africa Bureau for NRM activities in sub-Saharan Africa. Congress has been considering a \$45 million annual earmark for NRM, but AID's current NRM activities, as judged by the definition of NRM in the draft legislation, may already approximate that mark. If a greater level of funding is made available for NRM activities, either through a net increase in overall program funds or a larger allocation within present

limits, the number of NRM activities requiring services is bound to increase. If, on the other hand, little or no increase in designated NRM funding takes place, the demand for services will rise only to the extent to which the bureau can promote, and missions are able and willing to make adjustments to current and planned portfolios in favor of NRM. In either case, the amount of NRM activity programmed by missions and the level of demand for NRMS services will be influenced to some degree by the quality, usefulness and timeliness of NRMS services and research as perceived by missions, host-country governments and PVOs.

Table A.1

NRMS Service Needs of Missions Expressed as of May 31, 1987

GROUP I

- Kenya
- Request for two 6-week TDYs early in FY 89: NR specialist and agro-forester to assess program possibilities
 - (Request to REDSO for CDSS review and for evaluations of wildlife/agriculture and forestry/agroforestry -- per J. Gaudet.)
- Madagascar
- Mission advised REDSO services will suffice
- Mali
- Design of Livestock Sector III, beginning July 1987
 - Design assistance for Haute Vallee project
 - Implementation assistance on Village Forestry project, both l-t and s-t
 - Redesign of forestry sector project
- Niger
- Implied needs for services for designing NRM and rural code policy reform components on two proposed projects (Agricultural Sector Development Grant II and AEPRP) as well as possible extension of FLUP; above subject to available funding
- Senegal
- Support for Southern zone water management and agricultural research
 - Assistance in updating NRM component of CDSS
 - Policy research and seminars on NRM in connection with forestry project
- Gambia
- No specifics
- Somalia
- No service needs expressed to NRMS. (Recent mission request to REDSO for design of a "bridge" program between JESS project and SWAMP project. Per J. Gaudet)
 - TA for monitoring Juba and Shebeli projects
- Sudan
- TA in forestry education and training; needs assessment
 - Forestry institution building - TA and procurement
 - Financial assistance for training
 - Data banks and information centers - technical and coordination support from AID/W
 - AID/W support to US and other institutions in developing forestry extension methodologies

(Table A.1 cont.)

GROUP II

- Lesotho - None expressed to date
- Rwanda - NR program plans under revision as of late May
- Zimbabwe - None expressed to date

GROUP III

- Burundi
 - Would welcome TA in examining ongoing planned projects for possible inclusion of additional elements required to reach desired objectives. No new NR projects planned
 - Need one-week TDY Dec. 87 for end-of-project report on Bururi Forest project
- Cameroon
 - AFR tech staff can contribute to consideration of focus countries, application of guidelines in integration of NRM within portfolio and development of CDSS. Awaiting info on availability of such staff to aid mission in planning its work on these matters
 - Can use TA to expand cereals project to include agroforestry, and agricultural management and planning project to include land-use planning. Also considering shelf proposal for development of the Korup National Forest (biological diversity)
- Chad
 - Mission may need services of soil and water conversationists, hydrologists, ag engineers and environmentalists over next 3 years to help assess progress of FVC Development Initiatives Project and help plan future activities;
 - Can use additional training funds and help in identifying participants; also French-language training courses; if funding were available, SHRD project is appropriate funding instrument
- Guinea - No needs expressed
- Malawi - No needs foreseen over next two years
- Tanzania - No needs expressed

(Table A.1 cont.)

GROUP IV

Benin	- No specifics
Botswana	- No info
Burkina Faso	- No needs expressed
C.A.R.	- No specifics
Comoros	- No info
Congo	- No info
Djibouti	- Mission recommends studying potential for collaboration with ISERST which has capacity in energy conservation, geothermal exploration and technology development, and expertise in remote sensing. Post also sees important role for IGADD in natural response to climatic calamities in East Africa. No direct service requests, however
Ghana	- No specific request
Guinea-Bissau	- No response
Liberia	- No request made
Mauritania	- Help available from own staff, neighboring missions and REDSO adequate for now; may need TDY help in future, however
Mauritius	- No cable response. (Request to REDSO for environmental/NR assessment of island and its coast. Per J. Gaudet)
Mozambique	- No response
Sierra Leone	- No request made

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(Table A.1 cont.)

- | | |
|-----------|---|
| Swaziland | <ul style="list-style-type: none">- Will require policy analysis focusing on land use evaluation and management issues to address excessive pressure on communal grazing areas (in context of new ag project)- Training in technical analysis for professional personnel- Awareness building for traditional leaders- TA for development of a water master plan (Komati River Basin)- Evaluation of soil erosion report and land tenure study- Propose "re-treading" ADOs into ADOs specialized in NRM, by providing short-term training- (Provide s-t TA to GOB Office for National Conservation Strategy. Request to REDSO via J. Gaudet) |
| Togo | <ul style="list-style-type: none">- No request (favorable to PNRM, but post lacks money for program) |
| Uganda | <ul style="list-style-type: none">- Mission awaits further word on services available; no specific request for services |
| Zambia | <ul style="list-style-type: none">- Request s-t consultant to assess ongoing NRM programs in country and identify possible mission initiatives; this could lead to addition of 1-t specialist to existing project or to launch other activities |
| Zaire | <ul style="list-style-type: none">- Mission would require TA in order to examine its program in greater detail and review possibilities for local currency support |

NATURAL RESOURCE MANAGEMENT ACTIVITIES 0

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$220)			
						87	88	89	LOP
I-MADAGASCAR	Biol. Diverse Island	CURRENT ACTIVITIES							
		Agric. Rehabil. Support (887-0101) BA	85	88	89	2,280	1,000	-	5,280
		(887-0101) 887	85	87		875	-	-	6,819
		MISSION-EXPANDED EXTENSION							
		Agr. Rehabil. Support (MARS) BA (887-0101)					250		
		CBS OPO under same project					?		
		PL 480 T.I. Counterpart funds							
		" "							
		NEW EXPENSES							
		Matching Grant on Wildlands & Human Needs FVA/PVC proj	88	(?)	82	-	200	-	200

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ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

	Obligations for			NEM Support from PL 480 FFW or Local Currency	NEM Area Addressed	Next Steps and Services Needed
	87	88	LOP			
90 10				Est. 62-3 million in counterpart funds since 1981 for agro-forestry	Agro-forestry	
	250	250	100		<ul style="list-style-type: none"> - Biol diversity 3 yr. in N.E. Mad. unspoiled region - Agr. Prod-Agroforestry OPG with CBS - ICHAF Agroforestry research and workshop mid-1988 - Strengthening ICHAF, IITA activities in agro-forestry in Mad. 	REBRO/ESA forestry, energy, environment and agriculture expertise will suffice for all proposed activities
	?					
				62.3 mill. over 3 years begin. '88	IBRD's household energy activity	
				CP Funds	IBRD & Swiss Forestry project	
00	200	-	200		<ul style="list-style-type: none"> - Integrate sustainable Agric production with of Biol. Resources in Beta Mahasaly Reserve and Nature Reserve No. 11 in Southern Mad. - Inventory - Strategy - Training 	World Wildlife Fund and Yale University will implement project

NATURAL RESOURCE MANAGEMENT

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$000)			
						87	88	89	LC
S-MALI	Arid/semi-arid	ENKESSE-Activities Livestock Sector II (888-0218)	82	88	89	-	1,000	-	10,
		Village Reforestation (888-0237)	83	87	87	750	-	-	1
		VITA Woodstoves (PVO) (888-0237)	85	87	88	-	350	-	7
		Biol Diversity: Conservation and Development in the Inner Niger Delta - II; Matching Grant (IUCN, W. Germany, W.M.F.)	87	87	89	166	-	-	21
		Operation Haute Vallée (888-0210)	78	87		1,800	-	-	10,85
		Farming Systems Research and Extension (888-0232)	85	82		1,723	1,750	7	10,4

MANAGEMENT ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

act (1999) 9	Obligations for NRM Conservation				NRM Support from PL 480 FFW or Local Currency	NRM Area Addressed	Next Steps and Services Needed
	LOP	87	88	89				LOP
-	19,220					Forage & livestock prod. research (ILCA) aimed at integrating livestock & agri. prod. systems. Addresses effects of shifting agric. on NRM mgt. Evaluators expressed.	
-	910	750	-	-	910	Improve capacity of 5th region forest service to manage and conserve natural resources. Stress inter-dependence of trees, crops and livestock; reforestation and soil conservation extension component.	
-	708	-	350	-	708	Develop production network for improved metallic cookstove (Bamako area).	
-	150	150	-	-	150	Agroforestry, fisheries and pasture, wetland conservation thru community development, research, training, awareness-building.	
-	19,895				?	Address NRM degradation thru extension; soil management, improved cook-stoves	
?	19,493				?	Research on soil erosion management, brush fires, crop-livestock integration. Complements ILCA work under livestock II project. Future research on agro-forestry concerns.	

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NATURAL RESOURCE MANAGEMENT ACTIVITIES OF

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	FACD	Total Project Obligations (\$000)				
						87	88	89	LOP	
I-MALI (cont.)		Mission-Crossed Extension Village Reforestation (888-0237) (This extension substitutes for \$15 million now project now shelved; Canada filling gap.)	88	?	80	-	?	?	?	-
		New Mission-Crossed Operation Haute Vallée II (888-0233)	88	81	?		2,000	?		11,000
		Livestock Sector III	88 or 89	?	?	-	?	?		?

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YES OF USAID IN SUB-SAHARAN AFRICA

Obligations for NRM Conservation				NRM Support from PL 480 FFW or Local Currency	NRM Area Addressed	Next Steps and Services Needed
87	88	89	LOP			
-	?	?	?		<p>Improve field-level mgt. and extension service; establish information system for evaluation and replication purposes.</p>	<p>To meet funding shortfall. Mission requests l-t and e-t TA for implementation & in-country training in resource mgt. & conservation methods.</p>
					<p>Continue in sub-humid zone suffering NR degradation; alternative forage crops, agroforestry, soil & water conservation, prevention of brush fires.</p>	<p>PP design assistance requested.</p>
					<p>Reorient research southward into sub-humid zone and expand it to include soil science.</p>	<p>Project to begin Oct. 89. PID design beginning July 87. NRMS requested to provide TA for design.</p>

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NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$2000)			
						87	88	89	LOP
I-NIGER	Arid/semi-arid	Current Activities Forestry and Land-use Planning (FLUP) (883-0230)	80	86	87	-	-	-	4,089
		Applied Agric. Research (883-0256)	87	90	7	7	3,476	7	12,611
		Review-Proposed Extension FLUP--one-year ext. (883-0230)				88			

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NIGER

ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

* Obligations for				NRM Support from PL 480 FFN or Local Currency	NRM Area Addressed	Next Steps and Services Needed
87	88	89	LOP			
-	-	-	4,089		Forest management, land-use planning	none noted
			?		Soil fertility management, cropping patterns	none noted
				Extension to be financed w/local currency genera- tions.		none noted

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NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$000)			
						87	88	89	LOP
II-RWANDA	Highlands	Farming Systems (S96-0110)	84	88	?	2,800	-	-	10,800
		Womunal Reforest (SIA) (S98-0424.01)				87	-	-	800
		CARE - Gitsa Forestry (S98-0802.98)				88	-	-	2,800
		Uwengeri Resource Mgt. (ETMA) (S98-0427)				88	-	-	650
		NEW MISSION PROJECTS							
		Project to address soil protection, soil fertility and management of hydro-agricultural systems beginning FY 89							

RWANDA

TYPES OF USAID IN SUB-SAHARAN AFRICA

Obligations for NRM Commitments				NRM Support from PL 480 FFM or Local Currency	NRM Area Addressed	Next Steps and Services Needed
87	88	89	LOP			
			7	Agroforestry		
			500	Reforestation		
			2,500	Cookstove production, communal tree nurseries		
			650	Natural Resources Mgt. and Planning		
				Soil and water management		Major data collection and analysis activity over 12-18 month period conjointly with PID/PP preparation.

NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$000)				
						87	88	89	LOP	
I-SENEGAL	Arid/semi-arid	CURRENT ACTIVITIES Senegal Reforest. and Soil Conserv. (885-0283)	86	87	86	4,800	-	-	10,000	4,8
		Cereals II (885-0235) (Agroforestry Component)	80	83	87	-	-	-	77,000	
		Irrigation and Water Mgt. (885-0280)	85	87	89	800	-	-	8,800	
		Keyar Dune Stabilization PL 480 Title III extended thru 87								
		Regional river basin projects (Gambia R., Senegal R., OMVS)								
		New Mission Programs Southern Zone Water Mgt. (885-0285)	88	91	88		10,000	7	20,000	
		Agric. Research Project (to include forestry research)	89							

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SENEGAL

ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

	\$ Obligations for				NRM Support from PL 480 FFM or Local Currency	NRM Area Addressed	Next Steps and Services Needed
	87	88	89	LOP			
000	4,500	-	-	10,000		<ul style="list-style-type: none"> - Agroforestry actions in 60 villages - To est. adaptive research in agroforestry on species, techniques, use of animal wastes, crop residues, etc. in soil conservation. 	Per Dakar 05086 of 6/11/87: Within framework mainly of projects 0280, 0283 and 0285 (see column at left), mission will need 4-6 p.m. of services over two years in watershed management, agroforestry, water resource development and habitat protection. Cannot forecast level of effort, timing and technical specialties now.
.000	-	-	-	2,200		Agroforestry	For Dakar 03711 of 4/9/87, mission may also need help in updating CBSS.
.500				?		Water management	
					Title III WFP/FFW	<ul style="list-style-type: none"> - Tree planting - 500 ha rehab. & new area 	
						Will continue to integrate NRM concerns in planning/mgt/devel	
1,000				?		Protection of lowland rice soils against salt water flooding; improved water management in upland areas. Includes PVO component.	<p>PIS to be submitted shortly</p> <p>Concept paper begun</p>

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NATURAL RESOURCE M

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$)		
						87	88	89
I-SENEGAL (cont.)								
		(New Mission Proposals cont'd) Senegal Reforestation (885-0283)	86	87	93	4,600	-	-
		PVO Co-Financing Project (un-numbered)	88	?	?	-	?	?
I-94NERIA	Arid/semi-arid	Agriculture Research & Diversification (835-0219)	85	80	92	1,960	1,960	?

MANAGEMENT ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

FY	LOP	Obligations for NRM Conservation			LOP	NRM Support from PL 480 FFM or Local Currency	NRM Area Addressed	Next Steps and Services Needed
		87	88	89				
	10,000	4,500	-	-	10,000			
	7				7		Mobilize large-scale participation in tree planting.	
	18,000				7		New project can be used to encourage PVO programming in NRM and forestry. (Existing PVO project GSS-0260 funded in '84 also supports NRM).	
								Await ABS proposals

NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$000)			LOP
						87	88	89	
I-SOMALIA	Arid/semi-arid	CURRENT ACTIVITIES CDA Forestry (649-0122) residual							500
		Juba Development Analytical Studies (JUDAS) (649-0134)	83	86	87	-	-	-	8,550
		Shebelle Water Mgt. (649-0129) (SWAMP)	87	92	92	2,512	8,250	-	15,000
		PVO Development Partners (649-0138)	85	88	7	3016 (ANRW)	250 (DFA)	-	9,600
		Kenya Mission Funded Extension CDA Forestry (649-0122)							

SOMALIA

ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

P	\$ Obligations for			LOP	NRM Support from PL 480 FFW or Local Currency	NRM Area Addressed	Next Steps and Services Needed
	87	88	89				
500				500	FFW: \$978,000 LC Support	<ul style="list-style-type: none"> - Training & TA for nat'l staff & forestry school - Reforestation & fuelwood production, conservation. - NR/Land use assessment - Monitoring 	Potential for follow-up survey
550	-	-	-	8,550		<ul style="list-style-type: none"> - River basin development master plan - Data base & monitoring NR of the Juba River & floodplains - Soil survey & land use study 	n-t TA to provide design for continuing monitoring & baseline data collection & analysis at end of project (87-88) until SWAMP project begins (88-89)
600				2,850		<ul style="list-style-type: none"> - Management plan for water resources on Shebelle River - Data base & monitoring aquatic NR & soils of river. 	
600				?		Agro-forestry & soil conservation.	Potential for building on 649-0122 Await ABE proposals
							Evaluation team recommended additional funds to make results usable.

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NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (1992)				87
						87	88	89	LOP	
I-SUDAN	Arid/Semi-arid	CURRENT ACTIVITIES Kordofan Rainfed Agric. (650-0064)								
		Eastern Refugee Reforest. (650-0064)	81	88	88	-	-	-	5,050	
		Renewable Energy (650-0041)	81	87	89	-	-	-	5,600 (as extended)	1.
		Regional Finance and Planning (650-0012)	79	88		3,100	2,000	-	5,300	
		Mission-Proposed Extension Regional Finance and Planning (650-0012)			?				?	
		Eastern Refugee Reforestation (650-0064)			91				?	
		New Mission Project Reforestation and Antidesertification (650-0082)	87	92	83	2,000	-	?	8,000	

SUDAN

JOINT ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

LOP	Obligations for				NRM Support from PL 480 FFW or Local Currency	NRM Area Addressed	Next Steps and Services Needed
	87	88	89	LOP			
5,050				5,050	\$741 (equiv.) (CARE + GOS)	- Reforest 8,000 ha. - Establish tree nurseries	
5,800 (as extended)	1,100	-700	-	?	FWG + US \$4,400 (equiv.) \$20,000 (PL 480)	- Efficient charcoal and wood use. - Efficient briquetting of biomass for fuel	
8,300				?			
?				?			Awaiting further info.
?				?			CARE drawing up plans for extension & expansion
8,000	2,000	-		8,000		- Reforestation and mgt. of existing forest cover. - Database on Natural Resources. - Monitoring vegetation changes.	1. TA: - Forestry education & training. - Assessment of needs and potential for forestry extension and agroforestry - Forestry instit. building - Information exchange & networking (data banks, info. centers) - Extension methodology 2. Assistance & training in nat. resource mgt., forestry extension and agroforestry.

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NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$000)			
						87	88	89	LOP
I-SUDAN (cont.)	Arid/Semi-arid	Famine Early Warning System (FEWS)	87	?	?				?

PL 480
Restocking the Gwa Belt

NATURAL RESOURCE MANAGEMENT (NRM) ACT

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (\$000)			
						87	88	89	LOP
III-KENYA	Semi-Arid + Highlands	EMERGENCY ACTIVITIES Nat'l Agric Research (S15-0229)	86	89	82	-	4,000	5,078	16,500
		Institutional Develop. for Agric. Training (Egerton College) (S15-0239)	86	86	7	-	-	-	2,000
		Arid and Semi-Arid Land Devel. (Kitui) (S15-0172)	79	83	87	-	-	-	10,900
		Renewable Energy Development (S15-0205)	80	81	86	-	-	-	4,800
		PVO Co-financing (VADA) (S15-0238)	85	89		3,382	672	-	11,900
		New Mission Programs Small Project Assistance (S28-0508) (Peace Corps)	87				40?		

) ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

\$ Obligations for				NRM Support from PL 480 FFW or Local Currency	NRM Area Addressed	Next Steps and Services Needed
87	88	89	LOP			
					Soil and water management (Nairobi 03736)	Due to reduced agricultural staff, mission estimates early FY 89 need for NR specialist and agro-forester to assess NR needs and possibilities for expanding existing programs, leading to PID and PF; six weeks for each specialist. (Nairobi 18014)
					Curriculum changes under IBAT will address NR and Energy (Nairobi 03736)	
					350-acre pilot soil and water conservation farm & training program; benefit to 21,000 farm families; and 210 GOK trainees	
			388	Extend with Loc. Curr. (Amt. _____)	Expand agroforestry centers from 8-24 (country-wide)	
					Renewable energy activities by PVO's, esp. agro-forestry inter- ventions	
				CBS FFW	Agroforestry 8-10 projects; 1-2 PCV agro- foresters	

NATURAL RESOURCE MANAGEMENT ACTIVITIES

Country/Group	Ecological Zone(s)	Activities with NRM Components-	Init. Obl. FY	Final Obl. FY	PACD	Total Project Obligations (000)			LOP
						87	88	89	
III-LESOTHO	Highlands	Current Activities Land Conserv. and Range Devel. (632-0215)	80	87	(extnd.) 88	-	-	-	12,000
		Lapis Ag. Prod. & Inst. Support (632-0221)	85	90	91	5,120	-	-	26,100
		CNS Watershed Mgt. Activity (PL 480)							
		New Mission Activities Lapis Project (632-0221) Amendment							
		PL-480 Small Activities							

LESOTHO

ACTIVITIES OF USAID IN SUB-SAHARAN AFRICA

\$ Obligations for NRM Conservation				NRM Support from PL 480 FFW or Local Currency	NRM Area Addressed	Next Steps and Services Needed
87	88	89	LOP			
		12,000			<ul style="list-style-type: none"> - Land range and soil conservation. - Conservation strategy for the country. 	
	800 (agroforestry component)			CARE PVO Activity supported by PL 480 FFW support for CBS	Agroforestry	
					To implement new nat'l Conservation Plan.	Mission will review plan to determine whether LAPIS should be amended to help implement it.
				Title II Support	Conservation and Nat. Res. Mgt.	

ANNEX B

**Directory of Support Services
in the
Bureau for Science and Technology
and the Bureau for Africa**

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Introduction

Descriptions of existing (May, 1987) service or research support projects available to missions are presented in this directory, and summarized in Table B.1. The information contained is derived from interviews with project managers and written materials on the projects.

The spectrum of services projects available through the Bureau for Science and Technology (S&T) ranges from those specifically focused on a natural resource, such as forests, soils or energy resources, to those concerned with technologies in agricultural production, such as the production of rhizobium inoculants. In agriculture, production factors and the resource base are inseparable. Strategies to redress problems such as soil erosion or deforestation may be contingent upon intensification of production. For example, application of phosphate rock fertilizer may be essential to making soil and water conservation works economically attractive to farmers. Consequently, several S&T projects that focus on technologies related to soil fertility are included in the listing.

S&T service projects (and research projects) are either contracts, grants or cooperative agreements with universities or non-profit institutions, or RSSA's and PASA's with government agencies. They are accessed free or by buying services, sometimes on a cost shared basis (with missions paying local travel, for instance). The Bureau for Science and Technology is increasing the use of the Basic Ordering Agreement as a companion to the cooperative agreement. The companion BOA constitutes an empty basket that can receive mission buy-in money, without affecting the cooperative agreement core budget.

S&T project managers draft PIO/T's and monitor project activity; the implementing organizations manage travel arrangements and, where necessary, consulting contracts. Africa Bureau management burdens can be minimal: review and approval of PIO/T's, travel clearances, and report distribution within AID/W/Africa Bureau.

Project activity monitoring is a standard practice for the various S&T service projects, and different managers use different systems. The Bureau for Science and Technology is reviewing options for a standard project tracking method, that could be uniformly employed. The Office of Information Resources Management was assisting in the development of the tracking system.

Table B.1 Bureau for Science and Technology and Bureau for Africa Service Projects and Possibilities for NRMS

Project	Possibilities for NRMS underwriting	Estimated Cost			Totals
		FY87	\$ 000's FY88	FY89	
Forestry Support Program RSSA with US Forest Service	Fund 1/2 FSP coordinator for forestry and agriculture.		25	25	50
	FSP consulting services for reviews of mission portfolios, assistance in design of agroforestry or forestry projects, extensions, evaluations, etc.		75	75	100
	Note: allocation for services to Africa is approximately \$50,000/yr. or five one month consultancies.				
Forestry/fuelwood research and development project Cooperative agreement with ICRAF	Underwrite technical assistance from ICRAF to missions for agroforestry project design. I. Morison estimates design services for the PID level would cost \$50,000 and for a PP the same amount.	50	200	100	350
	Explore an extension of support for agroforestry research efforts into the arid-semi-arid and the sub-humid tropical uplands sub-regions (lacking other donors' support).				
Environmental Planning and Management Coop Agreement with IIED	Support an extension of the cooperative agreement and a lifting of the spending ceiling, to accommodate additional activity and buy-ins in 1987 and 1988, and beyond.				
	Underwrite the costs of one environmental profile in a Group I or II country, to guide project portfolio development, possibly soliciting CDA collaboration, and making maximum use of the various S&T support services.	25	150	50	225

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Table B.1 (cont.)

