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

JAMAICA

PROJECT PAPER

NORTH COAST DEVELOPMENT SUPPORT

AID/LAC/P-709

PROJECT NUMBER: 532-0168

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE

A
 B
 C
 D

Amendment Number

DOCUMENT CODE

3

COUNTRY/ENTITY: JAMAICA

3. PROJECT NUMBER: 532-0168

4. BUREAU/OFFICE: Latin America & Caribbean 05

5. PROJECT TITLE (maximum 40 characters): North Coast Development Support

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM DD YY | 07 | 31 | 91

7. ESTIMATED DATE OF OBLIGATION (Under 8.1 below, enter 1, 2, 3, or 4):

A. Initial FY: 91 | B. Current: | C. Final FY: 91

8. COSTS / \$000 OR EQUIVALENT \$1 =

A. FUNDING SOURCE	FIRST FY 91			LIFE OF PROJECT		
	B. FX	C. LIC	D. Total	E. FX	F. LIC	G. Total
AD Appropriated Total	2,200	1,070	3,270	3,200	1,800	5,000
Grant	12,200	1,070	3,270	3,200	1,800	15,000
Loan						
Other: 1. U.S. 12						
Host Country Incl. ESR related	0	200	200	0	18,000	18,000
Other Donors: OECF (est.)	300	0	300	49,000	13,000	162,000
TOTALS	2,500	1,270	3,770	52,200	32,800	185,000

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION/PURPOSE	B. PRIMARY TECH. CODE	C. 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) HE n/a		0	0	1,532	0	2,000	0
(2) SD n/a		0	0	1,738	0	3,000	0
(3)							
(4)							
TOTALS		0	0	3,270	0	5,000	0

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 support the provision of adequate infrastructure facilities in Jamaica's key tourism areas to permit tourism growth to continue at a minimum of 5% per annum until 2000.

14. SCHEDULED EVALUATIONS

15. SOURCE/TYPE OF GOODS AND SERVICES

Interim: MM YY | 08 | 09 | 93 | Final: MM YY | 05 | 09 | 93 | Foreign Local Commodity

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (maximum 2 of 8 page 22 maximum)

*USAID/Jamaica's \$5 million North Coast Development Support Project is part of an overall \$85 million North Coast Development Project, to be jointly financed by the Government of Jamaica, the OECF of Japan and USAID. The USAID/Jamaica Controller has reviewed and concurred with the methods of implementation and financing included herein.

17. APPROVED BY: Robert S. Queener, USAID/Director

Signature: *Robert S. Queener*

Date Submitted: 07 19 91

Signature: *Marjorie Lewis*, Controller

Date Document Received in AID/ or for AID/ Disbursements, Date of Distribution: MM DD YY

NORTH COAST DEVELOPMENT SUPPORT PROJECT PAPER
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A C R O N Y M S

AID/W	Agency for International Development/Washington
BOJ	Bank of Jamaica
CDSS	Country Development Strategy Statement
CIDA	Canadian International Development Agency
ESF	Economic Support Fund
FARA	Fixed Amount Reimbursement Agreement
GDP	Gross Domestic Product
GOJ	Government of Jamaica
HN	Health and Nutrition
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
MIS	Management Information System
MOFA	Ministry of Foreign Affairs
NCDS	North Coast Development Support
NWC	National Water Commission
OECF	Overseas Economic Cooperation Fund
PA	Port Authority
PAMCO	Project Analysis Monitoring Company
PIOJ	Planning Institute of Jamaica
PMU	Project Management Unit
PSEE	Private Sector Energy Environment
PSIP	Public Sector Investment Programme
SAPROF	Special Assistance for Project Formulation
UDC	Urban Development Corporation
USAID	United States Agency for International Development

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PROJECT AUTHORIZATION

Country: Jamaica

Project Title: North Coast Development Support

Project Number: 532-0168

1. Pursuant to Sections 104 and 106 of the Foreign Assistance Act of 1961, as amended, I authorize the North Coast Development Support Project for Jamaica, involving planned obligations of not to exceed \$5,000,000 in grant funds over a four-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 costs and local currency costs (to the extent permitted under A.I.D. Buy America policies) for the project. The planned life of the project is five years from the date of initial obligation.

2. The project will provide technical assistance and other support for the North Coast Development Project being co-financed by the OECF (Japan), USAID and the Government of Jamaica. The project will consist of support for the Project Management Unit, an Environmental Monitoring Program as part of the Montego Bay Sewerage Plant subproject, and a water loss management program for the Lucea-Negril Water Supply system subproject.

3. The Project Agreement which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

4.a. Source and Origin of Commodities, Nationality of Services

(1) Commodities financed by A.I.D. under the Project shall have their source and origin in the United States except as A.I.D. may otherwise agree in writing, and, except as follows:

a) Up to \$100,000 per transaction of U.S. origin commodities may be procured in Jamaica; and

b) Commodities below \$5,000 per transaction may be procured in Jamaica from A.I.D. Geographic Code 935 sources.

(2) Except for ocean shipping, the suppliers of commodities or services shall have the United States as their place of nationality, except as A.I.D. may agree otherwise in writing, and, except as follows:

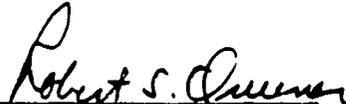
a) Up to \$250,000 per each contract for professional services may be procured from Jamaican firms or individuals.

(3) Ocean Shipping

Ocean shipping financed by A.I.D. under the Project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

4.b. Prior to execution of the Project Agreement, A.I.D. shall be assured that the OECF (Japan) financing will be provided on a general untied basis.

July 19, 1991
Date


Robert S. Queener
Director

I. SUMMARY

The proposed project is part of an overall \$85 million effort being jointly financed by the Governments of the United States, Japan and Jamaica. The overall effort, called the North Coast Development Project, will finance the design and construction of five infrastructure projects along Jamaica's North Coast, the heart of the tourism industry, Jamaica's key foreign-exchange earning sector. These subprojects were selected from a list of 12 originally proposed by the Planning Institute of Jamaica, and have been thoroughly examined and found to be economically, socially, technically, financially and environmentally feasible. USAID has played a major role in conceiving and designing the overall project, working in close cooperation with the Overseas Economic Development Fund of Japan and the Planning Institute of Jamaica. USAID provided \$600,000 to finance feasibility work done for the subprojects, most of which was done through AID direct contracts with U.S. firms.

The five subprojects selected for financing are: a) Montego Bay Sewerage Treatment Plant Improvement; b) Lucrea-Negril Water Supply Improvement, c) North Coast Highway Improvements, d) Montego Bay Drainage and Flood Control, and e) Ocho Rios Port Expansion. The completed subprojects will greatly improve Jamaica's ability to support the continued expansion of its tourism industry in an environmentally sound manner. In addition to the foreign exchange benefits that this project will yield for all of Jamaica's citizens, the activities will bring direct benefit to the residents of the North Coast in the form of improved water and sanitation facilities, better highways, and an expanded port. The project will also result in increased employment opportunities for Jamaicans in tourism and related service industries.

USAID's grant \$5 million project, called the North Coast Development Support Project, will finance technical assistance to the Project Management Unit, an environmental monitoring program for the Montego Bay Sewerage subproject and a water loss management program for the Lucrea-Negril water system. The Project Management Unit, under the direction of the Planning Institute of Jamaica, will coordinate overall project management. Line agencies responsible for implementing the individual subprojects will be the National Water Commission, the Ministry of Construction, and the Port Authority.

A yen loan from the OECF of Japan will finance approximately US\$63 million of foreign exchange and local currency costs of the project, to include engineering design and construction management services, construction, procurement and a limited amount of technical assistance to the Project Management Unit. USAID has indicated that it would be willing to jointly program up to US\$15 million of GOJ owned local currencies associated with our ESF cash transfer programs in support of this project over the next five years.

An important element of this co-financing effort is the significant number of procurement opportunities it will present for U.S. firms.

The Japanese yen loan has been made on a general untied basis, permitting worldwide eligibility to bid on all technical services, construction and procurement contracts. Care has been taken in the design of the project to ensure fair and open competition among all eligible firms during project execution.

II. Background and Rationale

A. General Economic Context

Jamaica is a country of 2.42 million people, with a per capita GDP of US\$1,184, and an estimated unemployment rate of 18%. Its external debt stands at US\$4.1 billion, and its debt service ratio for 1990 was approximately 31%.

Jamaica's recovery from the physical damages of the 1988 hurricane is largely complete, and the economy is experiencing favorable trends in its two major foreign exchange earners, tourism and bauxite/alumina exports, although the North American recession and the Gulf war caused a temporary decline in tourism. Unfortunately, the storm's disruption to the country's fragile monetary and fiscal systems has proven much more difficult to repair, and the outlook for continued economic expansion is quite clouded. Best available estimates for the fiscal year ending March 31, 1990 suggest that real economic output advanced by about two and one half percent, only slightly above the one and one half percent growth recorded in fiscal 1988/89, and well below the four and one half percent average annual growth experienced in the two years prior to the hurricane. The medium term economic framework for 1990/91 to 1992/93 prepared by the Government of Jamaica (GOJ) anticipates a three percent annual growth rate over the three year period.

Since September 1990, the GOJ has been implementing a new liberalized foreign exchange regime. On the broader macroeconomic front, fiscal and monetary policies are being tightened further to support the new foreign exchange system. The added cost of imports has been rapidly phased into the Jamaican price structure, through both increases in controlled prices and the removal of price controls on many items, including basic foods. Inflation has accelerated to a thirty percent annual rate, and prospects for constraining inflation have been reduced by the continued depreciation of the Jamaican dollar that is accompanying the new exchange rate regime. Renewed inflation translates into falling real incomes for the vast majority of Jamaicans working in the formal sectors, where a twelve and one-half percent wage guideline will now be abandoned in favor of production based wage increases.

In addition to a proposed new Standby agreement, the GOJ has submitted a Public Sector Investment Program and a medium term economic framework to the World Bank as a prerequisite to accessing additional loans. In conjunction with the above activities, and in line with USAID'S policy dialogue agenda, the Government of Jamaica

(GOJ) has moved closer to a market economy that is less encumbered by public ownership and control. This can be seen in some newer areas; e.g. decontrol of previously subsidized prices of food staples, sharp increases in the cost of transportation and energy, proposals to decontrol petroleum prices now under active consideration, and greater access of exporters to their foreign exchange earnings, as well as in the more familiar areas of tax reform and privatization.

It is likely that economic difficulties will increase in the short run as the Jamaican economy unwinds from past resource misallocations. Given the critical state of the economy, and the positive nature of the reform efforts to date, it is extremely important for donors to be forthcoming with support at this time. Jamaica is at a critical stage in its economic development, with an economy that is struggling to see the benefits of an improved policy climate. During this painful adjustment process, every effort must be made to reduce the burden of the transition on the poor. Government resources are stretched thinly in order to cope with the adjustment process, with very little left for investment in future growth. While no one doubts the importance of infrastructure, or the economic return that it will bring, the government must rely on donors for assistance in financing urgently required infrastructure improvements.

B. Trends in Tourism

The impact of tourism on the balance of payments, national income, employment, and government revenue makes its development a primary concern of the Jamaican government. Tourism is now the most important and fastest growing source of foreign exchange earnings. In 1982, tourism surpassed bauxite/alumina exports as the premier earner of foreign exchange, and in 1990, the industry earned US\$593 million, a 13% increase over the 1989 figure, making 1990 a very good year. Moreover, unlike in many other Caribbean destinations which use a high percentage of imported components in the tourist sector, foreign exchange leakage in Jamaica's tourist industry--estimated at below 30 percent--is relatively low, due to the fact that around 65-70 percent of food and beverages used in Jamaican hotels is locally produced. Moreover, the bulk of the accommodations in the sector are locally owned. By comparison, the only foreign exchange earning sector in Jamaica with a lower import content is mining. Agricultural exports have a 35 percent import content, while manufacturing is 73 percent.

Little attempt has been made to determine the direct contribution of Jamaica's tourist sector to GDP. The various service categories in the national accounts, such as distributive trade, transport, and miscellaneous, include both tourist related and non-tourist related elements. In addition, there are other sectors, such as agriculture and construction, which are affected by the buoyancy of tourism but fall into other component categories of the national accounts. Various institutions have estimated tourism's contribution to the

economy anywhere between 20 to 35 percent of GDP, but none can be considered authoritative. Nevertheless, it is clear that the overall well-being of the economy depends in large part on the performance of the tourism sector.

Direct employment in the accommodations subsector increased significantly in this decade, rising by almost 80 percent over eight years, from 9,527 in 1980 to 17,076 in 1988. Assuming that 1.5 persons are employed in peripherally related activities for every employee in the accommodation subsector, then around 40,000 jobs, or about 5 percent of the employed labor force, are directly employed in tourism. In addition, there is indirect employment in other sectors that provide inputs to tourism.

The government budget benefits from direct, indirect and induced taxes, duties and fees. According to a study done in 1986 by the World Tourism Organization, around 5 percent of stopover visitor expenditure accrues to the government as a direct result of tourism. Another 2 percent comes from the indirect effect, and 24 percent flows to government coffers from the induced effect. Thus for every million dollars spent by stopover visitors, government revenues grow by over \$300,000.

In 1970, when Jamaica had a total of 415,000 visitor arrivals, it was the number four tourist destination in the Caribbean, behind Puerto Rico, the Bahamas, and the U.S. Virgin Islands. In the 1970's, the average annual growth rate of visitor arrivals was 4.8 percent, but this does not reflect the volatility experienced during that decade. Arrivals increased steadily through 1975, then dropped sharply in 1976 and 1977, but rose again in 1978 and 1979, when European traffic increased in response to strengthening European currencies. Factors adversely affecting the industry during this decade were unprecedented political and social unrest in Jamaica, increased competition from Europe due to the dramatic reductions in transatlantic fares, and increased competition from neighboring countries such as the Bahamas and Barbados. Arrivals in 1980 were again abnormally low because of election violence in that year.

In the 1980's, total arrivals rose steadily, at an average annual rate of 10 percent, until 1988, when hurricane Gilbert adversely affected the tourist sector in the last four months of the year. Overall arrivals dropped only marginally, from the 1987 record of 1.038 million to 1.02 million. However, stopover visitors--those that stay for one or more nights--declined dramatically, from 748,827 to 648,873. Cruise ship visitors, on the other hand, jumped by over 25 percent, despite the hurricane. This is a continuation of the trend, begun around 1983, in which the growth rate of cruise ship arrivals is considerably outstripping that of stopover visitors. Since stopover visitors spent an estimated US\$78 per day in 1988, as opposed to US\$50 per day for cruise ship visitors, Jamaican authorities and hoteliers are seeking to assure that the cruise ship traffic does not have a negative impact on other tourists. Total visitor arrival in 1989 were 1.16 million, with

714,000 stopover arrivals and cruise ship arrivals of 448,000, up 20% over 1988. Preliminary data for 1990 suggest total visitor arrivals up approximately 10% over 1989. Jamaica has held its own in the 1980's, with one of the highest growth rates in the Caribbean region.

While tourism arrivals in 1990 were up over 1989, they do not quite match the levels achieved in 1988, a record year. However, in spite of the fall in arrivals, actual tourism expenditures have risen, as have room occupancy rates, making tourism officials very satisfied with their sector's performance in 1990. A major trend has been the tendency for resort areas, and particularly the all-inclusive hotels, to show continued high occupancy rates even during the traditional "low" season. Unfortunately, the industry is extremely vulnerable to world economic conditions. In the long run, however, tourism is expected to be a robust industry worldwide, based on demographic and disposable income trends.

Prospects for continued growth of tourism in Jamaica are good. The number of hotel rooms available in 1990 was 8.5% greater than in 1989, and the building trend is expected to continue, particularly in Montego Bay and Negril. Air access is also being expanded. Cruise shipping has shown extremely high growth in the last decade, and is forecasted to remain a very strong and competitive industry.

The tourism industry in Jamaica is not without its constraints, however, and infrastructure is widely regarded as one of the principal constraints to further, environmentally sound, growth in the tourism industry. Expansion in Montego Bay and Negril has greatly outstripped the pace of infrastructure development, and the Government is now seeking assistance from a variety of sources to address critical infrastructure requirements. The need for better water, sewerage and drainage facilities is especially pressing in these tourist areas, to produce reliable, safe water supplies and to protect the marine environment from deterioration. Power is another critical infrastructure requirement of very large magnitude which threatens to affect not just the tourism sector but all sectors and geographic areas in Jamaica, if not addressed soon. While the road network along the North Coast is generally in acceptable condition, particularly when compared to other areas of the world, it is reaching a point where rapid deterioration will soon be experienced given heavy traffic volume and relatively little periodic maintenance. Even at present, the long journey many travellers face when arriving in Jamaica is mentioned repeatedly in the private sector as a primary source of visitor discontent. It is therefore extremely important to devote adequate resources to upgrading the current highway before major damage occurs, a fact borne out by the high internal rates of return calculated for the proposed North Coast Highways subproject. Investment in pier facilities in Ocho Rios is required if Jamaica is to stay competitive in the expanding cruise shipping industry, due to the fact that the dominant trend is for vessels to become larger in the years ahead, requiring the initiation of expanded facilities now.

In addition to infrastructure, the other principal constraint which prevents Jamaica from maximizing the positive development impact of tourism is a deterioration in the quality of the tourism product vis-a-vis tourist expectations, resulting in a low rate of returnee visitors. This "product quality" problem includes such subcategories as a lack of diversity in attractions; harassment of visitors by overly aggressive vendors; and poor service in establishments catering to tourists. Partly in response to these problems, the Jamaican private sector has been marked by a trend towards "all-inclusive" resorts which limit exposure to other segments of the economy. The government is cognizant of the need to focus more of its resources on encouraging product improvement and less on marketing, and has now developed a detailed strategy to achieve the goals of the Five-Year Plan in this regard.

C. Background and Relation to AID Policy, CDSS and GOJ Plans

The proposed North Coast Development Project will consist of USAID and Japanese financing to assist the Government of Jamaica improve infrastructure in key tourism areas including Montego Bay, Negril, Ocho Rios, and along Jamaica's North Coast. It represents an innovative approach to donor collaboration, with both donors working together on a single project and together reaping benefits which could not be realized individually. The concept of USAID-Japan cooperation in the region traces back to June 1988, when Mr. Hanabusa, the Director General of the Economic Cooperation Bureau of Japan's Ministry of Foreign Affairs and Jay Morris, the Deputy Administrator of AID met to discuss opportunities for future cooperation between both Governments in development assistance programs in Central America and the Caribbean. One of the results was an agreement to explore the possibility of co-financing in several countries, including Jamaica. In July 1989, Acting Administrator Mark Edelman wrote to the Director-General of MOFA, Mr. Matsuura, indicating that information from Jamaica showed the most promise for development into a viable initial project between the U.S. and Japan. The original concept called for USAID, with its large in-country presence and availability of grant funds for technical assistance, to play a significant role in the design and supervision arena, and for the OECF, with its availability of loan funds for construction assistance, to play a significant role in the construction and commodity financing arena. That concept has been altered somewhat, but comparative advantage remains a key principle embodied in the framework of the proposed project.

To initiate project design, USAID made available \$500,000 in August 1989 to finance feasibility studies for subproject candidates, and later supplemented that amount by an additional \$100,000 after the first sum was utilized. The OECF fielded a mission to identify possible areas for OECF participation in reviewing feasibility findings through its "SAPROF" facility in the spring of 1990, and a SAPROF team reviewed U.S.-financed feasibility work and proposed an overall implementation framework for the project during August to November 1990. This framework was later modified through a series

of discussions between Japanese Ministry of Foreign Affairs and AID/W staff. In March 1991, an OECF appraisal mission visited Jamaica. The Planning Institute of Jamaica (PIOJ) has been an active partner in the discussions throughout. The original list of subproject candidates was proposed in consultation with the PIOJ, and the final list of subprojects has been determined by the PIOJ. The project described in Sections II through V of this Project Paper is the result of discussions involving the Governments of Jamaica, Japan and the United States.

The proposed project will directly support the activities of the Mission and the Government of Jamaica related to the promotion of tourism and increased foreign exchange earnings. In providing infrastructure for centers of tourism, the project will result in increased opportunities for economic growth and expansion. In addition, with the exception of one proposed subproject (Ocho Rios Port Development), all of the infrastructure facilities will directly serve both tourists and local residents.

Tourism is recognized as a key industry in Jamaica, given that it builds on the country's comparative advantage and is a major contributor of foreign exchange. The development of tourism falls within the Mission's current CDSS and Action Plan thrusts of increased economic opportunities and runs parallel to the promotion of exports as an essential ingredient for long-term economic stability. This project is therefore also in line with the first of the Bureau's three objectives articulated in 90 STATE 357566, namely, to support the achievement of broadly-based, sustainable economic growth. The Mission is now in the process of developing a tourism strategy to assess constraints and opportunities in the sector and to guide Mission allocation of resources. However, the lack of adequate infrastructure in tourist areas is already well-documented as a critical constraint, and there is no doubt that the proposed project will fall within the framework of the tourism strategy being developed.

