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UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

BELIZE

PROJECT PAPER

COMMERCIALIZATION OF ALTERNATIVE CROPS
(AMENDMENT NUMBER 1)

AID/LAC/P-603
(CR-244)

PROJECT NUMBER: 505-0008

UNCLASSIFIED

PROJECT DATA SHEET

1. TRANSACTION CODE

C

A = Add
C = Change
D = Delete

Amendment Number
1

DOCUMENT CODE
3

COUNTRY/ENTITY
Belize

3. PROJECT NUMBER
505-0008

4. BUREAU/OFFICE

LAC

5. PROJECT TITLE (maximum 40 characters)
Commercialization of Alternative Crops

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
| | | | | |

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

A. Initial FY 815 B. Quarter C. Final FY 911

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

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FY	C. L/C	D. Total	E. FY	F. L/C	G. Total
AID Appropriated Total						
(Grant)	1,575	700	2,275	6,070	2,030	8,100
(Loan)						
Other: 1.						
U.S. 2.						
Host Country		680	680		1,005	1,005
Other Donor(s)					389	389
TOTALS	1,575	788	2,363	6,070	3,424	9,494

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) ARDN	140	070				1,300		8,100	
(2) ES	140	070							
(3)									
(4)									
TOTALS									

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

11. SECONDARY PURPOSE CODE

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

A. Code
B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To expand the base of economic activity in Belize by developing alternative agricultural products for export and import substitution; by developing agricultural cooperatives' management capabilities, and by protecting the natural resource base.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY MM YY
015 88 028 89 069 92

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 22 (maximum))

To add emphasis on managing natural resource base by strengthening the public sector entities working in fisheries and land titling, and to modify the private sector component to reflect experience to date and enhance capacity to introduce new crops.

The Controller hereby certifies that he reviewed the methods of finance and implementation and hereby approves pertinent sections.

Mohamed Tanamly, Controller

17. APPROVED BY

Signature: Melissa H. Jordan
Title: A.I.D. Representative

Date Signed MM DD YY

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

MM DD YY

AGENCY FOR INTERNATIONAL DEVELOPMENT
UNITED STATES A. I. D. MISSION TO BELIZE
EMBASSY OF THE UNITED STATES OF AMERICA
BELIZE CITY, BELIZE, CENTRAL AMERICA

PROJECT AUTHORIZATION
Amendment No ?

Name of Country: Belize
Name of Project: Commercialization of Alternative
Crops
Number of Project: 505-0008

1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, the Commercialization of Alternative Crops Project was authorized on September 11, 1985 (the "Authorization") and amended on September 24, 1985. The Project Authorization is hereby further amended by deleting Section 1 in its entirety and substituting in lieu thereof the following:

"1. Pursuant to Section 103 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Commercialization of Alternative Crops project for Belize, encompassing grants to the Belize Agri-Business Company (BABCO), Belize Enterprise for Sustained Technology (BEST) and the Government of Belize (GOB), and involving planned obligations not to exceed Eight Million One Hundred Thousand United States Dollars (U.S.\$8,100,000) in grant funds ("Grant") over a six year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is eighty-seven (87) months from the date of initial obligation."

2. Except as expressly modified or amended hereby, the Project Authorization remains in full force and effect.



Mosina H. Jordan
A.I.D. Representative
USAID/Belize

1/31/90

Date

Clearances:

PDO:PBisek *P. Bisek* date *1/26/90*
ADO:SSzadek *S. Szadek* date *25/1/90*
ADO:EWashington *E. Washington* date *31/9/90*
GDO:PMcDuffie *deast B* date *1/31/90*
CONT:MTanamly *[signature]* date _____
CONT:TYee *[signature]* date *1-29-90*

Draft:PDO:PBisek:1/3/90:0760p

Delegation per STATE 122590 (4/19/88)

*Pending corrections
as discussed with F. Hunter*

Commercialization of Alternative Crops
Project No. 505-0008

Project Paper Supplement No. 1

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AGENCY FOR INTERNATIONAL DEVELOPMENT
UNITED STATES A. I. D. MISSION TO BELIZE
EMBASSY OF THE UNITED STATES OF AMERICA
BELIZE CITY, BELIZE, CENTRAL AMERICA

PROJECT AUTHORIZATION
Amendment No. 2

Name of Country: Belize
Name of Project: Commercialization of Alternative
Crops
Number of Project: 505-0008

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Mosina H. Jordan
A.I.D. Representative
USAID/Belize

1/31/90

Date

Clearances:

PDO:PBisek	<u><i>P. Bisek</i></u>	date	<u><i>1/26/90</i></u>
ADO:SSzadek	<u><i>S. Szadek</i></u>	date	<u><i>25 Jan 90</i></u>
ADO:EWashington	<u><i>E. Washington</i></u>	date	<u><i>31 Jan 90</i></u>
GDO:PMcDuffie	<u><i>deast B</i></u>	date	<u><i>1/31/90</i></u>
CONT:MTanamly	<u><i>MTanamly</i></u>	date	<u><i>1-29-90</i></u>
CONT:TYee	<u><i>TYee</i></u>	date	<u><i>1-29-90</i></u>

Draft:PDO:PBisek:1/3/90:0760p

Delegation per STATE 122590 (4/19/88)

*Pending corrections
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I. SUMMARY AND RECOMMENDATIONS

A. Summary

The Commercialization of Alternative Crops (CAC) Project (505-0008) was authorized on September 24, 1985 for a total of \$6.8 million. The five-year project was recently extended to June 30, 1990, to allow for the design and implementation of a Project Amendment. This proposed amendment to the CAC project is directly in line with the longer term development priorities of Belize, and supports the USAID/Belize CDSS goal of sustainable economic growth within the key sectors of agriculture and tourism. The amendment will place emphasis on the protection and enhancement of the natural resource base to increase opportunities for diversification and sustainable economic growth. This will be accomplished by strengthening the institutional capabilities of public sector entities working in fisheries and land titling. The amendment will also modify the private sector component to reflect experience to date and enhance capacity to introduce non-traditional crops.

The current CAC project is well on its way to successfully completing the project objectives of creating the Belize Agribusiness Company (BABCO) for increasing the production, marketing and processing of non-traditional export and import substitution crops. The project is helping to develop public sector participation and institutional support for realizing agricultural diversification projects.

A further amendment to add activities in the forestry sector is contemplated, but has been delayed until agreement can be reached with the Government of Belize (GOB) on priorities under the new Tropical Forestry Action Plan (TFAP). The Mission expects to provide additional support for increasing public and private sector capacity to protect and manage natural resources and for private sector agriculture marketing and export-related activities under the proposed Natural Resource Management and Protection Project (505-0043) planned for initial obligation in FY 1991.

The goal of the CAC Amendment remains the same as the original project: to generate increased employment, income and foreign exchange. Likewise, the primary purpose statement is unchanged: to expand the base of economic activity in Belize by developing alternative agricultural products for export and import substitution. However, the Project Amendment will focus on accomplishment of additional key objectives. A new subpurpose has been added, which is to strengthen and expand the GOB's capabilities to effectively plan and manage natural resource programs in the specific areas of fisheries and land titling.

The Project Amendment will provide funding to the Fisheries Unit within the Ministry of Agriculture to undertake a series

of activities in coastal resources and fisheries planning, protection, and management. This initiative will focus on long-term training of personnel, short-term training of personnel in Belize's Fisheries Compliance Unit, development of a coastal resources management plan, public awareness activities, and implementation of an innovative financing program.

The CAC Amendment will also support the development of a computerized system of land titling, administered by the Department of Lands and Surveys within the Ministry of Natural Resources. The proposed system will facilitate rapid access and modifications to the registration of land titles and leases for rural lands, and other land title information not available under the current manual system. The project will finance two computer work stations, specialized software packages, and technical support and training needed to initiate the system. The computerized land titling and records system will provide a solid base for the development of an automated Geographic Information System (GIS). The GIS can become an invaluable tool for planning and policy analysis based on accurate land use/capability data.

In both new components the Amendment will help influence the development of sound natural resource management policies which have a direct impact on the Belizean economy. Among other things, it is contemplated that project-funded natural resource management activities will enhance the prospects for tourism development in an ecologically appropriate way. Implementation of new policies for fees and licensing of marine-related fishing and tourism activities and taxation of land will generate additional revenue for the GOB. Additional policy leverage can be gained from other A.I.D. projects, such as DESFIL, the regional RENARM project and the proposed USAID/Belize Natural Resource Management and Protection Project.

Finally, the Amendment modifies the planned project outputs to reflect actual experience in development of viable alternative crops, and adds funds to assist a Belizean private voluntary organization, Belize Enterprise for Sustained Technology (BEST), to provide technical advice and training in business organization and administration and to cooperatives and other economic groups serving small farmers and fishermen, to complement the technical program of BABCO.

The Project Amendment will provide an additional \$1.25 million, with increased GOB and other local support estimated at \$475,000 over the remaining 2.5 year life-of-project (LOP).

B. Recommendation: That the CAC Project Authorization be amended to increase (LOP) funding by \$1.3 million to a new total of \$8.1 million, extend the period for obligation by two years, to a total of six years from the date of the original authorization, and extend the Project Assistance Completion Date (PACD) by 30 months, to December 31, 1992.

SUMMARY PROJECT BUDGET
A.I.D. Funds (\$000)

<u>Component/Line Item</u>	<u>Original</u>	<u>Amendment</u>	<u>Revised Amt.</u>
PUBLIC SECTOR			
<u>MOA Strengthening</u>			
Technical Assistance	778	-	778
Vehicles & Equipment	421	-	421
Training	221	25	246
Admin./Eval./Audit	75	25	100
Contingency/Inflation	10	-	10
Sub-Contracts/Research	<u>495</u>	<u>50</u>	<u>545</u>
Sub-Totals	2,000	100	2,100
<u>Fisheries</u>			
Technical Assistance	-	510	510
Training	-	176	176
Equipment & Materials	-	130	130
Sub-Totals	-	816	816
<u>Land Titling</u>			
Equipment & Materials	-	97	97
Training	-	97	097
Subtotals	-	194	194
Financial Review/Audit	-	20	20
Contingency	-	20	20
SUB-TOTAL, PUBLIC SECTOR	<u>2,000</u>	<u>1,150</u>	<u>3,150</u>
PRIVATE SECTOR			
<u>Belize Agribusiness Company (BABCO)</u>			
Technical Assistance	2,814	-	2,814
Local-Hire Staff	319	-	319
International Travel	155	-	155
Vehicles	92	-	92
Operating Expenses	178	-	178
Sub-Contractors	662	-	662
Administrative Costs	400	-	400
Evaluation & Audit	<u>180</u>	-	<u>180</u>
Sub-Totals	4,800	0	4,800
<u>Belize Enterprise for Sustained Technology (BEST)</u>			
Salaries	-	100	115
Operating Expenses	-	20	20
Training	-	15	15
Audit and Evaluation	-	15	15
Sub-Totals	-	150	150
SUB-TOTALS, PRIVATE SECTOR	<u>4,800</u>	<u>150</u>	<u>4,950</u>
PROJECT TOTALS	<u>6,800</u> =====	<u>1,300</u> =====	<u>8,100</u> =====

II. PROJECT AMENDMENT BACKGROUND AND RATIONALE

A. Background

Belize is a small country with a very small population (one of the least dense with six persons per square kilometer), a relatively stable political and economic situation, and a rich resource base. All of these factors contribute to the country's uniqueness in Central America. Yet, some of these aspects have potential for vast and rapid change.

More than half the population of 178,000 people is located in the country's urban centers. While the natural increase of population is about 2.0 percent annually, it is expected to increase rapidly (perhaps by 50 percent) over the next five years because of uncontrolled in-migration.

Belize's democratic government has developed policies and programs that have resulted in GDP growth, averaging 3.2 percent in 1984-1986 and 5.7 percent between 1987-1988. Agriculture, tourism and fisheries are the primary foreign exchange earners for the Belizean economy. While economic growth has occurred, it has been insufficient for the government to cover the cost of development and maintenance of the country's infrastructure and social services.

The nation's resource base includes rich commercial fisheries which generate approximately \$US 7.5 million per year; a forest resource base covering approximately 90 percent of the country with both hardwood and pine forests, which accounted for 3 percent of the country's total export value in 1987 (\$US 2.5 million); and aesthetic features and wildlife which are attracting a growing number of tourists each year and are key to the continued expansion of Belize's tourist industry.

However, over-harvesting of fisheries, slash and burn agriculture, conversion of land from forests to citrus and other detrimental agricultural and natural resource impacts--including forest fires, mining of the remaining stock of important hardwoods (primarily mahogany and cedar), silt from upstream sources of erosion flowing into reefs downstream, sewage from cities and tourist developments--all threaten the natural resource base on which the economy and country depend.

A number of government ministries have responsibility for managing these resources. The Department of Fisheries is part of the Ministry of Agriculture, while the Department of Forestry is located within the Ministry of Natural Resources. The Ministry of Natural Resources also has within it the Department of Lands and Surveys, which is responsible for land registration, titling and

transfer. In general, these ministries are not adequately staffed compared to the magnitude of the resource base.

Additionally, no formal training programs exist for developing skills and improving performance of duties in any of the sectors. Nor do these ministries have adequate policies to ensure effective management of the resources. Current price control policies for hardwoods serve as economic disincentives to the development of more profitable export trade. No coastal zone policy exists, in spite of the amount of land and water usage in urban development and tourism, and given the current and imminent impacts of terrestrial land uses on aquatic and reef habitats. Additionally, even when policy is adequate, enforcement capabilities are not, due to a lack of trained personnel needed to bring about compliance of the law in forestry, fisheries and land registration.

There is no question of the urgency for change in favor of constructive and wise natural resource management practices in Belize. Not only is this an environmental concern, but increasingly an economic imperative. Improvident management and continued unwise exploitation of the resource base will likely mean disaster both for the environment and the economy. On the other hand, there exists a strong base for increased economic diversification and development of the Belizean economy. Well managed and developed fisheries, forests and titling and planning capabilities will produce long-term, sustainable benefits, and help Belize fulfill its potential of entering the ranks of middle income countries over the next decade.

B. Amendment Rationale

1. Constraints

a. Fisheries

The unique coastal and land-based natural resources enjoyed by Belize are of uppermost priority to the GOB in terms of marine and agricultural production, ecologically sound tourism development, environmental protection, natural resource management, and increased foreign exchange earnings through diversification of export products. All of these areas of development play a major role in the country's prospects for continued and sustained economic stability and growth. Belize's 150-mile barrier reef provides the ecological support for a wealth of marine-life, including the fishing industry's most profitable products of spiny lobster and queen conch. In addition to these products, trawling for shrimp is becoming increasingly important, with great potential for expansion into deepwater fishing for snapper and grouper.

Following agriculture and tourism, commercial fishing is the third most important economic sector. However, although the fishing industry is generating US\$ 8-10 million annually in foreign exchange, the Fisheries Department within the Ministry of Agriculture has inadequate funds for increasing the number of trained personnel, providing materials and covering operational costs needed to address immediate constraints to protecting and preserving the coastal plain and increasing marine production.