Project	Possibilities for NRMS underwriting	Estimated Cost		
Soil Management Support Services PASA with USDA Soil Conservation Service	Assistance to review portfolios, help re-do CDSS's, design/implement projects.	75	150	225
	Funding to complement mission projects needing soils support work, or planning thereof. Special support for soils surveys, and land capability interpretations of selected on-going projects, or recent project designs.			
	Organize, co-sponsor (with other donors) a technical workshop on soils mapping in Africa.	40	10	50
Technology for soil moisture management	Review erosion research needs in East African highlands to diagnose and design a series of applied research plots or other trials.	25		25
PASA with USDA/ARS				
Approximately 50% of field work is done in Africa.	Review past experiences and benefits of soil erosion control and moisture conservation and management in semi-arid Africa, with a focus on the implications for agricultural development programs and for project design. Convene and co-sponsor workshop to disseminate results.	25	75	25
Soils Management Collaborative Research Support Project (Trop-soils)	See Table III.4. Missions should be queried, especially for combining this research with research underway in farming systems projects. NRMS could pay for the research.			100
Cooperative Agreement with North Carolina State U.				
Water Management Synthesis II	Three core-funded field studies of irrigation sectors are underway in Niger, Zimbabwe and Rwanda. Results will be presented at a Jan. 1988 workshop in Nairobi now being organized for multi-donor participation, which will be attended by 13 Africans sponsored by the project. These studies were funded via an OVB transfer from Bureau for Africa/RA (\$800,000).			

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Table B.1 (cont.)

Project	Possibilities for NRMS underwriting	Estimated Cost		
Water management synthesis (cont.)	NRMS could sponsor additional African participants, and/or summary and publication of workshop proceedings.	50		50
International Fertilizer Development Center Yearly spending levels: FY87 \$3.6 million. Allocation for Africa: Approximately one half.	Promote more general awareness of the role and potential of phosphate fertilizers in semi-arid to sub-humid African sub-regions. Examine ways to step up research on ways to maintain soil organic matter in semi-arid zone soils. None is being sponsored by AID at present.			
Improved Biological Nitrogen Fixation Through Biotechnology Also called NifTAL (Nitrogen fixation by tropical agricultural legumes)	Mission "demand" for assistance will depend on a clear link being established between BNF and planned or on-going projects. Workshops or seminars/presentations may be needed to acquaint mission with possibilities.			
Cooperative agreement with the U. of Hawaii, with a Companion Basic Ordering Agreement	NRMS could sponsor a workshop in Africa to review and plan research for packages of technology for dryland farming, which include BNF technology.			
Biotechnology, Limiting Factors PASA with USDA's Cooperative States Research Service	Research could be funded as an adjunct to AID-funded farming systems research or production projects which involve leguminous crops or trees. Finance a review and synthesis of research findings in Africa to date, and preparation of a publication for non-specialists, such as AID mission officers, on the work.	90	90	180
Agricultural Policy Analysis Project Contract with Abt Assoc., Inc.	Analyze policy issues in NRMS-supported project design Strengthen existing policy networks to address natural resources management issues.	50	35	85

Table B.1 (cont.)

Project	Possibilities for NRMS underwriting	Estimated Cost		
Ag policy analysis(cont.)	Convene two workshops on policy for improving natural resources management.	75	75	
	Examine natural resources aspects of agricultural policies in selected countries.	50	50	100
Farming Systems Support Project Cooperative Agreement with University of Florida	Review natural resources management aspects of farming systems research and extension, e.g. soils and agroforestry work, and develop appropriate training materials.			
International Benchmark Sites Network for Agrotechnology Transfer.	Examine possibilities of using IBSNAT methods for agroforestry systems modeling underway at ICRAF.			
Contract with University of Hawaii.	Initiate extension of IBSNAT methods to semi-arid dryland farming research in Africa, in collaboration with Tropsoils CRSP and other researchers.			
Fisheries and aquaculture technical assistance RSSA with NOAA, Dept. of Commerce	Review economics of estuarine habitats and their living resources in Africa. Develop plans for sustained use of coastal resources.	50		50
Renewable Energy Applications and Training PASA with Oak Ridge National Lab	This project has the potential of assisting in a wide range of renewable energy activities related to agriculture and rural development, from project design to evaluation. Long term (up to one year) services possible.	50	50	100
Energy Policy Development and Conservation PASA with Oak Ridge National Laboratory, with a companion contract for conservation	Technical assistance in project design, implementation, and evaluation.			
	Co-finance with S&T/EY an analysis of the relationship of energy production use and management in sustainable agriculture.	25	25	50
	Assess the impact of energy policies in Group I and II countries on resource regeneration, conservation and management.	50		50

Table B.1 (cont.)

Project	Possibilities for NRMS underwriting	Estimated Cost	
Low cost energy technology	Total buy-in of renewable energy technology assessments or of woodstove project designs, related to natural resources management problems, where work load could not be handled through the Energy Initiatives for Africa extension.		
Energy Training Project	Group III countries would be possible candidates for special attention.		
Human Settlements and Natural Resources Systems Analysis	This service would be a potential contractor for an assessment of institutional development needs in the Group IV countries. To begin this work, a pilot project might be commissioned in order to develop an approach and methodology that could be followed throughout.	50	50
Research on access to land, water, and natural resources	Review of literature on tenure constraints on improved and sustainable management of land, water and vegetative resources in Group I and II countries.	50	50
"RSSA with the National Park Service"	Commission technical background study for an Africa Bureau strategy for supporting the management and conservation of biological diversity in the region.	50	50

B-10

100

1. OFFICE OF FORESTRY, ENVIRONMENT AND NATURAL RESOURCES

Title: Forestry Support Program (FSP)

Scope: Worldwide

AID project number: 936-5519

Mechanism: RSSA between USDA's OICD and AID/S&T/FENR, managed jointly by OICD and the U. S. Forest Service.

Contract/agreement number: BST-5519-R-AG-2188

Implementing organization: U.S. Forest Service

Services available:

- Technical consultations
- Identification of qualified individuals (from the roster)
- Forestry program studies and technical reference services (for AID and for Peace Corps).
- Forestry research support.
- Forestry-agriculture with special focus on Africa.
- Technical oversight for PL-480 funded forestry activities undertaken under AID as well as Peace Corps auspices.
- Park planning

Consultants are drawn from a roster which includes private individuals as well as USDA technicians. About 20% are USDA technicians.

Training available: Short-term training and planning of training.

Current program for Africa: No particular program planned. Consultations and activities are on a "first come first served basis", i.e. FSP is demand oriented.

Buy-ins: Missions are encouraged to buy FSP services.

Mission or REDSO cables with PIO/T or request for service is routed by the S&T project manager to the appropriate individual in the Forestry Support Program staff. Qualified individuals are identified and proposed to the AID/W (or Peace Corps) action officer. The mission selects from the candidates. FSP staff help refine a PIO/T in consultation with the AID/W action person. OICD is then contacted and charged with developing travel arrangements and contract management details. Ultimately the consultant is contracted by OICD, which manages all travel and fee costs of consultancies.

AID project manager: Dan Deeley. (703) 235 2827

Implementing organization manager(s):

Gary Wetterberg (overall manager) (703) 235 2432
Leroy Duval (Africa Region)
Tim Resch, PL 480 funded forestry activities worldwide,
including related PVO support.
Dennis Johnson, agroforestry advisor
Tom Geary, training/educator coordinator

OICD: E.B. O'Malley (202) 653 7366

Financial data:

PACD: 1992
LOP: \$19.8 million.
Yearly spending level: \$1.2 million, of which one half for the
forestry enterprise initiative.
Africa allocation: for services is approximately \$50,000/yr.

At approximately \$10,000 per month/consultancy (includes
OICD's 28% overhead), the funding allocated to Africa would
supply approximately 5, one-month consulting visits per year,
and somewhat less if non-USFS personnel are used, because of
additional contractor overhead.

In FY 1986, only two contractors were sponsored by the
FSP, out of a total of nine consultancies. Three of the
remaining consultancies were combined into one trip to East
Africa, by an FSP employee. Two others were also carried out
by an FSP employee.

Management

Mission level: draft SOW and where applicable PIO/Ts.

AID/W/Africa: draft and clear cables, e.g. on proposed PIO/Ts,
candidates, itineraries, etc.
arrange briefings and de-briefings
assemble documentation
distribute consultant report, as appropriate

AID/W/S&T/FENR: Monitor project activities, route requests
if needed.

FSP management functions:

identify and check out candidates
logistics (with OICD)
documentation
briefings
review reports

A considerable amount of coordination is accomplished by the S&T and the FSP managers, who take the initiative to begin action on cabled requests, even though they are not the designated actions persons.

Project description: The program brings the knowledge of the professional forestry community to bear on the forestry development activities of AID. The program is designed to provide technical assistance to AID in identifying, designing, managing and evaluating field projects and country strategies in forestry and related natural resources.

Observations:

During the early 1980's when there were more forestry projects in Africa than at present, funding levels were twice as high, e.g. \$300,000 worldwide, and about \$100,000 for Africa.

FSP funding levels had anticipated a greater demand for services than is presently the case due to the reduction in active forestry projects, especially in Africa. Assuming a return to greater levels of activity in Africa, a higher spending ceiling would have to be established for mission or other buy-ins. However, managerially, the FSP project is organized to deal with higher levels of assistance.

Possibilities for NRMS:

Fund one-half of forestry-agriculture coordinator (Duval). (\$25,000/year).

Use FSP consulting services for reviews of mission portfolios, assistance in the design of agroforestry and forestry add-ons, extensions, etc.

Title: Forestry/fuelwood research and development project(936-5547)

Scope: Worldwide. Africa: East and Southern Africa.

AID Project no.: 936-5547

Mechanism: Cooperative agreement with ICRAF, 10/85 to 9/30/90.

Implementing organization: International Council for Agroforestry Research(ICRAF), P.O. Box 30677, Nairobi, Kenya

Contract no.:

Services available: Agroforestry information, assistance for project design(somewhat limited); research design.

Research support available: See current program for Africa.

Current program for Africa: Multi-purpose tree research net-working in eastern African highlands. Support technical meetings, training courses, and information dissemination, assist with research design and data base improvements, hold technical workshops.

Buy-ins: Not specifically planned for Africa, rather the four missions are expected to support the work.

AID/W Project manager: Ian G. Morison, S&T/FENR.
(703) 235 2559

Implementing organization contact: Filemon Torres

Financial data:

PACD 9/88

LOP \$40 million

Allocation for research in Africa: \$4.0 million total, including \$300,000 from the Bureau for Africa and \$1.3 million from missions as OYB transfers to the project (Uganda, Kenya, Rwanda, and Burundi.)

Observations: Following recommendations of IUFRO, the project awaits recommendations concerning the Sahel in particular(S. Africa well covered by IDRC and W. Africa by French).

Project description: Project aims to(1)genetically improve species for agroforestry systems, and (2) develop agroforestry systems for landuses in different agro-ecological environments. ICRAF has developed a field oriented Africa Research Network in Agroforestry which subdivides Africa into four

ecological zones, e.g. bimodal East African highlands, each of which is being supported by a different donor.

Possibilities for NRMS:

Underwrite technical assistance from ICRAF to missions for agroforestry project design. I. Morison estimates design services for the PID level would cost \$50,000 and a PF for the same amount.

Explore an extension of support for agroforestry research efforts into the arid-semi-arid and the sub-humid tropical uplands sub-regions.

Estimated cost to NRMS: FY 87: \$50,000 (Kenya design support)
FY 88: \$200,000
FY 89: \$100,000

Title: Environmental Planning and Management

Scope: Worldwide, but with planned program for Africa

AID Project No.: 936-5517

Mechanism: Cooperative Agreement.

Contract/agreement No.:

Implementing organization: International Institute for Environment and Development, 1717 Mass. Ave. NW, Washington D.C. 20036.

Services available: Short-term consultancies to missions in matters related to natural resources and environmental management. Organization and management of country environmental profiles or resources assessments. Assistance to strengthen the management capability of environmental PVOs.

Other program elements: Workshops on agroecosystem analysis for defining objectives in research and development (only in Asia and Latin America in 1987). Development of a systems modelling approach for defining research in natural resources.

Buy-ins: Mission buy-ins encouraged for short term consultancies, and are necessary for environmental profiles or other long efforts, but buy-ins do not increase project ceiling of \$6.2 million, and if substantial in 1987, could correspondingly decrease the funding level in 1988.

Mission sends PIO/T (e.g. for an assessment) to S&T project manager, who certifies it and sends it to S&T/contracts who notify AID/financial management where an additional credit is made in the project account. The PIO/T also serves to amend the cooperative agreement.

AID project managers: Lou Higgins and Molly Kux (S&T/FENR)
(202) 235 2827

IIED project manager: Walter Aarensberg. Tel (202) 462 0900

Financial data:

FACD. Extended to FY89.

LOP funding: \$6.2 million.

Overhead: 45% of all costs except benefits.

1987 budget: \$1.2 million (includes \$300,000 carry over from 1986)

1988 budget: \$1.3 million

Core staff and administrative budget: approx. \$500,000

1987 program for Africa(FY begins 4/1):

1. Assessment of the National Environment Secretariat, Kenya, to begin in September, 1987.
2. Proposed assessment of environmental and natural resources NGO's in African nations where there are umbrella grants.
3. Field test of the integrated planning technique, in Kenya. (\$260,000 for the whole program, part of which in Africa).
4. Nothing in sustainable agriculture is allocated for 1987 since Conway's time is fully committed in Asia and elsewhere.
5. Support for biological diversity activity planning worldwide. (new PIO/T with S&T for FY 87, funded at \$230,000), with collaboration from the WWF/CF and Nature Conservancy.

Management requirements:

Mission level. Draft SOWs or PIO/Ts

AID/W/Africa Bureau. Clearances for travel. Review draft and final scopes of work draft and get clearances on all cables out of Washington schedule briefings and de-briefings if appropriate; distribute reports in AID/W.

Project description: The project provides short-term technical assistance to missions for environmental and natural resources planning, especially with respect to field environmental profiles. Project does not carry out Initial Environmental Examinations or Environmental Assessments as required by Regulation 216. See above, Africa Program.

Observations:

The EPM cooperative agreement has been less active in Africa than in Latin America and Asia.

Assuming an increase in EPM services to African missions, a full time management job at IIED would be required. An increased level of services would correspond to 3 to 4 PIO/t's per month.

Presently Bob Winterbottom is managing EPM work for Africa, but he also is active in other IIED projects. At the hitherto low levels of EPM activity in Africa this has not been a problem.

Possibilities for NRMS:

Support an extension of the cooperative agreement and a lifting of the spending ceiling, to accommodate additional activity and buy-ins in 1987 and 1988, and beyond. The spending ceiling could be by-passed by developing a companion basic ordering agreement to the cooperative agreement.

The Africa Bureau could consider entering into separate cooperative agreement with IIED, however this would be more management intensive, and would face questions of exclusivity and justification. This could be an option for FYs 88 and 89.

Underwrite the costs of one environmental profile in a Group I country, to guide project portfolio development, possibly soliciting CDA collaboration, and making maximum use of the various S&T support services. One environmental profile at the field level could cost \$200,000.

2. OFFICE OF AGRICULTURE

Title: Soil Management Support Services

Scope: Worldwide

AID Project no.: 936-4021

Mechanism: PASA

Contract/agreement no.: BST-1229-P-AG-2178-00

Implementing organization: Soil Conservation Service, USDA

Buy-ins: possible

Services available:

* technical assistance consultations to mission's host country soils scientists in the development of new programs in soil survey, land use, land planning, soil conservation, and soil fertility management.

* participate in reviews or evaluations of proposed or on-going projects in soil survey, soil conservation, soil management.

* organize workshops, seminars and training programs.

* develop training packages.

* provide analytical and/or field testing services.

* provide on-site assistance to use of the Soil Taxonomy.

AID Project manager/monitor: Dr. Raymond E. Meyer, S&T/Ag/RNR
(703) 235 8993

USDA/SCS manager:

Dr. Hari Eswaran
(202) 475 5333

Financial data:

PACD: Sept. 1989

LDP funding: \$7.38 million

FY87 spending projection: \$250,000

1987 and beyond program for Africa:

The SMSS project manager has submitted a proposal to address

the needs outlined in the Bureau for Africa's Plan to Support Natural Resources Management in sub-Saharan Africa. It is proposed to:

- * assist countries to develop soil resources inventories and strengthen institutions to produce soil inventories, specifically by preparing or helping prepare 1:1,000,000 scale soils maps using satellite imagery,

- * assist in the preparation of large scale surveys and interpretations of soils;

- * strengthen soils laboratories,

- * regional training;

- * assist countries in the use of geographical information systems to develop soil data bases.

Management requirements:

Mission level. Prepare SOW's for assistance

AID/W/Africa. Clearances, coordination

AID/W/S&T: Help prepare PIO/T's; monitor work and spending.

Project description: Project purpose of extending the use of the Soil Taxonomy classification, to the Tropics as the basis for agro-technology transfer, shapes the nature of the services.

Observations: An external evaluation was performed in 1986. Missions found SMSS services and personnel to be high quality, and to work well with local counterparts. Response times of 5 weeks were judged by missions to be somewhat slow. Most USAID missions are ill-informed about SMSS. Contractors running projects are not eager to arrange services. Missions are limited by lack of "buy-in" money.

Problems affecting demand have been (1) lack of awareness, (2) coordination with other soils and water activities, (3) timely and effective involvement of SMSS in planning and implementation.

Possibilities for NRMS:

There is considerable scope for NRMS support to missions for this project's activities and services. Attention to soils management and soils mapping for agricultural production projects has lagged far behind attention to forestry, for comparison.

- * assistance to review portfolios, help re-do CDSS's,

- * funding to complement mission projects needing soils support work, or planning thereof.

* Special support for soils surveys, and land capability interpretations of selected on-going projects (small area coverage) or recent project designs.

* See also proposed Africa program above.

* Organize, co-sponsor (with other donors) a technical workshop on soils mapping in Africa.

Title: Technology for soil moisture management(936-4021)

Scope: Worldwide

Mechanism: PASA

Contract/agreement No.: BST-4021-P-AG-1080-00

Implementing organization: USDA's Agricultural Research Service

Services available:

* technical assistance for improving dryland/rainfed production systems by means of technical and economic assessments of soil and water resource problems.

* identification of technology transfer potentials; technical and economic feasibility studies of soil and water management practices, and related crop and livestock production systems; farm level analyses as related to agricultural policy and program planning.

* assistance to USAID missions in formulating country development strategies for soil and water resource management.

* participate in reviews or evaluations of proposed or on-going projects in dryland/rainfed production systems.

* facilitate dissemination of scientific information.

* promote regional collaboration through workshops, seminars and training programs, and through regional research activities focussing on common dryland/rainfed problems and issues in soil and water management.

Research done:

Assessment of soil, water and crop management systems under dryland or rainfed conditions, by compiling data bases or syntheses of relevant research, conducting workshops to assess findings, planning and implementing regional research and economic case studies on priority problems.

Work has been done in Niger, Mali, Burkina Faso and Sudan.

1987/88 program for Africa:

* Continue analysis of the economics of soil moisture management in Mali.

* implement and review synthesis project for soil and water resource management in Mauritania in cooperation with the U. of

Arizona's farming systems project.

* Continue research trials on plant residue management for soil moisture conservation and animal feed.

* explore setting up a collaborative regional program on soil erosion research in East Africa (Rwanda, Zimbabwe, Kenya).

AID/Washington project manager: Dr. Ray Meyer, S&T/Ag
(703) 235 8994

Implementing organization manager: Dr. James Parr,
USDA-ARS, Project coordinator
(301) 344 4281

Financial data:

FACD: Sept., 1988(to be extended)
LOP funding: \$2.9 million

FY 87	\$480,000
FY 88	\$480,000

Allocation for Africa: approximately 50%.

Management functions:

Mission level. prepare SOW's or PIO/T's

AID/W/AFrica Bureau. Clearances

AID/W/S&T. Prepare PIO/T's; monitor project funds, actions

USDA-ARS manager: Initiate and manage research or technical assistance activities, and workshops, by travelling to cooperating missions.

Project description: The project's purpose is to assist countries to assess their soil, water and crop management systems under dryland or rainfed conditions, as the basis for formulating strategies to improve income, food availability, and soil and water resource conservation through research and technology transfer.

Observations: The project has funded applied research and studies with practical implications for dryland agriculture, and could be a valuable complement to AID dryland farming projects or farming systems research projects.

Possibilities for NRMS:

Review erosion research needs in run-off/erosion in East African highlands to diagnose and design a series of research plots.

Estimated cost: \$25,000.

Review past experiences and benefits of soil erosion control and moisture conservation and management in semi-arid Africa, with a focus on the implications for agricultural development programs and for project design. Convene and co-sponsor workshop to disseminate results.

Estimated cost: \$50,000

For principal soils in the Sahel and Sahelo-sudanian zone, prepare baseline and projected estimates of agricultural productivity and related economic returns with improved soil and water management. Would involve assembly of data pertaining to soil/water/crop response relationships and use of economic methods for technology impact assessments, beginning in a pilot country and extending to the rest of the sub-region.

Estimated cost: \$120,000 over two years.

Analyze farm level benefits and returns associated with improved soil and water management on typical farms and predominant soils and agro-climatic conditions in selected areas of the Sahel-Sahelo-sudanian zone, and summarize findings in terms of implications for policies, programs and research planning.

Estimated cost: \$80,000 over two years.

Working with WMO, ICRISAT/Sahel, AGRHYMET and FAO, develop improved agro-climatic analyses for farm level decision-making to improve utilization and conservation of soil and water resources.

Estimated cost: \$50,000 over two years.

Title: Soils Management CRSP (Tropsoils)

Scope:Worldwide. Niger and, recently, Mali in Africa

AID project no.:931-1311

Mechanism:Cooperative Agreement

Contract/agreement no.:

Implementing organization: North Carolina State U.

Services available: None foreseen

Research support available:None directly to missions, but currently active in Niger with the U. of Niamey and the National Agricultural Research Agency(INRAN). Tropsoils scientists undertook land regeneration research at the site of an AID/Niger project(Forestry and Landuse Planning Project at the Guesselbodi forest).

Current program for Africa:

Proposed work through 1989 will be carried out mainly in Niger. The focus is on semi-arid zone soils. The research program aims to develop improved soil management techniques for small, low resource farmers, first through characterization of the problems and second through modification of the soil environment. This will entail research on agrometeorological factors, soil hydrology, and water and energy balances under different plant covers, soils surveys of research plots, research on dust and crusting, and experiments with different soil treatments and crop patterns/rotations.

Buy-ins: possible; no present buy-in ceiling limit.

AID/Washington project manager: John Malcolm, S&T/Ag
(703) 235 1275

Implementing organization manager/contact:

Dr.Charles B. McCants
North Carolina State University
(919) 737 3922

Dr.Ed Runge
Dept. of Soils Science
Texas A&M University
College Station, Texas

Financial data:

FACD:

LOP:

Yearly spending levels: approx. \$2.0 million worldwide
Allocation for Africa:

Management requirements:

Mission level: none except in host country - clearances

AID/W/Africa Bureau: none

AID/W/S&T: project monitoring

Project description: Research to develop low cost means of managing soils under agricultural production.

Observations: Unusual chemical status and variability of soil chemistry found in research fields near Niamey have complicated work on characterization of the soil environment. Unexpectedly high levels of aluminum were found.

Research at Guesselbodi forest on the effectiveness of mulching and associated termite action to increase soil porosity has attracted much attention and has immediate relevance for land regeneration efforts.

Possibilities for NRMS: None evident but missions should be queried, especially for combining this research with that underway in farming systems research projects.

Title: International Fertilizer Development Center

Scope: Worldwide

AID project no.: 931-0054

Mechanism: Grant

Contract/agreement no.:

Implementing organization: International Fertilizer Development Center, Mussel Shoals, Alabama.

Services available: Management assistance in fertilizer production, marketing and distribution.

Research support available: IFDC coordinates research networks in East and West Africa to evaluate fertilizers and their economics.

Training: in fertilizer production, raw material evaluation, fertilizer use, and fertilizer marketing.

Current program for Africa: A new center for research and training is being set up in Togo, with some funding (\$3.0 million from AID/W/Afr). About one half IFDC's program is devoted to Africa.

Buy-ins details/procedures: Missions make their own arrangements with IFDC.

AID/Washington project manager: John Malcolm S&T/Agr

Implementing organization manager/contact:

Financial data:

PACD: 1990

LOP:

Yearly spending levels: FY87 \$3.6 million

Allocation for Africa: Approximately one half

Management requirements:

Mission level: Arrange all aspects of whatever assistance or research is needed, dealing directly with IFDC.

AID/W/Africa Bureau: na

AID/W/S&T: project monitoring

Project description and objectives: Research on nitrogen efficiency and ways to use the phosphate rock found in developing countries. Management assistance in fertilizer production and marketing.

Observations: Recent IFDC research has underlined the role of organic matter in soil fertility and fertilizer use efficiency.

IFDC is funded from numerous sources, e.g. IFAD, other donors, etc.

Possibilities for NRMS: Promote more general awareness of the role and potential of phosphate fertilizers in semi-arid to sub-humid African sub-regions.

Examine ways to step up research on ways to maintain soil organic matter. None is being done at present.

Title: Improved Biological Nitrogen Fixation Through Biotechnology

Also called NifTAL (Nitrogen fixation by tropical agricultural legumes), after the program at the U. of Hawaii.