The Jamaica Five Year Development Plan 1990-1995, published in May 1990, calls for the government to support the expansion of the productive sectors through policy making, the provision of social and economic infrastructure support and the creation of an investment climate that will encourage private initiative. With regard to tourism, the Plan states "Government will retain a leading role in tourism development through infrastructure development and promotion of tourism, but will reduce its involvement in direct supply of tourism services." The Plan goes on to make specific mention of the upgrading of port facilities, water supplies, sewerage systems and the road network.

The proposed project is also in conformance with the LAC Bureau Tourism Guidance as amended in 90 STATE 000861, which states that with regard to infrastructure, Missions may use established procedures to development infrastructure activities that assist the development of the tourism industry. The policy goes on to state

that Missions should avoid financing capital or other investments that are appropriately left to either the private sector or other donors. The proposed project is structured so as to get maximum leverage from scarce AID grant resources by using them for technical assistance only, and relies on Japanese and GOJ financing to cover construction and commodity procurement costs.

D. Other Donor Activities

In addition to USAID and the OECF, a number of other donors are active in the provision of infrastructure in tourist areas. The needs with regard to infrastructure are so great, however, that there is strong justification for USAID's presence. Other donors were consulted during the design of this project and the Planning Institute of Jamaica undertook subproject selection with a view toward coordinating all donors' inputs. The EEC, the IDB and the Caribbean Development Bank, among others, are financing complementary infrastructure activities in the major tourist areas. CIDA was the financing agency for the feasibility work which led to the conceptualization of the the Montego Bay sewerage subproject.

III. PROJECT DESCRIPTION

A. Overall Co-Financed Project

The USAID/OECF Co-financed North Coast Development Project consists of the identification, design, construction and operation activities for five infrastructure subprojects targetted at the Jamaican tourism industry. The program will provide benefits, both direct and indirect, to Jamaica's tourism sector and to the entire Jamaican population. (See Section V.)

The Project will consist of a Japanese Loan of approximately US\$63 million, together with a USAID grant contribution of US\$5 million through the North Coast Development Support (NCDS) Project (532-0168) and a contribution of approximately US\$18 million in GOJ-owned local currency. The program was developed based on a list of 12 possible subprojects nominated by the Planning Institute of Jamaica (PIOJ). After submitting each requested improvement to a rigorous feasibility study, which included analyses of technical viability, environmental soundness, economic and financial determinations and social impacts, 5 infrastructure improvement sub-projects have been selected and will be financed under the co-financing scheme.

These are:

- 1) Montego Bay Sewerage
- 2) Negril Water Supply
- 3) North Coast Highway Improvements
- 4) Montego Bay Drainage and Flood Control, and
- 5) Ocho Rios Port Expansion

A brief description of each subproject follows. Further discussion of the merits of each subproject can be found in Section V., Summaries of Analyses, and in the Feasibility Reports for each of the subprojects, which are listed in Annex I.

1. Montego Bay Sewerage System Improvement Project

Montego Bay is vital to the economy of Jamaica, being the island's major tourism center and receiving the bulk of international tourist arrivals at its Sangster Airport. The city of Montego Bay has an existing domestic and commercial waste water system which was originally constructed in 1968 to cover a population equivalent of 24,000 people on a dry weather flow of 3,300 m³/day. The current need of the system is to cover approximately 94,000 people with a flow of 13,600 m³/day.

Failure to improve the present sewerage system and treatment plant will eventually affect the tourist industry by causing beach water quality and coral growth to deteriorate, and consequently affecting the general development and economy of Jamaica. Furthermore, the

existing superannuated plant and equipment cause frequent electrical and mechanical failures, resulting in excess operating costs.

In 1987, the National Water Commission (NWC) sponsored a study entitled "Montego Bay Pre-Feasibility Report for Proposed Sewerage System Upgrading", funded by the Canadian International Development Agency (CIDA). The report identified modifications and improvements necessary to provide adequate sewerage services until the year 2015. In 1990, USAID funded an environmental analysis of the proposed project entitled "Montego Bay Sewerage Improvement Project-Environmental Analysis".

The proposed sewerage improvement project is to cover the area for the Central System which encompasses a long narrow band of coastline stretching from the Great River in the west to the vicinity of Lilliput in the east, a distance of approximately 20 miles. The area involves urban downtown areas with some suburban and rural areas. The project planning period considers the sewerage requirements to the year 2015, and the collection system will be designed to carry the 2015 projected flows. However, the treatment facilities will be initially designed to handle flows to the year 2000 limited to the Central Treatment Plant.

The project includes the following work components.

- (1) Collection system: Sewers of approx. 7,800m for priority installation and approx. 5,000m for optional installation dependent upon costs and availability of budget.
- (2) Pump station: Installation of 4.0 imgd pumps with electrical controls and standby generators to operate the pumps.
- (3) Central treatment plant: Expansion of preliminary treatment and primary treatment plants at the existing Central Plant, and new construction of secondary treatment (facultative lagoon) at Bogue Bay.
- (4) Solids handling: Expansion of solids handling systems including sludge digesters and sludge drying beds.
- (5) Environmental: Environmental Monitoring Program and Public Education and Awareness program

The project cost will be US\$19,790,800 excluding the cost for engineering and construction supervision, the breakdown of which is as follows:

(1) Land acquisition	1,365,700
(2) Construction/procurement	15,807,800
(3) Contingency (10%)	1,717,300
(4) Environmental program	<u>900,000</u>
(5) TOTAL	US\$19,790,800

2. Lucea-Negril Water Supply System Improvement Project

The Negril area is a major center for international tourism currently experiencing the fastest development in Jamaica, thus necessitating adequate water supply if it is to meet its tourism potential. The area currently suffers from a deficiency of water supply caused by low system pressures and inadequate or non-existent service in places. It is also believed that considerable water loss occurs in the existing system due to leakage and wastage, thus contributing to the deficiency in consumer service.

The rapid growth of the tourism industry in Negril to date and for the foreseeable future indicates that the existing water supply capacity would fall in absolute shortage in the not too distant future, and therefore, the supply from the existing Logwood Treatment Plant should be developed to the fullest capacity. A hydrological survey of the Patterson Blue Hole, the raw water source of the Logwood Treatment Plant, indicates that a safe yield of the order of 5 imgd can be obtained as against the present intake flow of 2.9 imgd (13,200 m³/day).

In July 1988, a preliminary study was prepared by NWC, which contains an upgrading plan of the Logwood Treatment Plant, associated with a distribution system and water loss management programme. In September 1990, a feasibility study report was prepared as a supplementary report to the previous one and included an environmental analysis.

The project area covers the two towns on Negril and Lucea, and the coastal strip between and adjacent to them in the western tip of the island. The project includes the development of supplemental water resources, a new treatment plant at the existing plant site, a distribution pipeline and reservoir, and a water loss management program for the Logwood Plant service area.

- (1) Water resources: Consisting of two springs, one is Patterson Blue Hole of 4.0 imgd and the other is Fish River Blue Hole of 1.0 imgd.
- (2) Treatment plant: New plant of a rapid sand filter system.
- (3) Distribution pipeline: Trunk main from Orange Bay to Negril Lighthouse, upgrading and extension of existing main in places, construction of storage and booster stations.
- (4) Water loss management program for the Logwood Plant service area.

Studies have concluded that 40 to 50% of the water now produced at the existing Logwood water treatment plant is lost through leaks, unmetered connections, faulty meters, illegal connections, etc. The proposed water loss management program will reduce the water loss to about 10% to 15% and will help make the new Lucea-Negril water supply system viable by reducing losses and increasing revenue.

The project cost is US\$14,921,500 excluding the cost for engineering and construction supervision, the breakdown of which is as follows:

(1) Land acquisition	35,500
(2) Construction/procurement	11,620,500
(3) Contingency (10%)	1,165,500
(4) Water loss program	<u>2,100,000</u>
TOTAL	US\$14,921,500

3. Northern Coastal Highways Improvement Project

The coastal road from Negril in the west through Montego Bay to Port Antonio in the east is the highway over which the majority of foreign visitors travel. Most sections of this coastal road were built in the 1960's and 1970's with a few short sections having been reconstructed to high standards of surface pavement and alignment. A lack of periodic maintenance for 20 to 30 years has caused damage to many other sections. Even those still in good condition cannot be expected to remain that way for many more years. Considering that the highway is vital to tourism in Jamaica, the importance of improving it to a reasonably adequate, consistent standard of alignment and smoothness is obviously desirable to maintain Jamaica's tourism product.

The Ministry of Construction (Works) has completed a "Five Year Infrastructure Investment Programme" dated November 1989, funded by the World Bank. The report prioritized the road construction and upgrading subprojects in tourism related areas, and USAID conducted the feasibility study of the proposed project on this basis.

The North Coastal Highways between Negril and Whitehall (approx. 125 miles) have some sections which are of good geometric standards, and in general, the conditions of alignment and pavement are at least fair. Some short sections have been reconstructed over the past 10-15 years, but the rest, from Whitehall to Port Antonio, is the least adequate in terms of overall serviceability. In order to enhance the economic feasibility of the project, priority should be given to the following sections in this order, which will be reflected in preparing detailed designs.

- (1) Sections where design speeds and traffic safety are not secured due to lack of stopping-sight distance, width at sharp curves, degree of curvature, safety facilities, etc.,
- (2) Sections where existing pavement structure is seriously damaged,
- (3) Sections where wearing course is already damaged and leaving it without overlay would cause costly reconstruction in the near future.

The major work items involved in the project are as follows:

- (1) Plant-mixed asphalt concrete surface course applied on existing carriageway surface which has been damaged.

- (2) Widening: Construction to widen the carriageway to provide a minimum of six meters in width plus shoulders for increased safety.
- (3) Reconstruction: Where existing pavement has been heavily damaged with high roughness and extensive failures, pavement reconstruction will be necessary.
- (4) Realignment: Where the existing road is characterized by excessively substandard horizontal and/or vertical alignment, realignment will be carried out.
- (5) New shoulder: A shoulder of 0.5-1.5m or more is recommended for providing drainage and improving safety for road users.
- (6) Bushing and blading: Clearing vegetation and other obstacles to secure stopping sight distance.
- (7) Drainage: Construction of side drains and ditches, pipe and box culverts where necessary.

Notwithstanding the above, throughout the entire length of the road, numerous warning, regulatory and information signs will be provided to enhance roadway safety for road users.

The erosion control ("river training") work on the Negro/Church rivers at St. Ann's Bay was found to require immediate implementation to avoid possible damage to the highway. However, since the scale of the work is too small to formulate as a single project, it is included in this project.

The project cost will be US\$27,339,800 excluding the cost for engineering and construction supervision, the breakdown of which is as follows:

(2) Land acquisition	US\$ 2,773,400
(3) Construction/procurement	22,081,900
(3) Contingency (10%)	<u>2,485,530</u>
TOTAL	US\$27,340,830

4. Montego Bay Drainage and Flood Control Project

This project was initiated as a downtown development project in Montego Bay, since inadequate urban infrastructure is hampering further promotion of the tourism industry in Montego Bay. Frequent flood occurrence in the downtown area, chiefly due to rapid residential developments in the suburban areas, has increasingly become a major problem, disrupting activities, damaging properties and creating sanitary problems.

The downtown area of Montego Bay lies within the drainage basin of the North Gully, the South Gully, and the Montego River. Frequent flooding occurs along the South Gully which needs immediate improvement to increase its flow capacity to mitigate flood damages. A feasibility study was conducted in 1980 by the Urban Development Corporation (UDC), and was updated in 1990. The detailed design is currently in progress.

The project includes the construction of open channels with reinforced concrete or random-rubble walls, box culverts, siltation pond, etc., to meet a flood discharge of 942 cu.ft or 26.17 m³/sec, a once in ten-year period occurrence..

The project cost will be US\$6,818,100 excluding the cost for engineering and construction supervision, the breakdown of which is as follows:

(1) Land acquisition	US\$1,250,000
(2) Construction/procurement	4,948,200
(3) Contingency (10%)	<u>619,900</u>
Total	US\$6,818,100

5. Ocho Rios Port Development Project

Out of the 400,000 cruise ship passengers arriving in Jamaica each year, some 80 percent arrive in Ocho Rios. There are two berths in Ocho Rios for exclusive use of cruise ships under the jurisdiction of the Port Authority (PA). These two berths can accommodate ships of up to 750 ft. long, albeit with some difficulty in berthing and mooring. Given the recent world-wide popularity of cruise holidays, there is a strong trend for ship sizes to increase. The proposed project is to enable Ocho Rios to stay competitive in this environment, and accommodate ships of up to 900 ft. long (Super Liner) in the future. A feasibility study for the extension of the existing pier was conducted in August 1990, funded by USAID.

The project includes the following work components:

- (1) Extension of Pier: The existing pier of Berth No.2 will be extended to accommodate ships of up to 900 ft. long.
- (2) Mooring system: Constructing of mooring dolphins and navigation aid facilities will be required for the extension of Berth No.2.
- (3) Additional works: Rehabilitation of existing pile caps at trestle, and provision of parking lots and open space by reclamation at the northern end with rip-rap.

The project cost will be US\$6,593,900 excluding the cost for engineering and construction supervision, the breakdown of which is as follows:

(1) Land acquisition	Nil
(2) Construction/procurement	5,994,500
(3) Contingency (10%)	<u>599,400</u>
TOTAL	US\$6,593,900

Detailed engineering design and construction supervision services for all five subprojects, estimated to cost US\$7.5 million, will also be financed by the OECF.

B. Project Management and Financing Arrangements

The project will be coordinated by a Project Management Unit (PMU) to be located at the Planning Institute of Jamaica (PIOJ), with direct responsibility for implementation residing in the following three line agencies:

National Water Commission	Montego Bay Sewerage Lucea-Negril Water Supply
Ministry of Construction	North Coast Highways Montego Bay Drainage & Flood Control
Port Authority	Ocho Rios Port Development

As agreed by USAID, the OECF and the GOJ during the OECF appraisal of the project in March 1991, the main function of the PMU will be to coordinate and manage the components of the Project to ensure its efficient and expeditious execution. Specifically, the PMU will be responsible for:

- liaising with the line agencies responsible for implementing the subprojects, to ensure efficient implementation;
- facilitating and expediting the consent of the OECF and USAID on matters which require their approval;
- preparing annual budgets for the Project and estimates of projected expenditures for the Public Sector Investment Programme (PSIP);
- based on projected estimates of expenditure, requesting quarterly disbursement of funds from the Ministry of Finance;
- with the expertise of long and short term consultants, assisting in the tender evaluation based on the requirements of tender documents in accord with OECF guidelines;
- assisting in contract negotiations with the lowest bidder;

- assisting in obtaining the approval of the OECF for contract award and its enactment, and complying with all related GOJ regulations and procedures;
- convening meetings as necessary of the Project Coordinating Committee to discuss issues related to the project;
- convening meetings of donors and/or line agencies as necessary;
- verifying requests for payment from contractors/suppliers;
- monitoring transactions related to the project's special account in conjunction with the Ministry of Finance, Development and Planning and the Bank of Jamaica
- authorizing requests for replenishment of the Foreign Currency Special Account;
- preparing progress reports which will identify problems and make recommendations for actions to be taken to improve project implementation and avoid time and cost overruns; and
- working closely with PAMCO to monitor the financial and physical progress being made on each subproject.

AID has already contributed approximately US\$600,000 through its Technical Consultations and Training Grant (532-0079) for feasibility analyses. Under the proposed North Coast Development Support (NCDS) Project (532-0168), USAID will finance technical assistance in the form of overall project management services, engineering advisory services, an environmental monitoring program for the Montego Bay sewerage subproject, and a water loss management program for the Negril water subproject. Additionally, USAID has indicated that it would concur with the GOJ in giving priority to the North Coast Development Project when programming ESF-generated local currencies.

The Overseas Economic Cooperation Fund (OECF) will finance detailed engineering design and construction supervision services, some limited project management assistance (10 person months of a financial advisor and 10 person months of an environmentalist), construction, procurement, and operations/maintenance. The estimated cost for these project inputs is US\$490,000. The OECF, Japan's primary overseas financial assistance institution, makes loans to foreign governments at highly concessional rates. The OECF appraises projects after receiving loan requests from developing countries based on detailed feasibility work. Once an OECF appraisal mission has completed its recommendations, the project proposal is reviewed and approved by a Japanese Government Inter-Ministerial Body composed of representatives from the Economic Planning Agency, the Ministry of Foreign Affairs, the Ministry of

Finance and the Ministry of International Trade and Industry. This body is responsible for determining loan amounts, interest rates, tying status and other terms and conditions.

The GOJ will provide the local currency equivalent of approximately US\$17 million in counterpart funds to finance those local costs not covered by the OECF loan and USAID grant. These counterpart funds may come from local currencies generated by the ESF cash transfer program (as mentioned above) and/or from local currencies generated by Japanese assistance programs.

C. Detailed Description of the North Coast Development Support (NCDS) Project (532-0168)

The broad goal to which the USAID Project contributes is to enhance Jamaica's ability to increase employment and foreign exchange earnings through the tourism industry. The specific purpose of the USAID assistance is to support the provision of adequate infrastructure facilities in Jamaica's key tourist areas to permit tourism growth to continue at a minimum of 5% per annum until 2000. The anticipated outputs are five infrastructure subprojects in operation and contributing to the tourism industry.

USAID's \$5 million Project will cover four elements:

- 1) The locally hired project manager and support staff for the Project Management Unit (PMU) to be located at the Planning Institute of Jamaica (PIOJ) to coordinate overall project management. In addition, some limited commodity support (e.g., MIS equipment) will be provided.
- 2) The U.S.-hired project advisor to assist the project manager and other short term technical assistance as required for the smooth and effective implementation of the project;
- 3) The environmental monitoring program to monitor the effect of the Montego Bay sewerage improvement project on the environment and assure that any necessary corrective measures are identified and undertaken, and conduct a public awareness and education program; and
- 4) The design and implementation of a water loss management program for the Lucea-Negril water supply system to improve system efficiency and complement construction activities financed by the OECF.

The Project may also finance the services of a PSC engineer to advise the Mission on the project's implementation status and any problems and to provide direct implementation assistance to the GOJ when necessary. In addition, the Project will provide funding for evaluation(s) of the entire program and audit(s) of the USAID-financed portion.

The technical assistance to be provided under element one will be implemented using host country contracting and the technical

assistance under elements two to four will be implemented through a single AID-direct contract with a U.S. engineering firm (with up to \$250,000 of local subcontracting permitted). It is anticipated that the physical repairs to be financed under element four will be carried out through host country contracts or Fixed Amount Reimbursement Agreements (FARAs) with the National Water Commission.

Each element is described in more detail below:

1. Locally hired Project Management staff

USAID will provide assistance to the Project Management Unit to assure that the project is implemented effectively. This assistance will consist of a locally hired project manager, project accountant and secretary. The Project Manager will serve as overall project manager and will be the key contact between technical assistance personnel and the relevant government agencies. The Project Manager will report to the Director-General of the PIOJ or his designee. He or she will facilitate the timely and effective implementation of the project in accordance with Jamaican laws, regulations, policies and practices. The specific duties of the project manager, accountant and secretary are specified in the Terms of Reference which are included in Annex E. In order to facilitate the speedy implementation of the project, AID will permit the PIOJ to begin recruitment and hiring of the three PMU staff prior to the project authorization, for subsequent retroactive reimbursement by AID, subject to all appropriate AID guidelines being followed and AID approval of the draft contracts before they are executed. AID will make it fully clear that all risk is to be borne by the PIOJ, and that in the event that the planned project is not authorized, the PIOJ will be solely responsible for costs incurred. Commodities will not be procured until the project is authorized and the project advisor described below is in country.

2. Project Advisor and other TA

The expatriate Project Advisor will advise the PMU on an array of implementation matters. He or she will provide advice to the Project Manager to ensure effective and efficient management of the project, i.e., to serve as a troubleshooter and general resource person for review of designs and bid evaluation, oversight of construction, maintenance of the Project's management information system (MIS), financial management matters, and coordination of environmental monitoring and water loss management activities. Other, specialized short term technical assistance will be provided on an as-needed basis. It is anticipated that such assistance could cover specialized bid evaluation requirements, MIS advice, specific engineering reviews or analyses, etc.

3. The environmental monitoring program for the Montego Bay Sewerage subproject

The feasibility study for the Montego Bay Sewerage subproject did not anticipate significant negative environmental impact as a result

of the planned improvements to the facilities but recommended that additional environmental studies be undertaken. The SAPROF consultants endorsed this recommendation and broadened it. USAID's project will finance the five year baseline change study and public education and community awareness campaign arising from these recommendations.