Compliance/enforcement of regulations, and management of fishery resources are of immediate concern to the GOB. The Fisheries Department must have well trained personnel, with a larger and better-equipped presence in the field to both help protect and manage fishery resources. There is also an awareness that if fishery resources continue to go unmanaged and unregulated, particularly with respect to the coastal plain and barrier reef, fisheries may be rapidly overfished given the strong demand for seafood products in highly lucrative overseas markets. Based on this and other potential undesirable ecological/environmental impacts, training in compliance procedures for the newly established compliance unit in the Fisheries Department is a top priority.

As the barrier reef's natural beauty and unspoiled condition receive greater recognition, an increasing number of tourists and workers related to the tourism industry can be expected each year. The fragile ecosystem is thus affected by greater demand for water and pollution from sewerage systems by both visitors and workers drawn to new jobs. As population growth continues, there is ever more pressure to develop untouched coastal and inland areas. Exacerbating the problem is increased agricultural production and the influx of refugees and other immigrants into Belize. These factors have contributed to the beginning of a cycle of environmental degradation which is currently taking place in surrounding countries at a much faster rate.

b. Forests

The forest resource base in Belize covers approximately 90 percent of the country. Due to low population density and conservative logging practices, Belize forest resources remain abundant. The laws governing the Belizean forest sector are generally considered adequate; however, current management policies and practices result in limited realization of the potential economic productivity that can be derived from government forest reserves and private forest lands.

Although in the past the forest sector has been the mainstay of the economy, by 1967 forest products accounted for only 10 percent of the total value of export trade. By 1987, mahogany, cedar, pine and other wood products had declined to only three percent (US\$ 2.5 million) of total exports. Presently, forest resources

are primarily used to supply substantial quantities of wood products for the domestic economy. Domestic consumption exceeds by three or more times the total value of forest product exports, despite the strong demand for hardwoods and wood products in the international market.

Current forestry management policies and practices have also contributed little to achieving potential economic gains from the development of government forest reserves and private forest lands. Forest department budgets have declined in recent years, and there is a shortage of trained staff, equipment and operating funds needed to effectively carry out protection, management, and extension operations. Government policy in the forestry sector has encouraged the utilization of secondary woods, both for local use as well as export. This policy is reflected in a lower tax applied to secondary woods. Price controls on lumber, however, have produced a negative economic effect for the country as a whole. With prices for mahogany and cedar heavily controlled for the local market, the end result has been a severe economic misallocation of forest resources. Belize's comparative advantage in the more profitable export market for hardwoods and wood products offers great opportunity for increasing economic returns.

In addition, the productivity of timber lands can be greatly maximized through silvicultural operations and protection from fire, insects and disease. Prevention and control of wild fires are activities that the Forest Department has had to abandon due to budget cuts and associated lack of transport and personnel. The positions of fire tower rangers were eliminated three years ago when it was evident that suppression of observed wild fires was impossible due to shortages of personnel and equipment. The ordinance against setting fire to grasses or trees in forest reserves has also prevented any controlled burning of undergrowth, which could serve to lower fuel levels and limit the likelihood of wild fires.

c. Land Titling

Growth in Belize has created an ever-increasing need to determine precise property boundaries, locations, and ownership. Although growth and development are certain, an impediment to economic development in the country has been the painfully slow process of acquiring title to land resources. Land registration of rural lands and the task of revalorizing land titles and lease agreements is a major undertaking given the current deficiencies (e.g., operational skills, assigned personnel and system automation) of land titling in Belize. The Belize land titling system is antiquated, poorly organized, and in immediate need of computerization. As a consequence, today it is unknown how many separate parcels of land exist in Belize. Also, because of the antiquated land titling system, many taxes are past due on privately owned property and lease holdings. These taxes could

provide an additional important source of revenue used to offset the cost of additional personnel, and increased operational costs required to effectively register and update land title information and monitor the system.

Effective land usage in Belize is also directly linked to the immediate need for an efficient land titling system -- one that is computerized and can rapidly add to and modify land titling and lease-hold information. A priority task of the Lands and Surveys office will be to transfer all land titling and lease hold data onto the proposed computerized system. Once transferred, there will be a need for skilled department management and field personnel trained in systems applications and gathering, updating and monitoring land records -- eventually leading to a more elaborate GIS and land-use indexation system.

As proposed, the procurement of a limited number of work stations and appropriate software, with corresponding training and maintenance, will be required to initiate the computerized system. Past due payments from existing and new rural land leases, land transfer taxes as well as titling fees, can provide an immediate source of revenue to cover recurrent costs associated with the maintenance and eventual expansion of the system.

d. Alternative Horticultural Crops

Experience during the first four years of project implementation has shown that some of the original output targets for new crops were not realistic.

The target of 3,000 acres of export crops was based on the assumption that the export crops would be winter vegetables such as melons and cucumbers. The crops now being promoted instead are tropical fruits, mainly papaya, that have two to three times the profitability and safer markets than winter vegetables. The new output target of 1,200 acres for tropical fruits should produce economic returns equal to or greater than 3,000 acres of winter vegetables, with less market risk.

The original economic analysis assumed that 6,000 acres of soybeans and 4,000 acres of sesame would substitute for 6,000 acres of corn, 5,000 acres of beans and 4,000 acres of rice. It also noted that if any of the soybeans or sesame were grown on expanded acreage rather than replace existing domestic consumption crops, the benefits would exceed those portrayed in the analysis. Currently, 2,000 acres of soybeans are targeted to be grown on expanded acreage, since the domestic demand and profitability of corn, beans and rice remain positive. Returns on sesame have been negative, making production of this crop an unrealistic project target.

The original project design also assumed that the soybeans and sesame would be processed for oil extraction. It has now been shown that it is not cost-effective to extract oil from these crops in Belize. Thus, the target of reducing oil and lard imports through production of soybeans and sesame was unrealistic. However, full-fat roasted soybeans can be used to replace one-third of the protein requirements of animal feeds, providing a market for soybeans from about 2,000 acres.

An additional constraint to introducing non-traditional crops experienced under the CAC Project is BABCO's difficulty in reaching large numbers of small farm operators. While BABCO has developed technical capability to perform research and provide advisory services in the production and marketing of new crops, it does not have the capacity to assist cooperatives and other economic groups of small farm operators to improve their organization and business management abilities. BEST is an established Belizean PVO which has this capacity and has been providing such services successfully, with support from USAID under a separate project. While that project is terminating, BEST has requested additional USAID support through CY 1990. BEST's financial plan provides for increased revenues from other sources while phasing out direct support from USAID.

An option for continuing support to BEST to complement BABCO activities is to channel the resources through BABCO via a subgrant or contract. However, a recent audit of BABCO identifies institutional weaknesses which need to be addressed before placing such a substantial additional management burden on that organization. Consequently, the most effective means of assisting BEST to continue its complementary services is through extension of the current direct grant from USAID.

2. GOB Plans

The GOB has made a strong commitment to economic growth in agriculture and tourism together with implementing sound natural resource management plans and policies. The new government's mandate and recent organization serve to reinforce this commitment. In line with this, the government has expressed a desire to pursue a strong policy of natural resource planning and management based on a long-term, ecologically sound, tourism development plan. The five-year plan for development of tourism outlines policies, strategies and objectives needed to carry out the plan. The GOB's approach is based on a moderate rate of growth in tourism. Under this scenario, a number of immediate actions are needed to prevent any negative environmental impact and to ensure optimum, ecologically sound development. Initially, emphasis will be placed on identifying those islands and other potential sites which could be developed, reserved and protected, as well as establishing specific zoning and building codes and

carrying out other forestry planning activities. The strategy also includes the development of a plan for national parks.

In the area of fisheries conservation, the GOB has given high priority to strengthening capabilities and developing a plan for decentralizing the functions of the Compliance Unit. Once the plan has been established, the Fisheries Department, in conjunction with the longer-term plans of the current administration, will develop a systematic approach for effectively exploiting and managing coastal and fisheries resources of Belize. Corresponding regulations, policies and follow-up implementation activities are also important elements of the proposed plan.

Directly supportive of the GOB overall natural resources strategy, and indeed key to the successful accomplishment of project forestry objectives, is the recently completed Tropical Forest Action Plan (TFAP). TFAP will serve as a blueprint for establishing natural forest management policies, licensing regulations, and the development of wood and wood product export markets.

The GOB's longer-term plans for the forestry sector are to more fully develop the concept of natural forest management, including the protection of reserved and privately-owned forest resources against the destruction from forest fires. The Ministry of Natural Resources is now gearing-up for these new activities in forest fire protection by allocating resources in anticipation of assistance from the CAC Project Amendment and other projects as well.

It is envisioned that National Park management will continue to be assisted by the Belize Audubon Society. National Park management could possibly benefit from the supply of technical resources and programs to be carried out under future interventions.

The GOB fully recognizes the need for efficient land-use planning and management capabilities. The GOB, through the Office of Lands and Surveys, is in the process of manually recording land titling records and other rural property information in preparation of an automated system. A computerized system is essential for rapidly accessing rural lands information, determining the amount of overdue land-title and lease hold payments, and updating and modifying important land information in a flexible and expeditious way.

3. BEST Proposal

BEST is a Belizean PVO formed to assist in the agricultural, agro-industrial and economic development of Belize. USAID has assisted BEST with grant support since 1985 to finance a pilot program of management and technical services principally to

Belizean agricultural cooperatives and associations resulting in positive solutions to a improvement in their economic and financial conditions. BEST has developed the capability to provide an integrated package of management and technical services to farmer groups. However, most of the groups BEST is currently serving are unable to pay the real cost of the services because of low sales volumes and profit margins. As a result, BEST has requested additional assistance from USAID for a period of three years to continue providing management and technical assistance to these groups, focusing on improving their economic viability.

The USAID grant has been extended to permit consideration of continued support under this CAC amendment, as requested in BEST's proposal. However, this amendment contemplates funding for only an additional 15 months, through December 1990. During this period, an assessment of BEST will be undertaken (along with an assessment of BABCO) to determine future support from USAID.

4. Mission Response

The Mission's CDSS for the 1991-95 period states that USAID will focus efforts on two key sectors of the economy; those being agriculture and tourism. If these sectors are allowed to grow unchecked, without adequate planning and management, they will pose an increasing threat to the conservation of tropical forests and soils, wildlife, coastal and fisheries resources and eventually limit or negate the potential for economic development.

The major thrust of the USAID/Belize longer-term development program is to help the GOB develop the capacity to rationally plan and manage the natural resource base, and more effectively guide and diversify economic growth. At the same time, current and proposed USAID projects will continue to address key constraints to growth, including the shortage of managerial and technical skills and the narrow product base for exports. Future projects supported by USAID/Belize will help maximize incomes and generate employment, produce additional government revenues, and protect and manage the natural resource base. The Mission's strategy also supports other existing plans, in addition to TFAP interventions, which the CAC amendment will complement and enhance. Among these are a development and zoning plan for Ambergris Caye financed by UNDP; a Belize City development plan; a Mangrove Management Plan; and a plan for protection of the Glover's Reef Atoll.

Other opportunities include tapping the RENARM project for planning, policy analysis and other assistance, and working with Peace Corps, CARE and other local organizations in fisheries and forestry management, agroforestry and other forest sector activities.

Examples of existing and projected support by USAID/Belize for these plans and programs are:

- * Assistance in developing a comprehensive national physical plan, including areas for potential agriculture, tourism and forestry expansion, areas for preservation, protection and limited access, and optimum sustainable use of existing agricultural lands; and
- * Technical assistance and training for Belizean Government, private sector and PVO organizations required for resource planning and management, including agriculture, forestry, environment and wildlife protection, tourism, general management and necessary shelter and social support services.

5. CAC Project Amendment

The diversification effort initiated under the original CAC project will be continued and expanded (building on BABCO and other local PVOs and cooperatives) under the proposed Natural Resource Management and Protection (NRMP) Project. The CAC has already accomplished the development of a private, producer-owned and operated organization to identify, promote and market export crops. With additional assistance, most likely secured under the NRMP, it is anticipated that BABCO will become a major organizer of farmers in the establishment of quality control standards for agricultural export commodities and in international marketing. Other PVOs, such as BEST, will very likely continue to have significant roles in providing organization and business management assistance to farmer organizations.

The CAC Project Amendment interventions in fisheries will address major constraints related to the planning, training of personnel, and conservation of the resource base. The over-exploitation of certain species, including spiny lobster and conch, exacerbated by the lack of coherent government policies, now threatens the economic (and possibly biological) viability of these fisheries. Project activities will assist the GOB in improving fisheries conservation policies and helping strengthen the fishery conservation compliance unit within the Ministry of Agriculture. Planning, commodity support, staff training, and technical assessments will be major areas of assistance under the Project Amendment. Funding will also provide for training programs and technical assistance to strengthen the government's delivery of services to fishing cooperatives and other private entities.

Definition of activities for A.I.D. support in the forestry sector has been postponed since the GOB has not yet adopted the Tropical Forestry Action Plan as a blueprint for action. Work will continue in collaboration with the GOB to design a forestry component that addresses critical constraints, either as a further

amendment to the CAC project, or, depending on the timing, as a part of the new NRMP project.

The CAC Amendment will support the development of a computerized system of land titling registration, through the Department of Lands and Surveys. The system will facilitate access and modification to land title information and lease-hold data, as well as expedite the entire process of revalorizing rural lands. The project will finance computer work stations, specialized software packages, and technical support and training needed to initiate the system. The system will also enable the Department of Lands and Surveys to begin generating additional revenues derived from land lease holdings, property transfer taxes and land revalorizations.

The timing of the proposed Project Amendment is critical for enabling the Mission to provide, within the first quarter of 1990, key support to the GOB. Importantly, the Project Amendment will also provide financial continuity to GOB plans and those of USAID/Belize in terms of planning and managing natural resource programs, establishing the analytical base for new policy decisions in natural resource management, continuing to expand the base of diversified agricultural projects, and contributing to sustainable economic growth in the future. The Amendment will incorporate a number of responsive mechanisms designed to channel an immediate source of funding, technical assistance and training to the new GOB administration, through the government Ministries of Natural Resources, Agriculture, and the newly formed Ministry of Tourism and the Environment. Besides providing rapid implementation services, the contracting mechanisms and buy-ins to existing technical programs will also serve to reduce the Mission's administrative and management burden.

The Mission envisions that the proposed CAC Amendment will pave the way for a much larger project initiative (i.e. Natural Resources Management and Protection Project) planned for FY '91. Each of the Amendment's components of fisheries, forestry and land titling will be strengthened and broadened under the NRMP project. Important issues to be addressed will include natural forest management and agroforestry activities. The agroforestry activities will be designed to benefit small farm populations with on-farm applications that are capable of increasing farmers' incomes. Lastly, the NRMP project will increase the outreach and expand the capabilities of the computerized land titling system initiated under the Project Amendment. It is important that the land titling system be designed to be compatible with the expanded GIS functions projected under the NRMP project.