Scope: Worldwide

AID project no.: 936-4177

Mechanism: Cooperative agreement with the U. of Hawaii, with a Companion Basic Ordering Agreement (permitting buy-ins).

Contract/agreement No.: DAN-4177-A-00-6035-00

Implementing organization: U. of Hawaii, Dept. of Agronomy & Soil Science.

Services available: Technical assistance in project identification, project development, evaluation and assessment of national programs for biological nitrogen fixation and sustainable agricultural production; also help solve local problems. Provide publications.

Research support available: Subgrants for research in which LDC scientists cooperate. Provide publications.

Training support: Training local personnel in rhizobium technology, BNF legume production, genetic technologies, commercial BNF inoculant production and distribution. Periodic conferences.

Current program for Africa: Nothing specific but work has been done in Zambia on legume production. Core funding for technical assistance worldwide is approximately \$145,000.

Buy-ins: Preferred mode for technical assistance is mission financing of travel and per diem, with the project financing the fees.

AID/Washington project manager: L.R. Frederick, S&T/Ag

Implementing organization manager/contact:

Dr. B. Ben Bohlool,
U. of Hawaii - NifTAL
P.O. Box "O"
Paia, HI 96779
(808) 579 9568

Financial data:

PACD: FY97

LOP: S&T/Agr \$9.69 million

Yearly spending levels: S&T/Agr \$750,000

Allocation for Africa: about \$5,000/yr but none specified

Management requirements:

Mission level: prepare PID/T for buy-in of assistance following prior arrangements made with NifTAL.

AID/W/Africa Bureau: minimal (clearances)

AID/W/S&T: arrange for needed assistance and preparation of task order for the Basic Ordering Agreement.

Project description: The project aims to use biotechnology to increase the efficiency of N-fixing microorganisms adapted to LDC conditions, promote the use of BNF in LDC's through assistance, and increase LDC capacity to make and distribute BNF inocula.

Observations: Inocula is available in West Africa. A collection of inocula has been set up in Bambey, Senegal, at the INRA facilities.

In Zambia, an inoculant production component, carried out by the U. of Hawaii, was added to a U. of Illinois-managed agricultural production project that included soybeans. During project design a NifTAL staff member joined the team to design the innoculant production component.

Degraded land is poor in rhizobia, and leguminous forestry species as well as agricultural legumes can benefit from inoculant.

Mission "demand" for assistance not likely to be forthcoming, unless a clear link can be made with planned or on-going projects. Workshops or seminars/presentations may be needed to acquaint mission with possibilities.

Possibilities for NRMS: (L. Frederick suggestion)- sponsor a workshop in Africa to review and plan research for packages of technology for dryland farming, which include BNF technology.

Work more closely with the Technology for Soil Moisture Management project.

Title: Biotechnology, Limiting Factors.

Scope: Worldwide

AID project no.: 931-0610

Mechanism: PASA

Contract/agreement no.: BST-0610-P-AG-2170-00

Implementing organization: USDA's Cooperative States Research Service

Services available: Scientists available for consultations through personal services contracts.

Research support available: Grants to LDC scientists, who work jointly with a U.S. scientist (see project description below).

Training available: Technical workshops on BNF, technical assistance by visiting U.S. scientists, cooperative research with U.S. scientists.

Current program for Africa: In 1986 research was underway in Swaziland, Cameroon, Kenya and Malawi. Research has been completed in Sudan and Senegal.

Buy-ins: Funds for research grants can be transferred to S&T/Agr to supplement project budget earmarked for Africa cooperative research.

**AID/Washington project manager: Lloyd Frederick, S&T/agr
(703) 235 8993**

Implementing organization manager/contact:
Dr. Charles Smith,
USDA-CSRS
119 JSMorrill
Washington, D.C. 20251
(202) 447-2039

Financial data:

PACD: 9/30/89

LOP: \$7.0 million

Yearly spending levels: \$200,000 in '87 for research grants.

Allocation for Africa: none specified

Management requirements:

Mission level: none

AID/W/Africa Bureau: none

AID/W/S&T: monitor activities and participate in award selection. All solicitations of research proposals and awards are managed by the USDA's Cooperative States Research Service.

Project description: The project finances research carried out jointly by U.S. and LDC scientists on various limiting factors to the use of biological nitrogen fixation technologies. 3-year research grants of up to \$90,000 are awarded competitively, with no more than \$54,000 being used by the U.S. scientist.

Observations: Research could be encouraged as an adjunct to AID funded farming systems research or production projects which involve leguminous crops or trees.

One of project's research objectives is that of overcoming soil and environmental constraints to inoculants and nodulation.

Possibilities for NRMS: Finance a review and synthesis of research findings in Africa to date, and preparation of a publication for non-specialists, such as AID mission officers, on the work.

Title: IPM(Integrated Pest Management) and Environmental Protection.

Scope: Worldwide.

AID project no.: 936-4142

Mechanism: Cooperative Agreement

Contract/agreement no.:

Implementing organization: Consortium for International Crop Protection. 4321 Hartwick Rd. Suite 404, College Park, Md, 20740

Services available:

* Short term technical assistance in low input methods of pest control and management.

* design and assistance in of pest maangment research; identifying pests, assessing pest-caused crop losses;

* training in pest and pesticides management.

* assistance in safe use and disposal of pesticides.

* environmental assessments of pesticides uses.

* regional workshops on pesticides management or pest management (one per year but need mission buy-ins or other complementary source of funding, i.e. FAO.)

Research support available: Design, implementation assistance.

Current program for Africa: Have proposed development of pest management programs in various countries; post pest management specialists in the REDSOs. Will send advisory group to review locust control efforts and will undertake programmatic environmental assessment(in partnership with consulting firms) of the locust control in Africa.

Buy-ins: less than \$25,000 Purchase orders sufficient. Over \$25,000 missions or S&T/Ag develops a PIO/T. Missions usually underwrite fee, per diem and travel. though regular staff don't have to have fees covered. the ffnee.Possible.

AID/Washington project manager: Carroll Collier
(703) 235 8877

Implementing organization manager/contact: Allan Steinhauer

(301) 454 5147

Financial data:

FACD: 1990

LDP:

Yearly spending levels: \$1.0 million

Allocation for Africa: none specified.

Management requirements:

Mission level: Draft PIO/Ts or SOWs

AID/W/Africa Bureau: clearances

AID/W/S&T: Finalize PIO/Ts, monitor activity

Project description:

CICP is a consortium of 13 universities. USDA's Greg Rowher, APHIS, and Julius Menn, ARS, Beltsville, are on the B. of Directors.

Project underwrites salaries of various university experts: Paul Teng from U. of Minnesota -- 25% of time; U. of Miami -- 75% of scientist expert in pesticides residues. and 50% of project manager's time (A. Steinhauer); 50% of economist and wheat scientist each at Oregon State U. No travel funds are available for these staff, however.

Observations: Have assisted PVDs in the S. Pacific and in Haiti and some Africa countries.

Possibilities for NRMS: Assist PVDs involved in umbrella grants in the Sahel to design, implement pest management for agricultural projects.

Title: Water Management Synthesis II

Scope: Worldwide

AID project no.: 936-4127

Mechanism:Contract

Contract/agreement no.: DAN-4127-C-00-2086-00

Implementing organization:Consortium for International Development

Services available: Technical assistance to missions and host governments to strengthen abilities in irrigation systems development and operation; project design, monitoring and evaluation; sector surveys, studies and analysis; and trouble-shooting on irrigation and water management problems.

Training support: In-country and in the U.S. - short courses related to irrigation systems operations and management; diagnostic analysis workshops; policy and strategy training courses.

Technology transfer: Information exchange, manuals, handbooks, workshops and conferences.

Current program for Africa: Three core-funded field studies of irrigation sectors are underway in Niger, Zimbabwe and Rwanda. Results will be presented at a Jan. 1988 workshop in Nairobi now being organized for multi-donor participation, which will be attended by 13 Africans sponsored by the project. These studies were funded via an OYB transfer from Bureau for Africa/RA(\$800,000).

Buy-ins: Possible, but deadline for requests was June 1, 1987.

AID/Washington project manager: Dr. Worth Fitzgerald
(703) 235 1275

Implementing organization manager/contacts:

Dr. Richard J. McConnen, Exec. Project Director
Dr. Wayne Clyma, Colorado State University
Dr. Jack Keller, Utah State University
Dr. Michael Walter, CU

Financial data:

PACD: March, 1988
LOP: \$20.0 million
Yearly spending levels:
Allocation for Africa:

Management requirements:

Mission level: Prepare face sheet PIO/T, without need for detailed budget or SOW and cable to S&T.

AID/W/Africa Bureau: Clearances

AID/W/S&T: Prepare final PIO/Ts and SOWs; monitor project.

Project description: Project was to assist LDC governments to improve their irrigation systems development, and initially worked mainly with gravity-fed irrigation systems in Asia and Latin America.

Observations: The project will be succeeded by the Irrigation Management Support and Research project (936-4179), now in FID stage. This new project will focus heavily on Africa, and on traditional irrigation systems in Africa, e.g. swamp farming, run-off agriculture, irrigation with groundwater, recession farming, etc.

Possibilities for NRMS: Few in present project, but follow-on Irrigation Management Support and Research Project should be useful to missions even without NRMS financial assistance.

Title: Agricultural Policy Analysis Project (AFAP)

Scope: Worldwide

AID project no.: 936-4084

Mechanism: Contract

Contract/agreement no.: DAN-4084-C-00-

Implementing organization: Abt Associates, Inc.
4250 Connecticut Ave., NW
Washington D.C. 20008

Services available: Project design and evaluation, where policy constraints or issues are present.

Training support available: Training in assessing environmental impacts of economic policies and in policy analysis effects on resource use, particularly as regards limited resource farmers.

Current (1987) program for Africa: Workshop in Madagascar; networking in Anglophone and Francophone Africa; technical assistance in Cameroon, Zaire, Togo, Mali and Mauritania.

Buy-ins: Possible. Missions submit PIO/T with SOW and budget with instructions to SER/CM/FA to amend the contract.

AID/Washington project manager: Dr. Phillip E. Church
(703) 235 8946

Implementing organization manager/contact:
Dr. Stephanie Wilson
(202) 362-3800

Financial data:

PACD: 9/29/88
LOP: \$9,055,000.
Yearly spending levels:
Allocation for Africa: \$1,000,000

Management requirements:

Mission level. Write SOWs and PIO/Ts
AID/W/Africa Bureau. clearances
AID/W/S&T. Help prepare PIO/Ts.

Project description: The project works towards assisting missions in establishing policy dialogues with host country officials, building host-country capacity in policy analysis, and supporting policy reform.

Observations:

Possibilities for NRMS:

Analyze policy issues in NRMS-supported project design and in regional surveys of studies.

Strengthen existing policy networks to address natural resources management issues.

Title: Farming Systems Support Project

Scope: Worldwide

AID project no.: 936-4099

Mechanism: Cooperative Agreement

Contract/agreement no.: DAN 4099-A-00-2083-00

Implementing organization:

Institute of Food and Agricultural Sciences
Department of International Programs
U. of Florida
Gainesville, FL 32611

Services available: Technical assistance to agricultural research and extension projects that employ Farming Systems Research and Extension, including project design and evaluation.

Research support available: See above.

Training: Three week courses in methods of farming systems research and extension; training of trainers; preparation of training materials; and development of training strategies.

Current(1987) program for Africa:

- (1) Training workshops in Niger, Cameroon and Mali.
- (2) Networking in Nigeria
- (3) Project evaluation assistance in Cameroon

Buy-ins: Possible

AID/Washington project manager: Dr. Roberto J. Castro
(703) 235 1275

Implementing organization manager/contact:

Chris O. Andrew
(904) 392-2309

Financial data:

FAOD: 12/31/87
LOP: \$9.9 million
Yearly spending levels: \$300,000(1987)
Allocation for Africa: \$100,000

Management requirements:

Mission level: prepare SOWs or PIO/Ts

AID/W/Africa Bureau. Clearances

AID/W/S&T. PIO/T preparation; coordination

Project description: The project was set up to support AID's work in farming systems research and extension. U. of Florida is the lead for a consortium of 21 universities and five private firms.

Ob servations: A mid-term evaluation in June, 1985, caused the narrowing of the project to assistance to West African countries. A research network of 18 West African countries has been formed.

Possibilities for NRMS: Review natural resources management aspects of farming systems research and extension, and recommend appropriate actions, e.g. soils and agroforestry aspects.

Title: International Benchmark Sites Network for Agrotechnology Transfer.

Scope: Worldwide

AID project no.: 936-4054

Mechanism: Cooperative Agreement.

Contract/agreement no.: DAN-40540C-00-2071-00

Implementing organization:

Department of Agronomy and Soil Science
College of Tropical Agriculture and Human Resources
University of Hawaii at Manoa
Honolulu, Hawaii 96822

Services available: Technical assistance, training.

Research support available: Possible.

Current(1987) program for Africa: Activities in Burundi, Zambia.

Buy-ins: Possible.

AID/Washington project manager: Dr. T.S. Gill
(703) 235 1275

Implementing organization manager/contact:
Dr.G.Uehara
U. of Hawaii

Financial data:

FACD: 9/92
LOP: \$9.9 million
Yearly spending levels: approx. \$1.0 million
Allocation for Africa: about 10%

Management requirements:

Mission level: SOWs and PIO/Ts for buy-ins.

AID/W/Africa Bureau: cable clearances, briefings on buy-ins.

AID/W/S&T: monitor activities, route requests

Project description: The project aims to help develop prototype Decision Support Systems for Agrotechnology Transfer (DSAAT) and Expert Systems, which use inexpensive microcomputers, data bases, and techniques. It will simulate conditions and predict performances under given bio-physical parameters.

The approach is a hort cut to time-consuming traditional agricultural experimentation.

Observations: The primary aim of the project is to minimize risks and maximize crop yield and income through an integrated systems approach.

Possibilities for NRMS: Review potentials for initiating national and regional networks based on the project concept. Promote awareness and training workshops. Support case studies to demonstrate cost-effectiveness fo the concept.

In cooperation with REDSO/ESA extend the concept to agroforestry applications, through AID supported work at ICRAF.

Title: Fisheries and Aquaculture Technical Assistance

Scope: Worldwide

AID project no.: 931-0242

Mechanism: RSSA

Contract/agreement no.: BST-0242-RCC-2219-00

Implementing organization: Department of Commerce, NOAA

Services available: Short term technical assistance available on small scale fisheries and aquaculture, supplied by the two long term advisors placed in AID/S&T/Ag under this RSSA, or by any of the experts in the National Marine Fisheries Service.

Research support available:

Current(1987) program for Africa: None specified

Buy-ins:

AID/Washington contact: Dr. Lamarr Trott
(703) 235 8994

Implementing organization manager/contact:
Mr. Fred Beaudry
(202) 673-5302

Financial data:

PACD: started 1977, continuing

LOP:

Yearly spending levels: approximately \$190,000

Allocation for Africa:

Management requirements:

Mission level: SOWs

AID/W/Africa Bureau. clearances

AID/W/S&T: monitor or execute work.

Project description: The project provides two long term fisheries and aquaculture advisors, and additional short term technical advisors as needed. The long term advisors also help manage five fisheries projects, two dealing with aquaculture and three with marine fisheries.

Observations: Minimal project funding levels necessitate mission buy-in for travel.

Possibilities for NRMS:

Buy-in assistance for missions.

Underwrite review of the economics of marine resource utilization in Africa with special emphasis on estuarine habitats and their living resources.

3. OFFICE OF ENERGY

Four ongoing projects could provide support to missions with buy-ins provided on behalf of missions by the NRMS project.

Renewable Energy Applications and Training(936-5730)
(PASA with Oak Ridge National Laboratory)

Energy Policy Development and Conservation(936-5728)
(PASA with Oak Ridge National Laboratory)

Bioenergy Systems and Technology(936-5709)
(RSSA with the Tennessee Valley Authority)

Energy Training Project(936-5734)
(new project; contractor yet to be selected)

A number of field support projects active in the past 5 to 7 years and related to natural resources are coming to a close this year, with no-cost extensions to mid-1988 to permit final administrative and evaluation actions. They are:

Small decentralized hydropower (936-5715)
Photovoltaic development support programs (936-5710)
Low cost energy technology (936-5701)
Energy technical service support (936-5702)

VITA was contracted to implement the Low Cost Energy Technology project. NRMS could buy services from this project for the missions in woodstove project design and in low cost energy technology assessments, however, until June, 1988.

The Office of Energy began staff studies in May, 1987, to formulate a strategy for the Africa region with respect to the activities funded by the office.

Title: Renewable Energy Applications and Training

Scope: Worldwide

AID project no.: 936-5730

Mechanism: FASA

Contract/agreement no.: BST-5130-X-ER-5097-00

Implementing organization: Oak Ridge National Laboratory

Services available: Technical field support in renewable energy activities, namely in evaluations of renewable energy project experiences, guidance for project design, information support on equipment and suppliers. Services can be provided for periods of up to one year.

Research support available: Yes.

Current program for Africa: None specified as of 5/25/87

Buy-ins: Possible through PIO/T procedure. The project can cover some technical assistance costs, but usually seeks at least a 50% mission buy-in. If necessary NRMS could buy in 50% for missions.

AID/Washington project manager: James Sullivan, (703) 235 8902

Implementing organization manager/contact: Tom Wilbank,
FTS 624 5515

Financial data:

FACD: started 7/8/85, ending 9/30/90

LOP: \$8.2 million

Yearly spending levels: approximately \$600,000.

Allocation for Africa: none specific

Management requirements:

Mission level. Prepare SOWs and/or PIO/Ts

AID/W/Africa Bureau. Clearances, coordination

AID/W/S&T. Prepare PIO/Ts

Project description: To bring about investments in renewable energy systems which contribute to the solution of development problems.

Observations: Not really a field service oriented project, but services can be arranged. However, missions are discouraged from demanding a preferred individual.

The project began implementation in late 1986, when the contractor was selected.

Possibilities for NRMS: This project has the potential of assisting in a wide range of renewable energy activities related to agriculture and rural development, from project design to evaluation. However, a special service oriented focus for African missions may have to be negotiated.

Title: Energy Policy Development and Conservation

Scope: Worldwide

AID project no.: 936-5728

Mechanism: FASA, with a companion contract for conservation

Contract/agreement no.: FASA No. DHR-5728-P-ER-7008-00

Implementing organization: FASA with Oak Ridge National Laboratory. Companion contractor yet to be selected.

Services available: Technical assistance in national level energy policy and program development.

Research support available: A collaborative research grant program awards grants to U.S. and LDC researchers, on a competitive basis.

Current(1987) program for Africa:

Buy-ins details/procedures: Buy-ins possible through FIO/T.

AID/Washington project manager: Alberto Sabadel - conservation
David Jhirad - energy policy
(703) 235 8902

Implementing organization manager/contact:
Tom Wilbanks - FASA
FTS 624 5515

Financial data:

FACD: begun 1982, extended 1986 to 9/30/92
LOP: \$29.9 million
Yearly spending levels: \$1.5 million
Allocation for Africa:

Management requirements:

Mission level. Prepare SOWs and FIO/Ts

AID/W/Africa Bureau. Clearances and coordination

AID/W/S&T. Prepare FIO/T's; technical and financial monitoring of FASA & contracts.

Project description: The project aims at the national and global aspects of energy policy making and planning, and energy conservation.

Observations: Project is a continuation and expansion of the Energy Policy and Planning project (936-5703).

Possibilities for NRMS: Review energy policy constraints on renewable energy resources management. Technical assistance in project design, implementation, evaluation. Special studies or analyses.

Title: Bioenergy Systems and Technology

Scope: Worldwide

AID project no.: 936-5709

Mechanism: RSSA

Contract/agreement no.:

Implementing organization: Tennessee Valley Authority

Services available: Support development

Research support available: Support for research

Current program for Africa:

Buy-ins: Not possible

AID/Washington project manager: James B. Sullivan
(703) 235 8902

Implementing organization manager: John Kadyszewki
Bioenergy Systems
1611 N. Kent, Suite 200
Rosslyn VA, 22209
(703) 235 3470

Financial data:

PACD: begun 1979, to 9/30/88(extension to 8/31/89 requested)
LOP:
Yearly spending levels: approximately 1.0 million
Allocation for Africa:

Management requirements:

Mission level

AID/W/Africa Bureau

AID/W/S&T

Project description: Project seeks to increase the availability of energy through the more effective use of existing bio-resources as well as through the development of new bioenergy systems.

Observations: none

Possibilities for NRMS: none evident.

Title: Low Cost Energy Technology

Scope: Worldwide

AID project no.: 936-5701

Mechanism: Contract

Contract/agreement no.: LAC-5701-C-00-5057-00

Implementing organization: Volunteers in Technical Assistance

Services available: Not organized as a service project but technical assistance for woodstove project design and assessments of low cost energy technologies could be provided.

Research support available: na

Current program for Africa: none

Buy-ins: Total NRMS buy-in would be needed since project resources are exhausted as of Dec. 1987.

AID/Washington project manager: James B. Sullivan
(703) 235-8904

Implementing organization manager/contact: Steve Hirsch
(703) 276 1800

Financial data:

PACD: begun 1/1/79; activities ending Dec. 87 but no cost extension to 6/30/88.

LOP: \$6.2 million

Yearly spending levels: na

Allocation for Africa: none specific

Management requirements:

Mission level.

AID/W/Africa Bureau.

AID/W/S&T.

Project description: Project consists of three components: (1) compilation of a detailed description of 74 AID-supported low cost energy projects, about 1/2 of which are from Africa; (2) technology assessments, including a review of renewable energy evaluation reports and a survey of international donor experiences in renewable energy; and (3) the design of an international woodstove network.

Observations: Project activities scheduled to terminate at end of 1987.

Possibilities for NRMS: Total buy-in of renewable energy technology assessments or of woodstove project designs, related to natural resources management problems, where work load could not be handled through the Energy Initiatives for Africa extension.

Title: Energy Training Project

Scope: Worldwide

AID project no.: 936-5734

Mechanism: Contract to be let in June or July, 1987.

Contract/agreement no.: na

Implementing organization: RFP out requesting bids(May, 1987)

Services available: Training

Current(198_) program for Africa: na

Buy-ins details/procedures: Buy-ins for special training will be possible through use of PIO/Ts.

AID/Washington project manager: Shirley Toth. (703) 235 9818

Implementing organization manager/contact: To be determined

Financial data:

PACD: 9/30/92

LQP: \$30 million

Yearly spending levels: not yet determined

Allocation for Africa: none specifically determined.

Management requirements:

Mission level.

AID/W/Africa Bureau.

AID/W/S&T. Preparation of PIO/T's

Project description: To provide training to LDC personnel in energy resource identification, exploration, production and use.

Observations:

Possibilities for NRMS: NRMS country assessments could help identify training needs that could be accomodated through this project.

Title: Energy Technical Service Support

Scope: Worldwide

AID project no.: 936-5702

Mechanism: RSSA

Contract/agreement no.: EST-5703-R-ER-2099-00

Implementing organization: Department of Energy

Services available: Short-term technical assistance to missions.

Research support available: na

Current program for Africa: none

Buy-ins: Not possible

AID/Washington project manager: Shirley Toth
(703) 235 8918

Implementing organization manager/contact:

Financial data:

FACD: begun 9/1/78; ending 6/30/88.

LOP: \$1.9 million

Yearly spending levels:

Allocation for Africa:

Management requirements:

Mission level

AID/W/Africa Bureau

AID/W/S&T. Prepare FIO/T's and monitor project

Project description: Project provides short term scientific and technical consultants at missions' requests for advice on energy program planning and energy technology.

Observations: RSSA mechanism with DOE has not worked altogether satisfactorily.

Possibilities for NRMS: none. EIA extension plus other S&T/EY projects should be able to meet all mission needs for energy related to the NRMS project.

4. OFFICE OF RURAL AND INSTITUTIONAL DEVELOPMENT

Title: Human Settlements and Natural Resources Systems Analysis

Scope: Worldwide

AID project no.: 931-1135

Mechanism: Contract

Contract/agreement no.:

Implementing organization: Department of Geography
Clark University
Worcester, MA 01610

Institute for Development Anthropology
P.O. Box 2207
Binghamton, N.Y. 13902

Services available: Studies and assessments of natural resources, settlements and resettlements; institutional development and training in these areas.

Research support available: Field research and studies.

Current program for Africa: In Senegal, planning oversight of mission support to OMVS; for AFR/PD a multi-year comparative study of river basin development in Tanzania, Kenya, Ghana and Senegal; rural/urban marketing linkages in Somalia and Zaire. Study for Administrator of U.S. assistance during the drought.

Buy-ins: Possible and frequent. Mission buy-ins become amendments to the cooperative agreement.

AID/Washington project manager: John Grayzel S&T/RD
(703) 235 8860

Implementing organization manager/contacts:

Gerald K. Karaska
Clark U.
(617) 793 7310

Peter Little
IDA
(607) 772 6244

Financial data:

PACD: 1990

LOP: \$6.7 million.