USAID will finance a five year biomonitoring program to examine potential impacts of the proposed release of treated sewage effluent into Bogue Lagoon. This program will:

- a. Establish baseline (existing) conditions within the area environment;
- b. Determine if existing environmental conditions would suggest modifications to the final proposed sewerage treatment design prior to completing the new treatment system project;
- c. Monitor changes (negative and positive) to the lagoon and surrounding region resulting from effluent discharges; and
- d. Propose treatment criteria such as advanced nutrient removal to mitigate any measured negative environmental impacts.

The program will look at two primary constituents of the mangrove/lagoon complex. The first is water quality within the mangrove swamp, the lagoon, and other regions of the Montego Bay Harbor. Particular emphasis will be placed on monitoring water depth, salinity and nutrient levels of water entering and leaving the mangrove forest. Monitoring of contamination of poorly treated human wastes (e.g., fecal coliforms, E. coli) will also be emphasized.

The second constituent is the existing and resultant productivity and health of the various biotic communities. Parameters which will be monitored include mangrove growth and productivity, phytoplankton, benthic invertebrate and fish communities within the Bogue Lagoon, and through an independent assessment, health of the local and regional coral reef communities.

4. The water loss management program for the Lucea-Negril Water Supply subproject

This element will reduce water losses in the Lucea-Negril water supply system by improving the condition of the water mains, installing meters and repairing leaks, and is viewed by USAID/Jamaica as an integral part of the overall effort to increase Negril's water supply. The feasibility study estimated the potential for water losses at 40-50% of system flow and strongly recommended a leakage control program. AID would finance the engineering services to design and implement the program, and as much of the actual construction and commodity procurement to implement the program as our funds allowed.

The water loss management program will be implemented by the National Water Commission with the assistance of the major engineering contractor. Services to be provided by the U.S. engineering firm include:

- a. overall detailed field inspection with recommendations for water loss reduction program;
- b. oversight of the implementation of the program, including an on-the-job water distribution system maintenance training program, development of water system maintenance records system, water system maintenance manuals, and other services as required.

The NWC will be responsible for providing

- a. the staff for on-the-job maintenance training, training venue, and storage space for materials and equipment;
- b. contracting with local contractors to implement portions of the water loss reduction program; and
- c. updating the map of the water distribution system.

In addition to the above elements, the project will provide financing for audit and evaluations, and may provide financing to procure the services of an engineer to assist AID and the GOJ to review project implementation and provide advice on project implementation matters. It is envisioned that this person will not be part of the larger institutional contract, and will instead be hired as a Personal Services Contractor (PSC). The PSC will fill a "troubleshooter" role.

IV. Cost Estimate and Financial Plan

The proposed project will cost \$5.0 million in grant funds over five years, and is part of an overall Co-Financing effort which will cost approximately \$85 million. Of this latter amount, the OECF is expected to contribute approximately \$63 million in loan funds (their pledge is for a yen loan of 8.606 billion), and the GOJ to contribute at least \$17 million in local currency. For this latter, USAID will agree to jointly program up to \$15 million of GOJ-owned local currency associated with our ESF cash transfer programs for this effort over the next five years, assuming the availability of ESF funds. The Summary Cost Estimate and Financial Plan for the AID-financed North Coast Development Support (NCDS) Project is presented in Table A, and for reference, the budget for the overall Co-financed Project is presented in Table B. USAID grant funds will come from the PSEE and HN accounts. A proposed obligation schedule is presented in Table C, and the planned annual expenditures are presented in Table D. Table E indicates projected local currency requirements for GOJ-owned local currency associated with our ESF cash transfer programs, and Table F presents proposed Methods of Implementation and Financing.

**TABLE A: Summary Cost Estimate and Financial Plan
USAID Contribution
(US\$000)**

<u>Element</u>	<u>Amount</u>
1. Locally hired PMU staff and limited commodities	300
2. Technical advisor to the PMU and related short-term TA	1,160
3. Environmental monitoring program for Montego Bay sewerage	900
4. Negril water loss management	2,100
5. PSC engineer	240
6. Evaluation and Audit	150
7. Contingency	<u>150</u>
TOTAL	5,000

TABLE II

	Foreign Component		Local Component		Total	
	(Million Yen)	US Equivalent (Million OSS)	(Million Yen)	US Equivalent (Million OSS)	(Million Yen)	US Equivalent (Million US)
I. Construction & Procurement						
1. Land Acquisition	0	0	732	5.425	732	5.425
2. Construction & Procurement	3,231.0	23.929	4,931	36.522	8,162	60.451
3. Contingency	323.0	2.393	566	4.195	889	6.588
Sub-Total	3,554.0	26.322	6,229	46.142	9,783	72.464
I. Engineering Service (Consultants)						
USAID Finance	637.0	4.720	38	0.28	675	5.000
OECD Finance	690.0	5.110	326	2.418	1,016	7.528
Total	4,881.0	36.152	6,593	48.840	11,474	84.992

TABLE C

Proposed Obligation Schedule
(US\$ 000)

<u>FY 1991</u>	<u>FY 1992</u>	<u>FY 1993</u>	<u>FY 1994</u>	<u>TOTAL</u>
3,270	930	700	100	5,000

TABLE D

Projected Expenditures by Fiscal Year
(US\$000)

Expenditures will take place over a five year period, beginning with the last quarter of FY 91 and continuing until the third quarter of FY 96.

	<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>TOTAL</u>
1. PMU	30	60	60	60	60	30	300
2. TA	160	300	270	190	140	100	1,160
3. Envir.work	100	400	200	150	50	0	900
4. Water loss mgmt	100	1,500	500	0	0	0	2,100
5. PSC engineer	0	100	120	20	0	0	240
6. Eval. & Audit	0	0	50	0	100	0	150
6. Contingency	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>0</u>	<u>150</u>
TOTAL	420	2,390	1,230	450	380	130	5,000

TABLE E

**Projected Local Currency Requirements
(in J\$ millions)**

This table presents the anticipated local currency costs (as opposed to the foreign exchange costs) for the entire North Coast Development Project, excluding the \$5 million AID grant-financed portion. The OECF yen loan will cover some of the costs in the "other" cost category, but will not cover any of the land acquisition costs.

<u>ITEM</u>	<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>TOTAL</u>
MoBay Sewer					
Land	0	10.98			10.98
Other			40.34	40.34	80.68
Negril Water					
Land	0	0.29	0	0	0.29
Other	0	0	18.58	13.94	32.52
No.Coast Hghwys					
Land	0	11.15	11.15	0	22.30
Other	0	0	72.57	72.57	145.14
So. Gully					
Land	0	10.05	0	0	10.05
Other	0	3.88	7.76	9.70	21.34
Ocho Pier					
Land	0	0	0	0	0
Other	<u>0</u>	<u>4.66</u>	<u>9.32</u>	<u>0</u>	<u>13.98</u>
TOTAL	0	41.01	159.72	136.55	337.28

AID has agreed to jointly program the J\$ equivalent of US\$15 million in GOJ-owned local currency associated with its ESF cash transfer programs in support of project activities, including land acquisition costs, subject to the availability of ESF funds. Funds are planned to be programmed as follows, for expenditure within six months of programming:

(In J\$ millions)

<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>TOTAL</u>
\$15.5	\$28.1	\$60.0	\$53.0	\$156.6

These figures are estimates only; the actual programming of funds will occur in connection with the implementation of the ESF cash transfer programs.

TABLE F

<u>Element</u>	<u>Methods of Implementation and Financing</u>		<u>(\$000)</u>
	<u>Method of Imp.</u>	<u>Financing</u>	<u>Amount</u>
1. PMU staff	Host Country Contract	Reimbursement	300
Commodities	HCC or AID direct	Reimbursement or direct payment	limited amount included in 300 above
2. TA to the PMU	AID direct	Direct payment	1,160
3. Environmental monitoring program for MoBay	AID direct	Direct payment	900
4. Negril water loss mgmt	AID direct/ HC FARA	Direct payment/ Reimbursement	2,100
5. PSC Engr	AID direct	Direct payment	240
6. Eval. & Audit	AID direct	Direct payment	150
7. Contingency			<u>150</u>
		TOTAL	5,000

V. Implementation Arrangements

A. Key Implementing Entities

Overall responsibility for implementation of the program will be assigned to the Planning Institute of Jamaica (PIOJ)/Project Management Unit (PMU). The PMU will be established within the legal jurisdiction of the Ministry of Finance, Development and Planning (MFDP). The PMU will be the project implementation arm of PIOJ for this scheme and will be comprised of the technical assistance personnel provided by USAID and OECF. It will be assisted by a Project Coordination Committee made up of relevant GOJ entities and Jamaican Private Sector interests. The GOJ representatives are presently expected to be Ministry of Finance, Ministry of Construction, Jamaica Tourist Board, Port Authority, Ministry of Public Utilities and Transportation, National Water Commission, Natural Resources Conservation Department and PIOJ. Private sector representatives will be from the Tourism Action Plan and the Chambers of Commerce. Individual subproject implementation will be the responsibility of the relevant GOJ line agency. Post project operations and maintenance (O & M) will be financed by the GOJ through the annual budget for each of the implementing agencies.

Each of the key implementing entities is described below.

- PIOJ/PMU - The project management unit will manage the overall North Coast Development Project for the GOJ. Its main responsibilities will be the overall coordination of design, contracting, procurement and construction. It will also serve as the central coordination point for monitoring, reporting, transmitting reimbursement requests and conducting inter-agency reviews.
- PCC - The Project Coordination Committee will act as a body to resolve inter-agency and/or inter subproject conflicts or issues. It will meet on an ad hoc basis when issues arise, or annually to be briefed on project progress.
- NWC - The National Water Commission will be the implementing agency for the Montego Bay Sewerage subproject and the Lucea-Negril Water Supply subproject. It will be responsible for the design, construction, operation and maintenance of these facilities. Design and construction is to be accomplished by outside contract and not performed in-house.
- MOC/W - The Ministry of Construction/Works will be the implementing agency for the North Coast Highways subproject and the Montego Bay Drainage and Flood Control subproject. It will be responsible for the design, construction, operation and maintenance of these facilities. MOC/W has nearly completed the detailed engineering design and has a consultant updating the project's feasibility report for the Montego Bay Drainage and Flood Control subproject. Design and construction is to be accomplished by outside contract and not performed in-house.

PAOJ - The Port Authority of Jamaica will be the implementing agency for the Ocho Rios Port Development sub-project, and will be responsible for the design, construction, operation and maintenance of this facility. Design and construction is to be accomplished by outside contract and not performed in-house.

B. Procurement Plan

The PIOJ will be responsible for host country contracting for this project. AID has had experience with PIOJ's contracting capability in implementing the PARC Project and has found it acceptable. All contracting actions will be less than \$250,000 each and will be reviewed by USAID.

PIOJ will contract for three local-hire staff for the PMU. We anticipate that they will have staff selected and in place by the end of June 1991. PIOJ may also be responsible for limited amounts of commodities to support the PMU.

USAID plans to enter into one major technical assistance contract with a multi-discipline U.S. engineering firm to provide the services required to implement elements two (TA to the PMU), three (MoBay environmental monitoring) and four (Negril water loss management) of the project. The TA contact will allow subcontracting with local firms up to a maximum of US\$250,000. This is permitted under the Buy America guidelines without a waiver. This TA contractor will also be designated the procurement agent for up to \$250,000 worth of commodities needed to undertake the Negril water loss management program. These commodities are to have source/origin in the U.S.

USAID may enter into a personal services contract with an engineer to assist the Mission and the GOJ to review project implementation progress and serve as a troubleshooter when the project is at a critical implementation stage. A total of \$240,000 has been budgeted for this. If these funds are not used under the PSC line item, they will be rebudgeted.

In order to have our major TA contractor on board as quickly as possible, USAID/Jamaica advertised in the CBD on April 19, 1991, prior to project authorization. However, contractor selection will not be finalized until the project is authorized and funds are available. The project is slated to be authorized by mid-June 1991, with obligation targetted for late June or early July. The Mission plans to proceed with contractor selection, negotiation, and award immediately afterwards. Our target date for having a technical advisor in country is the end of Sept. 1991.

All engineering design, construction monitoring, construction and commodity procurement will be financed by the OECF. It is our understanding that procurement will be accomplished using international competitive bidding

procedures with worldwide eligibility, following OECF's standard procurement guidelines. The OECF pledge was made on a general-untied basis. USAID has reviewed OECF's guidelines and finds them to be simplified and more general versions of our own, requiring "due attention to considerations of economy, efficiency and non-discrimination among those eligible to bid." We have requested, and the OECF has agreed, that advertisement should be used to develop all shortlists under the project.

Land acquisition will be the responsibility of the line agencies, namely, the National Water Commission and the Ministry of Construction. The NWC has begun the process of acquiring the privately held lands required for the expansion of the sewerage treatment plant. Once the OECF pledge is received, the NWC will enter into negotiations with the land owners. USAID and the OECF have stressed the importance of quickly concluding the negotiations for the land. The PIOJ has budgeted J\$6 million in the JFY 1991 budget for this project, most of which will be allocated to land acquisition costs. The Ministry of Construction will undertake land acquisition for the highways subproject once the detailed design work is completed; at this point, it is too early to know which lands must be acquired.

C. Gray Amendment Certification

It is not anticipated that a Gray Amendment set-aside will be used, since a single major technical assistance contract will be sought to reduce costs and contracting workload and to simplify monitoring requirements. However, the Mission will encourage subcontracting with Gray Amendment-qualifying firms.

In reviewing and approving this project, the Mission Director has certified that the procurement plan was developed with full consideration of maximally involving Gray Amendment organizations in the provision of required goods and services.

D. Implementation Schedule

The proposed North Coast Development Project was appraised by the OECF in March 1991 and was reviewed by the Inter-Ministerial Board in April 1991. A formal Pledge was made by the Government of Japan to the Government of Jamaica on May 31, 1991. The loan agreement is expected to be signed by early July. USAID has received the delegation of authority to authorize the project, and plans to do so by the middle of June, with an obligation to follow by the end of June or early July.

The parties to this project--GOJ, OECF and USAID--have interdependent tasks which need to be fully coordinated in order to maintain a satisfactory schedule. Accordingly, presented below is an indicative Implementation Schedule for the project depicting major milestones, involved parties and the target dates for completion.

ILLUSTRATIVE
IMPLEMENTATION SCHEDULE

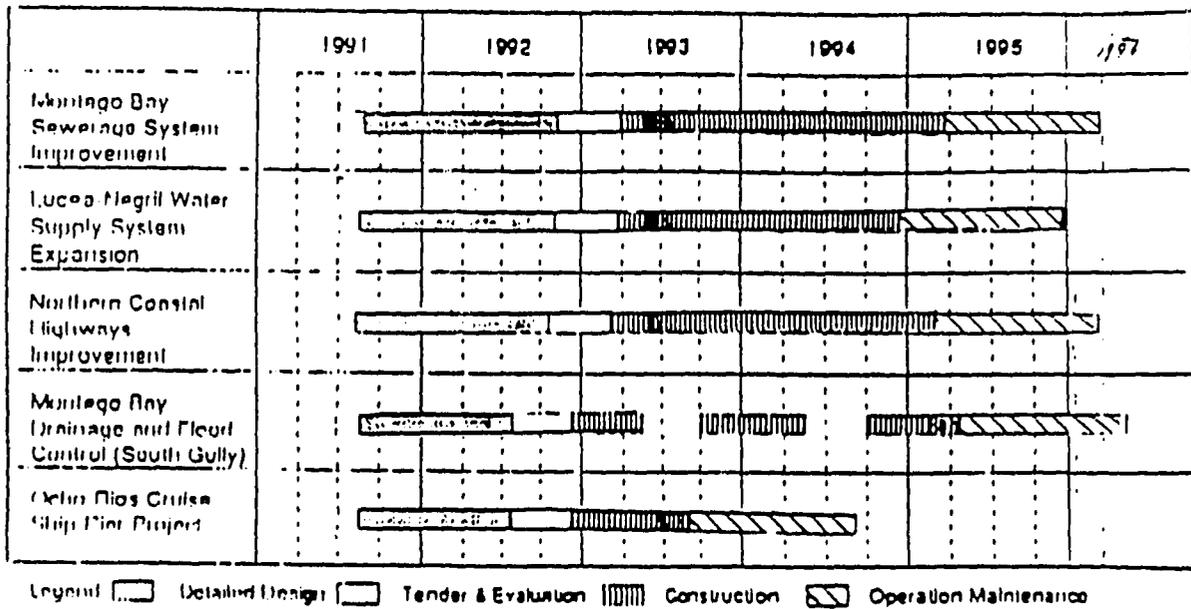
<u>Action</u>	<u>Entity(ies)</u>	<u>Target Date</u>
1. Advertise for AID TA firm	USAID, w/ PIOJ	April 19, 1991
2. Advertise for PMU staff	PIOJ, w/ USAID	June 10, 1991
3. Select PMU staff	PIOJ, w/ USAID	July 10, 1991
4. Contract w/ PMU staff	PIOJ, w/ USAID	Aug. 1, 1991
5. PMU staff in office	N/A	Aug. 15, 1991
6. Select TA firm	USAID, w/ PIOJ	Aug. 1, 1991
7. Contract w/ TA firm	USAID, w/ AID/W	Sept. 13, 1991
8. TA firm in office	N/A	Sept. 30, 1991
9. Develop TOR for 3 engr contracts	PMU, w/ TA	Oct. 15, 1991
10. Begin Negril Water loss and Mobay monitoring activities	TA firm	Oct. 30, 1991
11. Advertise for shortlist for 3 engr contracts	PMU, w/ TA	Oct. - Nov., 1991
12. Negril water supervisor in country and begin commodity procurement	TA firm	Nov. 91 - June 93
13. MoBay environ. baseline	TA firm	Nov. 91 - Oct. 93
14. Select shortlist for 3 engr contracts	PMU, w/ TA (& OECF)	Dec. 1, 1991
15. Distribute RFTP for 3 engr contracts	PMU, w/ TA	Dec. 2, 1991
16. Local contractors imp. water loss mgmt program	NWC, TA firm	Jan. 92 - June 93
17. Receive proposals for 3 engr firms	PMU	Jan. 31, 1992
18. Evaluate proposals and select firms	PMU, w/ TA (& OECF)	Feb. 15, 1992

ILLUSTRATIVE
IMPLEMENTATION SCHEDULE
(continued)

<u>Action</u>	<u>Entity(ies)</u>	<u>Target Date</u>
19. Contract w/ 3 firms	PMU	March 15, 1992
20. Engr teams in office	N/A	March 30, 1992
21. Detailed design completed		
a. MoBay sewer	Engr. team	June 30, 1993
b. Negril water		June 30, 1993
c. Highways		May 30, 1993
d. South Gully		March 30, 1993
e. Ocho Rios pier		March 30, 1993
22. Construction tender and bid evaluation		
a. MoBay sewer	NWC, w/ PMU	Sept. 30, 1993
b. Negril water	NWC, w/ PMU	Sept. 30, 1993
c. Highways	MOC, w/ PMU	Aug. 30, 1993
d. South Gully	MOC, w/ PMU	June 30, 1993
e. Ocho Rios pier	PA, w/ PMU	June 30, 1993
21. Mid-term evaluation	AID, OECF, GOJ w/ consultants	August 1993
22. Further project implementation		Ongoing
23. PACD		July 31, 1996

As depicted above, the procurement of detailed engineering design services to be financed by the OECF are scheduled to begin in the latter part of 1991 with construction and O & M services continuing through December 1995. The detailed design, tender and evaluation, construction and O & M schedules are depicted in Fig. 5.3 from the SAPROF report to PIOJ.

Fig. 5.3 OVERALL IMPLEMENTATION SCHEDULE



E. Monitoring, Evaluation and Audit Plan

The PMU attached to the PIOJ will have principal responsibility for monitoring the progress of the overall program. The PMU will be responsible for submitting quarterly progress reports to USAID and the OECF. While USAID will exercise more rigorous oversight of the technical assistance provided by the AID North Coast Development Support (NCDS) Project, it will also perform routine monitoring of the implementation of the entire program and will promptly alert the PMU if any problems are observed. If USAID judges the problems to be of sufficient magnitude to warrant OECF involvement, it will also notify the OECF.

It is anticipated that the GOJ will constitute a Project Coordination Committee to meet on an ad hoc basis to resolve issues which may arise during the implementation of the program. The PCC will be made up of the heads of the various subprojects' implementing agencies, together with senior representatives from the Ministry of Finance, Tourism, and Development Planning and Production. Quarterly progress reports will be sent to the members of the PCC.

It is expected that the quarterly progress reports will be prepared based on information submitted to the PMU by the implementing agencies, and will contain the following types of information: subproject workplans with milestones or key decision points highlighted and progress indicated; financial commitment and expenditure data; indication of management issues requiring resolution; and gender-disaggregated beneficiary information, to the extent possible.

The NCDS Project will provide a limited amount of commodity assistance to the PMU to carry out this monitoring and reporting function.

