

PD-ABD-451
ISN 74417

A.I.D. Project No. 505-0043

PROJECT GRANT AGREEMENT
between the
GOVERNMENTS OF BELIZE
and the
UNITED STATES OF AMERICA
acting through the
AGENCY FOR INTERNATIONAL DEVELOPMENT
for the
NATURAL RESOURCE MANAGEMENT AND PROTECTION PROJECT

Dated: September 24, 1991

Appropriation : 72-1111021
BPC : LDNA-91-25505-KG13
Control No. : A110340
This Obligation : US\$1,000,000
Total Obligation: US\$1,000,000

Project Grant Agreement

Dated: September 24, 1991

Between

Belize ("Grantee")

and

the United States of America, acting through the
Agency for International Development ("A.I.D.").

Article 1: The Agreement

The purpose of this Agreement is to set out the understandings of the parties named above ("Parties") with respect to the undertaking by the Grantee of the Project described below, and with respect to the financing of the Project by the Parties.

Article 2: The Project

SECTION 2.1. Definition of Project. The Project, which is further described in Annex 1, will consist of financial and technical assistance to the Government of Belize and selected non-governmental organizations to improve the management of Belize's natural resources in order to increase and sustain the economic benefits from agriculture, forestry, fisheries and tourism while protecting and conserving the resource base upon which these industries depend. Annex 1, attached, amplifies the above definition of the Project. Within the limits of the above definition of the Project, elements of the amplified description stated in Annex 1 may be changed by written agreement of the authorized representatives of the Parties named in Section 8.3, without formal amendment of this Agreement.

SECTION 2.2. Incremental Nature of the Project

(a) A.I.D.'s contribution to the Project will be provided in increments, the initial one being made available in accordance with Section 3.1 of this Agreement. Subsequent increments will be subject to availability of funds to A.I.D. for this purpose, and to the mutual agreement of the Parties, at the time of a subsequent increment, to proceed.

(b) Within the overall Project Assistance Completion Date stated in this Agreement, A.I.D., based upon consultation with the Grantee, may specify in Project Implementation Letters appropriate time periods for the utilization of funds granted by A.I.D. under an individual increment of assistance.

Article 3: Financing

SECTION 3.1. The Grant. To assist the Grantee to meet the costs of carrying out the Project, A.I.D., pursuant to the Foreign Assistance Act of 1961 as amended, agrees to grant the Grantee under the terms of this Agreement an amount not to exceed the equivalent of One Million United States ("U.S.") Dollars (\$1,000,000) ("Grant").

The Grant may be used to finance foreign exchange costs, as defined in Section 6.1, and local currency costs, as defined in Section 6.2, of goods and services required for the Project.

SECTION 3.2. Grantee Resources for the Project

(a) The Grantee agrees to provide or cause to provide for the Project all funds, in addition to the Grant, and all other resources required to carry out the Project effectively and in a timely manner.

(b) The resources provided by the Grantee for the Project will be not less than the equivalent of three million nine hundred thirteen thousand nine hundred U.S. dollars (US\$3,913,900) including costs borne on an "in-kind" basis.

SECTION 3.3. Project Assistance Completion Date

(a) The "Project Assistance Completion Date" (PACD), which is September 30, 1996, or such other date as the Parties may agree to in writing, is the date by which the Parties estimate that all services financed under the Grant will have been performed and all goods financed under the Grant will have been furnished for the Project as contemplated in this Agreement.

(b) Except as A.I.D. may otherwise agree in writing, A.I.D. will not issue or approve documentation which would authorize disbursement of the Grant for services performed subsequent to the PACD or for goods furnished for the Project, as contemplated in this Agreement, subsequent to the PACD.

(c) Requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters are to be received by A.I.D. or any bank described in Section 7.1 no later than nine (9) months following the PACD, or such other period as A.I.D. agrees to in writing. After such

period, A.I.D., giving notice in writing to the Grantee, may at any time or times reduce the amount of the Grant by all or any part thereof for which requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters, were not received before the expiration of said period.

Article 4: Conditions Precedent to Disbursement

SECTION 4.1. First Disbursement. Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) an opinion of counsel acceptable to A.I.D. that this Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee, and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms;

(b) a statement of the name of the person holding or acting in the office of the Grantee specified in Section 8.3, and of any additional representatives, together with a specimen signature of each person specified in such statement.

SECTION 4.2. Subsequent Disbursement

(a) Prior to any disbursement for activities initiated after December 31, 1992, or to issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the Government of Belize (GOB) will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(1) for activities under Element 1, evidence that positions are established and filled in the Ministry of Tourism and the Environment in sufficient numbers to carry out implementation of the portions of the Project for which that Ministry is responsible and specifically, that a minimum of four positions in the Department of Environment have been established and filled;

(2) for activities under Element 3, evidence that positions are established and filled in the Ministry of Natural Resources in sufficient numbers to carry out implementation of the portions of the Project for which that Ministry is responsible and, specifically, that a minimum of 10 positions in the Department of Forestry's Conservation Division have been established and filled, and that a minimum of 10 Forest Guard positions have been established, of which a minimum of five have been filled, with an additional five positions to be filled in each of the following two years.

(b) Prior to any disbursement for activities initiated after December 31, 1993, or to issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the GOB will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D., evidence of effective measures having been taken to ensure that the process by which national lands are made available for other uses is subject to (a) prior public notice; (b) review and approval by a qualified technical group; and (c) due consideration of the environmental impact of the proposed use.

(c) Prior to any disbursement for procurement of pesticides, or to issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the GOB will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D., an assessment of the environmental impact of the specific pesticides to be procured and a description of measures to ensure their safe use.

(d) Prior to any disbursement for procurement of equipment for the Conservation Data Center, or to issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the GOB will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D., the identification of the facility in which the Center is to be located and evidence that funds will be available for its operations.

SECTION 4.4. Terminal Dates for Conditions Precedent

(a) If all of the conditions specified in Section 4.1 have not been met within sixty days from the date of this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D., at its option, may terminate this Agreement by written notice to the Grantee.

(b) If all of the conditions specified in Section 4.2(a) have not been met by March 31, 1993, or if the conditions specified in Section 4.2(b) have not been met by March 31, 1994, or such later dates as A.I.D. may agree to in writing, A.I.D., at its option, may cancel the then undisbursed balance of the Grant, to the extent not irrevocably committed to third parties, and may terminate this Agreement by written notice to the Grantee.

Article 5: Special Covenants

SECTION 5.1. Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

- (a) evaluation of progress toward attainment of the objectives of the Project;
- (b) identification and evaluation of problem areas or constraints which may inhibit such attainment;
- (c) assessment of how such information may be used to help overcome such problems; and
- (d) evaluation, to the degree feasible, of the overall development impact of the Project.