III. DETAILED DESCRIPTION

A. Goal and purpose

The goal of the CAC Project is to generate increased employment, income and foreign exchange. The purpose of the project is to expand the base of economic activity in Belize by developing alternative agricultural products for export and import substitution. The Project Amendment adds a separate sub-purpose of strengthening and expanding GOB capabilities to effectively plan and manage natural resource programs in the specific areas of fisheries and land titling.

Specifically, the Project Amendment supports certain activities that will ensure the development of public institutional capabilities needed to address economic diversification issues in fisheries and land titling. During the LOP, the project will work to:

- * Transform existing feasibility studies into strategic and action plans for public and private implementation over the longer term.
- * Ensure the continued planning, management and operation of the Hol Chan Marine Reserve and Conch Laboratory.
- * Obtain more control over the natural resource base.
- * Secure the tools and methods to enhance land titling which will provide more opportunities to farmers to manage resources in a sustainable way.
- * Develop and implement more consistent and supportive policies, legislative mandates, and enforcement mechanisms.
- * Disseminate information to enhance public awareness about resource management and the contribution of natural resources to the Belizean economy.
- * Coordinate with governmental, indigenous non-governmental and international organizations, to ensure the most effective use of human, financial and other resources during the implementation of the project.

B. Beneficiaries

The primary beneficiaries of this project amendment will be field personnel and mid-level managers in the public sector with responsibility for fisheries, land titling, and environmental education/public awareness programs. Small farm operators will

also benefit directly from the enhanced ability to take advantage of opportunities in production and marketing non-traditional crops.

The secondary or indirect beneficiaries will be those Belizeans benefitting from public sector activities that move toward greater diversification of economic activity in the fisheries sector, and those who are better able to revalue and/or transfer existing or new rural properties owing to the new computerized land titling system. The majority of these individuals will be from the private sector. These beneficiaries will include entrepreneurs and job-holders whose positions will be strengthened due to project activities and outputs, as well as new entrants into the job market with new opportunities created through project activities.

The ultimate beneficiaries will be the general public of Belize, gaining from a stronger economy, a more sustainable natural resource base, and continued and improved environmental quality.

C. Amendment Activities

1. Fisheries

This project component promotes more careful planning of the coastal zone, short and long-term training for personnel who work in the government and in cooperatives, and greater awareness by the public about decisions related to the fisheries and coastal resources of the country. There is a need to finance the development and conservation of natural resources commensurate with their contribution to the Belizean economy. The range of activities requiring immediate attention in Belize is great. Yet considering the length of the amendment and the need to achieve positive, discrete results in two and a half years, with the opportunity to lay a firm foundation for more concerted action in fisheries and coastal activities under the proposed Natural Resources Management and Protection Project, only a select group of activities will be undertaken.

a. Rationale

Fisheries habitat makes up approximately 51 percent of Belize's official territory of 18,000 square miles. This habitat includes the second longest barrier reef in the world (150 miles long from the Sapodilla Cove to the south, stretching to the Mexican border in the north). The commercial fishing cooperatives which exploit these resources generate \$7-8 million per year. In fact, commercial fishing activities in the country are the third most significant sector of the economy, with agriculture and tourism first and second, respectively.

Currently, these fisheries are:

- * not properly planned and managed as a resource,
- * not well coordinated in broader economic and land planning, (e.g., agricultural pesticides and erosion due to agricultural practices upstream which effect water quality and reef health; and uncontrolled tourism development which has allowed sewage and other wastes to pollute waters, even though the industry is dependent upon the reef for its own vitality),
- * inadequately supervised (lack of personnel and lack of training for existing personnel), and
- * not well understood by the fishermen and the general public in terms of their contributions and sound management for a long-term viable economic base.

The fisheries sector approach will be based on priorities elaborated by the Fisheries Department, on-going activities, recommendations arising out of the Belize Coastal Zone Management Workshop, the technical analysis done for this PP Amendment, and from discussions with other GOB representatives, including the new Minister of Tourism and the Environment. While many activities could be undertaken, emphasis will be placed on: development of capabilities within the Compliance Unit (equipment and training as well as through development of a Compliance Unit Plan for future implementation during the Natural Resource Management and Protection Project), development of a preliminary coastal resources plan, training (short-term training in compliance and long-term training in coastal resources and fisheries management), public awareness, and policy dialogue.

A number of the outputs of this Amendment will provide useful guidance to USAID for the design of the proposed Natural Resources Management and Protection Project, e.g., requirements for further strengthening Compliance Unit operations, research needs, management needs, and staffing requirements.

The amendment will provide continued support for the Conch Laboratory and for three major new activities in the fisheries sector during the Amendment period:

Planning

Coastal zone planning and management is a critical issue for countries such as Belize with vast coastal and fisheries resources. The participants of the recent Belize Coastal Zone Management Workshop agreed that planning and management are "vital to assure the sustainable development of Belize's coastal

system, mainly because of its traditional importance to commercial and subsistence fisheries and because of its rapidly growing significance in supporting nature-based tourism". Among the workshop's many recommendations is the development of a coastal zone plan which would: guide development and use of the zone; involve public participation in the development and implementation of the plan; utilize existing institutions and knowledge; institute appropriate regulations for management of the zone; minimize costs during implementation of the plan; promote sustainable development activities; and ensure adequate government support (financial, human resources, and legal) to develop, implement, monitor and revise the plan as needed.

The planning process outlined by the workshop is consistent with the objectives of the project amendment. Both attempt to ensure a sustainable set of practices whereby natural resources can serve as the sustainable basis for economic development. Concurrent to development of the plan, other activities should be taking place, including the establishment of an inter-ministerial committee to oversee development of the plan. While acknowledging the need for more knowledge to ensure careful planning and related activities, it is clear that the GOB is eager to move from the phase of doing more feasibility studies, to translating existing knowledge into planning and implementation activities.

GOB officials identified one specific topic, however, for which a brief (six weeks) assessment should be undertaken. Concern over observations made in the fisheries technical analysis conducted for this project amendment suggests that an assessment of reef quality should be undertaken by a reef specialist working with GOB staff. Equipment and technical assistance to undertake this activity will be provided under the project amendment.

Training

The Fisheries Department considers training to be a major priority during the next few years. Specifically, the requested short-term training focuses on development of Fisheries Department personnel in the Compliance Units. These individuals work with fishing cooperatives to ensure adherence to existing laws and regulations. The training for these individuals will focus on enhancing their knowledge about the laws and regulations, and their ability to articulate and apply them. In addition, training will serve to develop communications skills to provide fishing cooperatives and others with more information regarding the role of fisheries in the Belizean economy and on the need for and ways to ensure sustainable fisheries. Another small training component will occur once the innovative financing mechanisms are in place; a staff person is assigned to

monitor the fees, permits, licenses, etc.; and a computer and tracking system are available to monitor the financing program.

A second short-term component of training will be provided to several (approximately two- four) Fisheries Department personnel to orient them to the nature of coastal zone planning, and to enhance their ability to participate as appropriate in the planning process as it evolves. Belizean government counterpart personnel in coastal resource planning will also receive in-service training in the planning and implementation process.

A final component of training will cover the cost of two Belizeans for two years (either to finish undergraduate studies or to undertake a master's degree program) in coastal resources planning and/or fisheries management. These individuals will be expected to have a corresponding position in the Fisheries Department upon their return.

Public Awareness and Policy Considerations

A major concern is how to enhance public awareness and understanding of the contributions of fisheries to the Belizean economy and ways to enhance management of fisheries resources. The project amendment will work with the Ministry of Education and coordinate with Peace Corps activities (e.g., 3 Environmental Resource Centers) to make curriculum and educational materials available that can be integrated into existing science and related curricula.

Among the most critical issues the project amendment will address is that of innovative financing of the recurrent costs of fisheries. Belizean fisheries bring in millions of dollars each year, but more could be obtained by licensing fishermen, and taxing sportfishing, diving, and other activities. Many of the mechanisms have already been analyzed and discussed. It is now time to work with the GOB to obtain approval and develop the mechanisms to institute and keep track of the new financing activities. Other related policy considerations will include the need to increase government commitment and support for more personnel in the Department of Fisheries for participation in planning, management, enforcement and related activities.

b. Activities/Outputs of the Project Amendment

The activities for this amendment were selected based on discussions with the GOB, technical analyses and other literature, and interviews with USAID and Peace Corps staffs. The following activities were chosen for their ability to:

- * give strategic direction to future coastal resources and fisheries development activities;

- * contribute to the existing base of knowledge on Belizean fisheries;
- * enhance enforcement/compliance capabilities of the GOB;
- * strengthen GOB staff through long- and short-term training;
- * contribute to generating public awareness; and
- * ensure future financing of fisheries sector activities through careful selection, enforcement and monitoring/tracking of innovative financing mechanisms

Planning

While other activities (e.g., the creation of a Belizean inter-ministerial committee on coastal zone management) are proceeding, the CAC will support advancement of the development of the coastal resources plan proposed during the Coastal Zone Management workshop. Implementation of the plan will involve the following:

- * Initiation of a rapid compilation of available information on coastal resources, including utilization and socioeconomic importance, the existing legal and institutional framework and human and financial resources available for coastal resource management, and major threats to the sustainable utilization of coastal resources.
- * Planning to include guidelines for development of internationally accepted standards, zoning, programs for fisheries resource management, research and monitoring, infrastructure development, administration, and inter-ministerial and agency coordination.
- * Planning to also include the development of a compliance plan for strengthening the enforcement capability over the long-term to protect the fisheries resources. This will also consider staffing requirements and needs to decentralize and further strengthen the Compliance Unit operations. Recommendations from this compliance plan will be used in the development of the proposed Natural Resources Management and Protection Project to design appropriate assistance for further strengthening the Unit in the future.
- * Inclusion of an orientation/training component in the planning exercise to ensure that multidisciplinary GOB and other participants work under a consistent planning

process. Over the course of the amendment, it is important to stress that as the GOB counterpart works actively in the planning effort, he/she will be receiving effective long-term, in-service training.

- * Undertaking of an assessment of the quality of the reef (approximately six weeks, working in conjunction with GOB personnel). The information from this assessment will provide useful data for the development of the coastal resources and fisheries planning exercise.
- * Continued support to the GOB/WWF Hol Chan Reserve project, including continued planning and management activities. [This continued support is given with the understanding that once the USAID project is completed, the GOB will ensure that innovative financing of recurrent costs is available for similar projects.]

Conch Research

The Queen Conch is a staple food and import export product through the Caribbean region, and has, as a consequence, been heavily fished. Strong demand has created pressure on the resource to the point that Conch are severely depleted. Under a grant from the A.I.D. Science Advisor, low technology research was conducted establishing the kinds, extent and distribution of genetic stocks; using gene markers to study larval migration and origins; and studying the relationship of genetic variation to population demographic features such as age structure, density recruitment rates and growth rates.

Continued support for research to determine the feasibility of re-seeding natural breeding grounds with Conch reared under controlled conditions is being provided under the CAC project. However, since this specific activity was not identified in the original project design, this Amendment reflects the appropriate modifications in outputs and budget.

The objective of the feasibility work is to determine the most economical way in which Conch production can be increased through rational management. The following activities will be conducted:

- * increase hatchery production of juvenile Conch;
- * expand and refine feeding experiments to increase the number of Conch produced;
- * stock rehabilitation through re-seeding experiments;
- * identification of new stock;

- * induced spawning; and
- * continuation of the public education program for Conch conservation.

Training

The training activities under the fisheries component will cover the following areas, considered to be of high priority to GOB:

- * Training of staff in the Compliance Unit in the areas of standards for conformance to fisheries laws and regulations, communications skills to work with local fishermen, and public awareness information to ensure that fishermen and others are aware of the role and importance of fisheries in the Belizean economy and the needs for careful management of the resource in order to ensure long-term economic activity
- * Training to include GOB staff in the fisheries and hatcheries units and selected representatives from fisheries cooperatives. Approximately 20-24 individuals should participate in the training program during the amendment period.
- * In-country orientation/training on coastal planning as noted under the planning activity listed below.
- * Training for Fisheries or other GOB personnel with responsibility for monitoring the licensing and other innovative financing programs.
- * Long-term training in the U.S. or elsewhere in the fields of coastal resources and/or fisheries.

Public awareness and Policy Considerations

Activities anticipated under this component include:

- * Adapt and/or develop curriculum and educational materials for integration in existing science and related school curricula to enhance the access teachers have to technical knowledge about fisheries, fisheries standards, and the role of fisheries in the economy of the country.
- * Discuss mechanisms for innovative financing of the recurrent costs of the sector. This will include development of policy, procedures and standards for taxes, fees, licenses etc., that will be levied on both foreign and domestic tourists, including recreationists

and fishermen. The tourism industry, while an important contributor to many economies, remains a potentially unstable source of foreign exchange. Should foreign tourists move to other touristic zones, the government must already have mechanisms in place to ensure that the Belizean people contribute to the maintenance of these fisheries.

Analyze and discuss other policies with ramifications for coastal resources planning and management, as well as policies regarding staffing and human resource development in the fisheries, coastal zone planning, and related programs.

c. Inputs

The inputs to these activities, in addition to GOB staffing, include technical assistance, equipment, and coordination with government agencies and others.

Staffing

Staffing to carry out the project activities will, for the most part, be by regular GOB employees financed from the recurrent costs budget. One exception is salaries for Conch Laboratory personnel, which will be financed for two years under the CAC Project. The Project addresses some of the issues of increasing financing for recurrent costs, and other USAID support activities will address, on a broader basis, the subject of tax reform and financing of environment and natural resources management activities.

Technical Assistance

Technical assistance for the fisheries component of the project will be provided by the a buy-in to the Coastal Resources Management Project and an IQC (See Matrix on Implementation Mechanisms for details). They will provide assistance in the following areas:

- * Long-term training
- * In-country training of fisheries staff and others
- * Development of planning efforts
- * Conduct of assessments
- * Procurement of equipment
- * Discussions regarding GOB policies on coastal zone management, and financing recurrent costs of fisheries activities.

The level of technical assistance for the two year period will include:

- * One full time coastal resources planning advisor for two years, to work with Belizean counterparts.
- * One short-term training/public awareness advisor (six months at outset, then several trips for follow-up and coordination on the public awareness program).
- * One policy advisor (3-6 months over the LOP).
- * One researcher (six weeks).

Equipment

This project will require the procurement of the following equipment:

- * Two boats for use in planning, training, and public awareness activities.
- * Monitoring equipment for the reef quality study, in coordination with the Conch Lab.
- * Computer and supplies for monitoring licensing, fines, fees and other tax revenues.
- * Materials for educational campaigns.
- * Three boats for Compliance Unit operations (locally made boats, 20-25 ft. long with 80 h.p. outboard motors).
- * Four radios.

Coordination

The contractors/cooperators will ensure that their efforts are coordinated with GOB institutions, including the appropriate Ministries, the Fisheries Dept., the Ministry of Education, and others, as well as with the Peace Corps, conservation groups, fisheries cooperatives and others that have interests and responsibilities for working in the fisheries sector of Belize.