Yearly spending levels: \$400,000 through FY89.

Management requirements:

Mission level: develop requests and SOWs

AID/W/Africa Bureau. draft SOWs for
special studies, clearances.

AID/W/S&T: develop PIO/Ts; monitor project activities.

Project description: Project undertakes regional or country level studies and field assessments for missions or for the Africa Bureau, e.g. regional analyses of rural-urban linkages, river basin development, review of U.S. assistance during the African drought. Especially effective in identifying various resource management institutions, formal and informal, traditional and modern.

Observations: The project was being evaluated in May, 1987. Clark U. and the Institute for Development Anthropology have wide experience and a long history of work in Africa, with AID and other donors(World Bank, etc.).

Possibilities for NRMS: This service would be a potential contractor for an assessment of institutional development needs in the Group IV countries. To begin this work, a pilot project might be commissioned in order to develop an approach and methodology that could be followed throughout.

Title: Research on Access to Land, Water, and Natural Resources

Scope: Worldwide

AID project no.: 936 5301

Mechanism: Cooperative agreement

Contract/agreement no.:

Implementing organization: Land Tenure Center, U. of Wisconsin
Madison, WI 53706

Services available: Feasibility studies; project design, monitoring and evaluation; policy research; and training on various aspects of land and other resources tenure.

Research support available:

Current program for Africa: None specified. LTC has an Africa coordinator (John Bruce).

Buy-ins: Possible and frequently used, as amendments to the Cooperative agreement. Bureau for Africa uses OYB transfers to finance desired studies or research.

AID/Washington project manager: David Atwood, S&T/RD
(703) 235 8860

Implementing organization manager/contact:

David Stanfield
Land Tenure Center
U. of Wisconsin
(608) 262 3657

Financial data:

FACD: 7/89

LOP: \$6.1 million

Yearly spending levels: FY87 \$530,000

FY88 \$530,000

FY89 \$520,000

Allocation for Africa: none specified

Management requirements:

Mission level: draft SOWs

AID/W/Africa Bureau: draft SOWs or PIO/Ts

AID/W/S&T: write PIO/Ts, manage activity funds and monitor.

Project description: Purpose of project is to assist USAIDs and LDC governments to address land tenure constraints on use of land, water and other natural resources.

Observations: The LTC has already carried out considerable work in Africa.

Possibilities for NRMS: Review of literature on tenure constraints on improved and sustainable management of land, water and vegetative resources in Group I and II countries.

B. Bureau for Africa

Title: "RSSA with the National Park Service"

Scope: Sub-Saharan Africa

AID project no.: Not a project; funded from Africa Bureau Project Development and Support account.

Mechanism: Cooperative Agreement

Contract/agreement no.:BAF-0135-R-IP-224400

Implementing organization: U.S. National Park Service

Services available: Short term technical assistance to missions in relation to the conservation of tropical forests and biological diversity.

Expertise available through the US Park Service personnel and facilities.

Training: assistance in the development and support of conferences and workshops.

For training programs cooperative agreements have been made between the Park Service and a number of universities, namely U. of Michigan (natural resources planning), U. of Arizona (arid and semi-arid lands management), U. of Miami (marine environments) and Yale (forthcoming agreement concerning tropical forests).

PVO/NGO support: small grants (Approx. \$5,000) to strengthen PVOs or NGOs and educational institutions...for information, studies, translations, publications of workshop proceedings.

1987 program for Africa:

A conference in West Africa on coastal resources management is scheduled for October, 1987. It is financed largely by the AID RSSA. The IUCN is collaborating, and through the IUCN-NPS cooperative agreement, visits to the W. African coastal states have been made in preparation for the conference. Also the IUCN/Dakar office is the secretariat for the conference.

An amendment to the RSSA was being prepared in early May, to provide an additional \$150,000, destined for the IUCN's project in the Niger delta (in Mali) that is reconciling conflicting uses of the delta's wetlands. This is one the Bureau for Africa's regional projects, responding to the

1986 earmark for biological diversity projects.

Buy-ins: Possible, within scope of the agreement.

AID/Washington project manager: TR/ARD

Implementing organization manager/contact:

Rob Milne
Office of International Affairs
U.S. National Park Service
Washington D.C.
(202) 343 7063

Financial data:

FACD: begun 1983, continuing
LOP: \$405,000; \$1,000 remained unobligated in May, 1987
Yearly spending levels: none specified
Allocation for Africa: none specified (see Africa program)

Overhead: 20%; less if activity is carried out by IUCN.

Management requirements:

Mission level

AID/W/afr.

prepare amendments
work programming
clear consultancies
schedule briefings

USNPS management responsibility:

financial
contracts
technical
logistics

Note: Unlike the RSSA between the USDA and AID, there is not an organization in the Dept. of Interior which handles routine contractual, logistical and financial matters.

AID/W/S&T: none

Description: Agreement provides longterm (staff) services to assist the Africa Bureau in environmental programs, and to supply short term services in support of mission programs and for studies, workshops or conferences.

Observations: This RSSA has not been evaluated yet. It has been mostly used to supply ad hoc needs of the Bureau for Africa, and as a convenient way to obtain products or services of interest to the Bureau. No joint programming has been attempted to cooperatively address needs. The first long term employee assigned to the Bureau was from the U.S. Fish and Wildlife Service, not the Park Service, because of qualifications. Subsequent services were drawn mostly from the Fish and Wildlife Service. The long term staff person remained only 1 1/2 years in the Bureau, and was not replaced when he left (to chair the Inter-agency Committee on Biological Diversity).

NPS also has an Inter-agency Agreement with the U.S. Peace Corps, to provide staff support (Dennis MaHaffey and possibly a second individual) as well as assistance in training, technical information, project design, and project back-stopping.

Also cooperative agreements exist between the NPS and the IUCN and the World Wildlife Fund/U.S. to expedite or carry out activities involving Third World projects.

Possibilities for NRMS: Commission technical background study for an Africa Bureau strategy for supporting the management and conservation of biological diversity in the region.

Title: RSSA between AFR/TR/ARD and the USDA

Scope: AID/W and USAIDs in sub-Saharan Africa

AID project no.:

Mechanism: RSSA

Contract/agreement no.:

Implementing organization: USDA's OICD

Services available: Long term staff support programmed yearly

Research support available: none

Current program for Africa: none outside of AFR/TR/ARD

Buy-ins: possible by missions for short term services up to 60 days

AID/Washington project manager: Kenneth Prussner, AFR/TR/ARD

Implementing organization manager/contact: Robert Wilson
OICD

Financial data:

PACD: renewed yearly

LOF:

Yearly spending levels:

Allocation for Africa:

Management requirements:

Mission level: SOWs for shortterm services.

AID/W/Africa Bureau: Management oversight for longterm advisors.

AID/W/S&T: none

Project description:

Project supplies long term, full time technical staff to AID's TR/ARD, including advisors who will assist in the NRMS project, namely an agroforestry advisor and a natural resources advisor.

Observations: Short term services to missions have not been programmed in the yearly budgets, thus missions must pay for all costs. Services are occasionally requested by missions.

OICD must post notice to allow qualified individuals to apply for shortterm services.

Possibilities for NRMS: Use occasionally for shortterm assistance
when alternative S&T projects are not suited or available.

Title: Energy Initiatives for Africa

Scope: Sub-Saharan Africa

AID project no.: 698-0424

Mechanism: Contract

Contract/agreement no.: AFR-0424-00-2079-00

Implementing organization: Energy/Development International

Services available: Project design and analysis in fuelwood, forestry, agroforestry, and related natural resources subjects.

Research support available:

Current program for Africa: Provide technical assistance to missions and host governments in renewable energy management matters.

Buy-ins:

AID/Washington project manager: Abdul Wahab
(202) 647 8717

Implementing organization manager/contact:
Assif Sheikh
(202)

Financial data:

PACD: 12/88

LOF: \$.0 million

Yearly spending levels:

Allocation for Africa: Entire remainder, namely \$545,000.

Management requirements:

Mission level: SOWs

AID/W/Africa Bureau: virtually none.

AID/W/S&T: none.

Project description: Project is a one year extension of EIA, with a continuation of the Abidjan office and its long term forest economist, plus allowances for 8 months of short term consulting services.

Observations:

Possibilities for NRMS: See table II.4.

Bureau for Policy and Program Development

Title: Title XII Consortia: Technical Assistance in Women in Development.

Scope: Worldwide

AID project no.:

Mechanism: Cooperative Agreements with the two members.

Contract/agreement no.: Being finalized.

Implementing organizations:

Consortium for International Development
1515 E. Broadway, Suite 1500
Tucson, Ariz. 85711-3766

Midwest Universities Consortium in International Activities (MUCIA)
Women in Development
202 International Center
Michigan State U.
East Lansing, Michigan 48824

Services available: Technical assistance to missions seeking to improve the participation of women in development, especially in credit and enterprise; rural off-farm enterprises and agriculture; to develop project-related information to document the progress and experience of integrating women into projects; to identify potential experimental project components.

Research support available:

Current program for Africa:

Buy-ins: Not necessary; but missions can buy in.

AID/Washington project manager: Paul Carlson
(202) 647-3995

Implementing organization manager/contact: To be selected.

Financial data:

PACD: 7/89

LOP: \$800,000

Yearly spending levels:

Allocation for Africa: None programmed yet.

Management requirements:

Mission level: must express interest and solicit.

AID/W/Africa Bureau: Will coordinate with Carol Peasely to identify potential missions.

AID/W/PPC: Manages contract; will contact missions.

Project description: See services available above.

Observations: Project will select eight missions to work with.

Possibilities for NRMS: Will depend upon mission responses.

ANNEX C

Review of PVO Support Needs and Possibilities

ANNEX C

Review of PVO Support Needs and Possibilities
by Fred Weber
and James Seyler*
edited by Walter Sherwin

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Attachment: Summary of IIED Report and Commentary on Training
and Technical Assistance Needs of Private
Development Assistance Agencies

* for training modules under IV. B. 3, and for Section IV.E.

I. Preface

Maintenance of a sustainable natural resource management base in Africa requires the full cooperation and participation of people at the local level where the problems of soil erosion, deforestation, etc., actually occur. The development organizations most closely associated with local people in Africa are the PVOs, both external and indigenous. (Use of the term PVO in this paper includes non-government organizations--NGOs.) AID has long recognized this unique association and supported PVO activities in sub-Saharan Africa. By combining volunteer effort and the resources furnished by private donors, host governments, AID and/or other international development agencies, PVOs have made significant and innovative contributions to natural resource management in sub-Saharan Africa (See Annex c). However, PVOs are not uniformly capable of addressing NRM problems in rural development. To enable them to make a greater contribution will require AID-funded technical assistance and training to supplement the PVOs' own resources for this purpose.

This need forms the basis for the PVO support component of the NRMS project. To prepare the supporting review, the design team engaged Fred Weber, a natural resources consultant who has worked extensively with both AID and PVOs in sub-Saharan Africa. During a ten-day consultancy he contacted a variety of PVOs to obtain their views on support requirements and ways for AID to help meet them. His findings, coupled with his own knowledge of PVO support needs and relations with AID, are reflected in the report. In addition, the report contains recommendations for special training programs prepared by James Seyler, former REDSO/ESA natural resources advisor. Also taken into account is a recent survey by the International Institute for Environment and Development of training and technical assistance needs among members of InterAction and CODEL. A summary of the survey follows Mr. Weber's report. These findings and recommendations constitute the general training and technical assistance agenda for the PVO support component of the project presented in Section II.C.

Mr. Weber and the design team leaders considered an immediate option to launch a support program by establishing a Natural Resource Coordination Office at a PVO consortium to serve as a combined program planner, broker of services and PVO representative. This option was deemed premature, however, because it was not possible to identify:

- o the specific PVOs which would be interested in AID assistance, and be of interest to AID as potential recipients of NRMS support,
- o the assistance needs of individual PVOs in that group,
- o the type of entity best-equipped to manage the support program in a way that meets the needs of the PVOs while minimizing the management workload of NRMS direct-hire staff (the consortium in question, for example, lacks operational development experience), and
- o the kind of representation that the PVOs to be assisted will wish to have (we spoke to InterAction, which represents 115 organizations comprising most but not all U.S. PVOs; it would be pleased to play a central role in the project).

Given these uncertainties, the design team proposes a phased build-up of the PVO support component. It begins with an immediate offer to finance services from S&T projects for PVOs undertaking mission-supported NRM projects in priority countries. At the same time an in-depth survey is to be carried out in a representative sampling of African posts and in the U.S. to lay the groundwork for a more extensive support program to be set in motion in mid FY 87. The details of this proposal are found in Section II.C and Annex G (Scope of Work).

II. PVO SUPPORT: THE FRAMEWORK

Two underlying assumptions of the PP scope of work and project concept are that PVOs involved in natural resource management in sub-Saharan Africa (SSA) lack technical support services and can be "strengthened" by training. To some extent this is true. However, other factors may limit the effectiveness of PVOs in the field. One is host government policies inhibiting sound natural resource management. Another is misunderstandings between PVOs and AID personnel which result from differing approaches and perceptions.

PVOs generally work directly with the local population rather than on a government-to-government level where AID operates. PVOs normally do not have (and consciously avoid) the large support structure common to public donor agencies. Operating on a small-scale, trial basis, they can be the risk-takers for larger, more formal projects. The majority of promising efforts in the forestry/conservation sector in SSA, over the last ten years or so, have been pioneered by PVOs and volunteers (such as Peace Corps). Examples abound: windbreaks of CARE in Niger, soil conservation efforts of Oxfam and Euraction in Burkina Faso, re-establishment of Acacia albida by CARE in Niger and Chad, and agroforestry efforts (live fencing, trees around gardens) by Lutheran World Relief in Niger, etc. Some PVOs such as the Mennonite Central Committee, Christian Children's Fund and World

Neighbors are doing pioneer work in SSA without the use of AID funds; they feel such use "ties them up too much" or poses a threat to their "identity."

While many PVOs work closely with AID, others make it a point to keep their distance from AID in day-to-day operations. Some ask for assistance from AID missions or embassies when they run into problems with host governments which they cannot resolve on their own. There is indeed a limit to PVOs' ability to change government rules and policies in such areas as tree tenure and future benefit distribution from tree planting and management efforts. When PVOs face such issues, AID can assist by lending its weight at higher government levels to complement PVO efforts in the field. A well-planned, coordinated initiative may be very effective in bringing about reform at both policy and field levels. As a result of such efforts, for example, the CARE project in Rwanda was able to introduce new rules on the distribution of previously free trees. In Niger, under the Forestry and Land-Use Planning project, the Cooperative League of the USA, CLUSA, helped organize local communities to become partners in the management of a government forest.

PVOs recognize their own shortfalls in overall management effectiveness; they see a need for more training and better backstopping. Technical training is an issue, but the need for "technical" support goes considerably beyond the scope of mere "bio-physical" aspects. A brief survey of the PVO community (supported in part by a recent IIED study on PVO training needs), shows that "training" and upgrading should encompass the following:

- o Technical training in its strict bio-physical sense^{1/} - Dissemination of "how-to" information on "what works" and "what makes sense to local people."
- o Institutional training:
 - First and foremost, analysis and design of local institutions and their development. Experience has shown that improved resource management depends on local people taking charge and being allowed to make their own decisions on regulating resource use.
 - Training of host government counterparts, especially extension agents. Building and strengthening host-country agencies is important, but emphasis must be

^{1/} E.g., See recent IQC work order with E/DI on the preparation of a concept paper for "Agroforestry Technology Transfer and Training for PVOs in Africa." 936-5519.0003. S&T/FENR 3/27/87.

placed on introducing basic concepts of a management and service orientation to government field personnel, especially forest service agents.

- o Training of trainers (PVOs' own staff as well as host-country agents and local farmers).
- o General project management, including preparation of proposals; implementation, monitoring and evaluation of projects; and financial management.
- o Basic training in cost-benefit accounting, indigenous production systems and development of natural resource cooperatives.

The PVO training provided through this project should include a balanced mix of the above in order to address the soft spots of individual PVOs and the problems they face in the field.

In addition, there should be briefings and orientations for AID personnel in Washington as well as at missions on the nature of PVOs and how they can be better integrated as AID partners and assisted in dealing with natural resource management. This activity should be carefully designed and balanced with inputs from the PVO community to address the above-noted problems.

III. PVOs ENGAGED IN NATURAL RESOURCES MANAGEMENT IN SUB-SAHARAN AFRICA

AID's present relationship with the PVO community can be seen as a challenge of "community development". The various PVOs are members of the community, each with its own agenda and perceived needs and constraints. The temptation exists for AID, since it controls the purse-strings, to begin organizing things unilaterally: providing training, establishing project criteria and guidelines, selecting training organizations, etc.

It is here that the PVO community would like to have an input, especially since PVOs have been in the forefront of the effort to do more in natural resource management in Africa.

PVOs which are active and interested in more rational management of SSA's natural, renewable resources are a large and heterogeneous group. Most belong to one or more of several consortia or umbrella organizations. From a purely operational viewpoint in the SSA, they can be roughly divided into field or line organizations with ongoing projects involving land, forests, range or water; and "supporting" organizations that provide training, information, advice and other services to those PVOs more active in the field.

In terms of technical assistance and training needs, a quick scan of PVOs working in SSA reveals that as many as 40 or 50 are involved in natural resource-related activities. Many of the

interventions are very small in scale, dealing with only a handful of farm families. Others are full-scale development projects of magnitudes similar to projects financed by public donors, either bilateral or international.

Approximately a dozen "major" PVO organizations are working on introducing better, more rational, sustainable resource use schemes in about as many countries. Improved resource management cuts across different sectors. A list of PVOs working on forestry or conservation projects is rapidly established. But others working in irrigation, livestock or general agriculture projects also can contribute much to address general natural resource concerns. Only a detailed analysis will yield a precise picture of what is going on in the field.

To get an idea of indigenous PVO involvement in natural resource management is even more complex. Local PVOs are currently getting together to form larger interest groups.

A provisional, incomplete list of U.S. PVOs active in NRM and known to the writer follows (Table C.1). More detailed information on some of these PVOs may be found in the InterAction publication, "Diversity in Development." Moreover, the International Tree Project Clearinghouse publication, "A Directory of NGOs in the Forestry Sector, 2nd Africa Edition, 1987" contains information on numerous indigenous as well as external NGOs working in African countries.

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TABLE C.1. PARTIAL LIST OF U.S. PVOs WITH
PROJECTS IN SUB-SAHARAN AFRICA DEALING WITH NATURAL RESOURCES

	Also Do Relief Work	Have In- House Trng. Staff	Provide ad hoc Staff Trng.	Use U.S. Govt Grants	Use PL-480 Commmod.	No Direct US Govt Support
CARE	X	X	X	X	X	
Save the Children	X	X	X	X		
Africare	X		X	X		
Lutheran World Relief	X		X	X		
International Voluntary Services (US)				X		
Oxfam (US)	X	X				X
World Wildlife Fund			X	X		
Church World Service	X			X		
United Methodist Community of Relief	X	X		?		?
Christian Children's Fund			X			
Mennonite Central Committee	?					X
Overseas Education Fund	X		X	X		
Transcentury Foundation	X		X	X		
National Council of Negro Women				X		
World Relief Corp	X			X		
World Vision	X	X	X	X	X	
World Neighbors		X				X
Catholic Relief Services	X	recent interest	X	X	X	
Global Waters						X
Grassroot Inter- national		?	?	?		?
Adventist Develop- ment & Relief Agency	?		?	X	X	
Heifer Project International			?		X	
Meals for Millions	X		X	X	X	
White Fathers (US)	?		?	?		X

Continuation:

	Also Do Relief Work	Have In- House Trng. Staff	Provide ad hoc Staff Trng.	Use U.S. Govt Grants	Use PL-480 Commod.	No Direct US Govt Support
VITA	X		X	X		
Congregation of the Holy Ghost	?	?	?	?		?
Divine World Missionaries	?					
Division of Over- seas Ministry	X					
Episcopal Church Franciscan Fathers	?	?	?	X ?		?
Maryknoll Fathers				?		
Maryknoll Sisters	?	X	X			X
Nat. Comm. on the Self-Development of People						X
PAX World Founda- tion						X
Society of the Holy Child Jesus	?	?	?			?
Technoserve	?	?	X	X		
Unitarian Service Committee	?	?	?			X
United Church of World Ministry	X	X				
YMCA	X	some	X	X		
YWCA		some	X	X		
Church of Latter Day Saints ^{a/}						X
Food Industry Crusade Against Hunger ^{a/}						

^{a/} Funding sources for other PVOs in natural resources management.

Table C.2

TENTATIVE LIST OF U.S. PVOs WHICH SUPPORT OTHER PVOs WORKING IN THE FIELD. (Note that some are shown on both lists. Most offer and can provide training services to other PVOs.)

IIED - International Institute for Environment and Development - ecologic concerns, balanced development, environmental assessments; indigenous NGOs.
 Winrock - supporting PVOs in LA. Recent AID contract plus other similar experience.
 Oxfam - community development, appropriate technology training.
 World Neighbors - slides, visual aids on many ag. extension subjects, low input-type.
 Sierra Club - world-wide environmental awareness, negative impacts, etc.
 Approvecho - stoves and "permaculture."
 Intern. Center for Apiculture - beekeeping, good grass roots approach.
 ECHO - Educational Concern for Hunger Organization - organic gardening, seed development (Florida).
 Experiment in International Living - Peace Corps training, among other groups.
 VITA - technical response services, how-to manuals, short-term consultants.
 Farrollones Institute -
 Rodale - organic gardening.
 Ecology-Action - (Willetts, California).
 New Alchemy Society - (Mass.)
 SIFAT - Southern Institute For Appropriate Technology (Alabama).

Note: Other organizations, private firms, institutions (e.g. NAS, Ford Foundation) and universities also can provide training and support services.

U.S. PVO GROUPS, CONSORTIA OR UMBRELLA ORGANIZATIONS:

InterAction - (NY, Washington, D.C.)
 PACT - (NY)
 CODEL - (NY)
 PVO/Universities - (Cullowee, N.C.)

IV. TECHNICAL ASSISTANCE AND TRAINING NEEDS

Training and follow-up assistance as needed and perceived by the PVOs (as much as could be ascertained during a brief consultancy), fall into the following categories:

A. Biophysical Support

Strict-sense "technical" support is the easiest form of training and backstopping to provide. Under this heading, short courses, materials and response services can be provided similar to what Winrock has done in Latin America during the last three years. The present S&T initiative with E/DI providing a concept paper for PVO agroforestry training in Africa is an example. Although subjects such as agroforestry or others that are relatively new may require a carefully planned approach, the basics are to teach what "has worked" in the field and what makes sense to the local people.

A series of papers exist (e.g. at IIED, WWF and WRI) which describe natural resource management interventions that PVOs have carried out successfully. A first list could be established for the various "sectors": agricultural lands, forests, range, water (as well as fish and wildlife) where things have "worked." Also, for these sectors, a number of training materials and texts exist that should be scanned, collected and their availability advertised. The first group of clients, obviously, would be the PVOs most heavily engaged in natural resource activities. Zoning according to the major agro-ecological zones of SSA would help systematize the efforts.

The quickest and most direct way of providing "how-to" information would be to send one or two representatives of the PVO requesting information to the site of other, ongoing projects where some of the answers already have been worked out. By the same token, farmers from one country can visit a project in a neighboring country to exchange ideas directly with local farmers involved in the project.

Pertinent information can be exchanged in other ways: sending data by mail, sending specialists to the site where questions originated, holding short courses or seminars, and offering project-specific information during briefings and orientations before project staff is placed at the site.

Depending on the subjects to be covered and the specific requirements in-country, several mechanisms to provide this type of training and assistance should be developed and made available to interested PVOs:

1. General Response Services

A number of organizations, including some U.S. PVOs, already have capacities to provide technical assistance services, ranging from replies to written inquiries (VITA, for instance) to providing short-term consulting services. Some have periodicals that are sent to interested parties, often on a paying subscription basis; others produce "how-to" training and teaching materials (hand-books, film-strips, video-tapes, etc.), often available on a commercial basis.

The problem is that most of these services are not low-cost or free. Therefore, a considerable amount of knowledge and material may not be reaching its intended clients.

As a first step, AID or its agent for the project could scan available services, literature and other training materials, and provide those PVOs working in the resource field, at little or no cost, the data or material they request.

A good example is the newly revised VITA text, "Reforestation for Arid Lands." In order to cover its costs, VITA at present is charging \$11.50 to a U.S. address, postage included, and \$16.00 to an overseas address. While this book contains much useful information for people working in the field, many of them may be doing without because of its cost. Moreover, it is only available in English; a French edition would be extremely helpful to host-country agents in francophone Africa. If this publication is deemed worthwhile to distribute widely, the project might subsidize or cover the full cost of distribution to PVOs concerned.