SECTION 5.2. Other Special Covenants. The Grantee covenants that, except as A.I.D. otherwise agrees in writing:

(a) Financial resources and personnel will be made available in the Ministries of Agriculture and Fisheries, Natural Resources, and Tourism and the Environment sufficient to carry out their responsibilities under this Project. (Training and technical assistance to be provided under the Project will be subject to approval of plans which specifically identify the individual(s) who will be counterparts to technical assistance personnel and who will carry out the work of the respective organizational unit(s) during proposed periods of training.)

(b) The Grantee will include A.I.D. in its annual planning, programming and budgeting discussions related to the Project and will submit, in form and substance satisfactory to A.I.D., annual implementation plans and budgets, and semi-annual reports on cash and in-kind contributions to the Project.

(c) The Grantee will pursue measures to:

(1) restrict the granting of government concessions, leases, development permits or other wide-scale access to areas designated as national parks or equivalent reserves targeted for assistance under the Project; and

(2) require that the granting of land titles and use rights, mining and timber concessions, river and coastal use permits, and road construction projects will be subject to a determination by a qualified body that the proposed land use or development is appropriate and that negative environmental impacts are minimized.

Article 6: Procurement Source

SECTION 6.1 Foreign Exchange Costs. Disbursements pursuant to Section 7.1 will be used exclusively to finance the costs of goods and services required for the Project having, with respect to goods, their source and origin, and with respect to services their nationality in the United States (Code 000 of the A.I.D.

Geographic Code Book as in effect at the time orders are placed or contracts entered into for such goods or services) ("Foreign Exchange Costs"), except as A.I.D. may otherwise agree in writing, and except as provided in the Project Grant Standard Provisions Annex, Section C.1(b) with respect to marine insurance. Ocean transportation costs will be financed under the grant only on vessels under flag registry of the United States, except as A.I.D. may otherwise agree in writing.

SECTION 6.2. Local Currency Costs. Disbursements pursuant to Section 7.2 will be used exclusively to finance the costs of goods and services required for the Project having their source and, except as A.I.D. may otherwise agree in writing, their origin in Belize and Central America ("Local Currency Costs"). To the extent provided for under this Agreement, "Local Currency Costs" may also include the provision of local currency resources required for the Project.

Article 7: Disbursement

SECTION 7.1. Disbursement for Foreign Exchange Costs

(a) After satisfaction of conditions precedent, the Grantee may obtain disbursements of funds under the Grant for the Foreign Exchange Costs of goods or service required for the Project in accordance with the terms of this Agreement, by such of the following methods as may be mutually agreed upon:

(1) by submitting to A.I.D., with necessary supporting documentation as prescribed in Project Implementation Letters, (A) requests for reimbursement for such goods or services, or, (B) requests for A.I.D. to procure commodities or services in the Grantee's behalf for the Project; or,

(2) by requesting A.I.D. to issue Letters of Commitment for specified amounts (A) to one or more U.S. banks, satisfactory to A.I.D., committing A.I.D. to reimburse such bank or banks for payments made by them to contractors or suppliers, under Letters of Credit or otherwise, for such goods or services, or (B) directly to one or more contractors or suppliers, committing A.I.D. to pay such contractors or suppliers for such goods or services.

(b) Banking charges incurred by Grantee in connection with Letters of Commitment and Letters of Credit will be financed under the Grant unless Grantee instructs A.I.D. to the contrary. Such other charges as the Parties may agree to may also be financed under the Grant.

SECTION 7.2. Disbursement for Local Currency Costs

(a) After satisfaction of conditions precedent, the Grantee may obtain disbursements of funds under the Grant for Local

Currency Costs required for the Project in accordance with the terms of this Agreement, by submitting to A.I.D., with necessary supporting documentation as prescribed in Project Implementation Letters, requests to finance such costs.

(b) The local currency needed for such disbursements may be obtained:

(1) by acquisition by A.I.D. with U.S. dollars by purchase; or

(2) by A.I.D. (A) requesting the Grantee to make available the local currency for such costs, and (B) thereafter making available to the Grantee, through the opening or amendment by A.I.D. of Special Letters of Credit in favor of the Grantee or its designee, an amount of U.S. dollars equivalent to the amount of local currency made available by the Grantee, which dollars will be utilized for procurement from the United States under appropriate procedures described in Project Implementation Letters.

The U.S. dollar equivalent of the local currency made available hereunder will be, in the case of subsection (b)(1) above, the amount of U.S. dollars required by A.I.D. to obtain the local currency, and in the case of subsection (b)(2) above, an amount calculated at the rate of exchange specified in the applicable Special Letter of Credit Implementation Memorandum hereunder as of the date of the opening or amendment of the applicable Special Letter of Credit.

SECTION 7.3. Other Forms of Disbursement. Disbursements of the Grant may also be made through such other means as the Parties may agree to in writing.

SECTION 7.4. Rate of Exchange. Except as may be more specifically provided under Section 7.2, if funds provided under the Grant are introduced into Belize by A.I.D. or any public or private agency for purposes of carrying out obligations of A.I.D. hereunder, the Grantee will make such arrangements as may be necessary so that such funds may be converted into currency of Belize at the highest rate of exchange which, at the time the conversion is made, is not unlawful in Belize.

Article 8: Miscellaneous

SECTION 8.1. Communications. Any notice, request, document, or other communication submitted by either Party to the other under this Agreement will be in writing or by telegram or cable, and will be deemed duly given or sent when delivered to such Party at the following addresses:

To the Grantee:

Mail Address:

Permanent Secretary
Ministry of Natural Resources
Belmopan, Belize

Alternative address for
facsimile transmissions:

Permanent Secretary
Ministry of Natural Resources
Belmopan, Belize
TELEFAX No. 08-22333

To A.I.D.:

Mail Address:

USAID/Belize
Gabourel Lane at Queen Street
P.O. Box 817
Belize City, Belize

Alternative address for
facsimile transmissions:

USAID/BELIZE
Belize City, Belize
TELEFAX No. 02-30215

All such communications will be in English, unless the Parties otherwise agree in writing. Other addresses may be substituted for the above upon the giving of notice. The Grantee, in addition, will provide the USAID Mission with a copy of each communication sent to A.I.D.

SECTION 8.2. Representatives. For all purposes relevant to this Agreement, the Grantee will be represented by the individual holding or acting in the office of Permanent Secretary, Ministry of Natural Resources and A.I.D. will be represented by the individual holding or acting in the office of A.I.D. Representative, each of whom, by written notice, may designate additional representatives for all purposes other than exercising the power under Section 2.1 to revise elements of the amplified description in Annex 1. The names of the representatives of the Grantee, with specimen signatures, will be provided to A.I.D., which may accept as duly authorized any instrument signed by such representatives in implementation of this Agreement, until receipt of written notice of revocation of their authority.