USAID and the OECF will jointly perform two independent evaluations, one mid-term and one final, to assess the overall program. The first evaluation will look at the process for providing program inputs, and make a preliminary determination of the effectiveness of implementation mechanisms. It will also measure progress in producing anticipated outputs, identify problem areas and make recommendations for needed improvements. This first evaluation will most likely take place towards the end of year two of the project. The final evaluation will examine program impact and the degree to which program objectives were met. It will also look at the overall effectiveness of the Co-financing mode, and make recommendations for any future USAID-OECF Co-financing efforts. It is expected that this evaluation will be conducted at the end of year four of the program. The GOJ will participate in the design, review and subsequent follow-up discussions for both of these evaluations.

USAID will maintain audit rights for the NCDS Project and those local currencies owned by the GOJ which were generated through USAID assistance. A portion of the funds under the NCDS Project will be set aside to finance any needed non-federal audits of the project.

VI. Analyses and Summaries of Analyses

A. Technical Analysis Summary

An indepth technical analysis was performed as a part of the feasibility work done for each of the subprojects, as summarized below.

1) Montego Bay Sewerage:

In 1988 NWC commissioned a Pre-Feasibility Study of wastewater treatment alternatives to meet Montego Bay's expanding wastewater volumes. USAID/Jamaica, in 1990, funded a review of this Pre-Feasibility Study and an indepth Environmental Analysis of the project. Several alternatives were considered for improving the treatment capability of the Montego Bay Wastewater Treatment Facility (WTF) including trickling filters, activated sludge and facultative lagoons.

Technical Feasibility for both construction and operations and maintenance were examined and the most appropriate technology recommended. The GOJ has accepted and USAID/J concurs in the recommended alternative of facultative lagoons as being the most technically feasible.

Based on the feasibility work prepared by Montgomery/Beak consultants, the Mission concludes that improvement of the existing Montego Bay Sewerage System and Central Treatment Plant is feasible in general. USAID considers that this sub-project is technically feasible and will significantly increase the capacity of the existing treatment plant to adequately process and discharge sewage collected from the Montego Bay area.

2) Negril Water Supply

Negril is presently served by a 3 mgd water treatment plant at Logwood. The water source for the plant is the Orange River Blue Hole which has a 6 mgd capacity. Prior to 1988, NWC studied several alternatives to increase the water supply to the Lucea-Negril area. A report prepared by Earle & Associates, Consulting Engineers examined several alternatives for increasing the water supply to the Lucea-Negril area. Alternatives identified and studied were:

- a) Fully use the capacity of the Orange River Bluehole (named Patterson Bluehole);
- b) Build a new water treatment plant on the Great River near Lucea to supply Montego Bay, Lucea and Negril; and
- c) Develop water supply and treatment facilities at a new location on the Roaring River.

The NWC studies conclude that alternatives a) and b) above are feasible while alternative c) was cost prohibitive. Accordingly, in 1987 NWC commissioned Earle & Associates, Consulting Engineers to examine indepth the full use of the existing Logwood Plant supply and the water loss management program. The Lucea-Negril Water Supply Preliminary Engineering Report dated July 1988 recommends immediate expansion of the Logwood Water Treatment Plant to handle the full usable capacity from the Patterson and Fish River Blueholes. Using this report as a starting point, USAID/J commissioned a Feasibility Study of expanding the Logwood Plant. This was completed in October 1990 by Harza Engineering Company and CDM International. USAID/J concurs in the feasibility study's methodology and conclusions.

Alternative No. 2, construction of a new water plant on the Great River near Lucea is currently being implemented by the GOJ with bilateral financing by Japan's OECF. The first stage of this project will furnish water only to Montego Bay. The second stage, scheduled to be built when the capacity of the Logwood Plant is expanded, will provide additional treated water to Lucea, thereby freeing up water presently being sent to Lucea, for use in Negril.

3) North Coast Highways

The Ministry of Construction/Works has developed a 5 year plan to identify and prioritize capital improvements required during the plan period. Using MOC/W's identified needs, USAID/J commissioned DeLeuw Cather International (DCI), to study the tourism area highways from Negril to Montego Bay to Ocho Rios to Port Antonio. Also studied was an alternate route from Negril to Montego Bay via Ferris Cross.

Using the World Bank's Highway Design and Maintenance computer model modified for Jamaican conditions, various levels of overlay, widening, realignment and relocation were studied. The complete 210 mile route was broken down into 27 separate road links, analyzed for needed improvements at various levels of construction standards and prioritized by internal rates of return. This study produced a listing of descending priority projects at a total cost of approximately US\$32m. This project will fund improvements for a mix of highway sections costing US\$27.3m. The exact locations will be determined during the engineering design but all will be located on the main North Coast Highway from Negril to Port Antonio.

4) Montego Bay Drainage and Flood Control

After severe flooding had taken place in the 1970's, MOC/W and the Urban Development Corporation (UDC) commissioned a feasibility study to evaluate alternative methods to alleviate the flood threat along the South Gully in Montego Bay. UDC's consultant, Earle and Associates investigated the physical and technical reasons for the frequent flooding and performed indepth interviews with longtime area residents to field check frequency and severity calculations. Alternatives for controlling flooding were 1) construction of a

flood control reservoir and 2) improvement and increasing the capacity of the existing South Gully waterway through downtown and into Montego Bay. Cost/Benefit analyses were done for 2 year, 5 year, 10 year, 25 year, 50 year and 100 year storm return periods.

The recommended alternative is to construct channel improvements through downtown Montego Bay for a 10 year storm return period. Because the cost and benefits calculated in the 1980 report are now out dated, MOC/W has recently commissioned an update of costs and benefits to reflect 1990 prices. This should not affect project feasibility but could alter the cost effective storm return period on which to design the drainage improvements. Final engineering design will use the storm return period recommended in the update.

Channel improvements consist of silt basin, paved invert, stone rubble or concrete walls, and box culverts under streets.

5) Ocho Rios Port Expansion

The Cruise Ship Pier in Ocho Rios is sized to handle a maximum ship size of 750. Present trends in the cruise ship industry indicate a need for facilities to handle the new mega liners of 900 feet in length. Accordingly, a feasibility study was done in June 1990 by Harza Engineering Company under an AID direct IQC to evaluate alternatives. Four alternatives were identified as warranting indepth technical, economic and environmental examination. They were:

- 1) Extension of existing pier to northward by 220 feet.
- 2) Build a new Pier north of existing Pier but oriented at right angle to the existing pier.
- 3) Anchor the larger ship outside of Ocho Rios Bay and operate a smaller tender boat from cruise ship to pier.
- 4) Do nothing.

The technical differences between alternatives revolve around the berthing orientation relative to prevailing winds and maximum storm winds. The prevailing winds are generally NE to SW while the maximum storm winds are generally out of the NW.

Other technical considerations for constructability, methods and materials for construction and effect on on-shore facilities were identical for the alternatives.

Technical design criteria were analyzed for these five (5) characteristics:

- 1) Ship Maneuverability
- 2) Mooring and berthing structure requirements
- 3) Obstructions to existing marine activity
- 4) Passenger comfort
- 5) Source of construction components

Based on the information as presented in the July 1990 Feasibility Study by Harza Engineering Company, the extension of the existing Berth 2 is recommended.

B. Administrative Analysis:

USAID/Jamaica has had previous experience implementing projects with each of the four (4) implementing agencies anticipated for this project.

Planning Institute of Jamaica (PIOJ) -

Responsibility for management of this project will rest with PIOJ. PIOJ does not ordinarily carry implementation responsibility but because of the coordination effort involved with 2 donors, USAID and OECF, and 5 separate construction projects under 3 different Ministries, PIOJ has been selected as project manager.

USAID/Jamaica has many years experience working with PIOJ in the coordination of our donor/grantee efforts in Jamaica. The PIOJ has noted, and USAID agrees, that it lacks the required number and type of implementation personnel required for project operation and implementation responsibility. Therefore, a Project Management Unit for PIOJ will be established, funded and personnel obtained under this project. This model is based on the PMU which was successfully established at the PIOJ for the PARC project, with AID financing. Terms of reference for the PMU staff are included as Annex F.

Responsibility for the design and construction of the 5 separate sub-projects will be assigned to the GOJ agencies with operational responsibility and authority in that functional area. They are as follows.

The National Water Commission (NWC) -

Under the overall supervision of PIOJ, NWC will be responsible for implementing the technical requirements, design and construction of the Montego Bay Sewerage sub-project and the Negril Water Supply sub-project. NWC has GOJ responsibility for these types of projects under the Ministry of Public Utilities. As such, USAID/J has previously implemented many water and sewer projects with NWC. NWC has the personnel, equipment, procedures and finances to perform this function satisfactorily and on schedule. Implementation of capital improvements projects is one of the normal functions of NWC and they are administratively capable of completing the responsibilities assigned.

Ministry of Construction/Works (MOC/W) -

Under overall management by PIOJ, MOC/W will be responsible for implementing the technical requirements, design and construction

of the North Coast Highways sub-project and the Montego Bay Drainage and Flood Control sub-project. MOC/W has responsibility with the GOJ for project planning, execution and maintenance for all highway and drainage projects. USAID/Jamaica has implemented many projects with MOC/W in the past and they have the personnel, equipment, procedures and finances necessary to perform this function satisfactory and on schedule.

The Port Authority of Jamaica (PAOJ) -

PAOJ is a statutory corporation functioning as the GOJ's principal maritime agency. As such, it has both regulatory and developmental responsibility. Because of its small staff, development projects are usually implemented using the Urban Development Corporation as project developer with PAOJ assuming operational responsibility upon completion of construction. However, PAOJ has been selected to take direct responsibility for developing this pier extension. Engineering and management consultants will be contracted to assist them in the design and management of the construction. It is felt that, with this assistance, the PAOJ is fully competent and best positioned to implement the Ocho Rios port development subproject. Once the facilities have been completed, PAOJ has the experience and capability to operate the facilities without additional help.

Detailed descriptions of the NWC, MOC/W and PAOJ can be found in Annex J.

C. Economic & Financial Analyses Summary

Detailed economic and financial analyses were performed during the feasibility study stage for each of the selected subprojects. The analyses in many cases led to the selection of one intervention/site/technology over another. These analyses are contained in the documents cited in Annex I. Detailed economic and financial analyses were not performed for the specific grant project funded by AID, based on the assumption that the returns to AID's input would be as great as the returns to the overall project on an absolute basis and would be much higher when calculated as a ratio. With its \$600,000 for feasibility studies and \$5 million in grant assistance, along with planned ESF related local currency inputs of approximately \$15 million, AID has been able to leverage Japanese resources of approximately \$65 million.

While certain items of the infrastructure (water systems, ports) being upgraded by the overall project are operated on a commercial or revenue-producing basis, and hence require appropriate financial analyses, the technical assistance and other inputs being provided by AID under its grant project do not fall into the "commercially operated" category. In the case of the Negril water loss management program to be funded by AID, however, the project is expected to have a significant positive impact on the financial

revenues of the NWC by reducing the volume of unaccounted water and increasing the volume of water sold.

The costs and benefits of the Water Loss Management Program were included in the Financial and Economic Analyses in the feasibility study resulting in a positive recommendation for the project.

D. Social Soundness Analysis:

The social soundness analysis: a) examines the Jamaican socio-cultural context for the tourism sector in general, and tourism infrastructure in particular; b) describes anticipated direct and indirect beneficiaries of the project and the overall program; c) documents the participation of government planners and implementing agencies in project design; d) assesses the project interventions' socio-cultural feasibility; and e) makes note of intended impact and long-term sustainability of the efforts supported under the project. The analysis concludes that the project is socio-culturally feasible, and if implemented as planned, should result in substantial improvements in Jamaican tourism infrastructure.

Tourism is one of the single most important sectors contributing to Jamaica's economy. Tourism supplies over \$600M of foreign exchange earnings annually and is projected to grow at a rate of at least 5% per annum until 2000.

This project will assist in the development and expansion of the tourist industry in the present tourist meccas of Negril, Montego Bay and Ocho Rios. In Jamaica, approximately 40,000 people are directly employed in the industry while many others are indirectly employed servicing the industry with food, supplies, materials and equipment. Reliable statistics on the precise numbers of persons employed directly and indirectly in the tourism sector are not currently available, but the 1991 Jamaica national census was expected to yield improved data in this regard. In the project areas, it is estimated that a large proportion of the population directly or indirectly rely on tourism for their livelihood.

Tourism employment is a respected profession in Jamaica and accordingly there are no ethnic, religious or other social groupings who would hinder overall project implementation. In the case of the Ocho Rios port development subproject, it is conceivable that there could be some resistance to the expansion of the pier by members of the local hotel industry. A running debate exists among many tourism planning officials about the merits of attracting additional cruise ship passengers vis-a-vis attracting stopover visitors. However, in the case of Ocho Rios, it is strongly felt that if the pier is not expanded, the number of cruise ship arrivals will greatly decrease in the future because of industry trends toward the deployment of larger vessels. These concerns were taken into account during the feasibility study stage of the subproject, and a recommendation was made that local planning be undertaken to avoid congestion in Ocho Rios. One element of the strategy for avoiding congestion calls for the expeditious start of the design and construction of

the Ocho Rios bypass, which is slated for financing by another donor and has been held up pending land acquisition. The expeditious completion of the Ocho Rios bypass has been made a covenant of this project. In addition, the Ocho Rios port development subproject includes some funding for additional ground facilities to ease congestion.

The direct beneficiaries of this project will be the persons employed in or employable by the tourism sector. Existing statistics indicate that poor (earning less than J\$10,000/year) and women dominate the employed in the tourism industry. Hotels, restaurants, entertainment and household services employment will all be increased. Additional direct beneficiaries are the various persons employed in the local craft industry - carvers, weavers, artists, leatherworkers, textiles, etc. - and the "higglers" and shop owners who sell the crafts. Again, these persons are also found in the lower portion of the socio-economic ladder.

A potential side effect from this project could be increased migration from rural areas into the tourism centers of Negril, Montego Bay and Ocho Rios. Four of the five sub-projects, in addition to providing the infrastructures needed for increased and sustained tourism, also provide the infrastructure required to meet the water, sewer and transportation needs of the area residents. However, the GOJ and its implementing agencies will need to remain aware of the importance of maintaining and planning for expansion of these facilities.

Various local participation groups have been included in the project planning and will continue direct participation during project implementation through their representation on the Project Coordinating Committee. The major groups include local Chambers of Commerce, Tourism Action Plan, the Private Sector Organization of Jamaica and the Natural Resources Conservation Department. In the case of the Montego Bay sewerage improvement subproject, AID's grant will finance a community awareness campaign to educate Montegonians of the effects of sewerage on the environment and the reasons for the planned treatment plant expansion, as well as to answer any questions they might have about planned interventions.

It is expected that this project will help Jamaica attain its stated goals to improve the quality of the tourism product and to increase tourism revenues while safeguarding the environment. The project has been designed to maximize the likelihood that effective maintenance procedures will be implemented and that the sustainability of the infrastructure will be ensured. The technologies selected for each of the infrastructure subprojects do not require costly or complex maintenance processes. In addition, the project will provide one full year of maintenance support for each of the subprojects to train staff and lay the foundation for proper maintenance techniques.

E. Women in Development

It is expected that there will be no constraints to women's participation in any of the project activities. There are significant numbers of women employees in the tourism sector, although they are disproportionately represented in the lower level occupations. There are many women employed in hotels and working outside as crafts vendors. Women are also well represented in the government and in private sector tourism industry groups.

In seeking opportunities for enhancing women's participation, this project is limited by the fact that it is basically an infrastructure project, with little emphasis on the general training or skills development type of activity which might serve to increase women's participation in the tourism sector. However, AID is in the process of developing a tourism strategy and is contemplating amending the Export Development and Investment Promotion project to include a tourism sub-element. This would probably be a more appropriate vehicle for increasing women's participation.

F. Environmental Analyses/Summary:

A separate environmental analysis has been done for each of the five sub-projects. They are listed in Annex G. Each is summarized below.

Sub-Project 1: Montego Bay Sewerage

The feasibility study done for this project by BEAK Consulting Engineers, Ltd. dated December 1989 includes an investigation into the environmental effects in Section 4 - Environmental Impact Assessment. The study was confined to the evaluation of readily available data and information related to sewage disposal, preliminary investigation of an Ocean outfall, assessment of the likely impact of sewage outfalls on the coral reef communities in Montego Bay, and assessment of the effects of sewage on mangrove. This study concluded that the existing available data are inadequate to determine the extent of effluent discharges on Montego Bay but that longer term monitoring and detailed impact assessments should be carried out prior to completing ultimate sizing of the sewage treatment facilities.

After review of the feasibility study, USAID Jamaica concluded that the Environmental section needed broader analysis of possible effects and identification of mitigation measures for the proposed sub-project. An Environmental Analysis by James M. Montgomery Consulting Environmental Engineers and Beak Associates Consulting, Ltd. report dated August 1990 accomplished this.

Key environmental issues evaluated were:

- 1) social and economic impacts on local business and residents.
- 2) maintain quality of existing fish habitats and minimize impacts to resident and reef fish.
- 3) minimize disruption to wildlife and wildlife habitats.
- 4) maintain the quality and quantity of water in freshwater and marine systems.
- 5) minimize disruption or diminution to recreation facilities or opportunities.
- 6) maintain a regional perspective to minimize impacts on other development projects.
- 7) minimize chances of project failure by incorporating technically feasible siting, design and mitigation features.
- 8) siting, design and mitigation features should be cost effective.
- 9) minimize visual impact of the proposed facility from the adjacent areas.

In summary, the report states "little direct long term irreversible negative environmental change would occur as a direct result of the proposed project". Indirect changes in population density patterns and land use and their consequent demand for increased public services are the major irreversible impacts which may be expected and are unavoidable.

The primary long term negative impacts of continued and increasing discharge of untreated or inadequately treated sewage to Montego Bay result from the no action alternative. Both the biological environmental and the economic well being of the region would be horrendously impacted.

The Montgomery Environmental Analysis recommends a background data study for Montego Bay and a Public Education and Awareness program. Both have been included as project elements to be funded by USAID's project.

The USAID funded Montego Bay Environmental Monitoring Study will establish baseline conditions in Bogue Lagoon and Montego Bay before construction, monitor conditions during construction, monitor conditions after completion of construction and initial system operation, and suggest mitigating actions, if needed.

Background data collection prior to ultimate plant sizing and determination of effluent quality needed will be done either prior to design or concurrent with preliminary design.

Sub-Project 2: Negril Water Supply

The feasibility study done by Camp Dresser, McKee International and Harza Engineering includes an Environmental Assessment in Section 10. The basic environmental resources of the Lucea-Negril service area were reviewed to evaluate potential effects.

The only potential lasting adverse environmental effect identified during this feasibility study was lower instream flow in the Orange and Fish Rivers downstream of Logwood. Although field

reconnaissance did not reveal any activities that are economically or culturally dependent on dry season instream flows, such as irrigation or aquaculture, there are ecologically important resources dependent upon downstream flows that deserve further attention prior to or during the design phase of the project. These ecological resources are the morass and its unique botanical and zoological features.

An instream flow study of the Orange and Fish Rivers, from Logwood to the sea, is recommended. The Natural Resources Conservation Department had input to the Terms of Reference for the study, and a qualified environmental firm will be contracted to the NWC and financed by AID. This work will precede subproject design.

The study, estimated to cost about J\$400,000 will have the following general objectives:

- 1) To inventory downstream human uses of water, including agricultural, industrial, tourist, and domestic uses;
- 2) To prepare flow duration curves of the Fish and Orange Rivers downstream of Logwood, showing pre- and post-project conditions;
- 3) To map the freshwater-salt water interface of the north canal during the wettest and the driest months of the year, including measurements of freshwater inflow via the Orange River and the cutoff canal;
- 4) To evaluate the wildlife and botanical resources existing in the north canal estuary and their tolerance of long term changes in salinity; and,
- 5) To recommend minimum instream flow or other measures appropriate for protecting human or natural resource uses of the freshwater from the two blueholes.

If the instream flow study determines that mitigation measures are required, the design study should incorporate them in to the overall project. Potential mitigation measures could include fish and wildlife habitat improvements to address lower dry season streamflows, modification of water flows in the morass to prevent or minimize changes in the freshwater-salt water interface, or other measures specific to an adverse impact identified by the study.

Sub Project 3: North Coast Highways

This sub-project has not had prior environmental consideration other than a cursory Air Quality Impact paragraph in the MOC/W's 5 Year Infrastructure Investment Plan.

This is a difficult sub-project to assess because:

- 1) the exact type of roadway improvements to be made, such as resurfacing, widening or relocation are not yet defined and,
- 2) the exact locations along the existing 210 miles of highway under consideration have not yet been determined.