Other PVOs have developed similar field and training manuals. World Neighbors, for instance, has developed an entire series of visual aids dealing with different aspects of natural resource conservation. Other PVOs working in similar project efforts could greatly profit from receiving copies of such aids, if they knew they were available and costs were lower.

Volunteers in Asia (VIA), located in Stanford, CA, has a microfiche system costing less than \$1,000 a kit (including monitor) which includes a wide range of books and manuals on technical subjects; every Peace Corps office overseas is said to have a set. Perhaps VIA could be commissioned to develop an NR-focused microfiche library of this sort for NRMS project use.

If it is determined that texts on particular issues have not yet been developed, the project could undertake their preparation, printing (or copying), and dissemination.

2. Customized Technical Support

To the extent not already handled by the Forestry Support Program, the project could

- o act as clearing house and activator to respond to specific requests received from the field for written replies (telex, express mail, etc.), relevant publications or visual aids; and
- o provide rapid short-term consultant services using personnel (including third-country individuals) from S&T service projects (see Annex B), and from specialized organizations such as Approvvecho (for improved stoves), the International Center for Apiculture, Oklahoma State (for inland fisheries), Vita, WWF, IIED and others. The key is to put together a list as complete as possible and to specify the inputs that each potential resource person or organization can provide. Their comparative costs for services and the speed with which they can reply are of importance.

In general, existing materials and organizations that can offer packages of information should be used. Though it may prove time-consuming to get a complete picture of what is already available, the temptation to develop the needed information from scratch without a prior cataloguing of existing materials should be resisted, lest there be needless duplication.

In some cases, on the other hand, the material may exist, but is in such elaborate form and so spread through multiple documents and publications that it may be worthwhile to condense and package it especially for use by PVOs in the field. CODEL has done this with a series of publications stressing environmental soundness for rural development projects by sectors. More of this should be done. An example exists (CARE-FSP-AID evaluation of windbreaks in Niger) of how to set up basic trials and observations in agroforestry which later on could be used by the scientific and technical community to do more formal research. A good, ten-to-twenty-page booklet on how to set up basic agroforestry experiments is needed (the same can be said for soil conservation trials). The information has been published by ICRAF, but it is contained in a thick volume written for scientists and researchers that is too complicated for the average field person to read and follow.

A careful balance, therefore, must be struck between gathering and disseminating what exists, and studies and texts that must be developed by specialists who have a feel for what the clientele needs and can readily use.

3. Workshops and Short Courses

On a third level, a series of workshops or short courses could be prepared and offered to PVOs working in the field on specific subjects, always on a "what works" and "what makes sense to local people" basis." These courses could be given either at PVO headquarters in the U.S. (in shortened form to train staff going overseas) and in-country where several PVOs (including third-country and indigenous) could be brought together. The subject area could also be focused on individual techniques such as terracing, river-bank stabilization or wind-breaks, as the situation warrants. CODEL's experience in this type of training should be reviewed.

It would seem appropriate to develop and test various technical training modules. Ideally, these would be organized on an agro-ecological zone basis and might include but not be limited to:

- o For the highlands: alley/hedgerow cropping, perimeter plantings, tree management (root and limb pruning), passive and active soil conservation techniques (debris strips, grass strips, side hill ditches, etc.), and green manure systems;
- o For the arid and semi-arid region: Windbreaks/shelter-belts, microcatchments/tied ridges/water harvesting systems, improved bush fallow systems and the use of Acacia albida systems;
- o For the coastal zone: Alley cropping, multi-story cropping, green manure, improved fallow systems, etc.;
- o General: Resource inventory techniques, perhaps in collaboration with the remote sensing centers; soil benchmark/IBSNET methodology, measuring crop yields and erosion rates, etc.

Implementation: The natural starting point would be to reply to requests from the field. A number of organizations (VITA, for instance) already have a record of the type of information requested most frequently. Secondly, a telephone survey of the most active PVOs could tighten up a preliminary list further. Of importance is concentration on those subjects the people in the field need and request most.

Workshops and short courses are best carried out by a staff consisting of at least one experienced trainer/facilitator. Trainers could come from neighboring countries or the U.S.; qualified people living close to the training site are particularly valuable as trainers. If possible, the training staff should also include one or two representatives from the local (or neighboring country) PVO community versed in the subject matter covered. In addition to trainers, an administrator-expediter should be provided to handle administra-

tive arrangements, which must include advance site preparation to ensure that facilities are ready, participants have been properly prepared and a minimum of secretarial services are in place.

This staff should convene a few days before each session in order to work out final detailed plans, set objectives, and prepare for feedback and evaluation to take place during and immediately after the session.

Depending upon subject matter covered, similar, condensed versions of these workshops could be offered to PVOs' home office staffs, possibly with several of them joining together as participants.

B. Institutional Support

The mechanism described above under "Biophysical support" can be used under this heading as well. The same patterns and principles apply.

It is worth noting, however, that many PVOs already have an advanced capability in institution building and training, especially in local situations. Their demonstrated preference and capability for working at local village levels has given many of them a lead over most other, larger development agencies in this respect.

With regard to institution building and strengthening, it is important to distinguish between two different kinds of institutions. The term "institutional strengthening and support" is often used to refer to modern host-country government organizations. Much work needs to be done in this regard and this will be covered in more detail below. Of first concern, however, are local institutions and their organization.

1. Local Institutions

Highly important to natural resource management are local, more or less traditional communities, villages and groups of people or families working closely together. Many forms of rational, sustainable natural resource management existed in the past which evolved over time and were practiced effectively by local people unassisted by modern government or donor efforts. It is only in the relatively recent past that population pressures and some government policies have disturbed traditional rules and regulations that used to provide sustaining-use patterns. In many places, traditional institutions have been replaced by well-intended but ineffective modern laws and regulations that need change before a more meaningful management of natural resources once again can take place, albeit under much more pressure than before because of demographic expansion and modern technology.

A serious problem in this respect is the difficulty in introducing "new" management systems for the rational use of common land. Another issue in small-scale forestry-related projects is benefit distribution and tree and land tenure. A prerequisite to long-term success of any intervention is that the local people, under their own initiative, begin to manage their dwindling natural resources themselves. None of the existing government agencies in SSA have the experience or the funds to do the job unilaterally. In any case, governments are best suited to setting a favorable policy and legal framework for natural resource management and providing technical support to local entities. Therefore, the analysis and development of viable and effective local institutions is one of the keys to successful natural resource management in SSA.

The proper role of outsiders is another matter. Development efforts in the past put emphasis on community development, supporting grass-roots movements, helping people pull themselves up by their bootstraps. Yet the art of doing this is still elusive and often poorly understood. PVOs, as practiced as they are in this respect, may need and want more information, training and support along these lines.

This project can assist PVOs in a number of ways. Regardless of the mechanisms used to make the information available, the essential point is to provide information through examples, case studies, visits or short courses on how an outside group, such as a PVO, can more effectively analyze, design and help develop local institutions for improved natural resource management. The training subjects listed above and under Section E below will be most helpful.

2. Government Institutions

PVOs promoting fundamental changes in the way forests, watersheds and agricultural land are managed, are engaged in transferring basic ideas, techniques and approaches not only to local people, but to government agents as well, especially those working in the field. Many basic natural resource decisions fall under the mandate of host-country forest services. Traditionally these services have been structured, staffed and equipped to deal with a limited clientele, often at odds with the concerns of local people. Many government field agents simply are not yet aware of the importance of local people in bringing about effective rural development, including natural resource management.

A major task, then, is to promote attitudinal changes among those agents. PVOs and volunteers have done important work in this regard, but can benefit from training and support to enhance their ability to train and encourage government agents to look at resource management problems and potential solutions differently

than in the past.^{2/} Various methods, techniques and procedures for training field agents exist that have worked well in the past. PVOs, in general, will be very receptive to assistance in the collection and dissemination of successful models. Again the same mechanisms as mentioned above can serve as distributing vehicles.

C. Training Trainers

Preparing local residents to act as trainers is a job and art by itself. The trainees may be local farmers, selected by their neighbors, school-leavers, government agents either retrained for this purpose or agents-in-training at government training institutes. AID could provide assistance in several ways.

First, existing methods and procedures to carry out such training activities could be collected and disseminated where they have proven successful and effective. Specialists could be made available to groups requesting their services. Workshops and short courses also would make sense for people whose assignment will be to train others in the field. Peace Corps has extensive experience in methods to teach local people as well as volunteers to become trainers. Their staff and expertise should be tapped as resources in these efforts.

Short courses should be organized at individual missions (perhaps with representatives from neighboring AID countries in attendance as well) where different PVO organizations and Peace Corps volunteers working in natural resource development would send trainees. During such courses, both technical and educational aspects should be covered, with emphasis placed on non-formal education and extension training, service and management functions, and attitudinal change in dealing with local people. The end result would be host-country people (either as agents, project staff or farmer-neighbors) who are better able to relate to their friends or constituents in the area of natural resource management.

D. General Project Management

A shortfall of PVO efforts lies in day-to-day project management, a matter of particular concern to AID where its funds and commodities are involved. This may lead, as it has in the past, to friction and loss of resources.

PVO staff deeply involved in helping local people may sometimes be neglectful in filling out forms and accounting for funds or equipment. A point may be reached where accounts do not close,

^{2/} CARE, for example, has recently developed an excellent "how-to" manual on improving local agents' communication skills. World Neighbors has developed an impressive array of audio-visual material on extension activities.

equipment is unaccounted for, and payroll records are incomplete or inaccurate. The group or agency funding the PVO then becomes nervous and demands more control, better records and a greater say in how the PVO manages its affairs; the PVO, in turn, sees this as "meddling."

PVO staff, especially younger people, with little previous administrative experience, could profit greatly from training exercises that cover the basic aspects of project management. How to make simple workplans and adhere to them, how to handle people (on a work-crew, for example), how to do office work and keep records straight by only spending one-half day per week indoors, all are subjects of importance and interest to PVO field staff, expatriate and indigencous alike. PVO staff also could benefit from training in how to formulate a project, how to undertake programming and priority setting, and how to examine the economic and social trade-offs that allow natural resource management to be better integrated into a rural development project. Project and resource monitoring and evaluation methods should also be taught.

As mentioned under "training trainers", mission-level short courses could be offered with several PVOs and volunteers in-country attending. PVO headquarters might also use the training material in briefing staff before they go out on an assignment.

E. Special Short Courses

PVOs are usually long on implementation but occasionally short on the ability to develop viable host country institutional linkages and/or conceptualize problems and design appropriate solutions. Moreover, as most PVOs use expatriate field staff with usually little more than two years Peace Corps Volunteer experience, appropriate technical skills are also lacking on occasion. Based on Jim Seyler's experience in Eastern and Southern Africa, he offers the following rationale (with citations) and suggestions for short-term training programs, directed where possible by PVO trainers.

1. Cost and Benefit Accounting

Most donor agencies funding projects in the natural resource sector require some form of economic analysis of a proposed technology prior to project approval. This analysis usually takes the form of an "economic" analysis, focusing on the benefits of the project or technology to society as a whole, and a financial analysis, usually based on estimates of the proposed technology's impact on the target group. However, after project inception, PVO project implementation personnel rarely take the time to develop accurate cost and benefit accounting information on the technology's labor requirements (or other investments required by the farmer), or on the actual benefits (crop and

forest product yields) if any, derived from the technology. The rate of return of the technology to the donor and sponsoring agency once implementation begins is almost universally ignored.

From an economic viewpoint, however, farmers are "induced" to invest in a new technology if it increases production, reduces input costs and/or if product prices increase relative to the cost of inputs (Hayami and Ruttan as presented in Stevens 1986). Furthermore, Molnar and Clonts (1983) argue that "economic and financial analysis must proceed on the basis that activities provide adequate incentive to individual farmers as well as a return to the investors or government agency sponsoring the project".

Thus, a training program which would focus on simple cost and benefit accounting methods would be a worthwhile endeavor.

2. Indigenous Production Systems

Molnar and Clonts (1983), citing Ekhaus state that "a major source of failure in the technology transfer process has been persistent attempts to install overly sophisticated production systems or simply to transfer scaled-down technologies that were not in tune with the needs, incentive system, or capacity of the recipient country". While natural resource development implies the use of a "culturally sensitive" technology, PVOs promoting natural resource development projects in Africa have a tendency to "push" the more complicated technologies in hopes of achieving higher yields, etc. Thus, advanced technologies such as intercropping or alley cropping are often unsuccessfully encouraged in a farming systems context where the presence of one or two trees in a farmer's field is the maximum extent of any "traditional" crop and tree associations. Moreover, these traditional agroforestry systems are just the types of "indigenous knowledge systems" that Brokensha et al. (1980) recommend be included as an integral part of rural development programs.

A training program to assist PVOs in the assessment of indigenous knowledge systems (i.e., diagnostic and design methodology) would therefore appear appropriate.

3. Development of Natural Resource Cooperatives

The importance of a bottom-up group or community approach to problem-solving as a foundation to sound community development is apparent throughout the literature. Roling (1982) states that "a very crucial alternative extension objective is the organization of low-access rural people so as to enhance their capability collectively to improve their relative socio-economic position." Cernea (1985) believes that a combination of family and group approaches are required for the resolution of social forestry problems, as groups "can supply the social structure necessary to

put to productive use certain natural resources (e.g., public or communal lands.) that would otherwise remain under-utilized or completely neglected."

Groups are especially important in natural resources, particularly if larger-than-family-scale type objectives such as watershed management or rehabilitation are to be achieved. In addition to being more effective, working with and through groups of farmers is also a more efficient use of project resources; a larger number of people can be reached than with the use of traditional one-on-one approaches. A short-term training course on cooperative or pre-cooperative development might be worth exploring.

F. Improving AID-PVO Communication

Increased communication and more frequent exchanges of view are proposed to improve understanding between AID and PVOs with a view toward achieving intensified and more effective cooperation in natural resource management in SSA. (See attached list of differing AID and PVO perceptions.) Many AID officers, particularly at the mid and lower field levels, have not been exposed in a systematic way to the PVO approach. Orientations are therefore suggested within the framework of this project to acquaint AID staff better with PVOs: what they are, what they stand for, and what makes them operate as they do. Their role, organization, purposes, etc., could be briefly explained with pertinent examples from field operations. The PVOs' ways of selecting countries, programs, and projects should also be explained. AID for its part should also prepare introductory presentations on how it operates (project cycles, budget exercises, etc.).

The details of such work sessions should be worked out with direct input and initiative from the PVO community, organized through the project. One or two such sessions might be held in Washington, others in the field. At a minimum, reading materials on the subject should be prepared for distribution to AID and PVO field staff.

It is extremely important that the PVO community have the opportunity to be involved in the design and implementation of these workshops from the start. Several of the PVOs already have in-house training staffs that are well-versed in conducting awareness sessions and should be tapped to help put the package together.

Attachment

AID's Perceptions of PVOs

PVOs often are seen as well-intended but lacking management and implementation skills. PVO field staff are volunteers with their own agendas, doing what they want rather than working within a more precise project framework.

PVO efforts are too small for the problems at hand.

One donor representative (not from AID) recently stated that PVOs should become more "professional."

AID has the funds and the responsibility: therefore PVOs should comply more closely with the way AID conducts its business.

PVO efforts sometimes lack adequate technical staffing, reporting may be sketchy, and many PVO projects are -- because of limited funds -- run on a short time frame only. A tendency exists to start many small projects at different sites, dispersing inputs too widely.

PVOs' Perceptions of AID

AID does not appreciate the independence of PVOs and their grass-roots priorities.

AID is slow to provide project funding and interferes in the way PVOs carry out their projects.

AID sets unrealistic technical achievement targets without sufficient emphasis on the need for community development and giving local people more of a say in the management of their natural resources.

Too much money, too rapidly applied, kills meaningful rural development efforts.

AID treats natural resources unrealistically as a separate sector. (Note: while recent Bureau cables make clear that it is not separate, some mission personnel still see it as such.)

Many PVOs see a much stronger need to "balance" development, with concern for the sustainability of natural resources as a key criterion of successful development.

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SUMMARY OF REPORT AND COMMENTARY
ON
ASSESSMENT OF TRAINING AND TECHNICAL ASSISTANCE
NEEDS OF PRIVATE DEVELOPMENT ASSISTANCE AGENCIES

INTRODUCTION

As the need to conserve and improve the natural resource base has become imperative, development assistance agencies are undertaking projects that require technical knowledge about the biophysical environment.

With experience in policy studies and field activities, the mandate of the International Institute for Environment and Development (IIED) is to deal with both development and natural resource issues. The Institute was founded by the late Barbara Ward, who saw environmental issues as integral to sustainable development. Because of IIED's interest in merging the concerns of these two constituencies, this assessment of the training needs of development assistance agencies was initiated.

The data were gathered and analyzed by Jacob Fillion, (US Peace Corps), in consultation with Laurie Greenberg (IIED) and Diane Wood, (IIED), and Helen L. Vukasin, (CODEL). Jacob Fillion prepared the report; Helen Vukasin edited the report and prepared a commentary with suggestions for IIED strategies. The U.S. Peace Corps Office of Training and Program Services generously provided Jacob Fillion's time to carry out this assessment in collaboration with IIED.

PURPOSE

The purpose of the study was to assess the needs of private voluntary development assistance groups for information, training and technical assistance in responding to issues relating to natural resource management in the context of development programs and projects so that IIED and other resource agencies can assist in meeting those needs.

METHODOLOGY

The assessment is based on information gathered by written survey and personal interviews. The interview sample of 9 interviewees was chosen at random from the list of InterAction members. The questionnaires were mailed to 149 organizations, including other InterAction members and selections from CODEL lists. There were 40 respondents providing usable responses from a broad range of development assistance groups.

The questionnaire contained 24 questions relating to background information about the agency, project information and needs for assistance. The questions were multiple choice or yes/no with space for commentary on each question.

The data tabulated were based on the forty respondents. The information secured in personal interviews was used to assist in analyzing the results and formulating recommendations.

RESULTS OF SURVEY

There were four principal areas surveyed through the questionnaire:

1. Present Natural Resource Management Components in Development Assistance Programs
2. Background Information about the Agencies Reporting
3. Needs Expressed for Training and Technical Assistance
4. Sectors in Which Technical Information and Training is needed

The following paragraphs provide some general conclusions about each of the areas:

The answers to the baseline questions regarding natural resource management components indicate three principal conclusions: First, there is wide variation in the definition of natural resource conservation among respondents, reflected in the diversity of program areas cited as natural resource projects. This range of definitions implies varying degrees of understanding of the relationship between development and natural resource conservation. Second, respondents indicated that there are many institutions that do in fact include environmental components in projects and some that directly support natural resource management projects. Third, many agencies recognize the lack of technical capacity to undertake such projects or even components of projects.

The data gathered about training and technical assistance needs indicate a few conclusions. Respondents have indicated that training is needed for field personnel and should take place in the field for the most part. The agencies have indicated a willingness to pay a limited share of costs of training or technical assistance but only if it meets their particular needs. In addition to the needs respondents identified in-service training in the field, there are still indications of the large gap in knowledge and information of US-based staff about environmental matters.

In citing training needs, the top five program areas in order of preference were: clean water and sanitation, soil conservation/erosion control, agroforestry, fuelwood conservation/improved woodstoves, and water conservation. In citing needs for technical assistance in natural resources (implying written materials and consultations in the field) the top five were: tree planting/reforestation, clean water and sanitation, agroforestry, soil conservation/erosion control, and fisheries.

In summary, based on the results of the assessment, the following are needed:

1. Written materials describing how to address problems.
2. Technical consultancies in the areas of needs assessment, design, implementation and evaluation of projects and assistance with funds for consultancies.
3. Training/workshops in the field for both U.S. based and local NGOs with clearly defined criteria for participants.

4. Better understanding of ecological systems as related to the development process by the agency personnel in the U.S.

Training, written materials, and technical consultancies were recommended in the areas of clean water, tree planting/reforestation, soil conservation/erosion control; agroforestry, water conservation, with flexibility to extend beyond these sectors.

RECOMMENDATIONS - The following are recommended to meet the above identified needs:

1. Preparation of the appropriate manuals for an audience with development training and some understanding of the importance of natural resources.
2. Promotion of the use of technical consultants (identified through data bank networks) in the areas of needs assessment, project design, implementation and evaluation.
3. Development of in-service training and workshops on a national regional basis for U.S. organizations working in those areas.
4. Extension of technical assistance and training to indigenous agencies as well as U.S. groups in the field, based on input from local/national NGOs.
5. Identification of ways to assist U.S.-based NGO staff to increase understanding of environmental issues.

CONCLUSION

In conclusion, it is hoped that the information gathered in the assessment will be useful to both the development assistance and the environmental communities. The assessment demonstrated that the importance of including natural resource management in development activities is recognized. Development assistance groups have begun including natural resources activities in their projects and will be increasing those activities.

The development assistance organizations tend to hire trained and experienced staff. However, the majority of the personnel have experience in areas other than natural resource management. If training in technical skills were to be provided and encouraged, competence in managing natural resource activities could be increased significantly.

A copy of the full report is available on request from:

International Institute for Environment
and Development
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Summary prepared by
Helen L. Vukasin

Annex D

Training Considerations

ANNEX D

Training Considerations

The following discussion is related to both the mission service and PVO support components of this paper. PVO personnel, host country project counterparts and government officials, and to some extent AID mission personnel will need NRM orientation or training. This annex proposes ways in which NRMS management, in coordination with AFR/TR/HRD and central training offices, can stimulate demand for and provision of NRM training.

1. Determination of Training Needs:

Determination of training needs will be a developing and continuing process under both the NRMS project and mission efforts in NRM programming.

PVOs: General needs are discussed in the PVO annex to the PP. Needs of specific PVOs will be established in three ways: (a) by surveys conducted in preparation for and under Phase I, b of the PVO support component of the NRMS project; (b) by ad hoc request from field PVOs supported by the AID mission; and (c) as an outgrowth of the country assessment and programming process.

Host country participants: An early NRMS initiative might be to organize NR orientation seminars for agricultural degree participants studying in the United States. It is also recommended that NRMS management and TR/HRD encourage missions as soon as possible to identify candidates for short courses and longer-term training (e.g., non-thesis Master's training of less than two years) in NRM, to be financed with regional or bilateral training funds. Training needs will be identified by missions and host governments on the basis of bilateral project requirements, NR program assessments and planning efforts, and NR training needs assessments.

It should be noted that the U.S. Department of Labor has developed a "Training Needs Assessment Guide" for mission or host government use. It is designed for rapid, low-cost implementation and is suitable for many training needs. The guide should be available for use soon after a field test in Latin America in June 1987.

Mission personnel: The planned Nairobi workshop for Africa

Bureau agricultural and rural development officers will offer an excellent opportunity to promote NR awareness. Awareness seminars should also include project development officers. In addition, selected mission personnel may benefit from in-country workshops which also involve host country and PVO personnel. Apart from benefit to the individual participant, there may be mutual benefit in having all the parties in a cooperative effort participate in the same training; an enhanced esprit de corps may be developed that will carry over into project implementation.

2. Modes of Training:

An important mode is practical, short-term training in the field, country by country, that reaches a broad range of personnel involved in NRM projects, is focused on common training needs in technical and management areas, and disseminates knowledge about NRM solutions that have worked. The first step with regard to "success stories" is an inventory (see also Annex C on PVO support). Action to compile an inventory and disseminate the data should be taken under either the mission service, PVO support and/or study components of the project, as orchestrated by NRMS management. Dissemination can be in the form of workshops, visits to successful project sites, and distribution of written, audio-taped or video-taped information and training materials to both workshop participants and those unable to attend but who could benefit.

Longer-term, specialized training should be provided in Africa to the extent appropriate, and in the U.S. where necessary. U.S. training facilities, for example, may be required for the more specialized or graduate-level courses.

3. Sources of Training Personnel and Institutions:

USDA's Office of International Training offers 40 courses in short-term courses in agriculture, of which six are directly concerned with or useful in natural resource management: three technical, three in management. In addition, OIT sponsors policy seminars for senior-level officials. The courses conducted in the U.S. last about six weeks and cost \$3,000-\$4,000 per person/month plus travel and per diem. The same or specially adapted courses can be mounted in Africa, training 20-25 participants over a 3-4 week period at a cost of \$40,000 plus 28% overhead for pre-course planning. At additional cost, workshop leaders can arrange for training of trainers and prepare materials for their subsequent use. Follow-up technical assistance also can be arranged. OIT also processes long-term academic training requests.

Various S&T service projects and the PVO community offer training possibilities. The former are listed in Annex B; the latter need to be surveyed under the PVO support component.

Several directories exist on NR-related training facilities, e.g., an IIED directory on relevant U.S. and Canadian

universities; a directory of "U.S.-based Short Courses in Renewable Energy Technologies: a Selective Guide for Developing Country Participants," dated December 1984; and an IIE two-volume publication entitled, "Specialized Short-Term Study Options in the USA for 1986-88."