SECTION 8.3. Standard Provisions Annex. A "Project Grant Standard Provisions Annex" (Annex 2) is attached to and forms part of this Agreement.

IN WITNESS WHEREOF, the Grantee and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

BELIZE

By: George Price
George Price
Title: Prime Minister

By: Florencio J. Maria
Florencio J. Maria
Title: Minister of Natural Resources

By: Michael Espat
Michael Espat
Title: Minister of Agriculture & Fisheries

By: Glenn Godfrey
Glenn Godfrey
Title: Minister of Tourism & the Environment

UNITED STATES OF AMERICA

By: Eugene L. Scassa
Eugene L. Scassa
Title: Ambassador

By: Barbara P. Sandoval
Barbara P. Sandoval
Title: A.I.D. Representative

Amplified Description of the Project

I. General Project Description

A. Goal and Purpose

The goal of the Project is to protect and manage the natural resources upon which the sustainable economic and social development of Belize depends. Its purpose is to improve conservation management in order to increase and sustain the economic benefits from agriculture, forestry, and fisheries while protecting and conserving the resource base upon which these industries depend.

B. Summary of Project Elements

The Project is comprised of three principal technical elements--Environmental Planning and Monitoring, Sustainable Agricultural Production and Forestry Development. Two additional elements--Private Voluntary Organization (PVO) Project Support and Project Coordination and Management--provide implementation support for activities in the three technical areas.

Thematically, project elements are linked by common concern about the cumulative effect of individual actions on the environment, particularly water quality and forest resources. Watershed management and forest conservation are the two cross-cutting interventions under which project activities will be implemented.

C. Problem To Be Addressed

At the core of the current threat to Belize's natural resources is a pervasive lack of alternative economic activities and continuing dependence on exploitable natural resources. The objective goal of this program of assistance is to help Belize realize the fullest, sustained use potential of its unique natural resource endowment.

The Project, designed as an integral, holistic approach, is a pro-active, conservation oriented program of assistance that will, together with the Government and people of Belize, support the opportunities for sustainable development by:

- o helping define and implement an overall strategy for environmental protection and natural resource management;
- o developing the policy guidance and regulatory alignment necessary for effective implementation;

- o fostering the establishment of a comprehensive system of protected areas based on the recommendations of critical habitat surveys and an enhanced land use planning capability;
- o mobilizing indigenous support and resources through participatory, community-based conservation initiatives;
- o early validation of the Government of Belize (GOB) capacity to plan, program and implement the mitigative measures needed to control key indicators of environmental quality;
- o developing a data collection and analysis capability needed for environmental monitoring, planning, and management purposes;
- o significantly increasing public awareness about environmental issues related to development objectives and encouraging an open dialogue leading to conflict resolution;
- o developing sustainable alternative cropping systems based on improved soil conservation and integrated crop production and protection practices;
- o strengthening the involvement of LNGOs in carrying out complementary conservation programs;
- o increasing private sector investment in forest conservation practices; and
- o expanding existing public awareness, environmental education and field research programs focusing on conservation and natural resource management.

D. Project Technical Elements

1. Element 1 - Environmental Planning and Monitoring

The first element, Environmental Planning and Monitoring, is the principal conduit through which environmental overview will be added to the natural resource planning and management process. As a result, the GOB's ability to monitor key indicators of environmental quality, assess environmental impacts of development projects and enforce compliance with the terms of development concessions will be improved. Environmental policies will be clarified and more effectively coordinated between government entities participating in the Project through a buy-in under A.I.D.'s centrally-funded Environmental Policy and Analysis Training (EPAT) project. The policy and regulatory foundation established at the outset of the Project will serve to orient field interventions and prioritize activities proposed under Project Element 3, Forestry Development.

a. Objective

The objective of this component is to strengthen the Department of Environment of the Ministry of Tourism (MTE) in order to increase its effectiveness in planning, programming and monitoring the environmental effects of Belize's growth and development.

b. Implementation

(1) Institutional Development

Project funds will provide local, regional and international expertise to help the GOB organize and build the Department of Environment (DOE) along the lines necessary to implement environmental planning and monitoring programs effectively. The process will begin with a joint review of the Belize natural resource policy inventory completed by Abt Associates in 1990.

The task will be to help the GOB determine how environmental policies and regulations may be realigned to more fully support conservation and production objectives. Drafting new legislation is not expected; rather, the focus will be on defining areas of regulatory complementarity of existing legislation between implementing entities. Issues and needs will be identified and prioritized, alternatives analyzed and recommended interventions detailed prior to initiating implementation. Throughout the process, interministerial responsibilities will be clarified and cooperation supported.

This will be augmented by the organizational changes in the DOE necessary for it to carry out its responsibilities under the Project. The major objectives will be to formulate an environmental policy strategy for the GOB; define the strategic objectives and directions for the DOE; develop a functional process for strong interministerial cooperation; draft the regulations to empower the DOE to pursue its objectives of monitoring the state of the environment; establish the environmental data base that will be incorporated into a Conservation Data Center^{1/}; conduct environmental impact assessments and promote public awareness of and involvement in environmental issues.

^{1/} The CDC will form the basis of the data analysis and land use planning that will support the conservation management program under the Project. Funds will be available to expand the hardware and software platform acquired under A.I.D. Project 505-0008, Commercialization of Alternative Crops, to provide satellite workstations and expand the Land Information Systems used to automate the property registry system for geographic planning purposes. Technical assistance, user support, systems management and training opportunities will be programmed and budgeted jointly.

To provide the DOE with an opportunity for first-hand experience in environmental planning, coordinating and compliance, expatriate assistance will define appropriate environmental quality guidelines, make them operational, expedite their adoption and train DOE staffers to facilitate subsequent monitoring.

The initial effort to define and build an effective organizational and management structure will also confirm the staff training requirements to be undertaken during the course of project implementation. The Project will assist the DOE and the MTE with its interministerial responsibilities through skills training and technical assistance in environmental policy making and administration, environmental planning, monitoring and evaluation, and information analysis (including gender based demographic and socio-economic data).

Consultants will provide assistance in developing environmental impact assessments, benefit/cost analysis, proposal writing, and methodologies for drafting environmental legislation and regulatory procedures. This will be augmented by academic training in integrated natural resource management and environmental planning and management; four degree programs at the BS and MS level are planned. Competition for the scholarships will be open to competitive selection of the community of professionals at the outset of the Project on the pledge of service upon their return.