Accordingly, a general Initial Environmental Determination has been prepared for each type of roadway improvement expected. For the minor interventions, i.e. resurfacing, widening and minor realignments, the IEE concludes in a negative determination. For the major realignment or relocation sections, the IEE has identified enough potential significant impacts to result in a positive determination. Accordingly, an Environmental Assessment will be included in the engineering design scope so that it is completed during the preliminary design phase of the project. Any section that this assessment determines to have overriding negative impacts that cannot be countermanded by design or construction procedures will be dropped from the project in favor of more environmentally balanced sections. Note: There are more than enough separate roadway sections to allow this flexibility while utilizing fully the OECF loan funds.

IEE: Minor Improvements consisting of resurfacing, resealing, grading, bushing, widening, reconstruction or realignment all on existing Rights of Way (ROW).

The roadway improvements envisioned under this category will all be buildable using the existing right-of-way. The highway to be improved stretches from Savannah-La-Mar to Negril to Montego Bay to Ocho Rios to Port Antonio connecting Jamaica's existing tourist areas and closely follows the western and northern coastlines. AID/Jamaica personnel from the Office of Engineering, Energy and Environment have travelled the full length of the anticipated improvements from Negril to Port Antonio. Although the highway traverses rural areas, the roadside is well developed with hotels, restaurants, shops, businesses and small communities such as Lucea, Falmouth, Duncans, Runaway Bay, St. Ann's, Oracabessa and Port Maria. Business or Residential relocation will not be required.

Drainage improvements will provide positive environmental benefits by eliminating mosquito breeding areas, by improving the appearance of the roadside, and by eliminating pedestrian hazards. No long term negative environmental impacts can be expected from these improvements. Short term impacts during construction such as dust, noise, traffic congestion and inconvenience will be mitigated with careful attention to design and construction specifications.

Therefore, these "Minor Improvements" will have no significant environmental impact and additional environmental review is not required.

IEE: Major Improvements consisting of realignments or relocations on which require new R.O.W.

The exact location of expected improvements under this category will be determined during the preliminary design stage. Therefore, it is not possible at this time to identify specific impacts that might occur. However, because the roadway "corridor" is now under post project use and it does not traverse any identified environmentally sensitive sites, forests or wet lands, major environmental impacts are not anticipated. In order to ensure this, the design consultant will prepare an environmental assessment during the preliminary design stage each new alignment section recommended for inclusion in the project. Should unavoidable, adverse impacts result, such sections will not be included in the project or redesigned along existing R.O.W.

Sub Project 4: Montego Bay South Gully Improvements

This sub-project consists of widening and paving an existing drainage ditch which runs through the southern part of the City of Montego Bay. The sub-project will improve the carrying capacity to reduce flooding along the South Gully.

Flooding presently occurs in the South Gully Area on a yearly basis with its attendant loss of property, loss of business, increase in unemployment and increase in health hazards. The improvements are designed to reduce the probability of flooding to once in 10 years.

A field inspection was made along the entire length of the existing gully from the sea to near Princess Street and Anderson Road. The project is located entirely within the "built up" area of Montego Bay. There were sensitive environmental areas, habitats or species identified along the project. The sub-project will not alter the total flow of storm water discharged to Montego Bay but the rate of flow will increase. This is not expected to adversely affect the fish or fish habitat at the discharge point.

Short term impacts during construction will be noise from heavy equipment, dust from excavation and traffic congestion. Project specifications will mitigate these effects and limit them to normal working hours.

No long term negative impacts can be foreseen and the Initial Environmental Examination made determination under AID HB3, App. 2D Sec. 216.2 (c) (1) that the action does not have an effect on the natural or physical environmental.

Sub Project 5: Ocho Rios Port Expansion

Harza Engineering Company, as a part of their Feasibility Study, prepared an Initial Environmental Examination of the potential environmental impacts of the cruise ship pier expansion at Ocho

Rios. The IEE investigated the existing natural resources of the area, identified environmental impacts for the proposed pier extension, for a new pier, for a tender operation and for no action.

An Environmental Assessment for the Ocho Rios Port Expansion subproject is being financed by USAID and will be completed by the fall of 1991, in time to have the results considered for detailed design. Mega-liners, regardless of how berthed, will create plumes of sediment when maneuvering. With their greater mass, deeper draft and more powerful thrusters, an increase in resuspended sediment may be experienced. Reef markers will be installed to keep the ships away from reefs and no impacts on marine life are anticipated. It is recommended that sedimentation activity near the reef be monitored by the Natural Resources Conservation Department so that port operations can be modified should sedimentation begin to affect the reef.

Funding for this monitoring activity will have to come from either the Port Authority or NRCA budget

VII. Status of Negotiations and Proposed Conditions and Covenants

The proposed project has been thoroughly vetted with the Governments of Jamaica and Japan. In March 1991, the OECF fielded an appraisal mission and no significant issues were raised. On May 31, 1991, the Government of Japan pledged a yen loan of billion, equivalent to approximately US\$63 million, on a general untied basis, thus paving the way for USAID authorization of this project.

The following covenants are proposed for the Project Agreement with the Government of Jamaica:

1. The Government of Jamaica will undertake to complete the Ocho Rios bypass road, with other donor assistance, in an expeditious manner so that traffic congestion in Ocho Rios will be minimized.
2. The Government of Jamaica will undertake to accomplish land acquisition for the proposed subprojects as quickly as possible in order to avoid delay and potential cost increases.
3. The Government of Jamaica agrees that the exemptions and privileges for Japanese nationals and companies set forth in the Exchange of Notes between the Government of Jamaica and the Government of Japan for the North Coast Development Project, will also apply to U.S. contractors providing goods or services for the North Coast Development Project.

The following condition is proposed for the Project Agreement:

Evidence of agreement between the OECF and the Government of Jamaica (GOJ) for the furnishing of assistance to the GOJ for the North Coast Development Project.

ANNEX A

Logframe

NARRATIVE SUMMARY:

GOAL--To enhance Jamaica's ability to increase employment and foreign exchange earnings through the tourism industry.

PURPOSE--To support the provision of adequate infrastructure facilities in Jamaica's key tourist areas to permit tourism growth to continue at a minimum of 5% per annum until 2000.

OUTPUTS--Five infrastructure subprojects in operation and contributing to the tourism industry.

INPUTS--USAID: Technical assistance in the form of support to the PMU, an Environmental Monitoring program for the Montego Bay sewerage subproject and a Water Loss Management program for Negril.

USAID: Limited commodity support for the Project Management Unit.

OECF: Yen loan to cover technical assistance, training, commodities and construction costs.

GOJ: Local currencies to cover technical assistance, training, locally-procured commodities and construction costs.

OBJECTIVELY VERIFIABLE INDICATORS:

GOAL--Tourism revenues continue to grow; employment in the tourism sector increases.

PURPOSE (End of Project Status)--Better water, sewerage, road transport, drainage and pier facilities are operational in the tourist areas, permitting the effective and environmentally sound reception of an estimated 1 million visitors per year by the year 1995.

OUTPUTS--Five infrastructure subprojects designed and constructed.

INPUTS--Budget (US\$000)

USAID--5,000

OECF--63,000

GOJ-- 17,000

MEANS OF VERIFICATION:

GOAL--National revenue and employment statistics, with some interpretation required of the latter since tourism employment not disaggregated.

PURPOSE--Visitor satisfaction surveys, economic trend lines, evaluation results.

OUTPUTS--Site visits and discussions with public and private sector representatives.

INPUTS--Site visits, quarterly progress reports and payment requests.

ASSUMPTIONS:

GOAL--Other variables affecting tourism do not change dramatically for the worse (e.g., domestic political stability, global economic situation).

PURPOSE--Factors which led to selection of subprojects do not change dramatically (e.g., trend in cruise shipping industry)

OUTPUTS--No severe adverse environmental impacts are discovered during the ongoing environmental monitoring programs (esp. MoBay sewer and Ocho Rios pier).

INPUTS--Availability of funds; Continued donor cooperation.

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ANNEX B

7

THE PLANNING INSTITUTE OF JAMAICA



ANY REPLY OR SUBSEQUENT REFERENCE TO THIS COMMUNICATION SHOULD BE ADDRESSED TO THE DIRECTOR GENERAL P.O. BOX 634 KINGSTON

Telephone 926-1480-8
Telex 3529 PLAN JAM JA
Facsimile (803) 926-4611

39-43 Barbados Avenue
Kingston 5 Jamaica W.I.

Ref No.

October 26, 1990

Mr. Robert Queener
Mission Director
United States Agency for
International Development
Mutual Life Centre
2b Oxford Road
Kingston 5

Dear Mr. Queener:

I write to request the assistance of USAID in co-financing the proposed Tourism Infrastructure Programme with the Government of Japan and the Government of Jamaica.

I understand that USAID is developing a project which will provide approximately US\$5 Million in grant support of the technical assistance requirements for the programme, to be combined with a Japanese yen loan from the OECF in the neighbourhood of US\$60 Million. In addition, the Government of Jamaica will give priority to this activity in providing the necessary counterpart support for the programme.

The Government of Jamaica enthusiastically endorses this programme, which will bring much-needed infrastructure improvements to the areas serving as centres of Jamaican tourism. We look forward to working together with you to implement the planned improvements in Negril, Montego Bay, Ocho Rios and along the North Coast.

Yours sincerely,

Omar Davies
Omar Davies
Director General

:cg

DATE RECEIVED:	10/30
ACTION OFFICER:	O.P.P.B.
INFO TO:	
DIR	NRDO
D:DIR	UNIP
RA	ORIR
OEPE	ORPD
OEEE	ORM
EXO	INUDO
CONT/	...
DUE BY:	11/8
ACTION:	M.C. 11/8/90

DIRECTORS: Dr. Omar Davies - Director General/Chairman, Dr. Allan Kirton, Mrs. Barbara Gunter, Dr. Arnel Henry, Mr. Vernon James, Dr. Edwin Jones, Dr. E.G. Marshall, Mr. Derrick Lalibeaudiere

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5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

Yes, A Country Checklist was Done for the 1991 Amendment to Prod. & Employ. X Program

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. Host Country Development Efforts (FAA Sec. 601(a)): Information and conclusions on whether assistance 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 - Tourism
- b) Yes - in tourism
- c) No
- d) No
- e) No
- f) No

2. U.S. Private Trade and Investment (FAA Sec. 601(b)): Information and conclusions on how assistance 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).

The project is structured so as to enable the U.S. private sector to participate to the maximum, not just in the USAID - financed portion, but in the overall co-financed project

3. Congressional Notification

a. General requirement (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A): If money is to be 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 (unless the notification requirement has been waived because of substantial risk to human health or welfare)?

A Congressional Notification was submitted and expired per STATE

b. Notice of new account obligation (FY 1991 Appropriations Act Sec. 514): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?

N/A

c. Cash transfers and nonproject sector assistance (FY 1991 Appropriations Act Sec. 575(b)(3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?

N/A

4. Engineering and Financial Plans (FAA Sec. 611(a)): 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?

a) Yes

b) Yes

5. Legislative Action (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, 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?

N/A

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6. **Water Resources** (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501): If 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.)

Yes

7. **Cash Transfer and Sector Assistance** (FY 1991 Appropriations Act Sec. 575(b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

N/A

8. **Capital Assistance** (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?

N/A

9. **Multiple Country Objectives** (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 - tourism
- b) Yes - in tourism
- c) No
- d) No
- e) No
- f) No

10. **U.S. Private Trade** (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).

The project is structured so as to enable the U.S. private sector to participate to the maximum, not just in the USAID - financed portion, but in the overall co-financed project

11. Local Currencies

a. **Recipient Contributions** (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.

It is planned that the GOJ will contribute approximately US\$15 million in local currency associated with ESF cash transfer programs.

b. **U.S.-Owned Currency** (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

c. **Separate Account** (FY 1991 Appropriations Act Sec. 575). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

N/A

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

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(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

12. Trade Restrictions

a. Surplus Commodities (FY 1991 Appropriations Act Sec. 521(a)): 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?

N/A

b. Textiles (Lautenberg Amendment) (FY 1991 Appropriations Act Sec. 521(c)): 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. Tropical Forests (FY 1991 Appropriations Act Sec. 533(c)(3)): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

No

14. **Sahel Accounting (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)?

N/A

15. **PVO Assistance**

a. **Auditing and registration (FY 1991 Appropriations Act Sec. 537):** 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.?

N/A

b. **Funding sources (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"):** 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?

N/A

16. **Project Agreement Documentation (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).

N/A

17. **Metric System (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy):** Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the

Not at present.
Specifications are to be performance based and not affected by Jamaica's use of the English system

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extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

18. Women in Development (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?

Not really relevant to this activity.

19. Regional and Multilateral Assistance (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.

Not regional, this is a co-financing effort, however.

20. Abortions (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525):

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No

b. Will any funds be used to lobby for abortion?

No

21. Cooperatives (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

No

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22. U.S.-Owned Foreign Currencies

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.

N/A

b. Release of currencies (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

23. Procurement

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

U.S. small businesses may participate on a competitive basis

b. U.S. procurement (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

c. Marine insurance (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?

N/A

d. Non-U.S. agricultural procurement (FAA Sec. 604(e)): 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.)

N/A

e. Construction or engineering services (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible

No

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.)

f. Cargo preference shipping (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?

No

g. Technical assistance (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

Yes

h. U.S. air carriers (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

i. Termination for convenience of U.S. Government (FY 1991 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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j. Consulting services

(FY 1991 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)?

N/A

k. Metric conversion

(Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

Not at present. Specifications are to be performance based and not affected by Jamaica's use of the English system.

l. Competitive Selection

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

Yes

24. Construction

a. Capital project (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?

N/A

b. Construction contract (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

N/A

c. Large projects, Congressional approval (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 Congressional Presentation), or does assistance have the express approval of Congress?

N/A

25. U.S. Audit Rights (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?

N/A

26. Communist Assistance (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

27. Narcotics

a. Cash reimbursements (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated?

N/A

b. Assistance to narcotics traffickers (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance?

N/A

28. Expropriation and Land Reform (FAA Sec. 620(g)): Will assistance preclude use of financing 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

29. Police and Prisons (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

30. CIA Activities (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? Yes

31. Motor Vehicles (FAA Sec. 636(i)): Will assistance preclude use of financing 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

32. Military Personnel (FY 1991 Appropriations Act Sec. 503): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

33. Payment of U.N. Assessments (FY 1991 Appropriations Act Sec. 505): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes

34. Multilateral Organization Lending (FY 1991 Appropriations Act Sec. 506): Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes

35. Export of Nuclear Resources (FY 1991 Appropriations Act Sec. 510): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes

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36. Repression of Population (FY 1991 Appropriations Act Sec. 511): Will assistance preclude use of financing 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

37. Publicity or Propoganda (FY 1991 Appropriations Act Sec. 516): Will assistance be used for publicity or propoganda 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 propoganda purposes not authorized by Congress?

No

38. Marine Insurance (FY 1991 Appropriations Act Sec. 563): 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

39. Exchange for Prohibited Act (FY 1991 Appropriations Act Sec. 569): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

No

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B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. **Agricultural Exports (Bumpers Amendment) (FY 1991 Appropriations Act Sec. 521(b), 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: (1) 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 (2) in support of research that is intended primarily to benefit U.S. producers?

N/A

2. **Tied Aid Credits (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund"):** Will DA funds be used for tied aid credits?

N/A

3. **Appropriate Technology (FAA Sec. 107):** Is special emphasis placed on use of appropriate technology (defined as 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

4. **Indigenous Needs and Resources (FAA Sec. 281(b)):** Describe extent to which the activity 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 civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

This activity fully recognizes needs and capacity of people of Jamaica

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5. Economic Development (FAA Sec. 101(a)): Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes

6. Special Development Emphases (FAA Secs. 102(b), 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) encourage democratic private and local governmental 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.

- a) The improved road network will enable better trade.
- b) N/A
- c) The project supports the GOI's plan for sustained economic growth.
- d) Women will benefit for better roads, water, sewerage.
- e) N/A

7. Recipient Country Contribution (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)?

N/A - This is a multi-donor project.

8. Benefit to Poor Majority (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

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9. Abortions (FAA Sec. 104(f); FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 535):

a. 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

b. 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

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? No

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? N/A

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? N/A

f. 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? N/A

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization? N/A

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10. **Contract Awards (FAA Sec. 601(a)):** Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

11. **Disadvantaged Enterprises (FY 1991 Appropriations Act Sec. 567):** 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)?

There is no funds set aside for these groups

12. **Biological Diversity (FAA Sec. 119(g)):** 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 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?

N/A

13. **Tropical Forests (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c)-(e) & (g)):**

a. **A.I.D. Regulation 16:** Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16?

Yes

b. **Conservation:** Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent

N/A

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- feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) 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; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) 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; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all relevant U.S. government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?
- 1) N/A
 - 2) N/A
 - 3) N/A
 - 4) N/A
 - 5) N/A
 - 6) N/A
 - 7) N/A
 - 8) N/A
 - 9) N/A
 - 10) N/A
 - 11) Yes

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c. Forest degradation: Will assistance be used for: (1) 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; (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas; (3) activities which would result in the conversion of forest lands to the rearing of livestock; (4) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (5) the colonization of forest lands; or (6) the construction of dams or other water control structures which flood relatively undergraded 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?

1) No

2) No

3) No

4) No

5) No

6) No

d. Sustainable forestry: If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?

N/A

e. Environmental impact statements: Will funds be made available in accordance with provisions of FAA Section 117(c) and applicable A.I.D. regulations requiring an environmental impact statement for activities significantly affecting the environment?

Yes

14. Energy (FY 1991 Appropriations Act Sec. 533(c)): If assistance relates to energy, will such assistance focus on: (a) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases?

N/A

15. Sub-Saharan Africa Assistance (FY 1991 Appropriations Act Sec. 562, adding a new FAA chapter 10 (FAA Sec. 496)): 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) to be used to promote sustained economic growth, encourage private sector development, promote individual initiatives, and help to reduce the role of central governments in areas more appropriate for the private sector; (c) being provided in accordance with the policies contained in FAA section 102; (d) being provided in close consultation with 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; (e) being used 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; (f) 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,

N/A

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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?

16. Debt-for-Nature Exchange (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management.

N/A

17. Deobligation/Reobligation (FY 1991 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 region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?

N/A

18. Loans

a. Repayment capacity (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

N/A

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b. Long-range plans (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?

c. Interest rate (FAA Sec. 122(b)): If development loan is 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?

d. Exports to United States (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?

19. Development Objectives (FAA Secs. 102(a), 111, 113, 281(a)): Extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out 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 the appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?

- 1) The improved road network will enable better trade.
- 2) N/A
- 3) The project supports the GOJ's plan for sustained economic growth.
- 4) Women will benefit for better roads, water, sewerage.
- 5) N/A

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20. Agriculture, Rural Development and Nutrition, and Agricultural Research (FAA Secs. 103 and 103A):

N/A

a. Rural poor and small farmers: If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor; or if assistance is being made available for agricultural research, has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made.

b. Nutrition: Describe extent to which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people.

c. Food security: Describe extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

21. Population and Health (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of

N/A

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mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

22. **Education and Human Resources Development (FAA Sec. 105):** If assistance is being made available for education, public administration, or human resource development, describe (a) extent to which activity strengthens nonformal education, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

N/A

23. **Energy, Private Voluntary Organizations, and Selected Development Activities (FAA Sec. 106):** If assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is:

a. concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment;

Training and intermediate technology, including energy conservation, will be emphasized

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

Is part of a co-financed effort

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c. research into, and evaluation of, economic development processes and techniques;

N/A

d. reconstruction after natural or manmade disaster and programs of disaster preparedness;

N/A

e. for special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U.S. assistance;

N/A

f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development.

The project will help the urban poor

24. Sahel Development (FAA Secs. 120-21). If assistance is being made available for the Sahelian region, describe: (a) extent to which there is international coordination in planning and implementation; participation and support by African countries and organizations in determining development priorities; and a long-term, multidonor development plan which calls for equitable burden-sharing with other donors; (b) whether a determination has been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of projects funds (dollars or local currency generated therefrom).

N/A

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C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. **Economic and Political Stability (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?

N/A

2. **Military Purposes (FAA Sec. 531(e)):** Will this assistance be used for military or paramilitary purposes?

3. **Commodity Grants/Separate Accounts (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?

4. **Generation and Use of Local Currencies (FAA Sec. 531(d)):** Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106?

5. **Cash Transfer Requirements (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 575(b)).** If assistance is in the form of a cash transfer:

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

b. Local currencies: Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

c. U.S. Government use of local currencies: Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?

d. Congressional notice: Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

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ANNEX D

May 31, 1991

JUN - 5 1991

Dr. Omar Davies
Director-General
Planning Institute of Jamaica
39 Barbados Avenue
Kingston 5

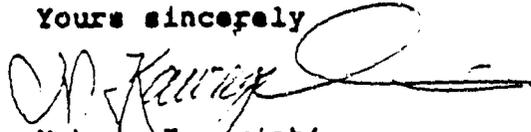
Dear Dr. Davies,

I have the honour to refer to your letter dated December 3, 1990, in which your Government requests the financial assistance of my Government in the North Region Development Project, and inform you that the Government of Japan has decided to extend to the Government of Jamaica a loan in Japanese Yen up to the amount of Eight Billion Six Hundred and Six Million Yen (¥8,606,000,000) under the Financial Recycling Scheme upon the following conditions:

- (1) The rate of interest will be three point zero (3.0) per cent per annum.
- (2) The repayment period will be eighteen (18) years after the grace period of seven (7) years.
- (3) Procurement: Generally untied.