Mechanisms for Implementation

The project will rely primarily on a buy-in to the Coastal Resources Management Project (S&T/FENR) with the University of Rhode Island for the long- and short-term training, the assistance on coastal resources planning, policy dialogue and public awareness activities of the project, as well as for coordination with the GOB, Peace Corps and other groups involved in fisheries activities. An IQC will be used as soon as possible to assist the reef quality assessment and to identify procurement needs for related equipment for that activity.

Additionally, funding for a second phase of the GOB/WWF Marine Reserve activity will be provided under this amendment.

2. Land Titling

The land titling component of the CAC Amendment is designed to provide a computerized system for registering and accessing land title information in Belize. Planning for the installation and implementation of the system, and training in the use of computers and application of the software package, are the primary activities of this component. The procurement package of two computer work stations and the ARC/INFO software, will include a training program for three (3) in-house representatives of the Office of Lands and Surveys within the Ministry of Natural Resources. Additionally, approximately seven (7) field technicians will receive training for application of the system to the Lands and Surveys district office locations. Lastly, the component will help initiate a program for analysis of policy alternatives, and assist in making recommendations for the most appropriate policies and compliance standards, for the enforcement of tax legislation on land titles, lease hold agreements, title transfers, and other fees and payments associated with the titling of land in Belize.

a. Rationale

It is a massive challenge to register all land titles and actively manage lands in Belize (estimated at 75 percent of the total land area of the country). Much of the land area of Belize that is privately held and government owned is not precisely known in terms of ownership and physical location. It is estimated that over 80,000 rural land parcels are not registered, and are therefore not on the tax rolls. Moreover, land transactions carried out between private parties often pass unrecorded. Thus, the GOB is unaware of new ownership, the value of land, and exact property boundaries. It is frequently found that two or more people have title to the same parcel of land, or the same land is in fact leased by the government to someone else. As a result, millions of dollars in land title fees, yearly property taxes, leasehold and transfer taxes go uncollected. This substantial source of potential income to the GOB and/or Ministry of Natural Resources, contributing to new investment and economic development, is left untapped owing to the current status of the Belizean land titling system.

The existing manual system of recording and filing land title information is unwieldy and for the most part in a state of disarray. The land information system is divided between 2-3 separate filing systems, each serving a different purpose. The current structure and organization prohibits the development of a strong institutional capacity -- one that is needed to rapidly

record, access and exchange important land title information. The system is also hampered by the geographic disposal of the files. Both the office in Belize City and the Lands and Surveys center in the capital city of Belmopan house land title records and other data. Unfortunately, a significant amount of the records have been misplaced or are lost owing to years of negligence in monitoring the permanent files, and the habit of lending out original files to other Ministries without an effective means of tracking the whereabouts of these files.

The Office of Lands and Surveys is currently involved in the process of reviewing the mechanics of the land titling system, and transferring as much information as possible to a more workable, centralized, although manual system. However, to date only five percent of the land records have been converted to the new index card registration system. Moreover, Lands and Survey's central office staff and field personnel are spread thinly between six district locations, with each having responsibility for attending to the needs of the public.

Despite these current obstacles to the development of an effective system of land titling registration and information, many factors now exist which bode well for going forward with the immediate procurement, installation and implementation of a computerized land title information system. For example, with large expanses of land uninhabited and still reasonably undeveloped, the time is right for employing and testing out a computerized system before the task of conversion to automation becomes overwhelming. The newly elected GOB administration has reaffirmed the priority need for a computerized land titling system. Current GOB officials and Lands/Surveys personnel are enthusiastic about the possibility of converting to the proposed system and becoming proficient in its operation and application. Importantly, conversion to the proposed computer system can be done expeditiously and parallel to the current manual transfer of information into an organized and workable format.

Land management can be greatly facilitated through rapid access by all departments to required information, including land abstracts, land area, information on the status of each application, names and addresses of owners of surrounding properties, as well as the amount of taxes paid. The process will eliminate many of the current delays experienced in the title application process. Moreover, the computer system will serve to reduce or eliminate duplication of effort, and the need for physically maintaining and storing maps and numerous other documents. Hence, both space and labor can be used for more productive purposes.

Eventual'y, the use of a spatial data base of lands will permit coordinacion of future field activities of inspectors,

surveyors, assessors, and provide other beneficial inputs to the system which save time and money for the GOB (to be funded under other projects).

b. Activities/Outputs

Required is the initial implementation of an appropriately designed, multipurpose, cadastral-based, computer-aided Geographic Information System (GIS), for the improved management of land and map information and records. The primary activity of this component is the procurement, installation and implementation of two work stations and the GIS software package, and appropriate training of Lands and Surveys Office personnel. The short-term result of this system will be the establishment of an information management and decision-making capacity within Belize, which takes into account developmental benefits, renewable resources, applicable technology, and the sustainability of specific geographic regions. Information will be made accessible on existing and potential resources, incorporating the information generated by a U.K.-sponsored project which updated and revised maps; a FAO-sponsored project which classified agricultural and forestry lands using remote sensing; and, the organization and formatting of data on land, sales, lease, taxes, and valuation information, for easy entry and access by Lands and Surveys Officers through the use of on- and off-site computer terminals.

Implementation of the proposed system will require:

- * Training of personnel (10) to operate and maintain the system, and in the various system applications;
- * Expansion of the office space within the Ministry of Natural Resources building at Belmopan (to be carried out by the GOB) to accommodate the system and provide adequate working areas for the Survey and Lands section of the Ministry.
- * The provision of additional means of transportation to improve the mobility of the Surveys and Lands Inspection/Valuation teams (to be provided by the GOB counterpart or by another project).

Policy Outputs

- * Stronger compliance measures to enforce current tax legislation for land titles, leases, title transfer and other property tax laws.
- * Revalorization of properties which are owned or leased. (This process is long overdue and should be carried out

immediately following initiation of the computer system for registering lands in Belize.)

- * Establishment of a land transfer "escrow" to be used for new land surveys, and verification of price and title prior to the issuance of a new land title.
- * Approval of "empowerment" provisions that will allow other officials within the Lands and Surveys office to sign and approve documentation in the absence of the Minister of Lands and Commissions.
- * Authorization to conduct title searches, surveys and settle boundary disputes prior to "declaring areas", in order to eliminate delays and facilitate the land registration process.
- * Enlisting the support of military helicopters in the completion of the Geodetic Control system which involves the mapping of land coordinates.

c. Inputs

- * (2) Spark (RISK) work stations, 208 Mb disk, 5 Mb RAM, 19" Color Monitor Keyboard and Mouse, 12.5 MIPS.
- * ARC/INFO work station primary software system.
- * ARC/INFO work station secondary software systems.
- * Spark work station annual maintenance agreement.
- * Spark server annual maintenance agreement.
- * ARC/INFO primary and secondary work stations service agreements.

Mechanisms

The Development Strategies for Fragile Lands (DESFIL) is an A.I.D. centrally-funded program for the LAC region which is designed to provide technical assistance to USAID Missions and host countries in a wide range of projects, including natural area management and policy analysis, sustainable agriculture, and soil and water conservation. The specific objectives of DESFIL are to:

- * raise public awareness and increase involvement in the sustainable use and management of fragile areas, and to analyze and formulate related policies;

- * study appropriate technologies for the management of fragile area resources and determine incentives to stimulate the use of those technologies;
- * identify institutional arrangements that promote and facilitate sustainable development;
- * develop geographic, management, and natural resource information systems and encourage information sharing;
- * formulate strategies and plans concerning natural resources for host country clients and A.I.D. missions, including environmental assessments, land-use planning, natural resource strategies, action plans, and project designs; and
- * promote collaboration among international donors, including A.I.D. and public/private development organizations, in cooperation with other centrally funded A.I.D. projects.

For the CAC Project Amendment, the DESFIL mechanism will be utilized to procure the required hardware, software, technical assistance and training, needed to install and implement the proposed computerized land information system. By means of a buy-in to the existing program with the use of project funds, it is anticipated that all equipment and technical assistance can be in place by the first quarter of 1990.

*3. BEST

a. Rationale

The cooperative movement plays a major role in the Belizean economy and is the dominant force in the fisheries and agricultural sub-sectors which together account for over 90% of total export commodities. The major industries of sugar, citrus, bananas, fisheries, livestock and honey are all organized into associations or cooperative societies, as are the main producers of basic food crops -- corn, rice, beans and vegetables. There are more than 10,000 farmers and fisherman, not including their dependents. They employ an estimated additional 15,000 permanent and seasonal workers.

BEST is dedicated to providing management, enterprise development and technical assistance to cooperatives and other community-based enterprises in the agricultural, agro-industrial and economically developing sectors in Belize.

b. Activities/Outputs

The most frequent request for assistance received by BEST over the past four years has been for management and accounting training. As a result, BEST developed a core of professional staff with a distinctively business bias. Marketing and distribution, project identification and development, and export-promotion will get increased emphasis in this new phase as the guiding considerations will be food security measures, marketing, and complementarity with general economic strategies.

While these types of assistance will continue at the core of its program, BEST is planning to focus on two additional areas: projects dovetailing with national economic planning such as crop diversification in northern Belize; and women and micro-enterprise development. Staff development and securing solid, long-term sources of funding are also key BEST institutional activities of this second phase.

BEST's goal is to continue improving the economic well-being of Belizeans, specifically low-income people, through a self-help enterprise development process. Through the provision of technical and management services to enterprises engaged in agricultural and agro-industrial activities, BEST intends to increase the income and economic benefits of the enterprise participants, create job and employment opportunities for both farming and non-farming communities, and improve the basic skills and technological expertise of Belizeans in order to better adopt, absorb and sustain the most modern and appropriate technology available. This enterprise development process will be complemented by assisting governmental, parastatal and private organizations in the efficient provision of services and resources to the enterprise sector.

Specific end results sought by BEST for cooperatives assisted are:

- * positive improvements in real terms of gross value of production, net worth, capitalization, productivity, long-term viability and growth;
- * directors and managers possess and apply modern business management skills based on practical experience, including production decision-making techniques and tested production and financial planning and analysis systems; and
- * members and employees have thorough knowledge and comprehension of the socio-economic role of cooperatives and effectively and efficiently carry out their responsibilities within the organizations.

c. Inputs

Inputs for the period of this amendment will include \$150,000 from USAID and \$314,000 from other sources, primarily for staff salaries and operating expenses.

Mechanisms

A.I.D. funds will be made available to BEST directly, through an amendment to BEST's existing grant agreement.

IV. COST ESTIMATES AND FINANCIAL PLAN

This Amendment to the CAC Project increases total project costs by \$2.014 million, to a new total of \$9.494 million, and extends the PACD to December 31, 1992. A.I.D. LOP funding will increase by \$1.3 million, to a new total of \$8.1 million.

A. Cost estimates for the activities being added by the amendment are as follows (LOP, U.S. \$000):

	A.I.D.	GOB	Other	Total
<u>Public Sector:</u>				
MOA Strengthening				
Hol Chan Marine Reserve & Conch Lab. Operations	100	15		115
Fisheries				
Salaries & Operating Exp.		50		50
Technical Assistance	510	25	50	585
Coastal Resources Planning Advisor	[270]	[15]		
S-T TA, Compliance & Public Awareness	[70]	[10]		
S-T TA, Policy Anal. Reef Assessment/Data Analysis	[70] [100]		[50] 10	206
Training	176	20		
L-T Participants (2) In-country workshops		75	15	220
Equipment & Materials Boats (5), radios, computers	130			
Fisheries Sub-Totals	<u>816</u>	<u>170</u>	<u>75</u>	<u>1,061</u>
Land Titling				
Salaries & Operating Exp.		50		50
Equipment and Materials	97	60		157
Hardware/Software				
Training	97	20		117
Land Titling Sub-Totals	<u>194</u>	<u>130</u>	<u>—</u>	<u>324</u>
Financial Review/Audit	20			20
Contingency	20	10		30
Subtotals, Public Sector	<u>1,150</u>	<u>325</u>	<u>75</u>	<u>1,550</u>

	A.I.D.	GOB	Other	Total
<u>Private Sector</u>				
BEST				
Salaries	100		135	235
Operating Expenses	20		116	136
Capital Expenditures			53	53
Training	15		10	25
Evaluation and audit	<u>15</u>	<u>---</u>	<u>---</u>	<u>15</u>
BEST, Sub-Totals	150		314	464
Subtotals, Private Sector	<u>150</u>	<u>---</u>	<u>314</u>	<u>464</u>
Amendment Totals	<u>1300</u>	<u>325</u>	<u>389</u>	<u>2014</u>

B. Host Country Counterpart

The GOB will provide approximately \$325,000 of counterpart funding in support of the fisheries and land titling components. The support will consist of: in-kind contributions of salaries of government employees in the Ministries of Agriculture (Fisheries Department), Natural Resources (Lands and Surveys) and to a lesser extent the newly formed Ministry of Tourism and Environment; operation expenses related to project activities; and use of existing physical plant such as office space, other facilities and vehicles needed to support the project's technical assistance, training and other implementation activities. (Government salaries are calculated on an average \$5,000 per year).

The project is expected to facilitate the generation of additional resources for the GOB, estimated at \$50,000 per year, through revision and enforcement of tax laws and fees related to fisheries and land title registration, revalorization and transfer of properties. While examination of innovative mechanisms for financing conservation and resource management activities will be undertaken under the project, earmarking of

overnment revenues for implementing agency costs is not a specific objective. A separate Development Policy Planning and Management Project (505-0045), planned for initiation in FY 1990, will address policies on taxes and allocation of revenues.

Approximately \$389,000 will be provided over the life of the project by PVOs, NGOs, fishing cooperatives and other private sector organizations and individuals benefitting from project activities.

Although not included in the budget, ROCAP's RENARM project is expected to provide significant assistance, particularly in policy analysis, use of automated Geographic Information Systems, and public awareness and education programs. Depending on forthcoming awards of assistance to U.S. environmental PVOs,

ROCAP assistance may also provide related support for the coastal zone and fisheries management component through expansion of marine protected area .

C. Methods of Financing

The Mission expects to buy-in to centrally-funded projects for technical assistance, training, and most commodity procurement for the fisheries and land titling components, as shown in the following table. Under this mechanism, financing will be by direct payment. Support for the Hol Chan Marine Reserve and Conch Lab., and, possibly, some additional coastal zone/fisheries assessment activities, will be provided through advances and/or reimbursement to the Ministry of Agriculture. Assistance to BEST will be provided through extension of an existing direct grant agreement.