(2) Environmental Monitoring

Starting the process of monitoring environmental quality has been expedited considerably by the Harvard Environmental Hazards Assessment (EHA) completed in April 1991, which provides a ready reference of Belize's environmental vulnerability and identifies initial issues to frame discussions on natural resource policy. The EHA will be expanded and revised periodically during the course of project implementation and used to identify the interministerial collaboration necessary to cut across sectoral interests and illustrate the interdependencies of desired actions.

Both the EHA and the recommendations of the Belize Environmental Profile stressed the importance of water quality in drawing the linkages between terrestrial and marine ecosystems and the impact of human activities as the fundamental indicator of overall environmental health. Because watershed degradation leads to onerous environmental and socio-economic costs that threaten agriculture, potable water supplies, hydroelectric generation, irrigation, flood control, navigation and tourism, the NRMP Project will adopt watersheds as units of environmental planning. Water quality will be monitored as a general indicator of impact and used as a common denominator in addressing the issues related to forestry, agriculture, tourism development and marine resource management.

Systematic sampling and monitoring of water and aquatic organisms in all major watersheds and adjacent coastal areas will be conducted to assess the impacts of land use changes on water quality and aquatic biological diversity. These tasks will be assumed by LNGOs selected by tender and directed by the DOE and the Ministry of Natural Resources (MNR). Sampling parameters and monitoring indicators will be identified and field tested. Point and non-point sources of pollution will be located and monitored regularly. An environmental impact review and compliance process will be developed by DOE and attached as a condition of all development agreements. This process will enhance GOB's ability to guide development with regard for environmental quality protection.

Responsibility for monitoring environmental quality will be shared by the GOB entities along the clearly defined areas of responsibility identified as a result of the policy and regulatory realignment. Selected Local Non-Government Organizations (LNGOs) will be competitively chosen to augment the technical capability of GOB Ministries to monitor environmental impacts emanating from current development activities. A training needs assessment, supported by appropriate on-the-job programs, will be carried out by the DOE and the LNGOs to meet existing and future demands of monitoring and compliance activities. Short courses, workshops, seminars and internships will be the primary means for the DOE, other government ministries and LNGOs to meet the planning, monitoring and compliance requirements of this component.

A number of environmental impact studies will also be undertaken by competitive, locally tendered contracts to assess resource use practices and evaluate regulations governing these practices. Mitigating measures will be developed based on field findings. These studies may include:

- o monitoring parameters for agro-chemical runoff;
- o appropriate technologies for solid waste management and sewage treatment;
- o impacts of river sand and gravel mining on aquatic ecosystems;
- o soil loss and sedimentation rates due to land use practices;
- o freshwater fauna inventory and sustainable harvest management of commercially viable species;
- o groundwater resource inventory;
- o projected demands on water resources for irrigation and rural/urban potable water supply.

Amendment 5 to the USAID financed Commercialization of Alternative Crops (CAC) Project directs funds to the fisheries sector to address specific marine resource management issues. Several short-term planning studies and hands-on operational activities, such as the strengthening of the Hol Chan Marine Reserve and Conch Laboratory, are supported by the CAC Amendment.

Development of a comprehensive coastal zone management plan is the primary output of the CAC Project Amendment. The plan is still in

the development stage and a set of activities is not expected to be agreed upon until late 1991. Yet, it is apparent at this time that a number of discrete analytical studies and research programs are appropriate to marine resource management, even though the institutional framework has not yet been established. These include:

- o monitoring parameters of reef health including pesticide and nutrient pollutants at select sites within the coastal zone complex;
- o small-scale habitat mapping and health status assessments;
- o biological, ecological, life history and replenishment studies for threatened and endangered species;
- o coastal run off, mangrove habitat destruction/conversion related to land use activities;
- o culture and re-seeding programs for seriously depleted commercial fish and commercially important mollusks;
- o policy related research for the management of coastal resources.

Project support for select marine research and monitoring activities will be awarded by the Project Coordinating Committee to competitively chosen LNGOs, based on the priority recommendations of the coastal zone management plan developed under the CAC Project.

(3) Public Awareness

Increased public involvement and awareness of the value of environmental and natural resource management is critical if corrective measures are to be implemented, particularly with any appreciable distance, physical or psychological, between the people and the problem.

The information developed through the baseline studies, critical habitat surveys and environmental assessments will provide the basis on which to build a public awareness program. Established yet inactive organizations like the Environmental Council will serve as a forum within which to make these initial findings public through periodic meetings, presentations, and debates. A specific competitively tendered grant to an LNGO will be issued for recommendations on the process to be followed in translating the findings into policy and corrective actions. This study will identify the organizational framework of the public awareness program, the funding and resource allocations needed to sustain it, and the criteria against which it should be evaluated.

Outputs

- o The legislative and regulatory framework defining the MTE and DOE's responsibilities for environmental planning and monitoring will be clarified and revised as necessary to increase interministerial coordination and effectiveness.

- o An Environmental Protection and Natural Resources Management Strategy will be developed and adopted by the GOB.
- o The DOE will be institutionally strengthened and organizationally empowered to apply environmental quality guidelines, carry out environmental impact assessments, and monitor trends in key indicators of environmental quality.
- o Public awareness of environmental issues will be increased and converted into political support for the decisions made affecting the environment.
- o LNGO involvement will be increased in support of the GOB's environmental objectives and lead to periodic assessments of environmental vulnerability, policy options, and annual reports on the State of the Environment.

Inputs: Planned inputs include grant financing for approximately 41 person months of short-term technical assistance, including about 25 person months for local data collection personnel; four long-term academic degree programs to be offered on a competitive basis for personnel committed to employment in the Department of Environment; about eight person months of short-term participant training in the U.S. and the region, and eight person months of short-term training conducted locally; office and communications equipment; equipment for field operations; and, funding for studies and multiple-use plans, and the public awareness program.

2. Element 2 - Sustainable Agricultural Production

a. Objective

The objective of the second element is to reduce the environmental degradation caused by farming in and around forest reserves and other protected areas. Interventions used will be in consonance with the forestry management and conservation objectives discussed in Element No. 3 (Forestry Development) and will build on two major technological advances: (1) the validated, adapted integrated farming systems technology derived from the Toledo Agricultural Marketing Project, and (2) the increased capability in land use planning and soils analysis that will build on the CAC property registry activity and the Environmental Planning and Monitoring component of the Project. While the focus of field activities will be directed at subsistence farmers, the land use planning and soils capability data will also be available to guide the investment and cropping decisions of producers of traditional export crops.

b. Implementation

(1) Institutional Development

Staff training, farmer outreach programs and participant training opportunities will be provided to strengthen and encourage adoption of improved agricultural production and integrated natural resource management skills. Much of this human resource development effort will be training integral to the sustainable agriculture program activity carried out under an umbrella cooperative agreement with an international PVO. The separate institutional development activity in this project element concentrates on increasing the availability of relevant professional skills through academic degree programs and short-term training at institutions in the U.S. or the region.