I have further the honour to state that the decision of the Government of Japan on the extension of the loan up to the above mentioned amount was informed by Prime Minister Kaifu to Prime Minister Manley during the course of their meeting in Tokyo on May 31, 1991.

Yours sincerely



Noboru Kawagishi
Charge d'Affaires a.i.

c.c. Sen. the Hon. Dr. Peter Phillips
Office of the Prime Minister

Mr. Robert Queener

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NORTH COAST DEVELOPMENT PROJECT

TERMS OF REFERENCE

PROJECT ACCOUNTANT

JOB SUMMARY

The Project Accountant will be required to supervise expenditure and maintain accounts for the entire North Coast Development Project in collaboration with the foreign Financial Expert. This will involve ensuring that procurement, disbursement and documentation of expenditure for the components funded by OECF (Japan) and the United States Agency for International Development (USAID) follow their guidelines, and that separate accounts are kept for all sub-projects in accordance with specified guidelines of Japan, USAID and the Government of Jamaica (GOJ) with internationally accepted accounting procedures.

DUTIES

Working in conjunction with the foreign Financial Expert, the Project Accountant will:

- (1) be required to establish and maintain an accounting system in accordance with internationally accepted accounting procedures for the Project. He will also initiate budgetary forecasts for Government of Jamaica's contribution to the Project and co-ordinate the preparation of the annual disbursement profile for submission to the OECF (Japan) and USAID;
- (2) be responsible for monitoring and consolidating the individual accounts of the various agencies and entities involved in implementation, including the Project Monitoring Unit (PMU) and for the timely preparation of financial statements, operating reports and reviews for the approval of the OECF (Japan) and USAID);

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2.

- (3) be responsible to the Government of Jamaica through the Project Manager for the funds disbursed to the Project by Government of Jamaica and for the financial progress of the Project as a whole. He will also account to the Board of Directors of the Planning Institute of Jamaica through the Financial Controller of the Planning Institute of Jamaica (PIOJ) for funds disbursed;
- (4) More specifically, the Project Accountant will perform the following duties:
 - (a) Write and issue directives and memoranda outlining procedures and techniques to be followed for the compilation and submission of financial statements and reports;
 - (b) Prepare annual accounting schedules, financial statements and explanations required by the auditors for the auditing of the accounts of the Project as a whole;
 - (c) Monitor monthly expenditure and effect tentative reconciliations in order to keep expenditure within budgetary allocations of the Project Management Unit;
 - (d) Prepare monthly cash flow projections for the PMU for presentation to the Ministry of Finance, Development and Planning through the Financial Controller, PIOJ for Government of Jamaica's contribution;
 - (e) Arrange draw-downs for the Project's special accounts at the Bank of Jamaica for the implementation of the Programme;

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3.

- (f) Consolidate the financial statements of the Project Monitoring Unit, agencies and entities in relation to the Programme for submission to the OECF (Japan) and the USAID;
- (g) Ensure that all procedures, guidelines and other dictates of the agreement with regards to the procurement of goods and services are followed;
- (h) Execute such other duties as may be necessary for the financial management of the North Coast Development Project.

REPORTING RELATIONSHIP

To the Project Manager.

QUALIFICATIONS

Education/Skills

1. Professional qualification in Accounting, e.g., ACCA or its equivalent;
2. Good public/human relations and social skills
3. Ability to communicate effectively in oral and written English format.

EXPERIENCE

A minimum eight years proven experience at a senior financial management level in a large public or private sector organization.

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TERMS OF REFERENCE

JAPAN/USAID CO-FINANCING OF
NORTH COAST DEVELOPMENT PROJECT

PROJECT MANAGER

1. As the Head of the Project Management Unit the locally hired Project Manager shall be responsible for the timely and effective implementation of the Programme which consists of the following five projects:
 - (1) Montego Bay Sewerage System Improvement
 - (2) Lucea-Negril Water Supply System Expansion
 - (3) Northern Coastal Highway Improvement
 - (4) Montego Bay/Drainage and Flood Control
 - (5) Ocho Rios Cruise Ship Pier
2. He/she will execute his/her functions in accordance with Jamaican laws, regulations, policies and practices.
3. The overall responsibility for the coordination and execution of the project is vested in the Planning Institute of Jamaica. The Project Manager will therefore work under the general direction of the Director General of the Planning Institute of Jamaica or his designate.
4. He/she will work in close collaboration with the Heads of the implementing agencies of the projects, viz:
 - (i) Ministry of Construction (Works)
 - (ii) National Water Commission (NWC)
 - (iii) Port Authority of Jamaica
5. He/she will work in consultation with the expatriate Project Adviser who will provide advice on an array of implementation matters to ensure effective and efficient management of the project.

6. He/she will also work in consultation with short-term management consultants who will assist in providing project management services (PMS) "including but not limited to the following functions:
 - (a) overall project management services to monitor and manage the detailed design, tender process and disbursement for each project during implementation
 - (b) construction management services to collectively control and monitor the quality, progress and budget of all the sub-projects
 - (c) environmental monitoring services for the water-related sub-projects."
7. He/she shall, in regular consultation with the Heads of the implementing agencies, be specifically responsible for the periodic assessment of the project activities.
8. He/she will therefore be required to report to the PIOJ on the progress of the work of the various sub-projects for review on a quarterly basis.
9. If in his/her judgement the timely completion of project activities and outputs appears to be in jeopardy at any time, he/she shall be specifically responsible for alerting the PIOJ and recommending any decisions or corrective measures which need to be taken to put the completion of activities back on schedule.
In particular he/she shall
 - fully understand the objectives, activities and

arrangements for the project

- plan, coordinate and monitor project activities in harmonization with implementing agencies, and other national and local authorities
- coordinate and supervise the activities of the project staff
- prepare and submit for approval to the Project Management Committee through the PIOJ, a work plan detailing the principal project activities to cover the first quarter commencing June 1, 1991, and thereafter on a monthly basis;
- prepare and coordinate annual and quarterly budgets, recommending the earmarking and commitment of funds
- supervise the maintenance of project accounts and ensure their timely presentation
- prepare and present quarterly reports on project activities in collaboration with Ministry of Construction (Works), National Water Commission and Port Authority of Jamaica and monitor performance against planned accomplishments
- prepare terms of reference and arrange contracts in consultation with the Project Advisor, supervise work and assess performance of short term consultants and provide necessary assistance to them
- evaluate results and recommend modifications in the implementation plan, reallocating resources where necessary.

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QUALIFICATIONS

Education/Skills

- (1) Post Graduate degree in Engineering and training in Project Management;
- (2) Good public/human relations and social skills
- (3) Ability to communicate effectively in oral and written English format.

EXPERIENCE

A minimum of ten years proven experience at a senior management level with a large organization. Preference will be given to a candidate with strong management skills and experience in dealing with regional and international organizations.

TERMS OF REFERENCE
NORTH COAST DEVELOPMENT PROJECT
EXECUTIVE SECRETARY

DUTIES AND RESPONSIBILITIES

Under the supervision of the Project Manager, performs the following secretarial functions:

- (1) Arranges appointments and maintains Project Manager's calendar, receives visitors, places and screens telephone calls and answers queries with discretion;
- (2) Arrange meetings, both internal and external, some involving high-ranking officials, and takes minutes and/or notes at meetings;
- (3) Takes dictation using shorthand on a variety of subject matters and transcribes, ensuring that spelling, punctuation and format are correct. Types correspondence, documents and reports, some of which are highly confidential;
- (4) Receives, screens, logs and routes correspondence, attaches necessary background information and maintains follow-up system;
- (5) Drafts non-substantive correspondence and ensures follow-up;
- (6) Maintains policy, confidential and general files;
- (7) Clears correspondence for conformity with established procedures and accuracy of statements before being signed by Project Manager;

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- (8) Selects and makes pertinent abstracts and undertakes searches for information;
- (9) Keeps lists of names, addresses and telephone numbers of ministers, government officials and members of the diplomatic corps;
- (10) Makes travel arrangements for the Project Manager and performs liaison duties with other units;
- (11) Performs other duties as required.

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FEASIBILITY REPORTS

1) Montego Bay Sewerage

Montego Bay Pre-Feasibility Report for Proposed Sewerage
System Upgrading Vol. 1 & 2
Beak Associates Consult. Ltd

Montego Bay Sewerage System Improvement Project
Environmental Analysis.
Beak Associates Consult. Ltd

2) Negril Water Supply

Lucea Negril Water Supply Feasibility Study
Camp Dresser & Mckee International Inc.

3) North Coast Highway Improvements

North Coast Feasibility Study Vol. 1 & 2
De Leuw, Cather International Ltd

4) Ocho Rios Port Expansion

Ocho Rios Cruise Ship Pier Project Feasibility Study
Harza Engineering Co. Ltd

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ANNEX H

Detailed Cost Factors
(All figures in US dollars)

Element One: Locally Hired PMU Staff
and commodity support

Project Manager	5 years @ \$40,000 p.a.	\$200,000	
Project Accountant	5 years @ \$15,000	\$50,000	
Secretary	5 years @ \$5,000	\$25,000	
Commodities		<u>\$25,000</u>	
			\$300,000

Element Two: Project Advisor and other TA

The expatriate Project Advisor 4.2 years @ \$200,000 p.a (incl. institutional overhead)		\$840,000	
Short Term TA 12 person months @ \$20,000		\$240,000	
Local travel, etc.		<u>\$80,000</u>	
			1,160,000

Element Three: Environmental Monitoring

Five year Baseline Change Study 36 person-months @ \$20,000		\$720,000	
Travel and Other costs		\$40,000	
Public education and awareness campaign		<u>\$140,000</u>	
			\$900,000

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Element Four: Negril Water Loss Management

Through Major TA contract:

Technical services to design program 4 person-months @ \$20,000	\$80,000	
Technical advisor for implementation 2.0 years @ \$200,000	\$400,000	
Commodity procurement	\$250,000	
Maintenance manuals	\$100,000	
Other TA: 2 person months @ \$20,000	\$40,000	
Travel and other costs	<u>\$150,000</u>	\$1,020,000

Through FARAs with the NWC \$1,080,000

PSC Engineer \$240,000

Evaluation and Audit \$150,000

Contingency \$150,000

TOTAL \$5,000,000

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ANNEX I, Part One

TECHNICAL ANALYSIS

MONTEGO BAY SEWERAGE IMPROVEMENT PROJECT

The existing wastewater treatment plant in Montego Bay was designed in 1968 to treat sewage from a population of 24,000 people which is 70,000 less than its present population. The collection systems are being expanded rapidly as new construction developments take place without the corresponding plant upgrade, resulting in overloading of the existing Central Waste Water Treatment Plant (CWWTTP).

In order to determine the process that was most suitable for the treatment plant expansion, six different treatment alternatives were evaluated namely: Trickling Filter; Trickling Filter Solids Contact; Rotating Biological Contactor; Activated Sludge; Aerated Lagoons and Facultative Lagoons. These were evaluated using an assumed average daily wastewater flow of 5.0 mgd and costs were projected to 1993 based on an inflation rate of 10% per year from 1990. A "No Action" alternative was also considered but the most financially attractive and technically feasible option found was the Facultative Lagoon. The proposed project is now divided into 3 sections namely:

- 1) Expansion/Improvement of the existing CWWTTP.
- 2) Expansion/Improvement of the existing Central Sewerage System (CSS) covering the densely populated downtown areas.
- 3) Construction of a facultative lagoon for secondary treatment.

Design Flows

The topography of the project area readily lends itself to the design of gravity sewers for the upper parts of southern Montego Bay and the low-lying downtown coastline areas which are the main population centres. These include all the hotels, commercial and light industrial facilities and some housing development.

The design flows are calculated from the present flows and projected by annual growth rates to the year 2000 for the CWWTTP, and to 2015 for the proposed collection systems.

Annual growth rates for Montego Bay were 4.07% for the period 1970 to 1982 compared with the national rate of 1.42%, it is apparent that the area is expected to attract a high population growth and will demand priority sewerage development. A conservative growth rate of 4.0% is used to project for the period up to the year 2015. The project will be capable of addressing future flows based on demands because the development will take place on a phased basis, after review of actual trends.

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It is highly recommended that no new sewer connections to the system should be provided until expansion to the CWWTP is operational. This is necessary to restrict any additional future flows into CWWTP which will further overload its capacity.

Treatment Process

The proposed treatment process consists of preliminary and primary treatment by clarifiers with solids handling facilities to stabilize and de-water waste solids generated by the treatment. This will be followed by secondary treatment using facultative lagoons sited in the vicinity of the CWWTP.

Discharge from the lagoons will be directly to the Bogue Mangrove Forest by way of a perimeter manifold discharge pipe. The mangroves will help polish the treated effluent prior to final discharge.

The major plant improvements will be to electrical and mechanical equipment such as upgrading clarifiers, sludge digesters, pumps and motors. The proposed secondary treatment process is chosen because of the following factors:

- 1) It is capable of reliably producing a high quality effluent.
- 2) Is easy to operate.
- 3) Requires low maintenance.
- 4) Electrical power requirements are minimal.

Collection System Expansion

The collection system proposed is a combination of buried sewers draining by gravity, pumping stations and force mains to the headworks at the existing CWWTP. This system involves installation of 4.0 mgd pumps with electrical controls and standby generators, installation of approximately 5 miles of buried pipes for priority areas and approximately 3 miles of additional piping dependent upon availability of project funds.

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The selected area contains all of the coastal area west of the international airport to Reading in the west, all of urban Montego Bay, and lands suitable for housing/industrial development in Fairfield and Bogue. Areas to be served by the proposed system are selected based on the following factors:

- The extent of organised housing development suitable for and requiring sewerage collections.
- Proximity to the coastline and the potential for adverse environmental impact from sewage waste.
- Areas planned for future development, involving industry, commerce, hotels and housing where sewerage would be desirable.
- Undeveloped areas with no planned or future foreseeable development.

Most of the areas excluded have unorganized housing development, where sewerage is not planned or is not economically and technically feasible due to site topography.

The collection system in the proposed project serves areas where the existing sewers offer the opportunity for service to adjacent new areas particularly in the downtown area of Montego Bay and Mt. Salem areas. Two independent collection and transmission systems are proposed and will a) serve the remaining Bogue Industrial Area including provision for future flows from Reading Area and b) supplement the existing MoBay downtown sewers including upper areas south of Montego Bay.

Materials and Installation

Because construction materials and equipment is available in limited quantities in Jamaica, some of the critical items will have to be imported from abroad. Some of the items which will not readily be available are:

- Pipe and fittings
- Pumps and motors
- Generator sets
- Electrical controls

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The project provides technology and construction methods which are consistent with local construction engineering practices. Local project inputs are labor force, plant and equipment, cement, sand and aggregate.

The construction problems which may create difficulties are:

- Hard limestone rock excavation.
- Groundwater along coastal areas.
- Poor soil conditions at the existing treatment plant site.
- Deep excavation through the high point to Cornwall College.
- Flash flooding in the lower areas.
- Narrow streets in some areas requiring limited open trenches.

Environmental Monitoring

The continued and increasing discharge of inadequately treated sewage to Montego Bay will adversely impact on both the biological environment and economic well-being of the region. With marine based recreational attractions, any public concern either real or perceived regarding water quality and recreational impacts could result in a decline in acceptability of the resorts in the project area. In addition, a decrease in the final water quality will affect fish habitats, wildlife habitats particularly alteration of nature and productivity of bird species.

Based on this, it has been recommended that detailed field investigations of the Bogue Mangrove Forest, Fish Sanctuary and the Montego Bay marine habitat be conducted to define current conditions of the local and offshore environs.

This project provides a 5 year biological monitoring program within the areas mentioned above to evaluate the following:

- a) Need for advanced treatment or additional nutrient removal from treated effluent beyond the levels provided in this project (Phase I), to meet water quality and environmental objectives.
- b) The effects and potential consequences that treated effluent discharge may have on the Bogue Mangrove and lagoon.

- c) Impacts that decreased salinity and turbidity may have on the water quality of the mangrove and lagoon.

This program will provide empirical data that would a) assist in better definition of the sewage treatment requirements and mitigating measures needed as the system expands and b) improve the technical database for the region to evaluate other projects of a similar nature.

Conclusions

Based on a review of the Environmental Analysis Report prepared by Montgomery/ Beak in July 1990, the Mission concludes that improvement of the existing Montego Bay Sewerage System and Central Treatment Plant is feasible. USAID considers that this sub-project is technically feasible and will significantly increase the capacity of the existing treatment plant to adequately process and discharge sewage collected from the Montego Bay area.

The proposed project will assist the Government of Jamaica in improving its tourism product and its tourism marketing strategy to optimize the chances for future success in what is, inevitably, a competitive and risky business.

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ANNEX I, Part Two

Lucea - Negril Water Supply

The towns of Negril and Lucea and the areas between them located in western Jamaica are supplied with water from the Logwood Treatment Plant. The present 2.9 imgd drinking water supply, treatment and distribution system are operating at their maximum capacity and are incapable of effectively producing additional supplies to meet future demands without capital construction improvements. This technical analysis is based upon the findings of a 1988 feasibility study carried out by local consultants Earle & Associates and more recently revised by Camp Dresser & McKee International Inc.

Present and Future Demand

Estimates of present demand by major water use category, residential and tourism are based on population and tourism activity projections. Current average daily demand is 2.48 imgd and this is expected to grow to 5.58 imgd by the year 2010 i.e. the end of the 20 year planning period.

Based upon projections of system supplies and consumer demand in the Lucea - Negril (L-N) area, it is estimated that with improvements to the current system in place, the L-N service area demands can be met until around the year 1998 - 2000. After this period, additional sources of water will have to be added to the system.

Alternative Sources of Water Development

Alternative resources for the development of increased supplies of potable water for the L-N service area were considered and include (i) further development of the Orange River/Fish River Blueholes to yield up to 5.5 imgd (ii) tapping into the Great River supply which has a current uncommitted potential of 10 imgd and, (iii) the Roaring River Springs with a current uncommitted potential of 15 imgd.

Conclusion

Significant cost differentials exist between the three alternatives due to the length and hence cost of transmission facilities required to deliver water to the L-N area. Alternative (i) above involves the further development of the "Logwood" (present source and facilities) resources to their fullest potential whereas alternatives (ii) and (iii) require an additional 20 miles of trunk transmission mains.

Alternative (i) representing the development to the fullest extent of the existing water resource area i.e. from the Orange/Fish River Blueholes is the recommended route.

Recommended Source

The Orange River Limestone Aquifer has a reliable yield of at least 4.00 imgd. In addition to this, pumped diversions of the Orange River and Fish River Blueholes are expected to provide an additional safe yield of 1 imgd thereby giving an overall safe yield of 5 imgd..

The discharge from both the Orange River and Fish River Blueholes were found to be within WHO guidelines for drinking water quality with respect to chemical constituents and physical characteristics that may affect aesthetic quality.

The proposed utilization of the discharge from the Orange and Fish River Blueholes will convert their associated rivers from perennial to seasonal streams. An instream flow assessment is therefore required in the design stage of the project.

Recommended Works

Development of the Orange and Fish River source is detailed in the two feasibility studies mentioned previously and includes the following actions:

- (i) The capacity of the NWC Logwood store facilities at Logwood be increased by a further 3.00 imgd. This requires additional water storage facilities, sludge lagoons, sludge drying beds and related appurtenances.
- (ii) Improvements to the Negril Water distribution system including an additional storage tank/reservoir.
- (iii) Implementation of the Water Loss Management Program.

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North Coast Highways Technical Analysis

This Technical Analysis is premised upon the Government of Jamaica's Five Year Plan to expand the number of visits by foreigners to the island by 40%. This plan requires the importation of additional vehicles in the island and the subsequent improvement and maintenance of the road network.

The coastal road from Negril to Ocho Rios is the highway over which the majority of tourists travel. The section from Ocho Rios to Port Antonio is also quite heavily trafficked. The section between Montego Bay and Ocho Rios is part of the principal ground transport route between Montego Bay and Kingston, the nation's capital. Some sections of this north coast road are still in very good condition, however, other areas are badly cracked, deformed, potholed and in need of reconstruction.

In the design of the pavement structure, differing combinations of component layers were evaluated in an effort to optimize strength/cost, with a 10 year design life being adopted for pavement reconstruction and a 20 year life for sections where realignment required new construction. Use of the computer model HDM-111, developed under World Bank auspices, made practical the evaluation of several alternatives of periodic maintenance for each study section.