METHODS OF IMPLEMENTATION AND FINANCING

<u>METHOD OF IMPLEMENTATION</u>	<u>METHOD OF FINANCING</u>	<u>APPROXIMATE AMOUNT</u>
<u>TECHNICAL ASSISTANCE</u>		
Coastal Resource Mgmt. ST/FENR/Univ.R.I.	Direct Payment	410,000
Reef Assessment (IQC)	Direct Payment	50,000
Reef Assessment	Direct Reimbursement	50,000
<u>TRAINING</u>		
Coastal Resource Mgmt.	Direct Payment	176,000
Land Titling (DESFIL)	Direct Payment	97,000
<u>COMMODITIES</u>		
Coastal Resource Mgmt.	Direct Payment	130,000
Land Titling	Direct Payment	97,000
<u>OPERATING COSTS</u>		
Conch Laboratory	Direct Reimbursement	100,000
BEST	Direct Reimbursement	135,000
Financial Review/audit	Direct Payment	15,000
Evaluation	Direct Payment	10,000
Contingency		30,000
TOTAL		\$1,300,000

PROJECT IMPLEMENTATION MECHANISMS

<u>COMPONENT</u>	<u>MECHANISM</u>	<u>ACTIVITY</u>	<u>COORDINATION</u>
Fisheries	-Buy-in Coastal Resources Management Project ST/FENR/Univ. of Rhode Island	-Coastal zone -Procurement of equipment -Training -Planning -Compliance -Long-term -Policy Analysis -Public awareness	-Dept. of Fisheries -Customs -Dept. of Education Peace Corps
	-Reef quality (IQC)	-Assessments -Conch Lab -Procurement of equipment -Planning and management	-Dept. of Fisheries -Customs
	-GOB/WWF		-Dept. of Fisheries
Land Titling	-Buy-in DESFIL S&T/RD with DAI/TR&D	-Procurement of equipment -Design of system -Training	-Dept. of Lands and Survey

V. IMPLEMENTATION AND MONITORING PLAN

A. Administrative Arrangements

The \$1.15 million increase for public sector activities will be obligated through amendment to the current Grant Agreement with the GOB. The \$150,000 increase for the private sector component will be obligated by amendment to the current Cooperative Agreement with BEST.

A USAID project review committee will (a) periodically review existing and proposed resource allocation under the project including any need to make modifications in the project, and (b) review obligating documents, and clear and/or make recommendations to the A.I.D. Representative according to normal Mission procedures. The USAID Belize project manager will oversee the activities of the U.S. contractors and ensure that all activities are performed in a manner that is in the best interest of the project.

Project monitoring will be exercised by the project manager assigned by USAID's Agricultural Development Office (ADO). The ADO project manager will work closely with Project counterpart personnel, and with the management of the contracted technical assistance entities, to assure that project implementation plans and objectives are met.

In accordance with Mission policy, project review meetings will be held quarterly to review and direct project implementation. The A.I.D. Representative will chair the meetings, with participation from the Agricultural Development Office, the Program and Project Development Office and Controller's Office.

B. Implementation Plan

<u>Activity</u>	<u>Completion Date</u>
	<u>1989</u>
Project Review/Authorization	December
	<u>1990</u>
Project Agreements signed	January
Initial CPs to disbursement	January
PIO/Ts developed and signed for Coastal Resources, and Land Titling	February

S&T buy-ins and DESFIL agreements signed	February
Contract for Assessment of BABCO and BEST	February
Contract for Assessment of Reef	February
Contract for Design of NRMP Project (PID)	February
S-T Advisors for Fisheries Policy/Compliance	March
Begin BABCO and BEST Assessments	March
NRMP PID Preparation, including redesign of Forestry component	March
Yearly Work Plans for Fisheries, and Land Titling counterpart agencies submitted to USAID	April
Procurement completed for Land Titling computer work stations, software and training package	April
Organization of in-country workshops for Coastal Resources Mgmt./Compliance	May
L-T Advisor for Coastal Resources Planning	June
Procurement completed for Coastal Resources commodities i.e. boats, vehicles, radios, and portable computers	June
Public Awareness campaigns initiated for Coastal Zone (emphasis on the reef), and Land Registration/Titling	August
L-T participant trainees enter U.S. Master's or Undergraduate program in Coastal Resources Mgmt.(2 yrs.)	September
<u>1991</u>	
Initial Financial Review and Mission semi-annual review on Project Amendment progress	January
Coastal Resources Plan in place and being implemented with full support of Fisheries Dept. personnel and resources	March

Yearly Work Plans developed for Yr. 2 of the Project for t' Fisheries Land Titling counterparts	April
Training through in-country workshops on schedule for Fishery personnel	June
Project overlap with similar components beginning under the NRMP project	June
	<u>1992</u>
L-T participant trainees return and are installed in key positions within their respective institutions	June
PACD	Dec. 31, 1992

VI. EVALUATION AND AUDIT

A. Annual Reviews

The Mission will conduct annual reviews with project counterparts and contractors, and with the GOB Ministry of Agriculture and Fisheries, to assess progress in achieving the project's objectives, identify methods to improve performance, and consider possible modifications to project implementation and design, as appropriate. As the reviews will be held toward the end of each year, they will serve as the basis for the subsequent year's work plan and budget.

B. In-Depth Evaluation

In addition to the annual reviews, the project will have one in-depth evaluation funded in part with CAC project resources allocated for the public sector activities, and with PD&S resources. This evaluation will take place about the middle of the implementation phase. Project counterparts and contractors will work with GOB and USAID to establish a system for information collection and reporting, which will also be compatible with regional indicators to be developed under the RENARM project during the first year. The evaluation will use baseline data monitored from the outset of the project amendment to measure the extent to which objectives have been achieved. The evaluation will be closely coordinated with the project design activity for the proposed Natural Resource Management and Protection Project, and will specifically examine the potential for continuity and follow-up assistance to ensure greater opportunities for diversification of the Belizean economy.

C. Financial Reviews/Audits

Generally, RIG/A is responsible for auditing A.I.D. projects. However, to allow for a non-federal audit in the event of RIG/A staff shortages, funds are budgeted for financial reviews/audits as needed during the remaining LOP.

D. Project Monitoring

A proposed system of monitoring and updating project information will enable managers to obtain timely and accurate feedback on interim effects of implementation. The project's planning, monitoring and internal evaluation system consists of a continual effort to: (1) establish general baseline data; (2) develop work plans for extending technologies; and (3) monitor the coastal resources and land titling impacts and provide follow-up information to adjust implementation plans and to improve service delivery capabilities.

VII. CONDITIONS AND COVENANTS

The following additional conditions precedent and covenants will apply to the Public Sector component of the CAC Project.

A. Conditions Precedent to Disbursement

Except as A.I.D. may otherwise agree in writing:

Prior to any disbursement of project funds for fisheries and land titling activities other than continued operations of the Hol Chan Marine Reserve and Conch Lab., or to the issuance of documents pursuant to which such disbursements may be made, the Grantee shall furnish in form and substance satisfactory to A.I.D.:

1. An implementation plan and budget for the first year of the Project Amendment activities, including a scope of work for the technical assistance and training requirements for each corresponding component and identification of positions which will have GOB responsibility for implementation;
2. Evidence that the Grantee has selected existing and/or contracted for appropriate office facilities in Belize City and Belmopan, including vehicles and maintenance services, and secure storage for all project financed commodities.

B. Covenants

Except as A.I.D. otherwise agrees in writing, the Grantee agrees to the following covenants:

1. That the Grantee shall furnish, in form and substance satisfactory to A.I.D., in January of each year during the life of the project, an annual detailed implementation plan and budget, derived from the Annual Operating Plan and the proposed GOB budget;
2. That the Grantee shall establish, as part of the Project, agreements with appropriate non-governmental organizations to provide relevant technical services and training to support the Project's coast resources/fisheries management and land titling information system as necessary;
3. That the Grantee will ensure that relevant positions within the corresponding Ministries and their respective departments are made available to government personnel upon their return from participant training in the U.S.

C. Waivers

Use of central agreement buy-in mechanism will eliminate need for procurement waivers. Other waivers expected to be necessary (e.g., use of non-U.S. flag carriers and payment of transportation for participants) are already included in the original project authorization or under blanket waivers.

D. Negotiating Status

The Project Amendment has been jointly developed with members of the relevant agencies of the GOB. The Mission expects that the Amendment to the Grant Agreement will be signed expeditiously upon authorization.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
Goal:			
1. To generate increased employment, income, and foreign exchange.	1. Increased production of alternative products for export and import substitution 2. Increased capability of GOB to protect, diversify, and develop the resource base of the Belizean economy	1. GOB data and statistics 2. BEST data and statistics 3. Presence of processing facilities	1. GOB, specifically MOA, supports project 2. Political, economics, and social situation in Belize remain stable
Purpose:			
1. To expand the base of economic activity in Belize by developing alternative agricultural products for export and for import substitution; by developing agricultural cooperatives management capabilities; and by protecting the natural resource base	1. Alternative agricultural products are produced and exported 2. Production and processing of import substitutes 3. Increased production of traditional crops and fisheries 4. Better managed cooperatives	1. Export Statistics 2. Import statistics 3. Yield and quality data from project research 4. BEST statistics and GOB Cooperative Dept. statistics	1. GOB supports export and investment promotion 2. GOB supports diversification and development of forestry and fishery 3. Land-titling remains priority for GOB
2. To strengthen and expand public sector capabilities to effectively plan and manage natural resource programs in the specific areas of fishery, forestry, and titling	1. Evaluation and audit of the MNR, Department of Land, Surveys office records and other data	1. Documentation in MNR 2. Agencies working cooperatively 3. Evaluation and audit reports 4. Consultants and research reports, and other documentation 5. Procurement records	1. Quality individuals are provided as counterparts on planning team 2. Existing feasibility studies are adequate to be used in planning process 3. Inter-agency cooperation exists 4. Procurement of equipment carried out 5. Assessment is designed to ensure improved planning

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Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p>OUTPUT =====</p> <p>Private sector Component =====</p> <p>A. BABCO -----</p>			
<p>1. Creation of the Belize Agri-Business Company (BABCO)</p>	<p>1. Cooperative and joint participation between private & public sectors represented on BABCO'S Board of Directors.</p> <p>2. Addition of producers' groups and other private sector components to Board of BABCO.</p> <p>3. Successful implementation of cooperative agreement and meaningful input by BABCO Board</p>	<p>1. Joint efforts by Board to meet objectives of BABCO.</p> <p>2. Desire by private sector groups to be associated with BABCO.</p> <p>3. Project evaluations.</p>	<p>1. Qualified individuals will be on BABCO Board.</p> <p>2. Members of Board will be active participants in operation of BABCO.</p>
<p>2. Production/Marketing of Non-Traditional Export Crops.</p>	<p>1. Selection of at least two exportable crops</p> <p>2. 1,200 acres in production of export crops</p> <p>3. Involvement of Belize entrepreneurs in packing, shipping, and sales of products</p>	<p>1. Project evaluations</p> <p>2. Project records, GOB data, and statistics</p>	<p>1. Crops will be grown in quantities sufficient for export.</p> <p>2. Foreign markets will be available.</p> <p>3. Production and marketing costs are competitive on world markets.</p>
<p>3. Production/Processing/Marketing of Import Substitution Crops</p>	<p>1. Field testing of crops for oil and animal feed use</p> <p>2. Completion of feasibility assessment of oil extraction and refinement, oil meal production and processing for direct feeding to animals</p> <p>3. If assessment is positive, startup of process by local entrepreneurs (with aid of BABCO)</p> <p>4. Production of 2,000 acres of soybeans</p>	<p>1. Test results verifying potential production.</p> <p>2. Project records.</p> <p>3. GOB data and statistics.</p> <p>4. GOB data on imports.</p>	<p>1. Assistance from MNR for field trials.</p> <p>2. Production in quantities sufficient for economic production.</p> <p>3. Active role by BABCO in obtaining entrepreneurs and financing.</p>

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
B. BEST			
1. BEST providing services in business/cooperative management including marketing and financial management; business/agricultural diversification; accounting; credit; small enterprise development, and women in development	1. BEST fully staffed 2. Cooperatives receiving assistance in all areas of management	1. BEST records 2. Cooperative records	1. BEST continue to operate
2. Cooperatives assisted by BEST are capable of determining their own gross value of production, net worth, productivity, and long-term viability with an emphasis on crop diversification	1. Fifteen (15) cooperatives with growth at a significant improved rate as compared to the pre-project period.	1. Cooperative records 2. BEST records	1. Cooperatives accept and adopt recommendations from BEST
Public Sector Component			
A. Strengthening the MOA			
1. Participation in BABCO.	1. Leadership from MOA in BABCO. 2. Linkages between public and private sectors of BABCO Board.	1. Feedback from prime Contractor 2. Private sector response to project initiatives	1. Public and private sector will work together
2. Development of an Action Plan	1. Completion of an Action Plan to enhance ability to bring about agricultural diversification 2. Assessment completion on schedule, plan completed and actions implemented in agricultural sector of MOA as scheduled 3. Equipment purchased and specialized training	1. Periodic evaluations 2. Consultant reports 3. Contractor records	1. The assessment phase will show needs for plan. 2. System is flexible enough to allow changes to occur.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
B. Fishery			
1. Advancement of coastal zone plan, including compilation of information, development of standards and guidelines for planning and implementation	1. Information compiled 2. Coastal zone planning established 3. Draft coastal plan prepared	1. GOB records 2. Evaluation reports	1. GOB possesses legislation to implement coastal zone laws 2. GOB enforces ordinances
2. Assessment for reef quality	1. Assessment reports 2. Monitoring program for reef quality		
3. Trained personnel: -in coastal zone planning -in regulations and procedures for standards adherence and public awareness, especially in fisheries communities regarding the conservation and development of fisheries resources -in reef assessment and monitoring activities -to monitor innovative financing programs	1. (2-4) Ministry planners trained 2. (20-24) Ministry personnel trained. 3. (2) Ministry personnel trained in the U.S. 4. (1) GOB person trained.	1. GOB records 2. USAID records	1. Ministry supports training 2. Staffing is adequate 3. GOB Office of Lands and Surveys is capable of physically transferring data from manual to computerized system 4. Trained personnel are placed in positions when they return that reflect their technical training and are provided incentives to continue working for GOB
4. Public Awareness/Policy Dialogue: Development of curriculum and educational materials.	1. Curriculum being used in secondary and primary schools, working closely with school principals in at least three districts 2. (75%) of teachers in districts have access to orientation program and materials 3. Action plan for innovative financing completed 4. Budget allocation increases in fisheries sector 5. Enforcement authority and personnel to monitor licensing 6. Recruitment and staffing	1. Curriculum available in pilot school program 2. Evaluation report	1. Inter-agency cooperation 2. GOB support for continued development and integration of curriculum and materials. 3. GOB support for policy and regulation changes.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
C. Land titling			
1. Planning, procurement and implementation of computerized system for registering rural land titles, lease agreements, and compiling index mapping information	1. Significant percentage (20%) of land titles and lease agreements registered under new system and entered into computer data bank	1. GOB records 2. USAID records	1. GOB maintains and continue to update data input
2. Trained Personnel: -Training of key personnel and field technicians to allow for full operation/implementation of the system	1. (15) people (3 in-house system managers and 12 field technicians) fully trained in functions and responsibilities corresponding to the operation of computerized land titling system.	1. GOB records 2. USAID records	1. Ministry supports training 2. Staffing is adequate 3. Trained personnel are placed in positions when they return that reflect their technical training and are provided incentives to continue working for GOB
3. Tax collection on past-due property titles and leaseholds, revalorization of rural properties and related tax collections. Total potential revenues of \$50,000 per year over LOP.	1. Approximately \$100,000 in GOB revenues generated as a result of increased tax collection capability for Department of Lands and Surveys.	1. Agency staffing lists 2. Legislation, regulations, etc. 3. Budget allocation records	1. GOB is flexible and willing to consider optimum policy alternatives 2. Monies generated by land titling to help pay recurrent costs.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
INPUT (over life of project)			
=====			
A. Private Sector Component			
=====			
1. AID Grant	1. U.S. \$4.95 million	1. USAID records 2. GOB records	1. Sufficient availability of funds by AID throughout life of project 2. Belize farmers accept and adopt new technologies to increase production
B. Public Sector Component			
=====			
1. AID Grant	1. U.S. \$3.15 million	1. USAID records	1. Sufficient availability of funds by AID throughout life of project
2. GOB contribution	1. U.S. \$1.005 million	1. MOA records and project records of contribution of appropriate resources, both actual currency and in-kind contributions	1. Financial situation of GOB permits counterpart contribution
3. Other contributions	1. U.S. \$0.389 million	1. MOA records and project records of contribution of appropriate resources, both actual currency and in-kind contributions	1. Financial situation of other sources permits counterpart contributions

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Annex B Summary Technical Analyses

Fisheries

The Fisheries Resource Base for Economic Diversification

Belize has an extensive fisheries habitat which comprises about 51 percent of the country's 18,000 square mile territory. Belize has sovereignty over the second longest barrier reef in the world. The reef extends 150 miles from Sapodilla Cove in the south to the Mexican border in the north. Along the coast are 450 cayes, mangrove swamps, and a broad shallow shelf. Three major atolls--Turneffe Islands, Lighthouse Reef and Glovers Island--contribute additional important fisheries habitat.