Initially the focus will be on enhancing the technical skills of field staff in areas at the interface of agricultural production, and natural resource management. As field programs evolve and extension skills become honed, leading farmer practitioners will be selected to help transfer the technologies to other areas. Workshops and field days promoting the adoption of integrated pest management, soil conservation practices and improvements in post harvest technologies for subsistence grains will be scheduled throughout the target area for the duration of the component.

Qualified farmers, extension agents and field staff will be selected for short-and long-term training opportunities. The Project plans to offer about six academic degree programs (BS and MS) to competitively selected, qualified candidates in return for a commitment of public service. Academic training in agricultural ecology, integrated natural resource management and related fields will serve to augment local capacity to address problems arising from meeting the food requirements of a growing population.

(2) SAP Program - PVO

Whether among the Maya Indians in the Toledo District, or refugees in the Cayo District, or part-time migrant farmers in the Stann Creek District, efforts to intensify land use, such as the Improved Milpa Integrated Cropping System (IMICS) promoted under the Mission's TAMP Project, will be a formidable undertaking.

Overcoming this obstacle will require an intensive effort utilizing trained field extension agents supported by a body of technical advisors. While interventions are focused on three themes--soil conservation, cropping systems and integrated pest management--the extension strategy is characterized by a unified, holistic approach. The activities will be guided by the need to (1) maintain and improve soil quality; (2) understand the degree to which specific ecosystems can be utilized for various key resources and factors of production; (3) develop farm management practices that provide the checks and balances for stable cropping

systems; and (4) preserve wildlands and naturally occurring biological diversity. Technology delivery will rely on the use of multi-disciplinary teams of extensionists and para-technicians as close and in as frequent contact with the client groups as possible. These extensionists, both men and women, will focus on the farms and communities adjacent to forest reserves and protected areas of the extended Maya Mountain area. Their tasks will include identifying individual farmer needs, and developing and delivering the appropriate mix of technologies and other resources needed to make farming economically viable and ecologically sustainable.

Land with promising agricultural potential identified through the soils capability analysis conducted by ODA will be made available to expand the range of options available to farmers, extensionists and planners. In areas where forest production, conservation and other land use considerations coincide in support of re-aligning the boundaries of reserves and protected areas, support will be sought to relocate inhabitants of existing settlements. In all instances, extension activities will be carried out based on individual farm plans, programs and budgets incorporating production, ecological and cultural considerations consistent with the watershed management objectives of the region.

The umbrella PVO will be responsible for working with the various government entities (Lands & Surveys of the Ministry of Natural Resources, the Conservation Division of the Forestry Department, the Department of Environment of the Ministry of Tourism and the Environment, and the Ministry of Agriculture and Fisheries) as well as LNGOs. They will analyze available information, initially identify priority areas of concern, and enumerate the specific sites where the enhanced land use planning capabilities can be used to support forestry conservation and environmental planning objectives of the GOB.

Field activities will begin with a series of site-specific rapid cadastral surveys carried out by LNGOs with the guidance of the MNR. This will confirm the information on existing land surveys, aerial maps and remote imagery developed by the ODA, and help identify priority areas for assistance. Later, as the hardware platform and software data base supporting the enhanced land use planning capability comes on line, the process of pinpointing present and future areas of environmental impact will be accelerated and incorporated into planning and monitoring decisions.

Interventions can take one of two alternative paths depending on the degree of existing or potential impact, i.e., realignment of the boundaries of forest reserves and protected areas, or where possible, farmers will be offered lands in other, more suitable areas. In either case, technical assistance will be made available to work directly with farmers to develop sustainable agricultural cropping systems and to safely manage the use of

pesticides. In addition to resident advisors in cropping systems and soil conservation and a project-funded team of local field agents responsible for implementing the subsistence agriculture component, the Belize Agribusiness Company (BABCO) may be invited to tender proposals for site specific crop varietal trials. High value cash crops (like spices) and select tropical fruits and vegetables will be incorporated into the cropping systems package extended to farmers. Also, as the Lands and Surveys Office of the Ministry of Natural Resources progresses in its computerization of the titling process funded under the CAC Project, priority attention will be given to issuing secure tenure status to farmers affected by the boundary consolidation program.

By working through farmers and para-extensionists similar to those used with success under the TAMP Project and LNGOs, the PVO's field staff will develop specific integrated pest management components for each farm management plan. To the maximum extent possible, farm level interventions will focus on reducing undue dependency on pesticides and other chemicals through the adoption of pest population monitoring practices, non-viral biological controls, multi-layered strip and alley cropping, adjusted planting schedules and judicious cultivation practices.

Additional support to address the need for agricultural extension and outreach will be provided to explore and build on other existing farm improvement and product marketing programs successfully operating in Belize. At least two LNGO's working with small farmer cooperatives have proven success records in extension and post-harvest loss reduction projects. One of these, Help for Progress, has established an impressive demonstration farm plot that is used to teach organic farming and composting techniques. Another successful activity was carried out through CARE's small farmer assistance program. The NRMP Project will evaluate these and other ongoing programs and provide resources for expansion where appropriate.

Outputs:

- o Adoption of sustainable alternative cropping systems by farmers on the fringes of protected areas;
- o Establishment of demographic and production profiles as benchmarks for subsequent outreach efforts;
- o Field application of land use planning and soils capability analysis in directing the further expansion of principal agricultural crops and minimizing the deleterious impact on protected areas;
- o Development of indigenous, site-specific diagnostic and production outreach capability;

- o Expeditious granting of secure land titles in support of the agricultural outreach program;
- o Twenty (20) percent decrease in the rate of post-harvest losses for principal food crops as a result of the adoption of improved technologies.

Inputs: Planned inputs include grant financing for approximately 239 person months of long- and short-term technical assistance under a cooperative agreement with an international PVO; about six long-term academic degree training scholarships in fields related to agricultural development and integrated natural resource management will be awarded on a competitive basis to qualified candidates agreeing to work for the GOB upon graduation; and regional and international short-term training in cropping systems and agricultural extension.

3. Element 3 - Forestry Development

a. Objective

The objective of the forestry development component is to enable the public institutions and private organizations sponsoring protected area programs to undertake greater responsibilities in managing forested areas for conservation purposes.

b. Implementation

In general, project resources will reinforce the complementary mandates of the public and private sector entities involved in forestry development programs and build on the comparative advantages distinguishing their programs in the field. Resources budgeted under the forestry development component will flow through three activities: (1) institutional strengthening to improve the resource management capacity; (2) a protected areas program to create a comprehensive system of protected areas and improve legal and policy support of their status, and (3) a boundary demarcation program to establish and guard the boundaries of key areas to be protected.