Evaluation was carried out on a number of alternative improvement and periodic maintenance schemes to determine optimum levels of economic rate-of-return within a range of geometric standards which would provide reasonable levels of serviceability at constrained funding levels. For any given section that was analyzed, the minimum construction option was that necessary to satisfy 10-year pavement strength requirements.

Description of the HDM-111 Planning Model

The broad concept of the HDM model used for analysis is quite simple:

Three interacting sets of cost relationships are added together over time in discounted present values, where costs are determined by first predicting physical quantities of resource consumption which are then multiplied by unit costs or prices.

Vehicle speed, which is a major determinant of vehicle operating costs, is itself related through a complex of probabilistic functions to road geometric design, surface condition, vehicle type and driver behavior.

The HDM model is used to make comparative cost estimates and economic evaluations of different policy options, including different time staging strategies, either for a given road project on a specific alignment or for groups of links on an entire network. It can quickly estimate the total cost for large numbers

of alternative project designs and policies, year by year, for up to thirty years, discounting the future costs if desired at different postulated interest rates, so that the user can search for the alternative with the lowest discounted total cost. Or if preferred, the user can call for comparisons in terms of rate of return, net present value, or first year benefits. In a single computer run the model can evaluate up to twenty different road links, each having up to ten sections with different design standards and environmental conditions. Each link can have a different traffic volume. Further, different maintenance standards can be implemented on different sections. At any time, any section can be upgraded (e.g., from earth to gravel or from gravel to paved) and the road can be realigned or widened. Altogether, up to fifty pairs of alternatives can be compared in one run.

In order to make these comparisons, of course, the model must be given detailed specifications of the various alternative sets of construction programs, design standards, and maintenance and other policies to be analyzed, together with unit costs, projected traffic volumes, and environmental conditions. Since there is always the possibility of error in coding these inputs, the model includes an extensive checking program which examines the inputs for formal errors and internal inconsistencies. Warning messages are automatically produced when such errors or inconsistencies are found, or when the program is requested to extrapolate relationships beyond their empirically validated range.

Input data into the model was based upon (a) traffic studies and (b) pavement evaluation.

(a) Traffic Studies

Of the three permanent traffic counting stations located in the island one station is located on the Northern Coastal road near Discovery Bay. Data from this station as well as recent studies such as manual classified volume counts and automatic recorded counts were conducted. In addition origin - destination studies were conducted at two sites. Average daily traffic on an annual basis was calculated using seasonal adjustment factors. The results of these traffic studies have been used to forecast the traffic volumes and compositions over the next ten and twenty years.

Weighing of trucks was also carried out in each major sector of the northern coastal road, to supplement limited existing truck weight data. Results confirmed that significant amount of gross overloading is practised in the case of three-axle and articulated trucks.

All of the traffic related data were used in the determination of the recommended thickness of new pavement and asphaltic concrete overlays.

(b) Pavement Evaluation and Materials Investigation

Pavement evaluation was performed recently to determine the structural and functional characteristics of the existing carriageways. Non-destructive testing methods used including the Benkelman rebound deflection and In-Vehicle Bump Integrator roughness measurement. The Transportation Road Research Laboratory (TRRL) Dynamic Cone Penetrometer (DCP) was used to complement the structural information obtained from the other tests. The degree of cracking, ravelling and other pavement deterioration was estimated by visual condition surveys.

In general, measured deflection values are not high because of good subgrade soils, high values have been measured only in areas with weak subgrades. Fortunately, rutting is not a generalized problem with only very few localized areas have ruts greater than 10 mm.

The engineering analyses conducted using the various inputs into the HDM model indicates that a program of pavement strengthening, with some improvement of horizontal and vertical alignment in critical sections is required.

The vast majority of sections either require an overlay now because of evident distress or will need to be overlaid within the next five years to retard accelerating deterioration and restore rideability and operating costs to acceptable levels. Widening of narrow carriageways and provision of partial all weather shoulders are justified in many sections due to favourable economic rates of return obtained when these safety options are added.

In general rehabilitation/reconstruction work will consist of a combination of any of the following options:

- (i) Patching
- (ii) Crack sealing
- (iii) Seal coat
- (iv) Widening
- (v) Asphaltic Concrete overlay
- (vi) Reconstruction
- (vii) Realignment
- (viii) Bushing
- (ix) New shoulders and drainage works
- (x) Safety features such as traffic signs and the painting of stripes.

The particular alternative chosen using the above possibilities is based upon the one with the highest Net Present Value.

Construction Material Sources

Suitable material can be found at a reasonable distance from the total northern coastal road. Good quality materials such as surfacing aggregates would have an average 40 miles of haul.

Findings

Table S-1 shows the recommendation for each road link or section considered.

The recommended programme of improvements on the study road (Table S-1) are based on those alternatives which minimize total transport costs. In some instances, return on capital investment, as measured by Net Present Value (NPV), was essentially the same for mutually exclusive alternatives with and without improvement in width, curvature and gradient. Inasmuch as there are certain to be benefits obtained by road users from widening of very narrow carriageways without hard shoulders, and from elimination of dangerous sharp curves - especially in flat terrain, the construction alternative was usually chosen if NPV for construction and non-construction were practically the same. To facilitate project prioritization, the improvements, by study link, are listed in descending order of IRR.

In general, pavement overlay as a construction option proved to be justified in the majority of sections because existing pavements need to be strengthened to adequately support the axle loads projected for the next ten years. There are a few sections, such as the one from Negril Airport to Green Island, where road geometry is quite good and no immediate overlay is required, either for strengthening or for smoothness. However, there are localized areas of distress which should be repaired, and bushing is required to permit full utilization of the paved carriageway and to provide proper sight distance around curves.

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ANNEX I, Part Four

MONTEGO BAY SOUTH GULLY FLOOD CONTROL

The South Gully Drainage Channel (The Creek) is one of three major water courses traversing the commercial sector of Montego Bay, the capital of the parish of St. James. The city suffers from flooding during heavy rainfall as the capacity of the existing channel is inadequate to collect and discharge run off from watershed areas.

Corrective work to this flooding is based upon a feasibility study produced by the Government of Jamaica. The solution calls for the design of a new drainage channel along the course of the existing creek, of sufficient capacity to efficiently discharge runoff from the watershed area into the sea. In general, the proposed South Gully drainage channel would uplift the environment of the city and be a benefit to both residents and visitors/tourists alike.

Design Considerations

The project envisages a channel, approximately 3,950 feet long, designed for a return period of 1 in 10 years. The design includes (but is not limited to) a channel of varying sections and comprises:

- approximately 1,200 ft. of open channel lined with rubble stone wall;
- approximately 800 ft. of three (3) cell box culverts;
- approximately 900 ft. of five (5) cell box culverts;
- approximately 950 ft. of reinforced concrete open channel.

ANNEX I, Part Five

OCHO RIOS PORT DEVELOPMENT

In Ocho Rios there are 2 berths for exclusive use of cruise ships which currently accommodate ships of up to 750 feet long. In order to cope with the trend towards increasing ship sizes, four alternatives were investigated. These were :

1. Extension of Berth No.2
2. Construction of a new pier. (North Pier)
3. Institution of a tender operation for future traffic.
4. No improvements.

The selected alternative is the extension of Berth No. 2 which shows an economic rate of return of 34.6 percent and includes extending and strengthening the existing Berth No.2, upgrading of existing mooring dolphins, and provision of additional mooring dolphins and navigation aids. This will be designed to provide the modifications to the existing Berth to accommodate the mega-liner class cruise ships. Technical design considerations are analyzed based on 5 characteristics namely ship maneuverability, mooring and berthing structures, obstructions to other marine activities in the harbor area, passenger comfort, and source of construction components. These are further discussed below.

1. Ship maneuverability

The extension of Berth No.2 is proposed to be 220 feet from its eastern end, with a combination of light access platforms. The proposed northeast orientation was selected based on prevailing wind patterns in the area which show the majority of wind blowing from the north-east and which have reached speeds of 30 to 40 knots. Even under these wind conditions vessels should be able to enter and exit the harbor, and efficiently berth alongside the pier extension. The presence of Mallard's reef in the northeast of the bay prevents high swell in the harbor resulting from these high winds.

Based on the fact that water depths in the harbor range from 30 to 50 feet, the proposed extension will not create any difficulties resulting from insufficient depths, most cruise ships reportedly have a draft of between 24 to 28 feet. Two new reef markers will be provided to aid in navigation and maneuvering around the Mallard's Reef, this is essential to reduce the risk of ship damage.

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2. Mooring and berthing structures

Berthing conditions will be improved by construction of a heavy-duty berthing dolphin and upgrading of two existing berthing dolphins. The impact loading from larger expected ship loads and from northeast winds hitting the vessels at right angles (Maximum condition), can be more economically resisted by the proposed structures than with any other orientation of the extension.

The pier extension will increase berthing capacity to accommodate a vessel up to 650 feet long on Berth No. 1 simultaneously with a vessel of up to 855 feet long on Berth No. 2. Its design will be of pile construction on a foundation of medium-fine sand and silt with pile caps and dolphin structures of cast-in-place concrete. Walkway platforms will be precast concrete light-duty and will be of similar design and construction to the existing facilities and landscape.

Construction of three new mooring dolphins and upgrading of two existing mooring dolphins will be undertaken in this project to increase the lateral load carrying capacities expected from the mooring lines of larger vessels. The design of these structures will result in an increased load carrying capacity for ships up to 900 feet long and 70,000 tons displacement, representing a 125 percent increase in displacement over its present capacity. The critical construction work item will be installation of 94 piles which are scheduled to last 4 months. An overall construction period of 12 months is proposed.

3. Obstructions to existing marine activity

Construction of this extension will permit cruise ship maneuvering and berthing to take place in the designated 60 percent of the bay area (60 acres). This will allow recreational watersport, swimming, glass-bottom boat tours, scuba diving, fishing and other activities to continue in the remaining area. These activities are enjoyed by both cruise-ship and stop-over visitors, and generate economic and social benefits to the Ocho Rios area.

In addition, the proposed extension will not produce any significant obstructions and interference from mooring lines from ships berthed simultaneously on Berths 1 and 2.

4. On-Shore Facilities:

The present on-shore facilities include a terminal building housing customs, immigration, currency exchange operations, a 50 space parking lot, a security control gate and an uncovered concrete walkway providing access to shore. These appear adequate for the present level of traffic on peakdays, but these need to be upgraded to service future passenger traffic demands.

The proposed improvements are limited to:

- Construction of protective canopies adjacent to the terminal building, over walkways on Berth No. 2, and overwaiting areas to provide additional covered area for passengers.
- Upgrading water system connections to efficiently provide potable water to the mega-liners from the improved water supply (additional 6 MGD).
- Provision of 12 additional tour vehicles, to improve flow of tourists from terminal area into town.
- Provision of a 25 space overflow parking and staging area adjacent to entrance road.
- Reclaim approximately 1 acre of land near the terminal area for construction.

The proposed pier extension will provide light access platform walkways leading to shore and the terminal facilities will provide far more comfortable accommodation than those presently existing. In particular, spill-over passengers using Reynold's Bauxite Pier will no longer be subjected to the aesthetic problems resulting from bauxite dust and will enjoy more convenient walking access to Ocho Rios along Turtle Beach.

The planned on-shore improvements are a function of the projected number of arrivals and can be undertaken in stages as the traffic figures increase. Based on this fact, the design will allow flexibility for expansion of these facilities as needed.

The design of the extension will allow minimal disruption to passenger traffic as Berth No.1 will still be operational. In the case of Berth No. 2, there may be temporary dislocation for 4 months of construction during piling installations, but this may be necessary to temporarily reroute ships to Montego Bay .

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5. Other Infrastructure Needs

It is envisaged that other infrastructure upgrading will be necessary to efficiently operate the project facilities when completed. These are as follows :-

- a) Water supply upgrading - This is currently under construction through GOJ funding and being implemented by the National Water Commission (NWC). When completed, the system will provide an additional 6 MGD of potable water to the Ocho Rios area including the project site.
- b) Sanitary sewer upgrading - The cruise ships currently docking at Ocho Rios are required to provide adequate on-board capacity for storing sewage effluent during its 8 hour stay in port because this is an intransit port and not a offloading ("home") port. However, the expected passengers from larger ships will generate additional sewage effluent in the city by using restaurants, recreational facilities and stores which will adversely impact on the existing overloaded condition of the Ocho Rios Sewage Treatment Plant. GOJ through NWC, has requested proposals for design of the improvements which will reportedly provide treatment for discharge flows through the year 2005 and will increase the treatment capacity sixfold. Funding for this project will be provided by GOJ and the European Economic Council (EEC) and design is scheduled for start in June 1991 with construction beginning March 1993.

The Harza Feasibility study did not address the need for city sewer upgrading. However, because of the adverse social and environmental impacts that could arise if this sewerage system upgrading project is not implemented in a timely manner, OEEE feels that the Pier Extension subproject should not be included in the TIPS project if GOJ does not have contracts executed for the sewerage system upgrading.

- c) Roadway improvements - These are planned for completion by 1991 and are being implemented by the Ministry of Construction (Works). These improvements include a by-pass road around Ocho Rios and is reportedly underway but construction activities have not progressed. The city streets cannot safely accommodate the current pedestrian and vehicular traffic generated by existing cruise ships docking at Ocho Rios and the projected traffic from larger ships will exacerbate the problem.

Because of this, road improvements will need to begin prior to the Pier Extension and OEEE recommends that the inclusion of this subproject in the TIPS project be contingent on Ocho Rios By-Pass being under contract.

6. Source of Construction Components

The estimated project cost for the pier extension is US\$ 8.22 million in 1990 and includes allowances for contingency, engineering, construction, vehicles and escalation at 10 percent. Direct foreign costs are expected to be US\$ 2.55 million or 31 percent of the project cost and will procure engineering, construction goods and services.

The major foreign components will be:

- Tubular steel piles as these are not manufactured locally.
- Piling equipment and contractors for pile installation.
- Bollards for mooring vessels.
- Fendering equipment and appurtenances.

Local inputs to the project will be limited to :

- Labor force
- Cement
- Sand and aggregate

Local costs are estimated to be US\$ 5.67 million and it is reported that approximately 50 percent of the local costs would be indirect foreign exchange costs of imported items that are included in the locally procured equipment, materials and services.

Conclusions

Based on a review of the feasibility report prepared by Harza Engineering Co. Ltd. in July 1990, the Mission concludes that improvement of the existing Berth No. 2 is feasible in general. USAID considers that this sub-project is technically feasible and will significantly increase the capacity of the existing facilities to accommodate larger ships of the mega-liner class, together with the associated passenger traffic.

Because tourism is Jamaica's most important source of foreign exchange earnings, and to meet new competition coming into the market, the Government of Jamaica is improving its cruise ship facilities in Ocho Rios as part of its marketing strategy to optimize the chances for success in what is, inevitably, a competitive and risky business.

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THE PORT AUTHORITY OF JAMAICA

The Port Authority of Jamaica is a Statutory Corporation, functioning as the Government of Jamaica's principal Maritime Agency. In this regard, the Authority performs both regulatory and developmental functions.

In its regulatory role, the Port Authority monitors and regulates the navigation of all vessels berthing at Jamaica ports or using the sea lanes in our territorial waters. Secondly, the Authority, through the mechanism of a public hearing, regulates the tariff regime on the public wharves.

In its developmental role, the Authority is charged with fostering the development, expansion and upgrading of the country's port facilities. In pursuit of this particular role, the Port Authority pioneered the establishment of the Container Trans-shipment Port, which was complemented by the development of the Export Free Zones.

ORGANISATION AND MANAGEMENT

The Port Authority is administered by a Board of 10 members, appointed by the Minister of Public Utilities and Transport, who has portfolio responsibility for the Port and Shipping Industry.

Day to day functions of the Authority are undertaken by:

- Chairman/Chief Executive Officer
- General Manager
- Deputy General Manager
- Seven Divisional Directors (covering the areas of Finance, Administration/Research and Special Projects, Engineering and Port Development, Harbors and Port Services, Planning and Operations, Legal/Secretariat and Free Zones)

Subsidiaries of the Authority are:

- Kingston Free Zone Limited
- Montego Bay Free Zone Limited
- Kingston Trans-shipment Port
- Port of Montego Bay

Under Harbors and Port Services Division, the Port Authority provides and maintains navigational aids, operates a Tug service, pilotage service, and Ferry Service (Kingston/Port Royal).

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The Ministry is currently in the process of re-assessing its organisational structure with a view to overcoming past problems in co-ordinating the technical services provided, overlapping of functions and the inefficient use of physical and human resources.

STAFFING OF THE MINISTRY

The Ministry has a staff complement of two thousand and forty seven (2047), with representatives from a wide variety of occupations. Five hundred and twenty five (525) or twenty six percent (26%) of the total staff belong to the Technical Support Group, with the professional group comprising five percent (5%) of the total.

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MINISTRY OF CONSTRUCTION/WORKS

The Ministry of Construction is divided into two entities (i) the Public Works division and, (ii) the Housing division. The Works sector is charged with the portfolio responsibility of:

- The construction and maintenance of all major arterial and secondary roads throughout the island.
- The construction and maintenance of secondary roads assigned to it from time to time.
- The construction and maintenance of government buildings.
- The installation and maintenance of machinery and equipment associated with the above.
- The carrying out of civil engineering works to control flood water.
- The operation of a mechanical units pool and workshop for Central Government Agencies.
- The provision and maintenance of a national traffic management system.

ORGANIZATION AND MANAGEMENT

The present organization structure of the Ministry is based along disciplined lines and was introduced in April 1959 following the recommendations of Urwick Orr and Partners Limited who at that time carried out a study on the then Public Works Department. The Chief Executive and Accounting Officer is the Permanent Secretary with the Chief Technical Director (CTD) being the Government's Chief Advisor on Technical and Engineering matters. This structure remained basically the same over the years, during which certain modifications were effected, the major one being the introduction of the Directorate of Major Projects in 1966.

Five Technical Directors report to the CTD viz: Director of Major Projects, Director of Technical Services, Director of Maintenance, Director of Electrical and Mechanical Services and Director of Construction. These Directorates are a mixture of program units and discipline based units.

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For ease of management, the Company is structured into four regions - Metropolitan, Northern, Central and Western. Each region has a Manager for operations and one for commercial activities. Supplementary services are provided by each of the other directorates.

The Commission is currently experimenting with the establishment of a single Regional Manager to be responsible for all functions in the region. If successful, replication will follow in the other regions. This will give greater autonomy to each region, expand the job content of each Manager and result in a more efficient management proves.

PHYSICAL FACILITIES

The National Water Commission has about one thousand (1,000) facilities islandwide. These vary from the Hermitage reservoir (390 MIG), the Mona reservoir (800 MIG) and the Constant Spring Treatment Plant (18 IMGD) to small diesel driven pumping installations serving rural villages. As may be expected, the larger installations are located in the two cities, Kingston and Montego Bay as well as the larger towns.

Wastewater facilities comprise some twenty six (26) plants (Greenwich (12 IMGD) and Western (6 MIGD) and smaller packaged secondary treatment plants ranging from 1 MIGPD to 0.25 MIGPD.

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NATIONAL WATER COMMISSION

The National Water Commission is a statutory organization responsible for water supply and sewerage services in Jamaica. The Company provides water supply to 1.8 million persons (82% of population) by a combination of household service connection, standpipes and wayside tanks. Trucking of water is also undertaken on a regular basis in a number of remote communities. Sewerage service is confined mainly to the large towns and is estimated to reach about 15% of the population. The Commission maintains a registry of some 240,000 customer accounts with a projected growth rate of about 2% per annum.

ORGANIZATION AND MANAGEMENT

The National Water Commission is headed by a Board of Commissioners appointed by government with a tenure of three (3) years. The Board is primarily responsible for the policies of the Commission. The executive functions of the organization are carried out by a staff of about 3,800 headed by a Managing Director, supported by three (3) Deputy Managing Directors and ten (10) functional Directors.

The National Water Commission is organized along functional lines with the areas of activity as outlined hereunder:

1. Engineering - Responsible for large to medium capital works as well as specialized engineering services.
2. Operations - Daily operation and routine maintenance of water and wastewater systems.
3. Water Quality - Essentially a staff function, carrying out a wide range of analytical services and ensuring potability standards.
4. Maintenance - Responsible for major break-down as well as preventative maintenance of plant and equipment.
5. Finance - Financial and accounting services.
6. Commercial - Meter reading, billings, rate collections and customer service.
- 7a. Planning (Engineering) - Responsible for development plans.
- 7b. Planning (Corporate) - Co-ordinates development plans with Financial Department.
8. Support Services - purchasing, stores, transportation.
9. Administration - General administration and properties.
10. Human Resources and Development (HR&D) - Personnel services.