Existing Use of Fisheries Habitat

Commercial use of this zones principally revolves around commercial fisheries. Lobster and conch are the main catches, while fishermen are increasing trawling for shrimp and expanding into deeper waters for snapper and grouper. While mariculture has greater potential, it remains a struggling actor in the overall scheme of economic diversification for the fisheries sector. Over 4,000 Belizeans make their living directly from the sea. Fishing cooperatives generate about \$BZ 15-16 million per year, making the industry the third largest contributor to the economy.

Water-based tourism activities, such as sportfishing, snorkeling, and diving, also account for income from the coastal environment. About 160,000 tourists every year make tourism the second largest (only behind the agriculture sector) export income generated for the country,

The Problem(s)

Demand for products from the sea for foreign markets and to supply increasingly populations of both Belizeans and tourists has lead to overharvesting. In many places, for example, fishermen harvest lobster when they have barely reached sexual maturity. This has implications for the sustainability of the resource base. If the lobster and conch fisheries collapse because of over-exploitation, the whole fishing industry of Belize will effectively collapse. The fisheries of Laughingbird Caye, where a Marine Reserve is proposed, have been fished out commercially.

Tourism also has had a negative impact on the very resource base upon which it depends for its vitality. Tourism developments cause water shortages on several cayes, sewage waters which destroy coral in the shallow waters of the inner reef, garbage disposal problems, dredging and landfilling. Just as in other areas of the Caribbean, Belize runs the risk of over-development that can result in degradation of the coral reefs, grass beds and mangrove ecosystems, pollution of swimming waters, beach erosion, and destruction of turtle and bird nesting habitat.

Coastal environments do not stand alone. Events from land-based development effect the fisheries resource of Belize. Other adverse impacts to these fisheries come from the agriculture. For example, erosion caused by conversion of lands to banana and citrus production as well as by slash-and-burn agriculture contribute run-off sedimentation, nutrients, and pesticides which degrade the barrier. Effluents from the sugar mills pollute waters in the north. Gallows Point Reef is silting over from erosion caused by refugees along Hummingbird Highway who practice slash-and-burn agriculture. Even activities in adjacent countries such as Guatemala and Honduras may be having an impact of Belize's fisheries as waters polluted with run-off from the watersheds from these countries are carried over the coral reefs by currents during the flood season in September.

The institutional challenges associated with these environmental problems are enormous. No coastal zone plan exists. Fisheries activities are not properly managed and controlled. While some laws do exist, the Fisheries Department is underbudgeted, understaffed and ill-prepared to enforce the regulations. Fisheries Department staff estimate that approximately another \$BZ 12 million is generated yearly by illegal fishing, a sizeable portion of which is undersized and out-of-season lobster and conch sold to local restaurants. Enforcement could bring this into the economy and take the pressure off of fisheries by the government to produce more and risk over-exploiting the fisheries. While external assistance might help the GOB address many of these problems, the long-term sustainability of any efforts must be confronted through the establishment and enforcement of mechanisms for innovative financing of the recurrent costs of government activities in the fisheries sector.

Potential Interventions by USAID

The following activities were recommended by the Technical Analysis:

1. Fisheries Management and Compliance--strengthening of Fisheries Department, through:
 - development of a management and compliance plan
 - decentralization of staff along the coast
 - establishment and enforcement of innovative financing
 - purchase of equipment as a start-up cost
 - training of staff
 - shrimp stock assessment
 - lobster tail assessment
 - establishment and management of marine reserves

2. Regional Environmental Monitoring and Surveillance--especially of land-based pollution.

3. Regional Coastal Zone Planning Study--including planning for land-based development in tourism, agriculture and forestry, consideration of opportunities to conserve biological diversity, efforts needed to properly manage existing fisheries, and means and mechanisms to ensure innovative financing.
4. Action-Oriented Watershed Management Program--principally focusing on the selection, study, and development of plans for two watersheds which are experiencing rapid conversion of vegetative cover to agriculture.
5. Strengthening of Fishery Cooperatives--focusing on development of marketing capabilities and improvement of infrastructure and management capabilities.
6. Support to Shrimp Mariculture--by finding providing low-interest development loans and improving technologies for shrimp hatcheries and small scale shrimp farming.
7. Seamoss Training Seminar--to train cooperative members in seamoss culture and marketing.
8. Continued Support to the Conch Farm--especially its reseeded program and efforts to collaborate with cooperatives in extensive conch culture.
9. Environmental Education--focusing on opportunities in nonformal education, curriculum development, and mass media programs.
10. Stock Assessments--shrimp, deepwater snapper/grouper, sportfishing, exploratory fishing for pelagic fish, grouper/snapper culture, and stone crab.

Forestry

The Forest Resource Base for Economic Diversification

Forests have traditionally played an important role in the Belizean economy, however in recent years that role has declined relative to other sectors. Before the turn of the century, mahogany (for fine furniture and interior decoration) and logwood (from which dye for the textile industry was extracted) were Belize's chief exports. Timber production actually peaked in the early 1950s and subsequently has declined. Since the 1950s, agricultural crops have exceeded forest products in export value. Sugar, citrus, banana, tourism, and fish exports now all surpass forestry (only three percent of the GDP) in their contribution to the Belizean export economy. As the Government seeks means to diversify the economy, it is turning once again to the forestry sector for an increased contribution.

Low population pressure and conservative logging practices have helped maintain a relatively substantial forest resource for a country the size of Belize. The Government estimates that approximately 90 percent of the country is forested. Sixteen Government forest reserves cover approximately 30 percent (6,368 square km) of the total land area of Belize, mainly in the mountainous central portion of the country and on the sandy southern

coastal plain. Another 6,557 square km of unreserved Crown lands are forested and still another 8,397 square km of forested lands are in private hands. The primary distribution (74 percent) of original vegetation is closed broadleaved forest, with lesser distributions of open forest (woodland/pine), mangrove and swamp, and open and woodland. One-third of the broadleaved forest is reserved while two-thirds of the pine forest is reserved.

Existing Use of Forestry Habitat

The forest industry has been heavily dependent on mahogany, pine, and cedar (accounting for almost 60 percent of the country's sawnwood production in the period from 1986-1987). Since the 1950s, an ever-greater proportion of timber harvested in Belize has been sold locally, and by 1970 log exports had practically ceased, except for rosewood destined for veneer slicing and logwood for dyes. In spite of the large number of secondary hardwoods with potential for local use for construction, furniture and other uses, the amount consumed has risen little. Local prices for lumber are controlled by the GOB.

In 1988, 2.7 million board feet of lumber were exported, and 9.8 million board feet were consumed on the local market. More than two-thirds of the local lumber is consumed in housing, even though there is a greater trend towards concrete housing, due to its lower cost and perceived greater durability. Other local uses of lumber include furniture, other construction, boat building and mill work.

The Government regards approximately 20 percent of the reserved forest area as protected, however it has not designated any specific areas to serve this environmental maintenance function. Several thousands of acres have been transferred out of Forest Reserves to agricultural uses over the past few years, and conversion to agriculture on private and national land has been accelerating in the recent past. While many sound laws exist to allocate lands to their most appropriate uses, the actual situation is that transfers and conversion are occurring in piecemeal manner.

Until recently, no significant deforestation had occurred, except in the areas of traditional Mayan milpa farming of the Toledo District in the south and the Cayo District in the west, and in the northern sugar cane region of the Orange Walk District.

The native terrestrial habitat of Belize is relatively undisturbed, compared with the rest of Central America. The repeated harvesting of only large trees of a few species during the colonial era had a limited effect on the extent or botanical structure of Belizean forests. While a National Parks System Act was passed in 1981, no large national parks have been established. The Belize Audubon Society currently manages the national parks for the Government. Additionally, several privately-owned protected areas complement the existing government preserves.

The Problem(s)

Repeated cutting in the broadleaved forests has reduced the populations of large mahogany and cedar. Pine forests on the southern coastal plain are declining because of burning and conversion of land to agriculture while stands in other parts of the country are generally poorer in quality and more immature.

Foreign speculators and slash-and-burn agriculturalists are converting the forest lands, thereby rapidly depleting the potential sustainability of the resource for rural production and diversification. In Belize, citizens and foreigners can apply to the Lands Department for a lease of Crown land to practice agriculture. A license to harvest trees in the lease area can be obtained from the Forest Department. No legal guidelines or process are given for determining the use capability of Crown lands, on which a lease and/or harvest permit should be given.

The Forest Department receives inadequate budgets and has a shortage of trained staff to scientifically manage forest reserves. No working management plans exist for reserves, and they receive practically no management, except for an antiquated system of girth limits during harvesting. Royalties do not reflect the relative value of timber, including the costs of extraction. The lack of roads means that loggers harvest only the highest value timber. Inadequate budgets have even caused the abandonment of fire protection in reserves.

There is little conservation ethic among private landowners. Marketing of only a few timber species means that a given unit of forest has a low economic value, so private landowners have little incentive to invest in forest management. There is no source of forest management assistance for private landowners.

Refugees and Mayans lack access to alternative, sustainable farming technologies. The insecurity of their land tenure militates against any investment in long-term sustainability. These farmers also lack the knowledge and capability to process and market tree crops.

Control prices of lumber give no incentive for Belizeans to use secondary species, and no system of lumber grades, with associated prices, except for mahogany exists. Limited technical assistance is available to improve sawmills. Potential investors in secondary processing lack capital, design capabilities and marketing experience.

No government agency responsible for parks exists, no extensive national parks have been declared, and personnel trained in management of protected areas and wildlife do not exist. Declaration of park is by ministerial fiat, rather than by permanent legislation. While the private sector (Belize Audubon Society) is now delegated the management of existing protected areas, they lack enforcement capabilities. No provision exists for integrating the fund-raising capability of the private sector with the management responsibility of the government.

Interest in Belize's tropical rainforests has led the international conservation and forestry community to focus its efforts on production of a Tropical Forestry Action Plan (TFAP) for Belize. The plan has been produced, but it still needs to be approved by the Belizean government before it can be put into action. Careful coordination of GOB and donor action will be required in order to avoid duplication and to move the plan forward.

Potential Interventions by USAID

1. Institution building of forest department--including:

- improvement of department capability to manage forest reserves and promote the conservation of private forest land through selected training, technical assistance, purchase of equipment, and improvement of infrastructure;
- changes in management of forest reserves, including the manner in which government timber is sold through adoption of state-of-the-art forest management practices from other tropical zones, regional focus for selected activities rather than national scale change in policy and practice, training for staff in a selected model area, and training of staff with practicing foresters in the U.S. and with technical specialists on the job;
- timber sales, including selection of specific forest reserve for timber sales during Project Paper formulation and model timber sale to be developed, a timber sale in project area to finance forest management planning and fire control activities in the area, training of 2-3 forest guards, a forest ranger and a divisional forester in all aspects of the timber sale process, technical assistance to the contractor awarded the timber sale, a contract to company for construction of a permanent road (including a discount on the royalties paid to the government for harvested timber), and technical assistance to the contractor of road construction;
- forest fire management, including a public fire awareness campaign, reduction in fuel levels and continuity, equipping and training of fire management crews, and suppression of wild fires

2. Land Management Planning—including development of:

- forest land management plans at a government forest reserve (southern coastal plain—mix pine-hardwood forest, e.g., Deep Creek Forest Reserve) and in privately owned forest (e.g., Rio Bravo Conservation Area);
- training of forest guards (work with Peace Corps volunteers) in inventory techniques (map reading, establishment of sample plots and data taking) and in timber cruising for preparation of timber sale activity;
- forest fire management plan and implementation activities.

3. Outreach to small and medium land managers—focusing on

two aspects:

- Agroforestry (with CARE, Peace Corps and local NGO(s), through development of a program for Stann Creek District with on-farm nurseries, school programs to produce seedlings in school nurseries, distribution of seedlings, training of farmers in management regimes, follow-up visits to farm sites, processing and marketing technical assistance component, and land tenure and titling considerations and through training of CARE, Peace Corps, agroforesters who will promote agroforestry techniques on small farms; and through

- Forest management including development of a program of assistance to private landowners in forest management information and technical assistance in the formulation of land management plans, timber inventories, layout of extraction roads, preparation of timber sales contracts, and the scaling of harvested timber.
4. Forest/wood product processing and marketing of secondary products (coordinate with RENARM and UK-funded Forest Products Specialist), including:
- Technical assistance and Administrative assistance to BLPA (Belize Lumber Producers Association), Development of a national lumber grading system, and Short-to medium-term technical assistance visits to primary and secondary manufacturing firms (e.g., sawmill improvement, saw doctoring, plant layout, wood drying, wood treatment, wood grading, lumber handling, wood grading, lumber drying, product design, machinery maintenance, gluing, finishing, marketing);
 - Training through short courses to primary and secondary manufacturing firms;
 - Analysis of revolving credit fund to promote new entrepreneurial ventures in woodworking;
 - Policy dialogue to promote scaled control prices for lumber based on grades;
 - Market development such as Consignment programs.
5. Preservation of representative areas of biological diversity which will mainly be done through ROCAP's RENARM project.

Land Titling

In addition to the proposed computerized Land Information System (LIS) to be financed under the project amendment, this summary analysis will illustrate the possibility of, and the benefits to be derived from, future coordination of the LIS with Geographic Information System (GIS) activities.