Institutions and qualified individuals exist in Africa that can provide, training in NR management and technical fields; these institutions should be identified and evaluated by a suitable entity. A useful starting point would be a directory of institutions which is volume II of a UNEP report issued in October 1985 on "Desertification Control in Africa."

Given a shortage of AID resources and the desire to provide a maximum amount of needed NR training in the shortest possible time, preference in selection initially should go to those African institutions requiring little or no special assistance to provide training and follow-up services. Should regional funds become available in the future for an institutional development effort, NRMS could prepare the way for a long-term linkage program between a U.S. university and an African institution providing needed NRM training. Under such a program, the U.S. university would send two or more specialists to Africa on long-term assignments to help the African institution in staff and curriculum development; the African body, in turn, would agree to accept a certain number of participants from other countries. Missions could use regional or bilateral-project funds to send participants for undergraduate training to the African institution and graduate fellows to the U.S. university.

For helpful insights into effective modes for institution-building and training in NR management, the NRMS project manager and implementing personnel should review the conclusions of the recently completed evaluation of the Environmental Training and Management in Africa (ETMA) project.

4. Financing of Training:

NRM training should be financed with

- o mission-administered bilateral and regional (HRDA, SHRD, etc.) funds for host-country participants,
- o NRMS funds for PVO trainees, and
- o mission operating expense funds for mission personnel.

To the extent these needs overlap, the training may be held jointly.

As a support and service project, NRMS should not become a major source of training funds except in the case of PVO training. Sufficient funds for NRM training should be allowed directly to the using project rather than pass through NRMS. As a rule, NRMS should only finance necessary studies of training needs and

sources, and where necessary provide seed money to launch new programs such as a pilot workshop.

Annex E

PROJECT ANALYSES

1. Management Analysis
2. Financial Analysis
3. Economic and Social Soundness Analyses

1. Management Analysis

Management tasks fall under five categories: (1) technical and (2) programming, (3) financial, (4) monitoring and (5) reporting. Overall management tasks and project organization are described in Section III of the Project Paper. In this annex a more detailed analysis and description of the management of the various project components are presented. Also, the management lessons from the Energy Initiatives for Africa project (EIA) pertinent to this project are presented.

The DESFIL project (Development Strategies for Fragile Lands in Latin America and the Caribbean) has been held up as a possible model of project management for NRMS. However, the implementation of DESFIL in its entirety is by means of a single contractor. Two other differences are that (1) the DESFIL project does not offer missions actual funding for design, evaluations or analyses as NRMS does (missions must buy DESFIL services) and (2) the DESFIL project managers cannot underwrite studies or analyses as a means of advancing the overall project goal.

a. The EIA management model

The Energy Initiatives for Africa Project is a regional project under the responsibility of AID/TR/PRO, which has been extended to December 1988 with NRMS funding. Of special interest is the role played by the REDSOs, especially REDSO/ESA, in management of small grants for sub-projects. Whereas Energy/Development International was contracted to provide technical advisory services under EIA, it was not the manager of the sub-project grants.

In REDSO/ESA sub-project grants management varies according to the way the sub-projects relate to mission activities in the region. Technical oversight and financial management may be shared by REDSO staff and missions in countries where sub-project activities are taking place, e.g., small hydro-power plants for rice-milling in Madagascar (\$150,000). Where there is a compatible bilateral project (and a manager supportive of the grant), these sub-projects essentially become bilateral project add-ons, managed entirely by the mission. The sub-project financing is essentially passed from the Regional Finance Office in Nairobi to the missions' "host" project funds. Without a host

project, sub-projects in a specific country have proven impossible to manage.

In the case of a grant to an NGO umbrella group working on a regional basis (KENGO), REDSO/ESA and the Regional Finance Office managed the technical and financial aspects of the grant.

REDSO/ESA presently manages approximately 12 regional projects in East Africa (including CGIAR support grants), and has had to employ additional staff to do so.

b. Background Programming Support (BPS) Management

As indicated in Section II.B.2, a number of BPS services need to be handled on an individual basis because of program sensitivity or special competence. Others may be consigned either to one contractor or a series of contractors. Three options are considered for securing the latter type of services, namely to contract for them:

(1) individually among various firms or organizations. This would spread the business but involve considerable processing of contracts as well as deprive NRMS of continuity in contract personnel;

(2) individually through a single level-of-effort contractor. This option would reduce the processing and afford continuity and identification among other-donor and professional contacts of a single entity with the BPS effort; or

(3) on a continuing basis through a full-time contractor. This option would provide even greater continuity and identification, and would be justified if the work is seen as full-time.

The second option appears to afford the best combination of continuity, convenience and flexibility. Should BPS services be required before this option can be implemented, individual work orders could be placed with one or more IQCs in the interim.

An initial review of data supplied by AID's Office of Small and Disadvantaged Business Utilization indicates that possibilities exist for a Sec. 8(a) firm to provide the above services. If a single firm does not meet all the requirements, AID might receive a joint venture or contract/sub-contract proposal involving, say, a natural resource consulting firm and a "program-oriented" one.

NRMS management, or a pre-project consultant, should review available information on the qualifications of minority and small business firms to determine whether an adequate choice exists within that group to avoid or limit competition. If not, competition should be broadened. Key selection criteria would include competence in natural resource management, familiarity with AID and other-donor organizations and programs, and experience in

Africa. As discussed in detail in the PVO section below, it is recommended that the BPS and PVO support contracts be let separately.

NRMS staff management effort for programming support is estimated at 20% of the manager's time (who also will be managing the project support to missions).

c. Management of mission project support services

NRMS can underwrite a wide range of specialized services available within the Bureau for Africa, the Bureau for Science and Technology and the Bureau for Program and Policy Coordination. The latter offers a technical assistance project to missions for enhancing the role of women in development. These various projects are inventoried in Annex B.

The Bureau for Africa's Office of Technical Resources/Agriculture and Rural Development division offers assistance through the recently extended Energy Initiatives for Africa project (to 12/88) and the USFS RSSA which was recently replenished with \$200,000. (See Annex B).

S&T projects have all worked with missions in Africa and are able to respond to mission needs. Their management structures are in place. NRMS management tasks related to accessing S&T services through the project are straightforward: financial and coordination. S&T projects are Cooperative Agreements, Cooperative Agreements with companion Basic Ordering Agreements, RSSAs and contracts.

Mission or Africa Bureau buy-ins become amendments to the agreements, executed by means of PIO/T's, drawn up by the Cooperative agreement project manager. Costs and scope of work are negotiated beforehand with S&T managers (specifically S&T/RD), who then accept the management burden of writing PIO/Ts and monitoring the work.

PIO/Ts would be written against the NRMS account. PIO/Ts could be written by the mission, the NRMS project managers, or S&T, preferably by the mission to the extent possible. If written or initiated by the mission, the mission officer would have to have the necessary fiscal data and the obligation number.

The NRMS project manager should request from S&T project managers written assurance that the requested services to be financed through NRMS will not exceed the spending ceiling or the PACD.

The Companion BOA obviates the ceiling on spending and the need to seek amendments to raise it when buy-ins are great. Mission buy-ins become task orders to the BOA's, again implemented by means of the PIO/T.

Companion BOAs are used in several Office of Agriculture projects.

The NRMS manager will review draft and approve final PIO/Ts written by S&T managers against NRMS project funds.

PIO/Ts can also be written against NRMS funds for services from RSSAs and PASAs, but there are budgetary consequences for such service projects, possibly necessitating later amendments to raise spending ceilings. NRMS managers must ensure that spending ceilings would not block NRMS underwriting of S&T projects.

Missions may have less flexibility to identify their consultants through RSSAs than through IQCs or cooperative agreements. For instance, the Bureau for Africa/TR's RSSA with USDA entails procedures at USDA whereby short-term consulting services requested by missions through the RSSA must be displayed as a notice for a month, to allow qualified and interested individuals to apply. The resulting delay may be excessive from the mission's standpoint.

Existing service projects already perform technical and financial management tasks. The NRMS project managers and advisors would ensure speedy action on mission requests for technical services through these projects and would facilitate the writing of PIO/Ts when necessary. Also project management will track the various actions being funded on the mission's behalf by the project; assure clearances and adequate briefings for technical advisors; and maintain a coherent view of the various activities underway throughout Africa through these projects.

Coordination and facilitation of services or support that follows NRMS-supported reviews at the mission level of portfolios and CDSSs would also be a function of project management. Actions can be reviewed against the criteria and priorities set forth in the Plan for Supporting Natural Resources Management in sub-Saharan Africa. Assistance that may be underwritten by NRMS will be determined and its availability made known to the mission in question.

There are two limitations to these various service projects, which, nevertheless, have not detracted from their usefulness:

(1) spending ceilings are quickly reached if there is a surge of mission buy-ins. This problem has been obviated by either raising the spending ceiling or attaching a companion Basic Ordering Agreement, in effect an "empty basket" for receiving mission buy-in money.

(2) these projects are not set up to achieve complete project design, although some may be competent to do so. Project design usually requires a team effort, and missions may wish to pick the team. RSSAs, PASAs and cooperative agreements do not lend

themselves to this sort of "body shop" operation. Also it appears that the team building aspect is difficult to achieve by drawing from a variety of support projects for expertise. Since missions have recourse to IQC contractors for fielding design teams this second limitation is unimportant.

NRMS management effort for project support services management is estimated to be equivalent to one person, one-half time. S&T project managers routinely handle management tasks entailed in refinement of PIO/Ts, identification of advisory personnel, travel arrangements (handled by managers of the project implementing organization) and AID/Washington briefings.

By FY 1988, service activities to missions could entail five or more individuals or groups in the field at any one time, and four to five new advisory visits or studies being initiated every 30 to 45 days. Monitoring and tracking this level of support activity to missions, including maintaining the corresponding data base, is estimated to require the following time commitments for management:

DH NRMS project manager: 20% of time

The NRMS management staff and advisors will have to learn how to use personal computers and project monitoring software (e.g. Dbase) in order to maintain the data base for tracking the services component of the project.

4. Management of PVO Capability Strengthening

The provision of S&T services to PVOs will require publicizing the availability of the program, review of applications against the criteria set forth in Section II.C, coordination with missions, and awarding and funding services.

As noted in Section II.C, a consultancy is necessary to identify the PVOs which contribute to AID's NRM objectives and may wish and need NRM assistance, to define the specific needs, and to recommend approaches to meeting those needs. Subject to the consultants' recommendations, the design team's preliminary conclusions are that a support entity will need to be engaged under a contract or cooperative agreement in order to assist NRMS management with a multiplicity of tasks, and that the entity selected will need to demonstrate:

- NRM experience or focus;
- experience of the organization, or that of its proposed project staff, in working harmoniously with PVOs;
- experience in providing technical backstop services and organizing training programs; and
- willingness to broker services from the sources most advantageous to AID and the PVOs in terms of quality, timeliness,

responsiveness and cost.

This unusual combination of requirements suggests a need for full and open contract competition to ensure an adequate number of qualified bidders. Likely candidates would be consulting firms, PVO consortia, and "support" PVOs specializing in NRM.

It is important that the work of the PVO support entity be kept distinct from the activity of the mission support contractor discussed in Section II.B.2. If the two functions were carried out by the same organization, and if the latter had other connections to either missions or PVOs, occasions of conflict in priorities could arise between its service to a mission and to a PVO (e.g., if both wanted access to the same resource, or if the same individual in the support entity were charged with serving both the mission and the PVO).

Another reason to keep the two functions separate is that the scopes of work are distinctly different. Contracting separately for the two functions therefore will avoid confusion of purposes and ensure wider participation of qualified organizations in the bid competition.

Although they will operate separately, the two management entities will need to coordinate with one another and with NRMS managers. To facilitate that process, it is recommended that the two entities' directors meet regularly with NRMS management.

An estimated 15-20 percent of NRMS staff time -- AID management and RSSA support -- will be devoted to PVO capability strengthening.

5. Management of Special Studies

Special studies or analyses will be needed or requested within the context of all the different components of this project. During project design many studies were identified (Table II.4), but missions have not yet been queried as to their needs. Their reactions will be solicited. Also, they will be notified that among other services that NRMS can underwrite at the mission level are special studies or analyses.

a. Studies for NRMS project implementation.

Studies or surveys required to implement the various components of NRMS would be contracted directly by the NRMS project, using 8(a) firms, IQC contractors or S&T service projects.

b. Studies of regional scope or in support of REDSOs

Once missions and REDSOs have reacted to the indicative list of studies and advanced their suggestions, the Project Committee will review and prioritize the studies to be undertaken, schedule them, and identify the appropriate implementing mechanism. Re-

representatives from AFR/DP, AFR/PD, S&T/FA, S&T/RENK, S&T/RD, and PPC/CDIE should be present.

REDSOs may be able to undertake the technical and financial management of the NRMS-funded studies, where local consultants or institutions are contracted for the work. In this instance, the NRMS project manager would write a PIO/T making the REDSO office responsible for approval of vouchers and work submitted.

c. Studies for missions

Studies requested by missions would be funded on their behalf through NRMS in their entirety or partially depending upon the mission's need and the degree to which the study matches the Natural Resources Management Plan and related directives. These studies proposals would be reviewed and acted upon by the authority of the project manager. However, the manager will keep the Project Committee informed of studies funded on behalf of missions.

NRMS project managers could suggest possible executing entities to the missions and arrange for or execute the necessary PIO/Ts, amendments, or task orders.

The management effort involved in studies will be discontinuous, except for the initial studies required to program and define NRMS project components whose management may entail a total of two weeks each over a period of months. An estimated level of effort is not meaningful at this stage, but the management burden should be easily shouldered among the direct-hire managers and the the three advisors.

6. Management of the biological diversity component

Assuming no special funding of field activities, management of this component will entail one person 40% of the time; however, management could be shared by direct hire staff and USDA RSSA advisors. Also, management of the background study for the plan to support biological diversity and the plan preparation could possibly accomplished throught the USFS RSSA. However, given the high interest in biological diversity, it would be useful to have one individual be the focal point for all actions underwritten by NRMS related to biological diversity. Except for administrative actions, a USDA RSSA advisor could perform the various tasks.

Management tasks would entail: supervise a background study and plan preparation, coordinate services to missions, and participate in periodic reviews, planning, and reporting on the status and progress of the biological diversity support.

Project management tasks will also include liaising with Peace Corps activities that directly bear on the conservation or management of biological diversity, especially where these may be

supported by P.L. 480.

It is proposed that most of the management tasks entailed could be performed by a qualified individual seconded from the USDA through an existing RSSA with the Bureau for Africa.

In the event of a special fund, management would be as described in Annex J.

7. Management of information support activities

Much of the information support work would be contracted out. The most important initial task will be to plan and initiate the assessment of natural resources information needs.

A contract (for the project's duration) would be appropriate for the newsletter, perhaps as an adjunct to the Basic Programming Support level-of-effort contract.

The PVO information support service could be developed through existing cooperative agreements or could be let out for competitive bidding. A number of proposals are known to exist which address this need, e.g., Development Ecology Information Service (an IIED proposal) and a proposal from the Rodale Institute. These should be reviewed.

A central or focalized management for information support actions is not necessary. Management effort would involve one individual, one day per week, average, but tasks will be concentrated in clusters of 5 to 10 days, except for routine monitoring.

2. Financial Analysis

a. Compliance with Section 611 (a)

The cost estimate and financial plan for the project as shown on Table IV.I is based on the following assumptions and calculations (items marked with an asterisk are considered as not meeting the requirements of Sec. 611(a) at this time):

- Standard costs for contractor services, averaged at \$15,000 per person/month for service including overseas travel, with 5% added for inflation in FY 89.

- A set of activities that fulfills FID requirements for specific components in the project.

- An overall estimate of the regional funds needed to fulfill the project purpose of promoting increased NRM activity among AID missions and PVOs in sub-Saharan Africa. At the same time, the project allows for mission buy-ins to any project component, with the effect of increasing the overall budget.

- An estimate of mission demand for NRM program-assessment and project-related services over three obligation years which is approximately double the amount registered to date in mission responses to several cables sent by the bureau concerning the PNRM and this project. Procedures and criteria for allowing funds are set forth in Section II.B.

- An estimate of PVO service requirements from S&T based on a limit of six person/weeks of services (up to about \$22,000) per request, with each request to be reviewed pursuant to the criteria and procedures defined in Section II.C of the PP. This sub-component, designated as Phase 1.a, is proposed to begin early in FY 88.

- An illustrative estimate of PVO service requirements under a broader support program whose dimensions will need to be confirmed by a survey proposed for early FY 88;

- An estimate of studies requirements for which a proposed list is included that exceeds the amount budgeted in order to allow NRMS management, the REDSOs and the missions to

select priorities within the list according to PNRM criteria and to consider other suggestions as well. Thus the final choice of studies is left to management, utilizing a budget that the design team considers reasonable but that may be adjusted depending upon need and availability of funds.

- An estimate of information support requirements that includes funds for a PVO information support sub-project (subject to receipt of competitive proposals)§/, for a newsletter, and for a study of mission information needs that would form the basis for a future support project or activity.

- An amount sufficient for a three person/month evaluation at month 21 of the project which falls in FY 89. The final evaluation, to be carried out in month 36, will need to be financed from funds outside this budget since it will occur in FY 90.

- The need for a small contingency amount.

- An illustrative budget for biological diversity field activities§/ which is subject to further planning and the establishment of a special fund. NRMS services -- but not field activities -- are covered within the regular NRMS budget; in the absence of a special activity fund, NRMS services would apply to activities financed from ordinary program funds on the same basis as other natural resources projects.

To sum up, the following items in the regular NRMS regular service budget noted above require additional planning before they meet Sec. 611(a) requirements:

<u>Budget Item</u>	<u>Amount</u> (#000)
PVO Support Entity Core	
Costs; Liaison Costs	430
PVO Services (Non-S&T)	945
PVO Strengthening Grants	105
PVO Information Support	300
Total	<u>1,770</u>

In addition, the biological diversity activities fund would require both planning and the establishment of a special fund. The financial plan shows an illustrative estimate of \$1,485,000.

b. Payment Verification and Audit Statement

The NRMS project will provide funds to U.S. contractors and grantees, with no departure from standard methods of financing foreseen. In the event of a grant to an indigenous PVO, a financial management assessment will be required as a prerequisite. It is probable, however, that any grant benefiting an indigenous PVO would pass through a U.S. PVO meeting AID financial management standards.

The following chart summarizes the methods of implementation and financing to be used under the NRMS project:

<u>Method of Implementation</u>	<u>Method of Financing</u>	<u>Approx. Amt.</u> (US \$000)
TA - AID Direct Contract	Direct payment or L/C	8,095
Direct Grants to FVOs	"	105
Commod. - PSA or Direct Procurement	"	310
		<u>8,510</u>

c. Factors Affecting the Budget Level

The NRMS project falls within the Africa Bureau's regional program budget. Depending on overall funding availabilities, the figure of \$8.2 million proposed for the regular NRMS budget could change. If it does not prove feasible to finance that amount within a three-year project life span, NRMS management will need to consider reducing the overall budget and limiting activities, or maintaining the budget over a longer time span. If the stretch-out option is selected, management has a further choice of (a) rendering a full range or nearly full range of services to priority countries and postponing some services to posts ranked lower in the PNRM, or (b) spreading services thinly among all the countries. Choice (a) seems preferable in terms of accomplishing the project purpose.

The overall budget will also be affected by the demand for project services, which in turn will depend upon the levels of activity funding which missions receive for NRM or which they are willing to apply to NRM within their country programs. The requirements for FY 88 should become clearer as the program cycle proceeds during the summer and fall of 1987. Further definition will occur following proposed consultancies on FVO and information support requirements and possibilities. Hence it will be necessary for NRMS staff to remain flexible and conduct frequent budget reviews. As stated in section II.A.2, the project components and the budget both are readily adjustable.

In sum, it is not possible at this time to set a firmer budget for the project than herein provided, given the uncertainties about NRMS funding, NRM field activity funding, and level of demand for services. However, the project has the flexibility to cope with these uncertainties, allowing for adjustments between line items.

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ATTACHMENT

FY 87 Obligation Documentation

1. Draft cable to REDSO/WCA approving grant to Government of Cote d'Ivoire for remote sensing equipment -- to be obligated by limited scope grant agreement (LSGA)	\$310,000
2. Draft PIO/T face sheet for TR/ARD RSSA with U.S. National Park Service	200,000
3. Draft cable to Kigali approving grant to Government of Rwanda for natural resources analysis and planning activities -- to be obligated by LSGA	200,000
4. To be furnished by TR/ARD: For a soils resources inventory and land evaluation in Uganda, a memo from the mission director assuring an FY 87 obligation by LSGA, and an outgoing approval cable to USAID/Kampala	100,000
	<hr/>
TOTAL	\$810,000

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AID/AFR/TR/ARD/PA:AWAHAB:JW:63650
6/26/87 EXT. 78716
AID/AFR/TR:KSHERPER

AID/AFR/TR:KPRUSSNER

AID/AFR/DP:GCAUVIN

PRIORITY

ABIDJAN

AIDAC, FOR REDSO

N/A

COTE D'IVOIRE REMOTE SENSING ACTIVITY

REFS: {A} ABIDIJAN 12115
{B} ABIDIJAN 13836
{C} CAUVIN/HANDLER TELECON 6/16/87

KS
AW
KP
GC

AS INDICATED REF {C}, AID/W APPROVES SUBJECT ACTIVITY FOR OBLIGATION IN FY 87 IN THE AMOUNT OF DOLS 310.000 AS PART OF NATIONAL RESOURCE MANAGEMENT SUPPORT PROJECT {698-0467}. [PROJECT WAS AUTHORIZED BY AA/AFR ON JULY AND CONGRESSIONAL NOTIFICATION WAITING PERIOD EXPIRED ON FISCAL INFORMATION FOLLOWS BY SEPTEL.] 44

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AID 1350-1 (10-79) PIO/T	UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	1. Cooperating Country Africa Regional	Page 1 of Pages 3
		2. PIO/T No.	3. <input type="checkbox"/> Original or Amendment No. _____
		4. Project/Activity No. and Title PD&S National Park Service RSSA	

DISTRIBUTION	5. Appropriation Symbol		6. Allotment Symbol and Charge BAF-0135-R-IP-2244-01	
	7. Obligation Status <input type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document		8. Project Assistance Completion Date (Mo., Day, Yr.)	
	9. Authorized Agent SER/OP/AFR		10. This PIO/T is in full conformance with PRO/AG N/A Date _____	
	11a. Type of Action and Governing AID Handbook <input type="checkbox"/> AID Contract (HB 14) <input type="checkbox"/> PASA/RSSA (HB 12) <input type="checkbox"/> AID Grant (HB 13) <input type="checkbox"/> Other		11b. Contract/Grant/PASA/RSSA Reference Number (if this is an Amendment)	
	12. Estimated Financing (A detailed budget in support of column (2) is attached as attachment no. _____)			

Maximum AID Financing	A. Dollars	(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
					\$200,000		$200,000
	B. U.S.-Owned Local Currency				

13. Mission References

14a. Instructions to Authorized Agent
Amend National Park Service RSSA No. BAF-0135-R-IP-2244-01 to enable the NPS to assist in the implementation of the Bureau for Africa's Plan for Supporting Natural Resources Management in Sub-Saharan Africa, specifically the conservation of tropical forests and biological diversity. This will be done through short-term technical services, training and NGO/PVO support.

14b. Address of Voucher Paying Office
AID/W/AFR/TR/ARD: A. Wahab

15. Clearances—Include typed name, office symbol, telephone number and date for all clearances.

A. The project officer certifies that the specifications in the statement of work are technically adequate AFR/TR/ARD, A. Wahab	Phone No.	B. The statement of work lies within the purview of the initiating and approved agency programs AFR/TR, K. Sherper	Date
	Date		Date
C. AFR/TR/ARD, K. Prussner AFR/TR, M. Winter	Date	D. Funds for the services requested are available FM/PAFD, G. Stoddard AFR/DP, G. Cauvin	Date
	Date		Date
E. AFR/TR/PRO, M. Sebsibe AFR/DP, R. Whitaker	Date		Date

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

17. For the Agency for International Development

Signature _____	Date _____
Title	
Signature Alexander R. Love	Date _____
Title AA/AFR - Bureau for Africa	

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AID/AFR/TR/ARD:AWAHAB:TS
6/25/87: EXT. 78716
AID/AFR/TR:KSHERPER

AID/AFR/DP:GCAUVIN
AID/AFR/CCWA:DBERNIUS

AID/AFR/TR/ARD:KPRUSSNER
ST/ENR/FSP:MLHIGGIN

PRIORITY KIGALI

PRIORITY MAIROBI

AIDAC FOR REDSO

N/A

{A} KIGALI 02395
{C} STATE 178105
{E} STATE 144310

{B} KIGALI 02821
{D} ROBBINS/WAHAB TEL 6/24/87

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1. USAID'S PROPOSED NATURAL RESOURCE ANALYSIS AND PLANNING ACTIVITIES SET FORTH IN REF {A} AND {B} APPEAR TO BE KIND OF ACTIVITIES BUREAU WISHES TO ENCOURAGE AND WHICH THE NEW NATURAL RESOURCES MANAGEMENT SUPPORT PROJECT {NRMS} IS BEING DESIGNED TO PROMOTE, AS INDICATED REF {E}. NRMS PROJECT PAPER HAS BEEN REVIEWED TWICE WITHIN THE BUREAU AND ECPR SET FOR EARLY JULY WITH AUTHORIZATION HOPEFULLY OCCURRING SHORTLY THEREAFTER.