(1) Institutional Development

The process of strengthening the public and private institutions begins with a rapid institutional assessment of government agencies and NGOs to confirm program focus, effective field impact, areas of complementary and possibly duplicative interests. Fortunately, this initial step builds on a good beginning by the Belize Audubon Society (BAS) and the newly created Conservation Division (CD) of the Forestry Department where funding provided by World Wildlife Fund-US (WWF-US) and A.I.D./Washington is helping to examine the options for managing Belize's National Park System, including the transfer of park management responsibilities from BAS to the Conservation Division.

Similar comparative program assessments will be carried out for other LNGOs and will be used to harmonize government and private sector roles with respect to protected area actions. While the GOB has ultimate responsibility for public wildlands, it is unlikely that the CD will be able to assume all responsibilities related to managing the country's protected areas. Many management tasks are best suited for the local NGO community.

Support will be provided to selected LNGOs to enable them to take on greater responsibilities in collaboration with the CD. Advice and assistance will be provided to help LNGOs develop strategies and specific work plans to define the nature of their complementary activities. Business management plans needed to address recurrent cost issues, strengthen overall managerial capacity and generally enhance the LNGO's competitive position will also be improved.

The Project will train selected personnel from the CD, the LNGOs and the new Department of Environment of the Ministry of Tourism and the Environment to help these entities fulfill their expanded mandates. The competitive academic degree scholarships to be funded under the Forestry Development element will be open to candidates outside the GOB in order to select the best possible individuals for continuing positions in government. In addition, funds are provided for shorter, non-degree programs aimed at increasing the awareness and understanding of conservation issues on the part of mid- and senior level individuals. Selected short courses, workshops, seminars and internships will also be provided to train the staff of the CD, the LNGOs and the Department of the Environment in land use planning and natural resource management. Initial training efforts will focus on management of protected areas, community relations, and conservation compliance measures for forest rangers and park wardens (the latter as part of the boundary demarcation activity). Training materials and audio-visual equipment will be procured and made available to support the training and extension work carried out in the field.

The establishment of the Conservation Data Center (CDC) will help serve the diverse data requirements of both government and LNGOs. The CDC will expand the capabilities of the automated land titling system developed under the CAC Project for MNR's Lands and Surveys Office to encompass the Geographic Information System (GIS), a requirement for effective land use planning. However, before project finances are available for the creation of such a Center, the Parties involved, including the CD and the LNGOs must demonstrate that (a) available information on the ODA land surveys is being used to guide development of agriculture and forestry; (b) agreement on collaborative use of that information has been reached; and (c) the diverse demands for a GIS have been reconciled, i.e., land use planning, land titling, property registration, forest management and protected areas development. Recurrent costs of operating the Center after the termination of the Life-of-Project (LOP) must also be demonstrated. Options under consideration include linkages to the Green Library Program

that would be established as a semi-autonomous entity supported by government and end users and appended to an LNGO or other educational facility.

(2) Protected Areas Program

This activity encompasses the various actions related to developing a comprehensive system of protected areas. Although created ad hoc, the number of existing protected areas is significant. Combined under a discernible system, they represent not only an opportunity to preserve representative samples of major habitat types but also the opportunity to leverage support for the GOB's environmental initiatives. The fact that most of Belize's land area is still under government control is fortuitous; changing the category of national lands will not imply significant outlays, especially if local interest and support is generated. However, it is an opportunity that is rapidly disappearing.

Seizing this opportunity will begin with a concerted program to implement ODA's recent land capability studies and the Belize Critical Habitat Survey compiled by the Belize Center for Environmental Studies in mid-1991. Combined, these are two excellent tools for making objective proposals for boundary adjustments of existing protected areas and the creation of additional ones. Through the CD, the NRMP Project will contract LNGOs to develop proposals and justification for such a system of protected areas. The Project will support this effort by expatriate technical assistance working closely with the revision of the boundaries of the forest reserves, foreseen by the Forestry Department and complemented by the extension efforts under Element No. 2 (Sustainable Agricultural Production). The resulting proposals (hereafter referred to as the comprehensive system of protected areas) will form part of the National Land Use Plan that will be developed by the GOB with ODA assistance.

Initially, the proposals for the comprehensive system of protected areas will be presented to the GOB for promulgation as a ministerial decree. However, because ministerial decrees can be easily modified or reversed, the Project will provide technical assistance in formulating policies that help assure immutability in order to avoid alienation of land targeted by the Project. One option would be to require that excising land from protected areas and forest reserves first be approved by a group representing a broad range of interests, such as the Land Use Authority to be supported by the ODA and the Environmental Council. Another option would be to revise the inventory of existing natural resource policies to clarify mandates, specify the institutional responsibilities and facilitate the creation of a system of protected areas as is proposed under Element No. 1 (Environmental Planning & Monitoring). The process of sensitizing legislators and decision makers would be expanded to include elements of the

interested public in order to build support and understanding for such logical extensions as the creation of biosphere reserves and world heritage sites.

The Public Awareness Activity under Element No. 1 will help to establish a forum to provide open hearings on issues of public interest. The possibility of reactivating the Environmental Council to fulfill this role and assist the CD will also be explored. Particular attention will be devoted to concerns about the proliferation of similar boards having overlapping mandates, comprised of essentially the same people who are equally constrained in their ability to effectuate needed changes.

(3) Boundary Demarcation Program

Measures undertaken in the field will complement these policy initiatives by helping the CD to identify those critical segments of protected areas where the threat of incursion is imminent. Forest guards will be trained, equipped with transportation and radio communication and deployed immediately to those areas in need of monitoring. In areas where the threat is less urgent, the roles and responsibilities for managing the protected areas will be agreed upon by the CD, the LNGOs and the local communities. Contracts will be funded to survey and demarcate these boundary segments in the field. Similar efforts to delineate forest reserves funded by ODA will provide opportunities to share the costs of vehicles, radios, guard stations and other inputs needed to assure the integrity of the boundaries.

In order to generate the local support necessary for continuity and maximum effectiveness, these measures will be preceded by the orientation and promotional efforts to elicit greater community involvement and to provide the training for forest workers, forest rangers, park wardens and guards. Recurrent cost implications will be addressed by the special efforts of the CD and LNGO community to develop funding arrangements that will permit retaining generated revenues to meet continuing costs of operation. The LNGO linkages with collaborating international PVOs will be used to raise funds for these operating costs and if possible, to establish the endowments needed to sustain a satisfactory cash flow. The combined effect of regularizing the legislative framework, field interventions at critical areas, and community empowerment will lay the foundation from which to progress to a more intensive management program--one which epitomizes the integrated approach initiated under the comprehensive system of protected areas.