Current geographic information system activities of the United Kingdom, involving information acquired in and for Belize, have promoted a strong internal interest in implementing a natural resources GIS. The GIS applications envisioned by the Ministry of Agriculture, Forestry, and Fisheries, the Ministry for Economic Development, and the Department of Archaeology are broad in scope and based on current constraints and proposed resources for addressing these constraints. The Ministries of Public Works and Tourism will also benefit from the introduction of this system.

For the work of all of these Ministries, it would be valuable to determine, for each parcel of land in Belize, the suitability for a given crop, the most suitable crop, its current land use, physiographic unit and sub-unit, soils and limiting factors, elevation, slope, aspect, and several other variables. Similarly, information such as this is highly suitable in supporting

national agricultural and forestry management and assisting in policy development. It is apparent that the integration of various types of physical, economic, and political information, which will eventually reside in the LIS/GIS, will greatly enhance the economic development capability of Belize.

Each day there are several requests at the Ministry of Natural Resources for information regarding the type of vegetation that should be grown on a given land parcel to ensure maximum production and profit. Members of the public must pour over maps to gather information about their property or prospective sites for investment. Concerns which include flood hazards, ownership, elevation, slope, soils, crop growing potential, proximity to water, transportation, and other services are met through this primitive and inadequate procedure. To date, no comprehensively organized set of data exists to provide this type of information.

The best available data on natural resources and the environment in Belize has been gathered and mapped by a team of experts from the United Kingdom. Information compiled for the U.K. project is useful, current, and the most accurate information of its type. Except for this recent work by the U.K. team for the Stann Creek and Toledo Districts, land use and land capability maps are outdated, and no mechanism exists to tie any of these data to land parcel information. Development of useful agro-climatic zones which would guide prospective investment is absent. These data can be extremely useful for the enhancement of efforts in conservation, planning, ecology, environment, and other purposes.

The LIS/GIS can facilitate the desired applications if efforts are made to standardize all mapping projects so both current and future data can be integrated. This is a necessary achievement if information is to be superimposed, combined and interpreted. New and extended information, such as that recently acquired by the study entitled "Land Resources Assessment of Stann Creek District, Belize" (King, and others, 1988), is highly suitable for such purposes.

The potential for integration of the U.K. data base with the proposed LIS data base was investigated in terms of establishing merged, comprehensive information management and planning systems, to be used in the future for all of Belize. In part this involved examining all maps and data in terms of the ARC/INFO system already in use. Portions of the U.K. map information have been incorporated into the ARC/INFO Geographic Information System at the University of Edinburgh. However, the U.K. project has not as yet been digitized utilizing the UTM coordinate system. The development of a GIS data base to manage various resource information for Stann Creek and Toledo Districts, such as land use, crop types, soils, elevation, slope, aspect, and other types of data, was carried out prior to the recently observed need for standardization of data to a common coordinate system. It is imperative that the LIS data base and the GIS data base be compatible so information can be integrated in the future.

Reasons for Selecting the ARC/INFO System over other Systems

- The system is already in use for Belize for the GIS element of land management activities. Compatibility will therefore be insured by acquiring the same software system for the LIS project.

- This software system has the demonstrated flexibility to allow easy integration with other application hardware and software. For example, statistical analysis functions, word processing, data base management systems, and user-developed software routines can all be integrated effectively under the ARC/INFO System.
- The system is relatively user friendly, not requiring operators to be technically knowledgeable in highly specialized programming and electronics.
- The software system is well documented, including training manuals, videos, and other materials.
- Excellent technical support is readily available in-country as well as through the DESFIL project.
- There is a wide user community, including usage in Mexico, and regions in Central America and South America. User groups could be formed in order to stimulate interest, solve problems, and share useful information and specific software packages.
- The software system operates on a number of hardware platforms, including mainframe and personal computers, with compatibility that fosters easy communications. This aspect implies that a variety of less expensive machines can be considered for future capabilities and add-ons.
- ARC/INFO is now compatible with the Earth Resources Data Analysis System (ERDAS), which produces land cover maps from various space orbiting satellites including Landsat MSS and TM, SPOT, and COSMOS. Through ERDAS, remotely-sensed data, including the FAO agricultural and forestry land images, can be registered to the LIS data base.
- Members of the U.K. team and others working on GIS/LIS projects all have experience with the ARC/INFO software system.

In addition, all land surveyed in Belize under the new Act after 1977 have been keyed to the UTM coordinate system. It is this common coordinate system which will serve as a common framework to which all geography of Belize will be associated. Standardization to UTM for all mapping projects, not only land records, insures that information will: a) be properly located, and b) "fit" with all other map information, regardless of the scale of the information mapped.

Careful attention was given the types of information appearing on each of the forms currently being used by government offices, to determine if these sets of information would be compatible with the ARC/INFO system. Although not all inclusive, the following types of information could be easily tabulated for computer-aided management:

1. First name of property owner.
2. Last name of property owner.
3. City of property owner.
4. District of property owner.

5. Registration Section.
6. Block number.
7. Parcel number.
8. Lot number.
9. Plan number.
10. Grant or Fiat number.

These types of information are fundamental items stored in the attribute tables of the ARC/INFO system. This system, during the process of creating a topological data structure from digitized map information, constructs a Polygon Attribute (PAT) Table. Information such as that noted above can be attached to the PAT, forming customized tables for each Division's purposes. This approach ensures that each office has the appropriate information available. Access to these custom forms can be controlled and limited as one method of providing information confidentiality and system security.

Agency for International Development
Washington, D.C. 205

Initial Environmental Examination -

Commercialization of Alternative Crops (CAC)
Project Paper Amendment, November 1989
Project Number (505-0008)
USAID/Belize

I. Project Description

The Commercialization of Alternative Crops (CAC) project (505-0008) was authorized on September 24, 1985 for a total of \$6.8 million. The five-year project was recently extended by the Mission to June 30, 1990, to allow for the design and implementation of a Project Amendment. The current CAC project is well on its way to successfully completing the project objectives of creating the Belize Agribusiness Company (BABCO) for increasing the production, marketing and processing of non-traditional export and import substitution crops. The project is also helping to develop public sector participation and institutional support for realizing agricultural diversification projects.

The goal of the CAC Amendment will remain the same as the original project -- to generate increased employment, income and foreign exchange. Likewise, the Amendment's primary purpose statement is unchanged -- to expand the base of economic activity in Belize by developing alternative agricultural products for export and import substitution. However, the Project Amendment will focus on the protection and enhancement of the natural resource base to increase opportunities for diversification and sustainable economic growth. This will be accomplished by strengthening the Government of Belize's (GOB) capabilities to effectively plan and manage natural resource programs in the specific areas of fisheries, forestry, and land titling.

The project Amendment will provide funding to the Department of Fisheries within the Ministry of Agricultural to undertake a series of activities in coastal resources and fisheries planning, protection, and management. This initiative will focus on long-term training of personnel in fisheries management, short-term training of personnel in Belize' Fisheries Compliance Unit, development of a coastal resources management plan, public awareness activities, and implementation of an innovative financing program. Equipment to be purchased under this component includes five small boats, computer equipment, and radios.

The Belizean Forestry Department, newly located within the Ministry of Natural Resources, will serve as the focal point for forestry activities. Project activities in forestry will be designed at a later date.

Lastly, the CAC Amendment will support the development of a computerized system of land titling, administered by the Department of Lands and Surveys within the Ministry of Natural Resources. The proposed system will facilitate rapid access and modifications to the registration of land titles and leases for rural lands, and other title information not available under the current manual system. The project will finance two computer work stations, specialized software packages and technical support and training needed to initiate the system. The proposed system will also enable the Department of Lands and Surveys to begin generating additional revenues derived from land lease holdings and property revalorizations. The computerized land titling and records system will provide a solid base for the development of an automated Geographic Information System (GIS). The GIS can become an invaluable tool for planning and policy analysis based on an accurate land use/land capability data base.

In all three project components the Amendment will help influence the development of sound natural resource management policies which have a direct impact on the Belizean economy. Among other things, it is contemplated that project-funded natural resource management activities will enhance the prospects for tourism development in an ecologically appropriate way. Implementation of new policies for fees and licensing of marine-related fishing and tourism activities, pricing of wood products, and taxation of land will generate additional revenue for the GOB. Additional policy leverage can be gained from other A.I.D. projects, such as DESFIL, the regional RENARM project and the proposed USAID/Belize Natural Resource Management and Protection Project.

The Project Amendment will provide \$1.3 million, with GOB and other local support estimated at \$450,000, over the 2.5 year life-of-project.

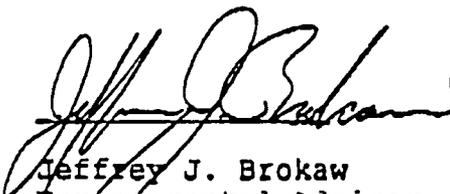
II. Environmental Review

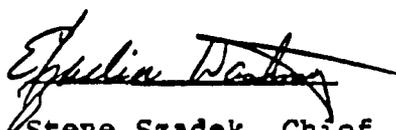
The Fisheries and the Land Titling components of the amendment will have no direct effect on the environment. Fisheries activities are limited to (1) training, (2) coastal zone management planning, (3) increasing public awareness, (4) implementing an innovative financing program, and (5) the

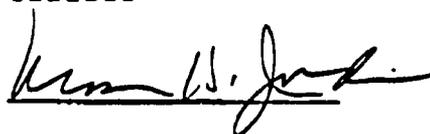
purchase of equipment to support these activities. The Land Titling component involves (1) training, and (2) the purchase of computer equipment. An environmental review of the Forestry component must wait for its design.

III. Recommended Environmental Threshold Decision

The Fisheries and the Land Titling activities qualify for a categorical exclusion (Part 216.2 (c) of 22 CFR) and, therefore, a negative Environmental Threshold Decision is Recommended for these components. A separate Environmental Review and Environmental Threshold Decision must be made on the Amendment's Forestry activities, once this component is designed.

Prepared:  12/28/89
Date
Jeffrey J. Brokaw
Environmental Advisor
LAC/DR/E

Approved:  12/29/89
Date
Steve Szadek, Chief
ADO/USAID/Belize and
Mission Environmental
Officer

Concurrence:  12/29/89
Date
Mosina Jordan
Mission Representative
USAID/Belize

 12/29/89
Date
Paul A. Bisek
Project Development Officer
USAID/Belize

Agency for International Development
Washington, D.C. 20523

LAC-IEE-90-07

ENVIRONMENTAL THRESHOLD DECISION

Project Location : Belize

Project Title : Amendment to Commercialization of
Alternative Crops

Project Number : 505-0008

Funding : \$1.3 million

Life of Project : 2.5 years

IEE Prepared by : Jeffrey J. Brokaw
LAC/DR/E

Recommended Threshold Decision : Negative Determination

Bureau Threshold Decision : Concur with Recommendation

Comments : A separate Environmental Review
and Environmental Threshold
Decision must be made for the
Amendment's Forestry activities,
once this component is designed.
The Fisheries and the Land
Titling components of the
amendment qualify for a
Categorical Exclusion (Part 216.2
(c) of 22 CFR).

Copy to : Mosina Jordan, Director
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John O Wilson Date DEC 28 1990
John O. Wilson
Deputy Environmental Officer
Bureau for Latin America
and the Caribbean

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5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded with Development Assistance loans; and B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1989 Appropriations Act Sec. 523; FAA Sec. 634A. If money is sought to obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified? Ongoing Project included in CP.
2. FAA Sec. 611(a)(1). Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? NA
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance? NA

4. FAA Sec. 611(b) · FY 1989 Appropriations Act Sec. 501. . project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.) NA
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? NA
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. No.
Project will use resources of regional institutions and complement regional natural resource management activities
7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to:
(a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions. a) Yes, by increasing exports of non-traditional crops. b) Yes, by supporting private farmer organizations and encouraging entrepreneurship. c) Yes, see b) above. d) Yes, by encouraging crop diversification and helping a variety of farmer organizations and fishing cooperatives. e) Yes by training in better production and post harvest treatment technology. f) no effect is anticipated.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). Private prime contractor with U.S. Market contracts encouraging participating by U.S. firms.

9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. Most local costs financed by host country contribution and ESF
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No
11. FY 1989 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? No
12. FY 1989 Appropriations Act Sec. 549. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? No
13. FAA Sec. 119(q)(4)-(6) & (10). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other a) Yes
b) Yes

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- wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?
- c) Yes
d) No
14. FAA Sec. 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? NA
15. FY 1989 Appropriations Act. If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? NA
16. FY 1989 Appropriations Act Sec. 538. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.? Yes
17. FY 1989 Appropriations Act Sec. 514. If funds are being obligated under an appropriation account to which they were not appropriated, has prior approval of the Appropriations Committees of Congress been obtained? NA
18. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision). NA

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B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FY 1989 Appropriations Act Sec. 548
(as interpreted by conference report for original enactment). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities (a) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (b) in support of research that is intended primarily to benefit U.S. producers?

a) No

b) No

b. FAA Secs. 102(b), 111, 113, 281(a). Describe extent to which activity will (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental

a) Small and medium scale farmers will have opportunity to participate fully and receive technical assistance as well as business management assistance for their cooperatives.

b) Grower organizations will be formed and assisted. Fishing cooperatives will be helped to conserve their resource.

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institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

c) The project is in line with GOB efforts to broaden the economic base through agricultural diversification.

d) Women farmers and women student from the agriculture school are participating in the project.

e) The project will use resources of regional institutions and implement regional natural resource management efforts.

c. FAA Secs. 103, 103A, 104, 105, 106, 120-21; FY 1989 Appropriations Act (Development Fund for Africa). Does the project fit the criteria for the source of funds (functional account) being used?

Yes

d. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

Yes

e. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

Yes, the GOB will provide 25% of the cost of the public sector component.

f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

Yes. The project is being amended to enhance ability to deliver benefits of crop diversification to less affluent farmers through their cooperatives. Most of the fishermen are relatively poor.

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FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

The project addresses the need for an expanded agricultural base by strengthening private farmer organizations and better GOB management and education programs to conserve the country's resources.

FY 1989 Appropriations Act Sec. 536.

Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

No

Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

No

Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No

FY 1989 Appropriations Act. Is the assistance being made available to any organization or program which has been determined to support or participate in the management of a program of coercive abortion or involuntary sterilization?

No

If assistance is from the population functional account, are any of the funds to be made available to voluntary family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services?

No

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- . FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes

- . FY 1989 Appropriations Act. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)? NA Amendment activities all directly with local entities or through "buy-in" to central A.I.D. programs.

- . FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (a) stress the importance of conserving and sustainably managing forest resources; (b) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (c) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (d) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (e) help conserve forests which have not yet been degraded by helping to increase

 - Yes
 - Yes
 - a) NA
 - b) Yes
 - c) NA
 - d) Yes
 - e) Yes

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production on lands already cleared or degraded; (f) conserve forested watersheds and rehabilitate those which have been deforested; (g) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (h) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (i) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (j) seek to increase the awareness of U.S. government agencies and other donors of the immediate and long-term value of tropical forests; and (k)/utilize the resources and abilities of all relevant U.S. government agencies?

f) NA

g) NA

h) NA

i) NA

j) NA

k) Yes

1. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project (a) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (b)/take full account of the environmental impacts of the proposed activities on biological diversity?

e) Yes

f) Yes

- n. FAA Sec. 118(c)(14). Will assistance be used for (a) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (b) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? a) No
b) No
- o. FAA Sec. 118(c)(15). Will assistance be used for (a) activities which would result in the conversion of forest lands to the rearing of livestock; (b) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undegraded forest lands; (c) the colonization of forest lands; or (d) the construction of dams or other water control structures which flood relatively undegraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development? a) No
b) No
c) No
d) No
- p. FY 1989 Appropriations Act. If assistance will come from the Sub-Saharan Africa DA account, is it (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) being provided in accordance with the policies contained in section 102 of the FAA; NA

(c) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa;

(d) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups;

(e) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

- q. FY 1989 Appropriations Act Sec. 515. If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same general region as originally obligated, and have the Appropriations Committees of both Houses of Congress been properly notified?

NA

2. Development Assistance Project Criteria
(Loans Only)

NA

- a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?
- c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

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3. Economic Support Fund Project Criteria

NA

- a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?
- b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes?
- c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. PROCUREMENT

1. FAA Sec. 602(a). Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? NA
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him? Yes
3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? NA
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.) NA

- FAA Sec. 604(g). Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.) NA
6. FAA Sec. 603. Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates? Blanket waiver in effect for Belize due to unavailability of service by U.S. flag carriers.
7. FAA Sec. 621(a). If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? Yes
8. International Air Transportation Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? Yes
9. FY 1989 Appropriations Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes

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10. FY 1989 Appropriations Act Sec. 524. If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? NA

B. CONSTRUCTION

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services be used? NA
2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? NA
3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP), or does assistance have the express approval of Congress? NA

OTHER RESTRICTIONS

1. FAA Sec. 122(b). If development loan repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? NA
2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? NA

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3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes
4. Will arrangements preclude use of financing:
- a. FAA Sec. 104(f); FY 1989 Appropriations Act Secs. 525, 536.
- (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; 1) Yes
- (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; 2) Yes
- (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; or 3) Yes
- (4) to lobby for abortion? 4) Yes
- b. FAA Sec. 483. To make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes
- c. FAA Sec. 620(g). To compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes
- d. FAA Sec. 660. To provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes, fisheries compliance Training and education program aimed at better regulation and adherence to fishing regulations, rather than law enforcement, per se.
- e. FAA Sec. 662. For CIA activities? Yes

- f. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

- g. FY 1989 Appropriations Act Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

- h. FY 1989 Appropriations Act Sec. 505. To pay U.N. assessments, arrearages or dues? Yes

- i. FY 1989 Appropriations Act Sec. 506. To carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes

- j. FY 1989 Appropriations Act Sec. 510. To finance the export of nuclear equipment, fuel, or technology? Yes

- k. FY 1989 Appropriations Act Sec. 511. For the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes

- l. FY 1989 Appropriations Act Sec. 516; State Authorization Sec. 109. To be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? Yes

- 5. FY 1989 Appropriations Act Sec. 584. Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? Yes

ARC.023.t62

14:41 04/19/88

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 TO AMEMBASSY BELIZE PRIORITY 5575
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 UNCLAS SECTION 01 OF 05 STATE 122590

AIDAC

E.O. 12356: N/A
 TAGS:
 SUBJECT: REVIEW OF USAID BELIZE FY 89/90 ACTION PLAN

1. THE REVIEW OF USAID/BELIZERS FY 89/90 ACTION PLAN WAS CHAIRED BY DAA/LAC MALCOLM BUTLER ON MARCH 29. A.I.D. REPRESENTATIVE NEBOYSHA BRASHICH AND PROJECT OFFICER PETER LAPERA REPRESENTED MISSION. THE CHAIRMAN COMMENDED THE MISSION ON A HIGH QUALITY AND TIMELY SUBMITTED ACTION PLAN AND THE ACHIEVEMENTS OF THE MISSION DURING THE PAST YEAR. PARTICULARLY, THE SUCCESS OF THE CAPS PROGRAM IS A NOTABLE ACCOMPLISHMENT IN TERMS OF COST AND PROGRAM EFFECTIVENESS. RESULTS OF THE REVIEW ARE SUMMARIZED BELOW.

2. THE MISSION WILL BE GUIDED IN PREPARING THE FY 90 ADS BY THE FOLLOWING PLANNING LEVELS (DOLS. 000) FOR FY 89 AND FY 90.

	FY 89	FY 90
ARDN	3,400	4,000
POP	20	0
HE	1,000	900
CSF	530	650
AIDS	100	0
EHRD	850	550
SDA	1,500	1,200
- TOTAL DA	7,400	7,300
ESF	2,000	600 (CAPS)

FY 89 LEVELS ARE THE SAME AS THOSE IN THE FY 89 CONGRESSIONAL PRESENTATION. FY 90 FIGURES ARE LAC PLANNING LEVELS SUBJECT TO AVAILABILITY OF FUNDS, AND NOT HAVE FVA, PPC, OR INTERAGENCY AGREEMENT.

Handwritten notes:
 AID
 PLS verify info
 AMB
 DEM
 CAPT CHRON
 Now
 4/11/88
 Pending Arch
 Bridges -
 see p-7
 @ P's make
 copy for
 Mr Jordan
 @ File 89-90
 AP

DIVISION	ACT	INF
AID REP.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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AC. DIV.		
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DUE DATE		

3. SUMMARY OF PROJECT DECISIONS:

FY 1988

505-0011 - NATIONAL DEVELOPMENT FOUNDATION (LOP-DOLS. 872,000); BUREAU CONCURS IN DELEGATION OF AUTHORITY TO THE A.I.D. REPRESENTATIVE TO APPROVE THE OPG AMENDMENT. ✓

505-0024 - VILLAGE LEVEL WATER (LOP-DOLS. 1,200,000); BUREAU CONCURS IN DELEGATION OF AUTHORITY TO THE A.I.D. REPRESENTATIVE TO APPROVE THE OPG AMENDMENT.

505-0027 - EXPORT AND INVESTMENT (LOP-DOLS. 4,500,000) BUREAU CONCURS IN DELEGATION OF AUTHORITY TO THE A.I.D. REPRESENTATIVE TO APPROVE THE PP AMENDMENT.

FY 1989

505-0020 - TRAINING FOR EMPLOYMENT (LOP-DOLS. 6,000,000); AMENDMENT WILL BE REVIEWED IN A.I.D./W.

505-0008 - COMMERCIALIZATION OF ALTERNATIVE CROPS (LOP-DOLS. 8,170,000); BUREAU CONCURS IN DELEGATION OF AUTHORITY TO THE A.I.D. REPRESENTATIVE TO APPROVE THE PP AMENDMENT.

FY 1990

505-0019 - EXPORT INVESTMENT CREDIT (LOP-DOLS. 6,000,000); THE MISSION WILL SUBMIT THE PID FOR AID/W REVIEW. (SEE GUIDANCE UNDER PARA 6 OF THIS CABLE.)

4. CROSS CUTTING PROGRAM ISSUES

A: ISSUE:

SHOULD THE MISSION SUBMIT A NEW CDSS?

DISCUSSION:

THE MISSION FEELS THAT A NEW CDSS SHOULD BE PREPARED IN LATE 1988 TO ALLOW FOR ORDERLY PLANNING AND DEVELOPMENT OF A COGENT ECONOMIC ASSISTANCE STRATEGY FOR BELIZE IN THE 1990S.

THE BUREAU HAS ALWAYS HELD OPEN THE OPTION OF PHASING-OUT THE BI-LATERAL ASSISTANCE PROGRAM TO BELIZE FOLLOWING CONCLUSION OF THE CENTRAL AMERICA INITIATIVE IN FY 1992.

IN LIGHT OF DIMINISHING A.I.D. PROGRAM AND OE RESOURCES



OFFICE OF THE DEPUTY PRIME MINISTER AND
MINISTRY OF INDUSTRY AND NATURAL RESOURCES

Belmopan

Telephones: 08-22226, 22249, 22231, 22232, 22711

Date January 3, 1990

BELIZE

Please Quote

No.

- Citrus Growers Association
- Forestry
- Geological Surveys
- Lands and Land Industry Settlement
- Land Surveyors
- Minerals, Petroleum
- Physical Planning
- Security of Tenure
- Rural Water Supply
- Sugar Cane
- Sugar Cane Control Board
- Water Resources Management
- Water and Sewerage Authority

0083

Ms. Mosina Jordan
U.S. Embassy
Gabourel Lane
Belize City
BELIZE

Dear Ms. Jordan,

Please refer to Paul Bisek's letter of 4 December, 1989 on the subject of the project paper amendment - Commercialization of Alternative Crops.

We have reviewed the document with regard to its Forestry and Automated Land Titling elements.

In the former instance and after discussion with Paul Bisek, the following points have arisen. The first is a re-affirmation of the emphasis we wish to give to forest fire management and as reflected in Loren Ford's report of July, 1989 is a recommended area for AID intervention.

Another point of concern is that the line item allocation for equipment as per the summary budget of page 8 of the document is inadequate for the purchase of the various pieces of heavy duty equipment and light vehicles listed.

In the instance of the Land Titling element of the project, there is a need for further elaboration to clarify the nature and level of involvement of Ministry personnel. Also a need has been expressed for further discussion on equipment to be provided.

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ACTION TAKEN		
DATE		
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This letter is sent in response to USAID'S request for comments to be submitted by 31 December. They are not exhaustive and require further discussion prior to finalising the required plans of action.

Sincerely,



(D.A.K. GIBSON)
Permanent Secretary
MINISTRY OF INDUSTRY AND NATURAL RESOURCES

cc: Chief Forest Officer

/ain



BELIZE

Please Quote

No.

M/243/90(67)

Ministry of Agriculture, and Fisheries
Belmopan, Belize C.A.

9th January, 1990

Ms. Mosina Jordan
USAID Mission
Gabourel Lane
Belize City

Dear Ms. Jordan,

The following comments are offered with respect to the Project Paper Amendment for the CAC recently submitted to this office. The comments are, for obvious reasons, limited to the fisheries component of the project.

It is noted that the document does not address in any form or fashion the Aquaculture Sector, given the stress that is placed on conservation of the natural resources base. It should be recognized that shrimp farming does achieve the objective of releasing some pressure from using lobster and conch as the only high value export marine products; and the document could usefully include such language in order to facilitate training and provision of short term consultancy in this area.

The document does state that funding for a second phase of the GOB/WWF Marine Reserve activity will be provided under this amendment, however, it is not apparent that the financial plan allocates any funds for Reserve activity.

We would wish to stress that priority be given to rapid establishment of the Compliance Unit. It is also expected that the TOR for the Policy Advisor, coastal resource planning advisor and all activities within the project, including the selection of consultants would fully involve the Fisheries Department personnel. The functions of the consultants will be developed jointly by USAID and the Ministry of Agriculture and Fisheries (MAF).

.../2

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Ms. Mosina Jordan

- 2 -

9th January, 1990

In order to apply for timely allocation of counterpart funds by GOB, the expected length of project and likely date of initiation should be transmitted to MAF as soon as possible.

The project paper amendment meets with our approval subject to the above comments.



(R. H. NEAL)
Permanent Secretary

RHN/mmn

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PROJECTED PUBLIC SECTOR EXPENDITURES BY YEAR

<u>Component/Activity</u>	<u>Thru</u> <u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>Total LOP</u>
USAID FUNDING					
<u>MOA Strenghtening</u>					
Technical Assist.	778				778
Vehicles & Equip.	421				421
Training	121	100	25		246
Admin./Eval./Audit	50	25	25		100
Contingency/Inflation		5	5		10
Sub-Contr./Research	420	95	30		545
Sub-Totals	<u>1,790</u>	<u>225</u>	<u>85</u>		<u>2,100</u>
<u>Fisheries</u>					
Technical Assist.		200	250	60	510
Training		100	76		176
Equip. & Materials		100	30		130
Sub-Totals		<u>400</u>	<u>356</u>	<u>60</u>	<u>816</u>
<u>Land Titling</u>					
Equip. & Materials		97			97
Training		57	40		97
Subtotals		<u>154</u>	<u>40</u>		<u>194</u>
Financial Review/Audit			10	10	20
Contingency		10	10		20
SUB-TOTAL, USAID	<u>1,790</u>	<u>789</u>	<u>501</u>	<u>70</u>	<u>3,150</u>
GOB FUNDING					
<u>MOA Strenghtening</u>					
Local Staff	150				150
Operating Expenses	406				406
Contingency/Inflation		95	29		124
Sub-Contracts/Research		15			15
Sub-Totals	<u>556</u>	<u>110</u>	<u>29</u>		<u>695</u>
<u>Fisheries</u>					
Operating Expenses		20	20	10	50
Technical Assistance		15	10		25
Training			20		20
Equipment & Materials		60	15		75
Sub-Totals		<u>95</u>	<u>65</u>	<u>10</u>	<u>170</u>
<u>Land Titling</u>					
Operating Expenses		20	20	10	50
Equipment & Materials		40	10	10	60
Training		10	10		20
Sub-totals		<u>70</u>	<u>40</u>	<u>20</u>	<u>130</u>
Contingency		5	5		10
SUB-TOTAL, GOB	<u>556</u>	<u>280</u>	<u>139</u>	<u>30</u>	<u>1,005</u>
OTHER FUNDING					
<u>Fisheries</u>					
Technical Assist.		50			50
Training			10		10
Equipmen. & Materials			15		15
Sub-TOTAL, OTHER		<u>50</u>	<u>25</u>		<u>75</u>
PROJECT TOTALS	<u>2,346</u>	<u>1,119</u>	<u>665</u>	<u>100</u>	<u>4,230</u>

SUMMARY PROJECT EXPENDITURES BY COMPONENT AND YEARS

<u>Component/Activity</u>	<u>Thru</u> <u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>Total LOP</u>
PUBLIC SECTOR					
<u>MOA Strengthening</u>					
Technical Assist.	778				778
Local Staff	150				150
Vehicles & Equip.	421				421
Operating Expenses	406				406
Training	121	100	25		246
Admin./Eval./Audit	50	25	25		100
Contingency/Inflation		100	34		134
Sub-Contr./Research	420	110	30		560
Sub-Totals	<u>2,346</u>	<u>335</u>	<u>114</u>		<u>2,795</u>
<u>Fisheries</u>					
Operating Expenses		20	20	10	50
Technical Assist.		265	260	60	585
Training		100	106		206
Equip. & Materials		160	60		220
Sub-Totals		<u>545</u>	<u>446</u>	<u>70</u>	<u>1,061</u>
<u>Land Titling</u>					
Operating Expenses		20	20	10	50
Equip. & Materials		137	10	10	157
Training		67	50		117
Subtotals		<u>224</u>	<u>80</u>	<u>20</u>	<u>324</u>
Financial Review/Audit			10	10	20
Contingency		15	15		30
 SUB-TOTAL, PUBLIC SECT.	<u>2,346</u>	<u>1,119</u>	<u>665</u>	<u>100</u>	<u>4,230</u>