2. KIGALI'S PROPOSAL IS BEING CONSIDERED {IN THE AMOUNT OF DOLLAR 200,000} FOR INCLUSION AMONG ITEMS TO BE FUNDED IN FY '87 BY NRMS, SUBJECT TO THE FOLLOWING CAVEATS:

{A} NRMS IS DESIGNED TO PROVIDE SHORT TERM TECHNICAL SERVICES TO MISSIONS {SEE REF E, PARA ONE}. THEREFORE THE FINANCING OF A LONG TERM NATURAL RESOURCE MANAGER

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{ITEM 6.6, REF {A} IS NOT REPEAT NOT ELIGIBLE FOR SUPPORT UNDER NRMS.

{B} REF {B} INDICATES FUNDS WILL BE OBLIGATED THROUGH A LIMITED SCOPE GRANT AGREEMENT. PLEASE CONFIRM THAT OBLIGATION CAN BE EFFECTED IN FY '87 ASSUMING PP AUTHORIZED BY MID-JULY AND FUND ALLOTTED TO USAID SHORTLY THEREAFTER.

3. ASSUMING KIGALI'S PROPOSAL APPROVED AND FUNDED, AID/W PREPARED TO PROVIDE A NATURAL RESOURCE SPECIALIST SUCH AS BOB WINTERBOTTOM OR SOMEONE WITH SIMILAR QUALIFICATIONS TO ASSIST USAID WITH REVIEW OF ENVIRONMENTAL PROFILE PER REF {D} TELECON. REQUEST USAID ADVISE AS TO NATURE AND DATES OF CONSULTATION. 44

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3. Economic and Social Soundness Analyses

The NRMS project is designed to manage funds and requests for various technical and training services in support of AID missions and PVOs with a view to promoting increased field activity in natural resources management. The framework for both NRMS services and the field activities is the Plan for Supporting Natural Resources Management in sub-Saharan Africa (PNRM). All NRMS services will reflect the PNRM and its assessment of the economic and social context for natural resources management (see quotations below). The economic and social soundness of individual field activities will be determined within the context of the design for those activities, frequently with the help of NRMS. The requests for NRMS services received from 15 missions already indicate a strong conviction that natural resources management projects and activities will meet soundness tests.

Following are pertinent quotations from the Plan with respect to economic and social soundness:

"Africa's present macro-economic development problems have many dimensions: accelerating declines in per capita output, growing debt servicing problems, continued low returns on private investment, increasingly ineffective public services -- all of which have direct impact on sustainable livelihoods at the grassroots (micro) level. Natural resources rehabilitation and management, whether by African nations or individual Africans, will be facilitated by parallel improvements in the overall development picture.

"At the national level, it takes significant commitments of money and trained personnel to evolve sustainable, effective programs of natural resource management. African governments will also have to undertake serious macro-economic analysis and policy review to find answers to questions such as overall funding levels for the natural resources sector, the costs of affirmative action now versus rehabilitation later, and the types of incentives that will encourage farmer productivity and resources conservation.

"For individual farmers, improved natural resources management and conservation can pose additional pressure and apparent risks on limited family resources (land, labor, capital and technology) now dedicated to sustenance and survival. Returns on farm labor in many parts of Africa have declined dramatically to the point where the urban/rural income ratio is

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now 5:1 (as compared with 2:1 in India). Despite this, many African farmers have already embraced natural resources management activities such as tree-planting or soil and water conservation practices.

"Real progress, however, in controlling and reversing environmental degradation will only come as participatory, farmer-driven programs begin to achieve exponential impact. For this to take place, over time and on an escalating scale, farm families will require greater economic stability so as to be able to reinvest in the stewardship of their basic resources. They will need sound advice and support in choosing appropriate natural resources interventions which provide earlier, tangible benefits for the household economy. Peasant farmers will also need government action in obtaining relief from the wide range of social and economic policies and institutional factors which presently militate against sustainable use and resource conservation. Land tenure, tree rights and the role of women in decision making are examples of key areas where policy change is frequently needed." (pp. 4-5, PNRM)

"African governments have increasingly given their support to community-based, participatory action programs for tree planting, soil and water conservation, agroforestry, low resource agriculture and environmental rehabilitation. Small-scale pilot demonstration efforts are found in many countries. In some, local non-governmental organizations have brought natural resources issues to national attention through community action programs. Comprehensive plans and strategies to improve program planning and implementation are also getting more attention. Natural resources assessments, national conservation strategies, and sector master plans are under preparation or recently published for a significant number of countries....In short, Africa is turning the corner in the environment field, although a great deal remains to be done...." (p.14)

"Governments, with or without donor support, will never have the resources to deal effectively with the full range of natural resources concerns reviewed here. The government driven "top-down" approach has too often attempted to implant shallowly conceived, often technocratic solutions to poorly understood problems. What is needed is a pragmatic and economically viable integration of agriculture, animal husbandry and natural resources programs, conceived on the basis of popular participation, and built on people's existing practices. Only farmers, including women who play a fundamental role in both African farming systems and natural resources utilization, and herders -- planting trees, controlling erosion, conserving the soil, managing their rangelands and wildlife -- can restore stability to Africa's natural resource base.

"Women supply well over half of all the agricultural labor in African countries in addition to performing nearly all household chores. Their social and economic position in African society rarely reflects the importance of their role as the

primary agricultural producers. Agricultural development is hampered when primary producers have little decision-making power and are not permitted to own land. Through policy dialogue and through its project activities, AID will seek to foster women's access to development, particularly in extension services, and the right of women to influence the manner in which Africa's natural resource base is linked to food security." (pp. 24-25)

Annex F

Logical Framework Analysis

Table F.1 LOGICAL FRAMEWORK ANALYSIS

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
GOAL			
To improve policies and programs to restore and maintain environmental stability and the natural resources base in SSA, especially in support of agriculture.	<ul style="list-style-type: none"> o Increased host country policy & budget commitment to natural resources. o Improved policies and programs dealing with natural resources and the environment. 	<ul style="list-style-type: none"> o Policy and program statements and documentation. o Budget allocations. 	<ul style="list-style-type: none"> o Changes are evident and measurable by end of project. o AID natural resources activities will favorably influence host country NRM policies and programs. o Host country governments will request NRM assistance.
PURPOSE			
To increase the quality and level of natural resources management activity in AID's country and regional programs in SSA, and in PVO programs supported by AID.	<ul style="list-style-type: none"> o Country strategies that incorporate NRM through existing and planned projects, policy dialogue and donor coordination. o Planning and preparation of NRM projects as per CDSSa. o Planning and funding of activities in Africa aimed at conserving biological diversity. o Improved planning and execution of NRM activities by AID, host country and PVO personnel. 	<ul style="list-style-type: none"> o Program documents (CDSSa, ABSa, CPa, CNa) o Project documents o Project documents o Evaluations of projects; project reports; case studies. o NRMS evaluation. 	Program and project documents are effective measures of the quality and level of activities in NRM.
OUTPUTS			
<p>Mission support</p> <ul style="list-style-type: none"> o Revised CDSSa o CDSS background documents o Policy dialogues defined in NRM. o Definition of training and other institutional development needs. o Revised or new projects. o Improved basis for planning, programming and implementing NRM in missions and in AID/Washington. 	<ul style="list-style-type: none"> o Reports on assistance provided; cables from missions. o Planning report. o Project documents. o Special studies or analyses. 	<ul style="list-style-type: none"> o Mid- and final evaluation, all outputs. o Project monitoring information. o Annual report. o Reports from contractors or grantees. o Workshop proceedings. 	<p>Total annual spending levels in SSA missions on natural resources management of approx. \$45 million.</p> <p>Missions will request services through the project.</p> <p>Missions will request services from the project.</p>

Narrative summary	Indicators	Means of Verification	Assumptions
(Outputs, cont.)			
PVO support: o Planning and design assistance through S&T projects. o Support program designed, following close consultations with missions, PVOs. o Entity for supporting PVOs and issuance of strengthening grants.	o Reports of T.A. missions. o Program document. o Contract or agreement.	o Annual report	o PVOs demand project design & other support, provided through S&T and the program.
Biological diversity o Africa Bureau plan for supporting biological diversity. o Grants and support for the conservation of biological diversity to PVOs. o Special Africa program supplement to IBPGR.	o Plan document. o Records of grants awarded. o Project monitoring info.	o Report from grant manager, or annual report. o Report from IBPGR, other implementing entities.	o All activities in SSA concerning biological diversity will be funded through NRMS. o ditto.
Information support o Improved information in AID and among PVOs about their NRM activities and related NRM news.	o Newsletter o PVO information service.		
INPUTS			
(1) AID management personnel AID/AFR/TR: direct hire project manager(100x) direct hire assistant(Chief,Planning & Analysis, 40x) one RSSA forestry advisor(75x) one RSSA natural resources officer(75x) one RSSA program assistant(50x) one energy advisor(25x) S&T: project officers REDSOs: to be determined, but possibly technical and financial management of sub-regional and PVO activities.		o Project monitoring and reporting. o Evaluation.	o Implementation section of the Plan to Support Natural Resources Management in SSA is approved. o Funds are made available for RSSA staff for NRMS
(2) Project Committee			
(3) Contracted tasks(probable) IOC contractor to AFR/TR for Background Programming Support. Biological diversity grant manager. Newsletter contractor.			

2/1

Narrative summary	Indicators	Means of Verification	Assumptions
(Inputs, cont.)			
(4) Financial	(9000s)		
Programming support services	1,870	o Project monitoring	o Funds are made available.
Project support services	2,420	o Reports from grantees	
PVD support	1,890		
Special studies, analyses	1,095		
Information support	725		
End of project evaluation	50		
Contingency	150		
Remote sensing equipment(Cote d'Ivoire)	310		
total	8,510		
Biological diversity sup-			
port(special fund)(illustrative)	1,485		o Special fund is established and expended through NRMS.

2/2

Annex G

Environmental Analysis

INITIAL ENVIRONMENTAL EXAMINATION

OR

CATEGORICAL EXCLUSION

Project Country: Regional

Project Title: Natural Resources Management Support

Funding: FY (s) 87-89 \$ 8,510,000

IEE Prepared by:

Environmental Action Recommended:

Positive Determination _____
Negative Determination _____

Categorical Exclusion:

This activity meets the criteria for Categorical Exclusion in accordance with Section 216.2 (c)

The project does not have a harmful effect on the environment. To the contrary, the purpose of the project is to improve environmental management through technical and training services for the planning, design, implementation and evaluation of field activities in natural resources management. Individual activities assisted will be subject to their own environmental examinations.

Concurrence:
Bureau Environmental Officer

APPROVED _____
DISAPPROVED _____
DATE _____

Clearance: GC/AFR _____ Date _____

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Annex H

Project Control System Documentation

PROJECT CONTROL SYSTEM
DOCUMENTATION

March 7, 1986

Prepared for:

S&T/EY Office of Energy
Agency for International Development
Washington, DC 20523

and

Martin Marietta Energy Systems, Inc.
Oak Ridge, TN 37831

Prepared by:

Development Sciences Inc.
P.O. Box 444
Sagamore, MA 02561

Overview

The Office of Energy Project Control System (PCS) is an ensemble of database files and applications programs based on the dBASE III software package by Ashton-Tate of Culver City, California. The file structures and programs have been developed by Development Sciences, Inc. of Sagamore, Massachusetts, in cooperation with Ms. Shirley Toth of the Office of Energy and her staff, in particular, Mrs. Carolyn Kiser.

The primary objective in the creation of the PCS has been to provide a means for tracking projects for which the Office of Energy has responsibility. Attention is focussed on the specific areas of project description, type of project, budget, expenses and schedule of reports and evaluations.

The PCS has been devised to permit two-level operation and interaction with the user. On the first level the system is entirely menu-driven, allowing a user with minimal computer experience to add data to the database, edit previously entered data and generate standard reports of various natures. On the second level the more experienced user is capable of interrogating the system and synthesizing special reports on an ad hoc basis.

This documentation emphasizes the menu-driven PCS, and details the file and program structure sufficiently to permit the more experienced user, with assistance from the dBASE III help screens and program documentation, to pursue his/her specific enquiries.

Data input to the PCS is contained in three major files, namely, 1) the project text file containing descriptors, dates, and type codes, 2) the project budget file which contains the anticipated expenditures, and 3) the project expense file containing the actual invoiced amounts. An additional file contains the Operating Year Budget for each project and allows the Office of Energy to track unexpended 'pipeline' funds from fiscal year to fiscal year.

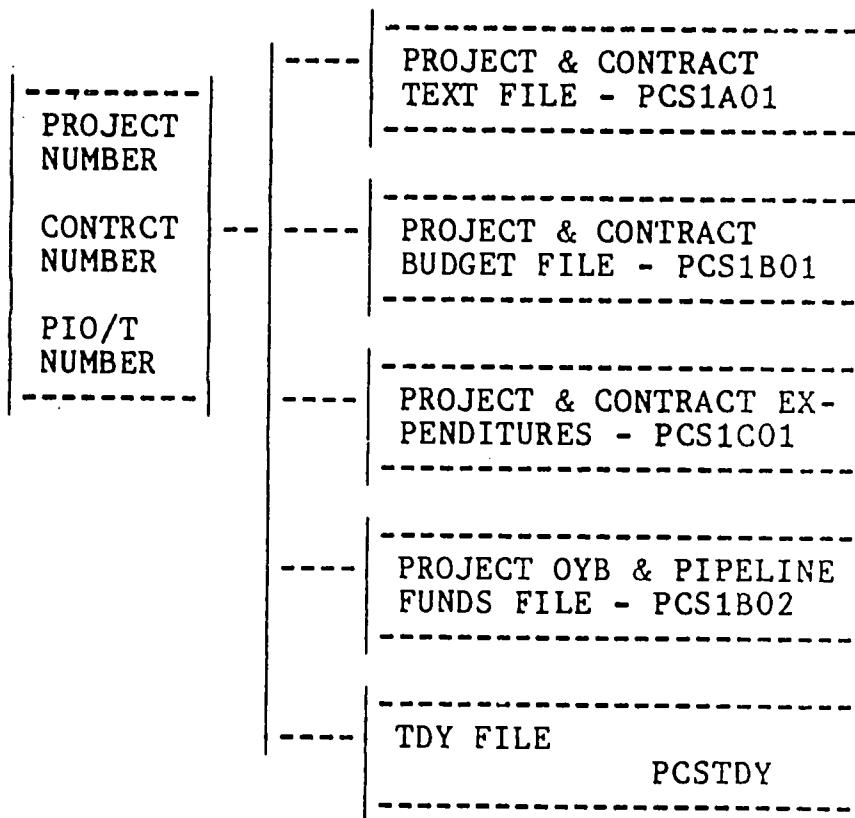
Reports automatically generated by the PCS include 1) a single project budget summary detailing budget totals, current expenses, cumulative expenses, budget amount remaining, percent of budget amount remaining and project dollar amount remaining by contract for any selected project; 2) a funding document status report detailing PIO/T number and date, description, amount obligated, expenditure to date, mission buy-in and Operating Year Budget remaining by PIO/T for any selected project in any selected fiscal year; 3) a six-month schedule of upcoming significant dates, beginning from the current date of program execution; 4) a listing of projects and their descriptions by selected energy research code or type; 5) an annual budget submission worksheet displaying a three-year evolution; and 6) a choice of two utility reports to display the specific contents of the major data files.

Overview (continued)

Provision has also been made in the PCS to develop projections of TDY expenditures by fiscal year, in the event staff support for collecting and entering data into the system becomes available.

As is shown in the following diagram of the PCS data files the specific keys which connect the data in the disparate files are the project number, contract number and PIO/T number.

PCS FILE INTERRELATIONSHIPS



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GETTING STARTED

The PCS has been designed to operate on a dedicated IBM PC XT installed at the Office of Energy. This machine has been configured by the vendor to operate dBASE III. The data files, programs and screen formats of the PCS have also been installed and are operational.

The startup procedure thus becomes a matter of turning on the machine, choosing the dBASE subdirectory on the hard disk and calling up the dBASE III program. Once the dBASE 'ready' prompt ('.') is visible, the user types 'do pcsstart' and presses the RETURN key. The menu-driven PCS is loaded and the user is led by on-screen instruction from menu to menu to data input/edit screen and back to menu. An orderly procedure for closing all files and exiting from the system is incorporated.

The sequence of menus and the programs, data files and data screen formats is detailed in the following series of diagrams. All files relating to the system use the prefix 'PCS' in their filenames so as to facilitate backup and archive procedures. The suffixes (.PRG, .DBF, and .FMT) are in accordance with the conventions of dBASE III to identify, respectively, programs, data files and screen format files. The first diagram presents the four major activity categories. The subsequent diagrams display each of these categories with the available options.

	PROGRAMS (.PRG)	DATA FILES (.DBF)	SCREEN FORMATS (.FMT)
----- MAIN MENU	PCSSTART	NONE	PCSMEM PCSS01
----- 1. ENTER DATA MENU			
----- 2. EDIT DATA MENU			
----- 3. PROCESS DATA MENU			
----- 4. GENERATE REPORTS MENU			

Project Control System Documentation

	PROGRAMS (.PRG)	DATA FILES (.DBF)	SCREEN FORMATS (.FMT)
----- MAIN MENU	PCSSTART	NONE	PCSMEM PCSS01
----- 1. ENTER DATA MENU	PCS101	NONE	PCSS101
----- A. PROJECT TEXT & DATES	PCS1A01	PCS1A01	PCS1A01 PCS1A02 PCS1A03 PCS1A04 PCS2A01
----- B. PROJECT BUDGET	PCS1B01	PCS1B01	PCS1B01 PCS1A01 PCS2A01
----- C. PROJECT EXPENSES	PCS1C01	PCS1C01	PCS1C01 PCS1A01 PCS2A01
----- D. ANNUAL BUDGET PREPARATION (DIRECT DATA ENTRY)	NONE	PCS1D01	NONE

Project Control System Documentation

	PROGRAMS (.PRG)	DATA FILES (.DBF)	SCREEN FORMATS (.FMT)
----- MAIN MENU	PCSSTART	NONE	PCSMEM PCSS01
----- 2. EDIT DATA MENU	PCS201	NONE	PCSS201
----- A. PROJECT TEXT	PCS2A01	PCS1A01	PCS1A01 PCS1A02 PCS1A03 PCS1A04
----- B. PROJECT BUDGET	PCS2B01	PCS1B01	PCS1B01 .PCS1A01
----- C. PROJECT EXPENSES	PCS2C01	PCS1C01	PCS1C01 PCS1A01
----- D. ANNUAL BUDGET PREPARATION (DIRECT DATA EDIT)	NONE	PCS1D01	NONE

Project Control System Documentation

	PROGRAMS (.PRG)	DATA FILES (.DBF)	SCREEN FORMATS (.FMT)
----- MAIN MENU	PCSSTART	NONE	PCSMEM PCSS01
----- 3. PROCESS DATA MENU	PCS301	NONE	PCSS301
----- A. REINDEX MAJOR PCS FILES	PCS3A01	PCS1A01 PCS1B01 PCS1C01	NONE

This module is reserved for programs which manipulate data without producing printed output. The menu screen shows provisions for future expansion.

Project Control System Documentation

	PROGRAMS (.PRG)	DATA FILES (.DBF)	SCREEN FORMATS (.FMT)
----- MAIN MENU	PCSSTART	NONE	PCSMEM PCSS01
----- 4. GENERATE REPORTS MENU	PCS401	NONE	PCSS401
----- A. PROJECT BUDGET SUMMARY	PCS4A01	PCS4A01 PCS1B01 PCS1C01	NONE
----- B. 6-MONTH SCHEDULE REPORT	PCS4B01	PCS4A01	NONE
----- C. PROJECTS BY SELECTED ENERGY CODE OR TYPE	PCS4C01	PCS1A01	PCS4C01
----- D. FUNDING DOCUMENT STATUS REPORT	PCS4D01	PCS1A01 PCS1B01 PCS1C01	NONE
----- E. ANNUAL BUDGET SUBMISSION	PCS4E01	PCS1D01	NONE
----- F. REPORT CONTENTS OF MAJOR PCS FILES			
----- 1. PROJECT, CONTRACT & PIO/T NUMBERS	PCS4F01	PCS1A01 PCS1B01 PCS1C01	PCS4F01
----- 2. PROJECT AND PIO/T DATES	PCS4F02	PCS1A01	NONE

Project Control System Documentation

The PCS has been delivered and installed in its uncompiled, source code form. All programs, screen formats and individual file structures can be printed out for archival purposes, as well as for analysis in the event modification is desired. The word processor installed on the Office of Energy PCS computer is capable of printing the programs and screen formats, and the dBASE III manual describes the procedure for listing the file structures to the printer. After sufficient usage has verified the adequacy of the system, the programs can be compiled for purposes of discouraging alteration and accelerating program execution.

Operational Notes

The following notes reflect procedural decisions reached by consensus during the development of the PCS, and are intended to guide the system operator when entering data into file PCS1B01.DBF, the Project Budget File.

The Life Of Project Cost (LOPC) for any project is to be placed in the field TOTALWFEE of a record containing only the project number, with no contract number or PIO/T number given. The approved Life of Project Cost (LOPC) represents the total project budget figure, and is being tracked and reported by the Project Budget Summary (PCS4A01.PRG). In other words, every project to be tracked must have an initial budget record in PCS1B01, even if the budget field (TOTALWFEE) is given a value of zero.

All records other than those representing the LOPC for a project must contain an entry in both the Contract Number and PIO/T Number fields, even if the entry is simply a flag (i.e., asterisks) to indicate that the information is not yet available.

For the budget record of a PIO/T, the field TOTALWFEE represents the Amount Obligated. This number will be manually updated following obligation by the Contracts Officer.

Amendments to PIO/Ts must reflect incremental amounts over the previously issued PIO/T, and NOT be entered as restatements of the total amounts.

There will be NO records to reflect any total contract budget amount. The sum of the budgets of all of the PIO/T records listed under a given contract will be reported as the contract budget amount.

Since the Project Budget Summary program (PCS4A01.PRG) adds the Mission Buy-In to the PIOT budget total (TOTALWFEE) for reporting under the heading 'Budget Total', the Buy-In amount should not be manually added to the TOTALWFEE amount, as this will result in the Buy-In amount being doubled on the report.