For many years, UNESCO has advanced just such a concept through its Man and the Biosphere Programme (MAB). A biosphere reserve typically consists of an area managed for multiple uses and characterized by protected core areas surrounded by buffer zones of increasingly intensive land use under an integrated natural resource management and conservation program. Once officially

recognized as being representative of the world's ecosystems, biosphere reserves form an international network of protected areas that combine the preservation of ecological and genetic diversity with environmental education, research, training and monitoring.

The improved analysis and planning provided by the CDC, will support the GOB efforts to develop the policies and programs needed to declare, support and manage the protected areas of the Maya Mountains and their surrounding buffer zones as 'a biosphere reserve under UNESCO's MAB guidelines. This represents a logical extension of a comprehensive system of protected areas. Exact boundaries will be established based on the National Land Use Plan to be developed with ODA assistance, critical habitat surveys, field expeditions and negotiations. It may be found desirable to include transects down to and including sections of the coastal zone, including cayes and the Barrier Reef in order to expand the radius of terrestrial-marine conservation management objectives. The main advantages for Belize are that this official status provides protection against spontaneous changes in boundaries and categories of land use. It also attracts the attention of the world scientific and conservation community, thereby making it attractive for support from a wider spectrum of international funding agencies.

The process involved is considerable, but much is already in place. Most of the area proposed for the reserve is still remote and intact, and because the forest reserves accounting for much of the area are subjects of forest management plans, the additional work is expected to be very modest during the life of the Project. As a first step, technical assistance for biosphere planning is provided under the Institutional Development activity. Support of the LNGOs will also be mobilized to enlighten the decision makers and interested public concerning the concept and implications of the biosphere reserve. The CD, with the assistance of LNGOs, will develop a strategy for its creation and management by harmonizing the management aims of the forest reserves, protected areas, local communities and private interests. The Environmental Council will take the lead in coordinating these actors. LNGOs and their supporting international PVOs will generate interest and financial support for this strategy in Belize and abroad. With the help of consultants, the CD will prepare the documentation that the GOB will use to apply to UNESCO for recognition.

The land use plans and activities of the GOB, the LNGOs and community-based conservation programs will be carried out in consonance with and support for the biosphere concept. This will include giving preference to local people in all activities that generate income, such as employment as guards, laborers, and guides, tourism-related concessions, extraction of non-timber forest products and others. While the need for community relations, education of decision makers and information of the

public permeates these activities, a specific national campaign on environmental education will be funded under the Project especially to emphasize the value of rational use of renewable resources in protected areas. Funds are provided in Element No. 1 (Environmental Planning and Monitoring) for the activities to be carried out under the Public Awareness Program. In addition, under Element 4 (PVO Project Support) environmental education will be one area supported by the Conservation Fund. Proposals will be invited from LNGOs, possibly in joint ventures with international PVOs, for the design of such a campaign from which the best proposal will be chosen for implementation.

Outputs:

- o The GOB and LNGOs will have enough qualified staff to maintain and manage the declared protected areas, have complementary mandates, have the necessary tools, and are working harmoniously together toward the management of these areas;
- o The number and extent of the protected areas needed to preserve representative critical habitats of Belize are legally fixed and are based on objective land use capability studies, present land use, gap analyses and other techniques;
- o The threatened segments of the boundaries of the protected areas are delineated in the field and the areas are adequately patrolled;
- o Expanded land use planning capability in the MNR;
- o The system of reserved lands of the Maya Mountains and the surrounding buffer zones have been officially declared a biosphere reserve, whose management is gradually being intensified according to a comprehensive management strategy;
- o The local population near the protected areas, and the Belizean public in general, are aware of the existence, value and need for rational use of protected areas.

Inputs: Planned inputs provide grant financing for about 13 person months of short-term technical assistance; six long-term academic degree programs plus short-term training and non-degree programs; equipment and materials for educational programs, the Conservation Data Center, and forest guards; and funds for construction of forest guard stations and boundary survey and demarcation work.

E. End of Project Status

At the completion of the NRMP, selected public and private institutions will have been effectively strengthened to guide the course of the Belize's economic development along paths ensuring

the renewability of the natural resources on which the country's development depends. Specifically,

- o the GOB's capability to anticipate the environmental consequences related to economic development and mitigate their impact will be increased;
- o meeting the country's food and fiber requirements will not take place at the expense of sustainable agricultural development; and
- o the income generated from forest based extractive processes, like timber production, will not compromise the development potential of other conservation based activities like tourism.

F. Project Strategy

Increased capability to rationally plan and manage natural resource use is the common objective linking the project components. Project resources will focus on the organizational and institutional shortcomings to more effective natural resource management and conservation through the application of technologies found successful elsewhere.

The Project will be implemented through the combined efforts of the GOB, an international private voluntary organization and USAID. An umbrella cooperative agreement awarded to an international PVO will provide the principal means of supporting project implementation. It will also support the LINGO involvement necessary to complement the GOB's capabilities, implement the field activities of the Sustainable Agricultural Production element, provide resident technical and administrative support and implement the Conservation Fund. A Belizean Project Coordinator contracted by the GOB will facilitate communication and expedite the implementation responsibilities of the three Ministries involved. USAID will employ a USNPS Natural Resources Project Manager and an FSNPS Assistant Project Manager to carry out its project management and support responsibilities. Additional technical assistance available through buy-ins to existing regional and centrally funded projects will provide specialized assistance in watershed management, land use planning, plant protection and coastal resource conservation.

The Project will strengthen the Department of Environment of the MTE and the Forestry Department, Conservation Division and Lands & Surveys (to a limited degree) in the MNR by providing training, technical assistance and necessary equipment and vehicles. The GOB will establish an effective environmental policy and regulatory framework, monitor key indicators of environmental quality, expand its property registry system to include a GIS for land use and land capability analysis, and manage the system of forest reserves and protected areas for conservation and

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production purposes. Project efforts will initially focus assistance on a relatively few critical areas in order to acquire needed experience in field interventions. This approach will help develop confidence rapidly and serve to validate and guide subsequent data gathering and planning efforts. Local non-governmental organizations and community based conservation interests will be relied on heavily to complement the GOB's capabilities. The Project will target these groups to strengthen grass-roots support and indigenous resources needed for continuity and for building long-term local support of Project goals and objectives.