+++

KISER7

06-09-1986

277504 bytes free

PCS101	PRG	891	FCS1A01	FMT	640
PCS1A01	PRG	512	PCS1A02	FMT	1108
PCS1A03	FMT	1056	PCS1A04	FMT	1408
PCS1A05	FMT	1180	PCS1B01	FMT	1664
PCS1B01	PRG	359	PCS1C01	FMT	1662
FCS1C01	PRG	384	PCS201	PRG	901
PCS2A01	FMT	1024	PCS2A01	PRG	1280
PCS2B01	PRG	1152	PCS2C01	PRG	1152
PCS301	PRG	950	PCS3A01	PRG	1298
PCS401	PRG	1152	PCS4A01	PRG	7808
PCS4A02	PRG	6016	PCS4B01	PRG	3840
PCS4C01	FMT	1280	PCS4C01	PRG	1792
PCS4D01	PRG	6272	PCS4E01	PRG	2304
PCS4F01	PRG	3200	PCS4F02	PRG	2816
PCSLINES	PRG	363	PCSMEM	MEM	512
PCSS01	FMT	1024	PCSS05	FMT	2816
PCSS06	FMT	2432	PCSS101	FMT	1024
PCSS201	FMT	899	PCSS301	FMT	1024
PCSS401	FMT	1024	PCSSTART	PRG	1022

Contract Expenditures

Project No.	PIO/T No.	AID/W Expenditures	Mission Expend.	Country	Invoice Month (01-Oct)	FY
** Total Expenditures for Contract No. BST-5728-X-ER-5072-00						
936-5728	5361318	121615.00	0.00		11	85
936-5728	5361318	261612.00	0.00		12	85
936-5728	5361318	107534.00	0.00		09	86
936-5728	5361318	105696.00	0.00		07	86
936-5728	5361318	119302.00	0.00		08	86
936-5728	5361318	98888.00	0.00		06	86
936-5728	5361318	108841.00	0.00		01	86
936-5728	5361318	114287.00	0.00		02	86
936-5728	5361318	162578.00	0.00		03	86
936-5728	5361318	122930.00	0.00		04	86
936-5728	5361318	195864.00	0.00		05	86
** Subtotal **						
		1519147.00	0.00			
*** Total ***						
		1519147.00	0.00			

*use pcs/c01
report form expenditures for
15072) \$ column + print*

Contract Status

Project Number	PIO/T No.	Obligations	Mission Country Buy-in	FY
** Total Obligations BST-5728-X-ER-5072-00				
935-5724	230442	0	80000 Pakistan	85
936-5724	5361629	34446	0	85
935-5724	6361532	50000	0	86
936-5728	350052	0	57000 ANE/Banglade	85
935-5728	5361318	1500000	0	85
936-5728	5361318 A-2	31400	0	85
935-5728	220104	0	316500 India	86
936-5728	240417	0	135000 Pakistan	86
936-5728	260029	0	15000 India	86
936-5728	260084	0	330000 Pakistan	86
936-5728	330114	0	37000 Ecuador	86
936-5728	330114 A-1	0	-15000 Ecuador	86
936-5728	6361012	800000	0	86
936-5728	6361012 A-1	35169	0	86
936-5728	A660157	0	14000 Madagascar	86
** Subtotal **		2451015	969500	
*** Total ***		2451015	969500	

DBASE>

useps1bol
report form contract for '5072' \$ column
to print

Structure for database : B:pcsla01.dbf

Number of data records : 8

Date of last update : 02/06/86

Field	Field name	Type	Width	Dec
1	PROJNUM	Character	15	
2	PTITLE	Character	65	
3	CONNUM	Character	25	
4	PIOTNUM	Character	8	
5	PNAR1	Character	65	
6	PNAR2	Character	65	
7	PNAR3	Character	65	
8	PNAR4	Character	65	
9	PNAR5	Character	65	
10	POFFICER	Character	30	
11	POFFICE	Character	15	
12	TELNO	Character	15	
13	PCODE	Character	4	
14	PTYPE	Character	1	
15	STRDATE	Date	8	
16	PACDATE	Date	8	
17	AMENDATE	Date	8	
18	MEVALDATE	Date	8	
19	IHEVALDATE	Date	8	
20	FEVALDATE	Date	8	
21	REVWDATE	Date	8	
** Total **			560	

Structure for database : B:pcslb01.dbf

Number of data records : 11

Date of last update : 02/05/86

Field	Field name	Type	Width	Dec
1	PROJNUM	Character	15	
2	CONNUM	Character	25	
3	FY	Character	2	
4	PIOTNUM	Character	12	
5	PIOTDATE	Date	8	
6	COUNTRY	Character	20	
7	APPRCODE	Character	20	
8	ALLOCODE	Character	20	
9	ALLOCODE2	Character	25	
10	DESCR1	Character	20	
11	DESCR2	Character	20	
12	DESCR3	Character	20	
13	SALWAGES	Numeric	12	
14	OVERHEAD	Numeric	12	
15	TRAVSUB	Numeric	12	
16	EQFACIL	Numeric	12	
17	SUBCONTRAC	Numeric	12	
18	OTHERDIREC	Numeric	12	
19	GENADMIN	Numeric	12	
20	FEE	Numeric	12	
21	COSTSHARE	Numeric	12	
22	TOTALWFEE	Numeric	12	
23	MISSION	Numeric	12	
24	MISSDATE	Date	8	
25	MISSCTRY	Character	12	
** Total **			360	

Structure for database : B:psic01.dbf

Number of data records : 7

Date of last update : 02/05/86

Field	Field name	Type	Width	Dec
1	PROJNUM	Character	15	
2	CONNUM	Character	25	
3	FY	Character	2	
4	INUMONTH	Character	2	
5	PIOTNUM	Character	8	
6	PIOTDATE	Date	8	
7	COUNTRY	Character	20	
8	SALWWAGES	Numeric	12	2
9	OVERHEAD	Numeric	12	2
10	TRAVSUB	Numeric	12	2
11	EQFACIL	Numeric	12	2
12	SUBCONTRAC	Numeric	12	2
13	OTHERDIREC	Numeric	12	2
14	GENADMIN	Numeric	12	2
15	FEE	Numeric	12	2
16	COSTSHARE	Numeric	12	2
17	TOTALWFEE	Numeric	12	2
18	MISSION	Numeric	12	2
19	MISSDATE	Date	8	
20	MISSCTRY	Character	12	
** Total **			233	

Annex I

Scopes of Work

Scopes of Work for the NRMS manager and advisors

The scopes of work for the NRMS project manager as well as project advisors have already been prepared, and they establish the range of responsibilities and tasks that these individuals will undertake within the overall operation of the Office of Agriculture and Rural Development. The manager and the advisors will be devoting time to other work within that office, however, since NRMS is the principal means over the next two to three years of facilitating the implementation the Plan for Supporting Natural Resources Management, their existing scopes of work easily bracket all of the actions they will be required to undertake.

The following language only specifies a few of the more obvious duties related to NRMS. In fact, the full scope of work for the project manager is represented in Chapter V of the Project Paper, Implementation.

1. Project manager

The manager will be officially responsible for all project activities, and for the correct employment of project advisors in project management tasks.

The NRMS manager will coordinate and approve all actions undertaken through implementing mechanisms controlled by AFR/TR/ARD:

- (1) the RSSA with the US Park Service, which is financed with NRMS project monies,
- (2) actions undertaken through the Energy Initiatives for Africa extension, also financed through NRMS, and
- (3) short term advisory services acquired by purchase order through the AFR/TR/ARD RSSA with the USDA.

The manager will also approve all PIO/Ts prepared for NRMS-financed actions.

2. Long term advisors

Three long term advisors are available to the project manager: a Natural Resources Officer (RSSA), a Forestry Advisor (RSSA), and an Energy Advisor (S&T buy-in).

The two RSSA employees will work in TR/ARD offices and will provide advisory and technical managerial services to the project manager in the fields of:

- forestry, agroforestry, watershed management, and soils

management aspects of NRMS support services.

- all activities related to biological diversity
- the PVO and information support components

A third advisor on energy matters is available to the project manager. That person was obtained through an AFR/TR/ARD buy-in to the S&T project Energy Policy Development and Conservation. He will not be physically located in AFR/TR/ARD but he will be in continuous contact with that office and the NRMS project manager. The energy advisor will be able to assist in

- energy-related activities and services underwritten by NRMS.
- technical management and coordination with EDI of actions underwritten by through the Energy Initiatives for Africa extension.

Each of these three individuals is a fulltime advisor to ARD, who also provides other programming and analysis assistance. Their scopes of work include assistance in the implementation of projects.

The advisors can assist the project manager in the following tasks:

- drafting and reviewing of scopes of work for contracts, work orders, amendments to IQCs, etc.
- technical oversight of studies or actions undertaken directly by the NRMS project,
- technical oversight and monitoring of services provided through NRMS to missions.
- operation and up-dating of the project's control system documentation, and preparation of draft reports on project progress.

3. Management of biological diversity support.

The following can be added to the existing scope of work for the Natural Resources Officer, funded under the USDA RSSA, who is professionally competent to handle questions of biological diversity.

* Oversight of technical services to missions and PVOs in biological diversity.

* Advisory management of a background study for the prepara-

tion of a plan for biological diversity support.

* Organization and technical supervision for the preparation of a plan to support biological diversity.

* periodic reporting on work done and in progress.

Technical management tasks will also include liaising with Peace Corps activities that directly bear on the conservation or management of biological diversity, especially where these may be supported by P.L. 480."

Management tasks related to the establishment of a special funding mechanism for supporting biological diversity detailed in Annex J.

Annex J

Design Concept for Biological Diversity Support

Design Concept for Biological Diversity Support

A. Introduction

This annex details a design concept for supporting biological diversity activities through the NRMS project in the event AID decides upon a special fund for the purpose. It is assumed that the funds would be expended through the project. This eventuality was not foreseen at the PID stage of NRMS but later became a distinct possibility. Consequently it is included as a design concept that would be developed as a sub-project activity of NRMS when and if a special fund is established. Should this take place, an amendment to the project paper and the project paper authorization will be made, and a sub-project prepared, based on this design concept to the extent it is suited to future needs.

A working assumption of the design for this component is the probability that during FY 87 through FY89 very few bilateral projects will be proposed by missions, and that missions will expect this facet of AID's overall program to be financed out of a separate account, as opposed to planned mission obligations.

It is also assumed that, as has been the case to date, many initiatives will continue to be undertaken by private voluntary or non-governmental organizations, or by regional organizations, with the collaboration of African governments or parallel NGOs.

The bureau may eventually find it convenient to prepare a separate project on biological diversity, but the merits of this approach are not clear at this time. Project design could be initiated through the NRMS project if this decision were made. Such a decision should benefit from the experiences of the first several years of implementing the biological diversity program, i.e., FY 87 and FY 88. Such a regional project could be patterned in part after the current SAARFA project (Strengthening African Agricultural Research and Faculties of Agriculture), which serves as an umbrella for various sub-projects.

Eventually, biological diversity projects may be included in mission portfolios, in which case they would go through the normal cycle of project design and approval, funded out of the bilateral OYB, rather than out of the NRMS project. Bilateral funding may be appropriate for projects that exceed a certain funding threshold, which could be set in consultation with missions.

B. Component Activities

NRMS support for biological diversity would consist of the following activities:

(1) PVO grants, perhaps managed by a third party, selected in competitive bidding for available funds;

(2) Sub-grants to uniquely qualified regional organizations, such as the IUCN, to finance special projects of mutual interest, managed through the existing Africa Bureau RSSA with the U.S. Park Service;

(3) Germplasm collection and management support, handled as an Africa Bureau buy-in to the current core funding contribution by PPC to the International Board for Plant Genetic Research, and managed by S&T/Ag;

Each of these three activity areas is described next.

1. PVO biological diversity grants

North American and Africa-based PVOs have exercised scientific, technical, and political leadership in the conservation of biological diversity in Africa. A continuation of their activities is expected and needed. This sub-component would support their work financially. Small to medium grants for worthy activities would be financed from a fund set up under this project but managed by a third party, who would be the prime grantee.

The purpose of the fund would be to finance PVOs and NGOs working in the field of biological diversity in Africa. Grant proposals would be solicited from the PVO and NGO community, following criteria and priorities established by the Bureau for Africa. Proposals could range from less than \$5,000 to more than \$200,000, if past experience is indicative. Size of grant may not necessarily correlate with the importance of the work proposed, hence a range of grant amounts should be offered. There are African-based as well as U.S. PVOs qualified to carry out work in this area.

Management tasks would include announcements, descriptions, and requests for proposals; screening of proposals (probably in a two-stage process); reviewing and awarding grants; and monitoring financial outlays and routine reports.

It may not be feasible for AID to undertake full management of the fund. Management by a third party as prime grantee is proposed. AID would set geographic and topical priorities, and criteria for screening and awarding, and would sit on the proposal review and awarding committees, with final approval authority resting with AID. However, these committees would also benefit from scientists and experts who could bring informed judgement to bear on the proposals. Periodic reports would be required of the

B. Component Activities

NRMS support for biological diversity would consist of the following activities:

(1) PVO grants, perhaps managed by a third party, selected in competitive bidding for available funds;

(2) Sub-grants to uniquely qualified regional organizations, such as the IUCN, to finance special projects of mutual interest, managed through the existing Africa Bureau RSSA with the U.S. Park Service;

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The purpose of the fund would be to finance PVOs and NGOs working in the field of biological diversity in Africa. Grant proposals would be solicited from the PVO and NGO community, following criteria and priorities established by the Bureau for Africa. Proposals could range from less than \$5,000 to more than \$200,000, if past experience is indicative. Size of grant may not necessarily correlate with the importance of the work proposed, hence a range of grant amounts should be offered. There are African-based as well as U.S. PVOs qualified to carry out work in this area.

Management tasks would include announcements, descriptions, and requests for proposals; screening of proposals (probably in a two-stage process); reviewing and awarding grants; and monitoring financial outlays and routine reports.

It may not be feasible for AID to undertake full management of the fund. Management by a third party as prime grantee is proposed. AID would set geographic and topical priorities, and criteria for screening and awarding, and would sit on the proposal review and awarding committees, with final approval authority resting with AID. However, these committees would also benefit from scientists and experts who could bring informed judgement to bear on the proposals. Periodic reports would be required of the

fund to help AID track this activity.

Possible grant managers include: the World Wildlife Fund, the African Caribbean Institute, the African Wildlife Foundation and the Ford Foundation. The IUCN is not a candidate because of the mixed political status of its membership, which includes governments as well as non-governmental organizations and individuals, and because of the communication difficulties posed by its location in Switzerland. Selection of the grant manager would be done competitively. AID would stipulate criteria and priorities for sub-grant proposals.

Post-project design action required would be to sound out candidate grant fund managers, initiate a competition, select one, and draw up a grant agreement.

Subsequent AID management tasks would include reviewing proposals, active participation in meetings to screen and award proposals, monitoring the management of the fund, and ensuring periodic reporting of fund activities.

The amount proposed to be allocated to this funding mechanism is based on preliminary very rough estimates. Ultimately, the funding level would be determined by the amount allocated by AID for a special fund for biological diversity activities.

Preliminary budget, PVO grant fund

FY 87 no activity or obligation.

FY 88 Grant Fund is set up, RFPs disseminated. Initial grants awarded by June, 1988.

Management: \$50,000 for a full timemanager
Fund: 150,000

FY89

Management: \$60,000
Fund: \$500,000

Total: \$760,000

2. Grants or contracts to regional organizations

This component is included to give the bureau the option of directly engaging a regional organization such as IUCN or the African Wildlife Foundation in a regional project or activity. For example, the bureau may wish to contract the IUCN to prepare a national conservation strategy, to assist in a country environmental profile, or to identify options for missions in

East Africa for supporting a sub-regional strategy for biological diversity conservation. Training is another possibility for a regional focus.

This subcomponent would be managed through the existing Bureau for Africa RSSA with the National Park Service, which allows for training as well as studies.

A total of \$325,000 is allocated to this work: \$125,000 in FY88 and \$200,000 in FY89.

3. Germplasm collection and management support

Support for this work has been managed by the Bureau for Science and Technology, through the International Agricultural Research Project (936-4111), in partnership with the Bureau for Program and Policy Coordination. Mandated budget cuts have reduced the level of AID funding to the organizations involved in germplasm collection in Africa, namely the International Board for Plant Genetics Research (charged with sponsoring and coordinating germplasm collection efforts worldwide) and the International Livestock Center for Africa, where a collection of plant species important to domestic animals (forage and browse species) is being assembled.

Funding cuts of 18 % have reduced the U.S. contribution to IBPGR to \$800,000, destined for core support. IBPGR does not propose special programs. Support to ILCA has been reduced to \$3.0 million. AID support to ILCA includes germplasm collection and characterization work for forage species.

The urgent need to develop improved food grains, especially for the semi-arid rainfed farming regions of Africa, underlines the importance of germplasm collection of land races (already domesticated grains) and their wild progenitors. Land races have been collected, but their wild relatives remain largely uncollected. Wild relatives can be expected to contain traits important to plant breeding: disease resistance, tolerance of or resistance to various limiting factors, etc.

The fact that over 2,000 strains of millet introduced from India into Africa at ICRISAT's Sahel center failed to outperform local millets is indicative of the need to tap the genetic wealth in the African germplasm of economic and food crops. Recent breeding progress with African sorghums has already demonstrated their superiority over strains introduced from India.

The need to advance work in forage and browse collections is driven by the increasing reliance in East Africa of small livestock on cut forage, as pastures come under the plow due to population pressures.

Also lagging is research on the characterization of collected species and varieties of land races and their wild relatives.

A third area needing support in Africa is the inventorying and evaluation of in situ gene pools, i.e., undisturbed places in different ecological zones containing plant communities that include wild progenitors of economic plants, and other plants with economic potential.

The IBPGR is interested in expanding its work in Africa and is preparing proposals along the lines indicated here. This sub-component of the NRMS biological diversity support component would provide special program grants to IBPGR for work in Africa for:

- 1) collection of wild relatives of priority food crops, e.g., millet, sorghum, cowpeas, okra, and others;
- 2) characterization research of priority accessions;
- 3) Survey and assessment of wild gene pools.

Proposed allocation:

FY88	\$100,000
FY89	\$100,000

The financial support supplied through NRMS would be a special grant supplement to the core funding to IBPGR supplied by AID. Ongoing or current IBPGR proposals for work that would be funded would be reviewed by the Office of Agriculture, Bureau for Science and Technology and the Office of Technical Resources, Bureau for Africa.

The funding mechanism would be the International Agricultural Research Project (936-4111), co-managed by PPC and S&T/Ag. An OYB transfer would be made to PPC, where the project account is located, and identified as a special grant contribution to the IBPGR.

Management of the special grant would be entrusted to the S&T/Ag manager of project 936-4111 who would report on the use and expenditure of money back to the Bureau for Africa, to allow tracking of the NRMS project money. The corresponding IBPGR work plan would be approved by AFR/TR as well as S&T/Ag. Similar arrangements with the Bureau for Africa have been made under this project, e.g., the IRRI grant in Madagascar.

C. Funding and Management

Costs and allocations for the sub-components are rough estimates. The level of funding that may be established will affect the design.

Management of this component could entail one-half person/year annually. Tasks would be in addition to the

management of technical advisory services to missions and the preparation of a plan for biological diversity support. The full range of tasks would be to

coordinate and orient technical advisory services,
contract background study for a bureau strategy,
supervise a plan preparation,
develop the various sub-components,
oversee their initiation,
review options for managing PVO grants,
participate in periodic reviews, planning, and
evaluation activities, and
report on the status and progress of the biological diversity component.

Project management tasks will also include liaising with Peace Corps activities that directly bear on the conservation or management of biological diversity, especially where these may be supported by P.L. 480.

The NRMS project manager would be assisted in technical direction by a qualified individual seconded from the USDA through the RSSA with the Bureau for Africa. (That individual is already attached to AFR/TR/ARD).

The specialized management of the germplasm sub-component, number 4 above, would be accomplished by the S&T/Ag manager of project 936-4111 (International Agricultural Research Project), by means of close consultations with the Africa Bureau. Similar arrangements have been made with the Africa Bureau for other special grants, such as the IRRI grant in Madagascar. This would allow the Bureau for Africa to participate in reviews of IBPGR work plans.

Annex K

PID Approval Cable

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Department of State

OUTGOING
TELEGRAM

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ORIGIN AID-00

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INFO LOG-00 AF-00 EB-00 /000 R

DRAFTED BY: AID/AFR/TR/ARD:AWAHAB:TS:60220
APPROVED BY: AID/A/AA/AFR:ARLOVE
AID/AFR/TR:KSHERPER (DRAFT) AID/AFR/PD:CPEASLEY (DRAFT)
AID/AFR/DP:JPATTERSON (DRAFT) AID/AFR/TR:HWINTER (DRAFT)
AID/AFR/TR/ARD:KPRUSNER (DRAFT)

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TO USAID MISSIONS IN AFRICA PRIORITY

UNCLAS STATE 144310

AIDAC, FROM AA/AFR A. R. LOVE FOR MISSION DIRECTORS

E.O. 12356: N/A

SUBJECT: NATURAL RESOURCES MANAGEMENT SUPPORT (NRMS)
PROJECT (698-0467)

REF: (A) STATE 356459 OF 11/14/86
(B) STATE 010377 OF 1/13/87
(C) 070177 OF 3/11/87

1. AT AN AFR ECPR MEETING ON APRIL 15, I APPROVED A PROJECT IDENTIFICATION DOCUMENT FOR THE SUBJECT PROJECT. PROJECT PAPER (PP) DESIGN HAS BEEN INITIATED. THE APPROVED NRMS PID REPLACES THE NREMA PID CIRCULATED IN REF B. THE PRIMARY DIFFERENCE BETWEEN THE DOCUMENTS IS THAT NRMS IS ESSENTIALLY A FUNDING AND ADMINISTRATIVE MECHANISM FOR PROVIDING NATURAL RESOURCES TECHNICAL SUPPORT SERVICES TO USAIDS AND REDSOS WISHING TO STRENGTHEN OR EXPAND THE NATURAL RESOURCES PORTIONS OF THEIR PROJECT PORTFOLIOS (E.G. MOSTLY SHORT TERM TA FOR PROJECT IDENTIFICATION, PROJECT DESIGN, CONSULTATIONS FOR USAID PLANNING, POLICY DIALOGUE, EVALUATIONS). THE PID CALLS FOR A THREE YEAR PROJECT BEGINNING IN FY 1987. IT ALSO PROVIDES LIMITED FUNDING IN ITS SECOND AND THIRD YEARS FOR TRAINING AND SEMINARS, STRENGTHENING GRANTS TO PVOS, FUNDING FOR DATA COLLECTION AND ANALYSIS

AND FOR RESEARCH. THE PID ALLOWS FOR LONGER TERM INTERVENTIONS SUCH AS THOSE OUTLINED IN THE NREMA PID TO SUPPORT MORE FULLY AFR'S WORK IN NATURAL RESOURCES (HERE AND IN THE FIELD). IT WAS DECIDED HOWEVER THAT DEVELOPMENT OF SUCH ACTIVITIES SHOULD INCLUDE FURTHER DIALOGUE WITH THE FIELD AND BENEFIT FROM LESSONS TO BE LEARNED FROM THE EXPERIENCE WITH INITIAL IMPLEMENTATION OF NRMS.

2. THE NRMS PID LOOKS TO EXISTING RAPID RESPONSE MECHANISMS CURRENTLY AVAILABLE TO AFR FOR TAKING ACTION ON FIELD REQUESTS FOR NATURAL RESOURCES SERVICES I.E., RSSAS, IQCS, QUOTE BUY-INS END QUOTE TO S AND T PROJECTS AND UTILIZATION OF 2-A FIRMS. OF THE (DOLLARS) 5.0 MILLION, (DOLLARS) 3.2 MILLION IS BUDGETED FOR FIELD SUPPORT SERVICES WITH THE REMAINDER ALLOCATED TO PVO STRENGTHENING GRANTS, RESEARCH AND ANALYSIS, SEMINARS AND TRAINING, AND EVALUATION/REDESIGN. THESE FUNDING FIGURES ARE PRELIMINARY AND MAY BE REVISED BY THE PP TEAM BASED ON THEIR ESTIMATE OF FIELD DEMAND FOR DESIGN SERVICES. AFR IS AIMING FOR PP AUTHORIZATION BY JUNE 30 AND HAS TENTATIVELY BUDGETED (DOLLARS) 750,000 FOR

OBLIGATION IN THIS FISCAL YEAR. AFR WILL BE CIRCULATING GUIDANCE ON PROCEDURES USAIDS AND REDSOS SHOULD FOLLOW FOR REQUESTING SERVICES TO BE PROVIDED UNDER NRMS.

3. THE PP DESIGN TEAM IS SIFTING THROUGH THE VIEWS AND SUGGESTIONS USAIDS HAVE OFFERED ON THE REFERENCED CIRCULAR MESSAGES SO THAT THEY CAN BE TAKEN INTO ACCOUNT IN SHAPING THE PROJECT. IF THERE ARE PARTICULAR POINTS OR ADDITIONAL SUGGESTIONS USAIDS AND REDSOS MAY WISH TO BRING TO THE DESIGN TEAM ATTENTION, THEY WOULD BE MOST WELCOME. IN ADDITION, ACTION ADDRESSEES ARE REQUESTED TO PROVIDE A PRELIMINARY ESTIMATE OF THEIR NEEDS FOR NATURAL RESOURCE TECHNICAL SERVICES OVER THE NEXT TWO YEARS INCLUDING, IF POSSIBLE, TYPES OF ASSIGNMENTS, TECHNICAL SPECIALTIES, LEVELS OF EFFORT, AND TIMING. ESTIMATES SHOULD TAKE INTO CONSIDERATION AFR'S FY 89 AOS GUIDANCE (SEE STATE 097541 PARAS 12 AND 13). ALSO PLEASE ADVISE WHICH OFFICER (S) AND UNDER WHAT POSITIONS IS (ARE) MANAGING PROJECTS RELATED TO NATURAL RESOURCES (NOT INCLUDING ENVIRONMENTAL CLEARANCE ACTIVITIES FOR PIDS, PPS ETC) AND PLEASE ESTIMATE THE PERCENTAGE OF SUCH PERSON/S TIME DEVOTED TO SUCH ACTIVITIES. USAID REPLIES SHOULD BE IN AID/W BY MAY 22 SO THAT THEY CAN BE UTILIZED BY PP DESIGN TEAM. PLEASE SLUG ALL SUCH MESSAGES QUOTE FOR AFR/TR/ARD, A. WAHAB. END QUOTE

4. A COMPANION MESSAGE ON THE SITUATION IN RESPECT TO MOVE IN CONGRESS TO EARMARK FUNDS FOR NATURAL RESOURCE ACTIVITIES IN FY '88 AND BEYOND AND THE AFRICA BUREAU'S PLAN FOR NATURAL RESOURCE MANAGEMENT WILL BE CIRCULATED SHORTLY. SHULTZ

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