As designed, the Project builds on the complementary mandates and comparative advantages of public and private sector entities concerned and actively involved in environmental protection and natural resource management issues. The Government's ability to articulate strategy, define policy, coordinate programs, enforce regulations and monitor compliance will be improved. Recurrent costs of maintaining protected areas will be defrayed in part by measures to retain revenues by the protected area management unit. Special efforts will be made to foster LNGO involvement in developing community-based conservation initiatives through the facility of a Conservation Fund.

G. General Implementation Schedule

The actions listed below focus on the steps required to get the Project going. Once the Project Agreement is signed, the priority will be the issuance of the request of application (RFA), recruitment of a USPSC Natural Resource Manager, the start of selected field activities critical to refining the Project target area and preparation of first year detailed work, procurement, training and financial management plans.

First Year Schedule of Implementation Actions

	<u>Week</u>
Project Agreement Signed	0
Project Implementation Letter No. 1 sent to GOB	3
Request for Applications (RFA) Issued	6
Terms of Reference for preliminary field work drafted:	6
o Critical Watershed Assessment	
o Identification of protected area "hot spots"	
o Siting of Point & Non-Point Sources of Environmental Contamination/Degradation	
Specifications for initial equipment procurement written	7
Initial Conditions Precedent met by GOB	8
Project Coordinator position advertised	8
First Year Annual Work Plan & Budget approved	8
First Year Project Procurement Plan approved	9
First Year Training Plan approved	10
IFB for initial equipment issued	10
Procurement of TA for preliminary field work started	10

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Receipt of PVO applications responding to RFA	13
Trainees and participants for first year training selected	14
Project Coordinator recruited	17
RFA respondents evaluated; selection made	17
PVO Cooperative Agreement negotiated	24
Arrival of initial commodities (vehicles, PCs, etc.)	28
Arrival of key PVO personnel to establish operations	30
Second Annual Work Plan and Budget approved	46

II. Illustrative Financial Plan

The total estimated cost for the Project is US\$12,412,700, with planned A.I.D. contributions totalling US\$8,500,000. The Illustrative Financial Plan is shown in Attachment 1 to this annex. Changes to the plan may be made by the representatives of the parties named in the Agreement provided that the changes do not cause (1) A.I.D.'s contribution to exceed the amount specified in the text of the Agreement, and (2) the Grantee's contribution to be less than the amount specified in the text of the Agreement.

The Project is to be incrementally funded by A.I.D. and future obligations are subject to availability of funds and mutual agreement by the parties to proceed.

III. Financing Methods

International participant training will be implemented through direct placement and direct payment by A.I.D. USAID will also directly contract for some technical assistance, project management support, equipment, evaluations and audits as may be required, and will arrange for direct payment for these goods and services.

A.I.D. funds made available for technical assistance and implementation support to be provided through a U.S. PVO will be provided by means of a cooperative agreement between A.I.D. and the PVO selected under a competitive Request for Applications. It is also planned that the cooperative agreement will include funds for subgrants and contracts with local non-governmental organizations, which will be managed by the U.S. PVO. Payments are expected to be made to the U.S. PVO through a Letter of Credit.

A.I.D. funds will be made available for local training and workshops, information and education program activities, boundary demarcation and other activities to be implemented directly by participating Ministries, and for the Project Coordinator by direct grant to the GOB. Disbursements will be authorized on the basis of documentation submitted for USAID

approval. Advances of funds may be made in accordance with USAID procedures. Financing procedures will be specified in greater detail in Implementation Letters.

IV. Evaluation

An internal monitoring system will be set up at the beginning of the Project by the Grantee, with the support of the U.S. PVO under the umbrella cooperative agreement, so that a periodic assessment of the Project's progress can be made. The specific data to be collected and monitored during the life of the Project will be established by mutual agreement between A.I.D., the PVO and the Grantee during the first three months of the Project. Systems will need to be put in place early in the Project to ensure that the data will be regularly collected and available to the project managers.

Annual internal assessments will be undertaken by the Coordinating Committee with assistance from the umbrella PVO. The assessments will involve participants in all elements in a review of progress in completing the activities in the work plans for that year. These reviews will be timed to provide input and assistance to the Coordinating Committee and Project Coordinator as they develop work plans for the following year.

A mid-term evaluation with outside assistance will be undertaken during year three of the Project to assess progress being made toward the project objectives. The evaluation will recommend any mid-course corrections or reprogramming needed to respond to lack of progress, compliance or support. Certain key issues will be examined closely, such as the environmental impact of the process by which national lands are dereserved.

A final evaluation toward the end of year five will examine the results achieved by the project in meeting its purpose and key objectives, make recommendations to the GOB and LNGO community for corrective or follow-on measures, and identify any lessons learned to be applied to similar efforts.

VI. Special Provisions

The A.I.D. funds included in the Illustrative Financial Plan for the USAID Project Management, USAID Direct Project Support, and Evaluation and Audit line items will be administered directly by USAID. Other project inputs arranged or contracted by USAID on behalf of the Grantee (training, technical assistance and commodity procurement) will be undertaken with specific agreement by the Grantee through Implementation Letters or Project Implementation Orders.

PROJECT FINANCIAL PLAN
 (Source and Application of Funding - US\$000)
 As of September 15, 1991

<u>Project Inputs</u>	<u>Cumulative Obligations</u>		<u>Future Years Anticipated</u>		<u>Total L O P</u>	
	<u>A.I.D.</u>	<u>GOB</u>	<u>A.I.D.</u>	<u>GOB</u>	<u>A.I.D.</u>	<u>GOB</u>
Environ. Monitoring & Planning						
Technical Assistance	80	425	150	-	230	425
Training	80	17	344	123	424	140
Commodities	135	30	65	-	200	30
Program Operations	-		250	150	250	150
Sustainable Agricultural Prod.						
Technical Assistance	-	-	1,362	535	1,362	535
Training	48	13	516	156	516	169
Commodities	-	-	225	-	225	-
Forestry Development						
Technical Assistance	130	537	87	610	217	1,147
Training	80	27	596	198	676	225
Commodities	200	279	239	61	439	340
Construction	-	-	60	4	60	4
Program Operations	-	-	60	45	60	45
PVO Project Support						
Technical Assistance	-	-	964	-	964	-
Commodities	-	-	95	-	95	-
Program Operations	-	-	773	300	773	300
Project Coord. & Mgt.						
Project Coordination	40	50	120	-	160	50
USAID Proj. Mgt.	87	-	715	-	802	-
USAID Direct TA	60	-	120	-	180	-
Audits/Evaluations	10	-	175	20	185	20
Contingency & Inflation						
	50	24		310	681	334
Totals	<u>1,000</u>	<u>1,402</u>	<u>7,500</u>	<u>2,512</u>	<u>8,500</u>	<u>3,914</u>
	=====	=====	=====	=====	=====	=====