PORT DEVELOPMENT

The most significant project undertaken by the Port Authority in pursuit of its developmental role has been the two-phase program for the Port of Kingston which established the Container Trans-shipment Port and the Kingston Export Free Zone.

Port of Montego Bay

The most significant innovation in their port development program in Montego Bay is the construction of two new cruise ship piers. Currently, cruise vessels and commercial vessels are required to share existing berths, resulting in a measure of inconvenience when priority has to be given to cruise vessels.

Cruise Port Management

The Authority also operates, through management contracts, the Ocho Rios and Port Antonio cruise ship piers.

DEVELOPMENT AND OPERATION OF FREE ZONES

As pointed out earlier, the Port Authority pioneered the development of Export Free Zones in Jamaica as a segment of our port development program. Currently, the Authority owns and operates two Zones in Kingston and Montego Bay.

These Zones have assisted significantly in boosting port cargo traffic in addition to national economic contribution in employment creation and foreign exchange earnings.

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ACTION: AID-2 INFO: AMB DCM ECON

VZCZCKG0002
 PP RUEHKG
 DE RUEHC #8938/01 0640520
 ZNR UUUUU ZZH
 P 050513Z MAR 91
 FM SECSTATE WASHDC
 TO RUEHKG/AMEMBASSY KINGSTON PRIORITY 2384
 RUEHWN/AMEMBASSY BRIDGETOWN 2452
 BT
 UNCLAS SECTION 01 OF 02 STATE 068938

05-MAR-91 TOR: 12:06
 CM: 09686
 CHRG: AID
 DIST: AID
 ADD:

AIDAC KINGSTON FOR SCHEIBAL BRIDGETOWN FOR RDO/C

E.O. 12356: N/A

TAGS:

SUBJECT: ENVIRONMENTAL THRESHOLD DECISIONS AND APPROVAL
 OF ENVIRONMENTAL ASSESSMENTS FOR USAID/JAMAICA TOURISM
 INFRASTRUCTURE SUPPORT PROJECT COMPONENTS (532-0168)

FOR REA/CAR

REF: KINGSTON 1696

1. LAC DEPUTY CHIEF ENVIRONMENTAL OFFICER (DCEO), J. WILSON, HAS REVIEWED AND HEREBY APPROVES TWO ENVIRONMENTAL ASSESSMENTS AND THREE INITIAL ENVIRONMENTAL EXAMINATIONS FOR COMPONENTS OF SUBJECT PROJECT. APPROVAL IS SUBJECT TO CONDITIONS PROVIDED IN PARAGRAPHS 2 THROUGH 7 BELOW.

2. MONTEGO BAY SOUTH GULLY DRAINAGE IMPROVEMENT

MISSION REQUEST FOR NEGATIVE DETERMINATION IS HEREBY APPROVED. IEE NUMBER IS LAC-IEE-91-20. COPY OF IEE WILL BE POUCHED TO MISSION FOR INCLUSION IN PROJECT FILES.

3. NORTH COAST HIGHWAYS COMPONENT.

A POSITIVE DETERMINATION IS MADE FOR THIS COMPONENT (IEE NO. LAC-IEE-91-21). TYPES OF HIGHWAY IMPROVEMENTS TO BE FUNDED UNDER THIS COMPONENT VARY FROM MINOR TO MAJOR MINOR IMPROVEMENTS CONSIST OF RESURFACING RESEALING GRADING, BRUSHING, WIDENING, RECONSTRUCTION OR REALIGNMENT OF THE ROAD WITHIN EXISTING RIGHTS OF WAY. SHORT-TERM IMPACTS OCCURRING DURING CONSTRUCTION WILL BE MITIGATED THROUGH CAREFUL ATTENTION TO DESIGN AND CONSTRUCTION SPECIFICATIONS. OTHERWISE, NO ADDITIONAL ENVIRONMENTAL REVIEW WILL BE REQUIRED FOR THESE MINOR TYPES OF ROAD IMPROVEMENTS. MAJOR IMPROVEMENTS CONSISTING OF REALIGNMENTS OR RELOCATIONS OUTSIDE OF EXISTING RIGHTS OF WAY ARE ALSO BEING CONSIDERED UNDER THIS COMPONENT. APPROVAL OF SUCH MAJOR IMPROVEMENTS IS SUBJECT TO PREPARATION OF AN ENVIRONMENTAL ASSESSMENT AS PART OF THE PRELIMINARY DESIGN PROCESS AND APPROVAL OF THE EA BY THE LAC CHIEF ENVIRONMENTAL OFFICER

DATE RECEIVED: 3/3	
ACTION OFFICE: ORR	
INFO TO:	
DIR	ARDO
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RIA	OCHR
OEPE	OPPD
OEER	OCM
EXO	RHUDO
CONT	R.F.
DUE BY: 3/7	
ACTION:	

UNCLASSIFIED STATE 068938/01

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FURTHERMORE, A PROJECT COVENANT SHALL BE ESTABLISHED TO PREVENT DISBURSEMENT OF PROJECT FUNDS FOR CONSTRUCTION OF NEW ROAD SECTIONS THROUGH ANY ENVIRONMENTALLY SENSITIVE SITES, FORESTS, WETLANDS, OR ENDANGERED SPECIES HABITATS.

4. OCHO RIOS PIER EXTENSION.

A POSITIVE DETERMINATION IS HEREBY MADE BY THE LAC DEPUTY CHIEF ENVIRONMENTAL OFFICER (IEE NO. LAC-IEE-91-22). POSITIVE DETERMINATION IS BASED UPON POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS ARISING FROM PIER IMPROVEMENTS THAT PERMIT BERTHING OF MEGALINERS IN OCHO RIOS. POTENTIAL IMPACTS RESULTING FROM SUCH IMPROVEMENTS AND THE RESULTANT NEAR DOUBLING OF TOURISTS VISITING OCHO RIOS ON A WEEKLY BASIS INCLUDE POSSIBILITY OF WATER QUALITY DETERIORATION AND EUTROPHICATION OF OCHO RIOS BAY FROM INCREASED INPUTS OF WASTE AND SEWAGE, SMOTHERING OF MALLARD'S REEF BY SEDIMENT RESUSPENDED BY MEGALINERS DURING DOCKING MANEUVERS, AND DAMAGE TO THE CORAL REEF IN THE AREA THROUGH INCREASED VISITATION BY SNORKELERS, SCUBA DIVERS, AND TOURISTS ON GASS BOTTOM BOATS. CONSEQUENTLY, AN ENVIRONMENTAL ASSESSMENT (EA) MUST BE CONDUCTED TO EVALUATE THE SIGNIFICANCE OF SUCH POTENTIAL IMPACTS AND RECOMMEND ANY NECESSARY MITIGATIVE MEASURES, AS NECESSARY AND APPROPRIATE. THIS EA MUST BE PRECEDED BY AN EA SCOPING EXERCISE TO IDENTIFY THE SCOPE

AND SIGNIFICANCE OF ISSUES TO BE ADDRESSED IN THIS EA INCLUDING DIRECT AND INDIRECT IMPACTS. LAC/DR/E LOOKS FORWARD TO RECEIVING THE EA SCOPE OF WORK FOR REVIEW AND APPROVAL.

5. ENVIRONMENTAL ASSESSMENT - MONTEGO BAY SEWERAGE SYSTEM IMPROVEMENT.

THE ENVIRONMENTAL ASSESSMENT FOR THIS COMPONENT IS HEREBY APPROVED BY LAC DCEO, J. WILSON. APPROVAL IS SUBJECT TO FOLLOWING CONDITIONS: (1) USAID/JAMAICA WILL IMPLEMENT A BIOLOGICAL MONITORING PROGRAM TO EVALUATE THE IMPACTS OF THE PROPOSED DISCHARGE OF TREATED EFFLUENT INTO THE ADJACENT MANGROVE AND LAGOON. THIS MONITORING PROGRAM WILL DETERMINE WHETHER ADVANCED TREATMENT OR ADDITIONAL NUTRIENT REMOVAL IS REQUIRED TO MEET WATER QUALITY AND ENVIRONMENTAL OBJECTIVES. (2) USAID/JAMAICA WILL UNDERTAKE THE DEVELOPMENT OF A LOCAL PUBLIC EDUCATION AND COMMUNITY DEVELOPMENT PROGRAM TO INCORPORATE THE IDEAS AND CONCERNS OF MONTEGO BAY RESIDENTS INTO THE FINAL PLANNING AND DESIGN OF THE

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PROPOSED WASTEWATER FACILITIES. AN EVALUATION OF THE PROGRESS IN IMPLEMENTING THE RECOMMENDED MONITORING PROGRAM AND OTHER MITIGATIVE ACTIONS SHALL BE INCORPORATED INTO ROUTINELY SCHEDULED PROJECT EVALUATIONS.

6. ENVIRONMENTAL ASSESSMENT - LUCEA-NEGRIL WATER SUPPLY DEVELOPMENT.

THE ENVIRONMENTAL ASSESSMENT FOR THE LUCEA-NEGRIL WATER SUPPLY COMPONENT OF THE SUBJECT PROJECT IS HEREBY APPROVED BY LAC DCEO, J. WILSON. APPROVAL IS SUBJECT TO THE CONDITION THAT A.I.D. FINANCE AN INSTREAM FLOW STUDY OF THE ORANGE AND FISH RIVERS. THIS STUDY WILL EXAMINE THE POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS ARISING FROM CONVERSION OF THE ORANGE AND FISH RIVERS FROM PERENNIAL TO SEASONAL STREAMS DUE TO DRAWDOWN OF WATER AT THE LOGWOOD TREATMENT PLANT. THIS STUDY WILL: (1) INVENTORY DOWNSTREAM HUMAN USES OF WATER, INCLUDING AGRICULTURAL, INDUSTRIAL, TOURIST, AND DOMESTIC USES; (2) PREPARE FLOW DURATION CURVES OF THE ORANGE AND FISH RIVERS DOWNSTREAM OF LOGWOOD, SHOWING RAINY AND DRY SAS M AND PRE- AND POST-PROJECT CONDITIONS; (3) MAP THE FRESHWATER-SALT WATER INTERFACE OF THE NORTH CANA DURING THE WETTEST AND DRIEST MONTHS OF THE YEAR,

INCLUDING MEASUREMENTS OF FRESHWATER INFLOW VIA THE ORANGE RIVER AND CUTOFF CANAL TO EVALUATE THE IMPORTANCE OF THE BLUEHOLES AND THE ORANGE AND FISH RIVERS AS SOURCES OF FRESHWATER FOR THE NORTHERN END OF THE NEGRIL MORASS DURING THE DRY SEASON, AND MONITOR THE IMPACT OF THE PROJECT ON THE SALINITY GRADIENT TO AVOID SALINE INTRUSIONS; (4) EVALUATE THE WILDLIFE AND BOTANICAL RESOURCES IN THE NORTH CANAL ESTUARY AND ASSOCIATED NEGRIL MORASS AND THE TOLERANCE OF THESE BIOTIC RESOURCES TO LONG-TERM CHANGES IN SALINITY PAYING PARTICULAR ATTENTION TO POTENTIAL IMPACTS ON ANY ENDANGERED SPECIES, SUCH AS THE AMERICAN CROCODILE (*CROCODYLUS ACUTUS*); (5) BASED ON THE ABOVE ANALYSES, RECOMMEND MINIMUM INSTREAM FLOWS OR OTHER MEASURES APPROPRIATE FOR PROTECTING HUMAN OR NATURAL RESOURCE USE, AND THE INTEGRITY OF FRAGILE AND IMPORTANT HABITATS, IN PARTICULAR THE NEGRIL MORASS WHICH REPRESENTS A UNIQUE BOTANICAL AREA CONTAINING MANGROVES HERBACEOUS PALUSTRINE WETLANDS AND PALM FORESTS.

7. IF THE INSTREAM FLOW STUDY AND BIOLOGICAL INVENTORY REQUIRED ABOVE DETERMINE THAT MITIGATION MEASURES ARE REQUIRED, THE LUCEA-NEGRIL WATER SUPPLY DESIGN STUDY SHOULD INCORPORATE THEM INTO THE OVERALL PROJECT. POTENTIAL MITIGATION MEASURES COULD INCLUDE FISH AND WILDLIFE HABITAT IMPROVEMENTS TO ADDRESS LOWER DRY SEASON STREAMFLOWS, MODIFICATION OF WATER FLOWS IN THE MORASS TO PREVENT OR MINIMIZE CHANGES IN THE SALINITY GRADIENT, AND MAINTENANCE OF MINIMUM FLOWS IN THE ORANGE AND FISH RIVERS TO PROTECT THEIR INTEGRITY FOR HUMAN OR NATURAL RESOURCE USES. AN EVALUATION OF THE PROGRESS IN CARRYING OUT THE INSTREAM FLOW STUDY AND IMPLEMENTING

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ANT NECESSARY MITIGATIVE MEASURES SHALL BE INCORPORATED INTO ROUTINELY SCHEDULED PROJECT EVALUATIONS.

B. MISSION IS COMMENDED FOR SENSITIVITY TO ENVIRONMENTAL CONCERNS IN THE DESIGN OF THE VARIOUS PROJECT COMPONENTS, AS DEMONSTRATED IN MATERIALS SUBMITTED TO OUR OFFICE FOR REVIEW AND IN PLAN MENTIONED IN REFTEL TO FUND ADDITIONAL ENVIRONMENTAL BASELINE STUDY FOR MONTEGO BAY AND RECOMMENDED LOW FLOW STUDY FOR THE ORANGE RIVER/NEGRIL WATER SUPPLY. LAC/DR/E LOOS FORWARD TO WORKING CLOSELY WITH MISSION TO ENSURE ENVIRONMENTAL SOUNDNESS OF THIS IMPORTANT ENTERPRISE DESIGNED TO EXPAND TOURISM INFRASTRUCTURE IN JAMAICA

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MINUTES OF DISCUSSIONS
ON
NORTH COAST DEVELOPMENT PROJECT
BETWEEN
THE OVERSEAS ECONOMIC COOPERATION FUND OF JAPAN (OECD),
THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)
AND
THE PLANNING INSTITUTE OF JAMAICA (PIOJ)

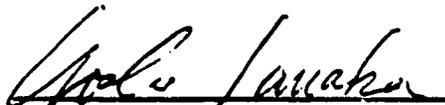
DATE: MARCH 12, 1991
PLACE: KINGSTON

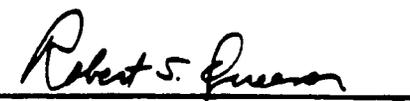
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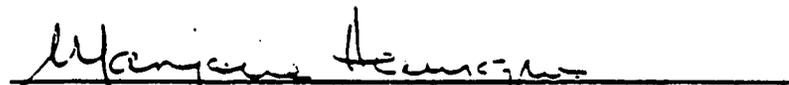
Based on the Implementation Programme submitted to the Government of Japan and OECF in 1990, an OECF Mission visited Jamaica from March 3-13, 1991 and carried out a field survey and had detailed discussions with the USAID Mission and officials of PIOJ.

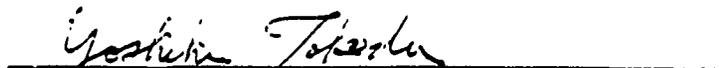
The OECF Mission, the USAID representatives and PIOJ officials hereby confirm the results of their discussions as follows:

1. The OECF Mission, USAID Mission and PIOJ officials confirm the description of the Project and its estimated cost as detailed in Annex I attached hereto.
2. The OECF Mission, USAID Mission and PIOJ officials confirm the implementation schedule and measures to be adopted for the implementation of the Project as in Annex II attached hereto.
3. The OECF Mission, USAID Mission and PIOJ officials confirm the main points discussed in Annex III attached hereto.


Mr. Y. Sanaka
Deputy Managing Director
Loan Department 3, OECF


Mr. Robert Queener
Director, USAID
Kingston


Mrs. Marjorie Henriques, Deputy Director General, PIOJ


Mr. Y. Takeda, Deputy Director
Loan Department 3, 3rd Division, OECF

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ANNEX I

1. Description of Project

1) Objective

The objective of the Project is to improve infrastructure in the Northern Coast of Jamaica impacted by tourism.

2) Sub-projects

The Project consists of the following five subprojects:

Sub-project A: Montego Bay Sewerage Improvement Project

Sub-project B: Lucea-Negril Water Supply System Project

Sub-project C: Northern Coastal Highways Improvement Project

Sub-project D: Montego Bay Drainage and Flood Control Project

Sub-project E: Ocho Rios Port Expansion Project

3) Location

Northern Coast of Jamaica (See Attachment 1)

4) Implementing Agencies

Ministry of Construction for Sub-project C and D

National Water Commission for Sub-project A and B

Port Authority of Jamaica for Sub-project E

5) Outline of Sub-projects

a) Sub-project A is sewerage improvement project which covers the area, which is shown in Attachment 2 and which is planned to meet the

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sewerage requirements in the Year 2,000, includes the following components:

- Collection System
- Pump Station
- Central Treatment Plant
- Solids Handling
- Environmental Monitoring Programme
- Public Education and Awareness Programme

b) Sub-project B is improvement of Water Supply System which covers the two towns of Negril and Lucea and is planned to increase the intake from 2.9 mgd to 5 mgd. This Sub-project includes the following components:

- Water Resource
- Treatment Plant
- Distribution Pipeline
- Water Loss Management Programme

c) Sub-project C is planned to improve the coastal road from Negril in the west to Port Antonio in the east through Montego Bay with reasonably adequate and consistent standards. This Sub-project includes the following major works:

- Asphalt Concrete Overlay
- Widening
- Reconstruction

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- Realignment
- New Shoulder
- Bushing and Blading
- Drainage

d) Sub-project D is planned to improve South Gully in order to prevent flooding.

e) Sub-project E is planned to extend existing pier Berth No. 2 and includes the following work components:

- Expansion of Pier
- Mooring System
- Additional Work

2. Estimated Cost

	Foreign Component		Local Component		Total	
	(Million Yen)	US Equivalent (Million US\$)	(Million Yen)	US Equivalent (Million US\$)	(Million Yen)	US Equiva (Million US\$)
I. Construction & Procurement						
1. Land Acquisition	0	0	732	9.425	732	9.425
2. Construction & Procurement	3,231.0	23.929	4,931	36.322	8,162	60.45
3. Contingency	323.0	2.393	566	4.195	889	6.588
Sub-Total	3,554.0	26.322	6,229	49.942	9,783	72.46
II. Engineering Service (Consultants)						
USAID Finance	637.0	4.720	38	0.28	675	5.000
OECP Finance	690.0	5.110	326	2.418	1,016	7.528
Total	4,881.0	36.132	6,593	60.840	11,476	84.99

Estimated cost by each Sub-project is shown in

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ANNEX II

1. Implementation Schedule for the Project is as detailed in Attachment 4.
2. Estimated Annual Financial Requirements

Fiscal Year	Foreign Currency		Local Currency	
	Mil. Yen	US\$ Equiv (000)	J\$ (000)	US\$ Equiv (000)
1991	156	1,157	4,828	600
1992	1,065	7,888	64,069	7,969
1993	1,821	13,491	166,831	20,751
1994	1,702	12,607	154,298	19,191
1995	137	1,009	2,643	329
TOTAL	4,881	36,152	392,669	48,840

3. OECF Assistance to the Project Management Unit
 OECF loan will be provided to cover a financial specialist, for 10 man months and an environmental expert for 10 man months in the Project Management Unit (PMU).
4. Budgetary Allocation of the Government of Jamaica
 It has been confirmed that the PIOJ shall take the necessary measures to secure the funds required for efficient implementation of the Project for each implementing Agency.
5. OECF/USAID Co-financing Scheme
 Page 6-7 third paragraph of the Final Report of the North Coast Development Project should be amended,
 (See attachment 5a and 5b)

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ANNEX III

Main points discussed:

1. The OECF Mission, USAID representatives and PIOJ officials agreed to include in the PMU a financial expert (10 man-month) to be financed by OECF, who knows OECF disbursement and other procedures in order to enhance smooth implementation of the project. It was also agreed that such expert would be employed by an independent contract.
2. It was agreed that the low water flow study (as recommended in the feasibility study) related to Negril Water Supply Project would be done by National Water Commission (NWC)
3. The PIOJ stated that a new project to improve Negril Sewerage System, planned to be financed by European Economic Community (EEC) would be implemented.
4. The OECF Mission stated that there is no OECF rule prohibiting a consultant who had executed a feasibility study (F/S) from participating in the detailed design and supervision of the project.
5. The OECF Mission, the USAID representatives and PIOJ officials agreed that the detailed design and construction supervision would be executed in one contract between a consultant and each of the three implementing agencies - NWC, PAJ & MDC.
6. The OECF Mission, the USAID representatives and PIOJ officials agreed that the Terms of Reference of the consultants, to carry out the detailed design and supervision are as described in Attachment 6, and also agreed to Terms of Reference for Project Management Unit, ^{PMU} Project Manager as described in attachment 7 ^{and 8}

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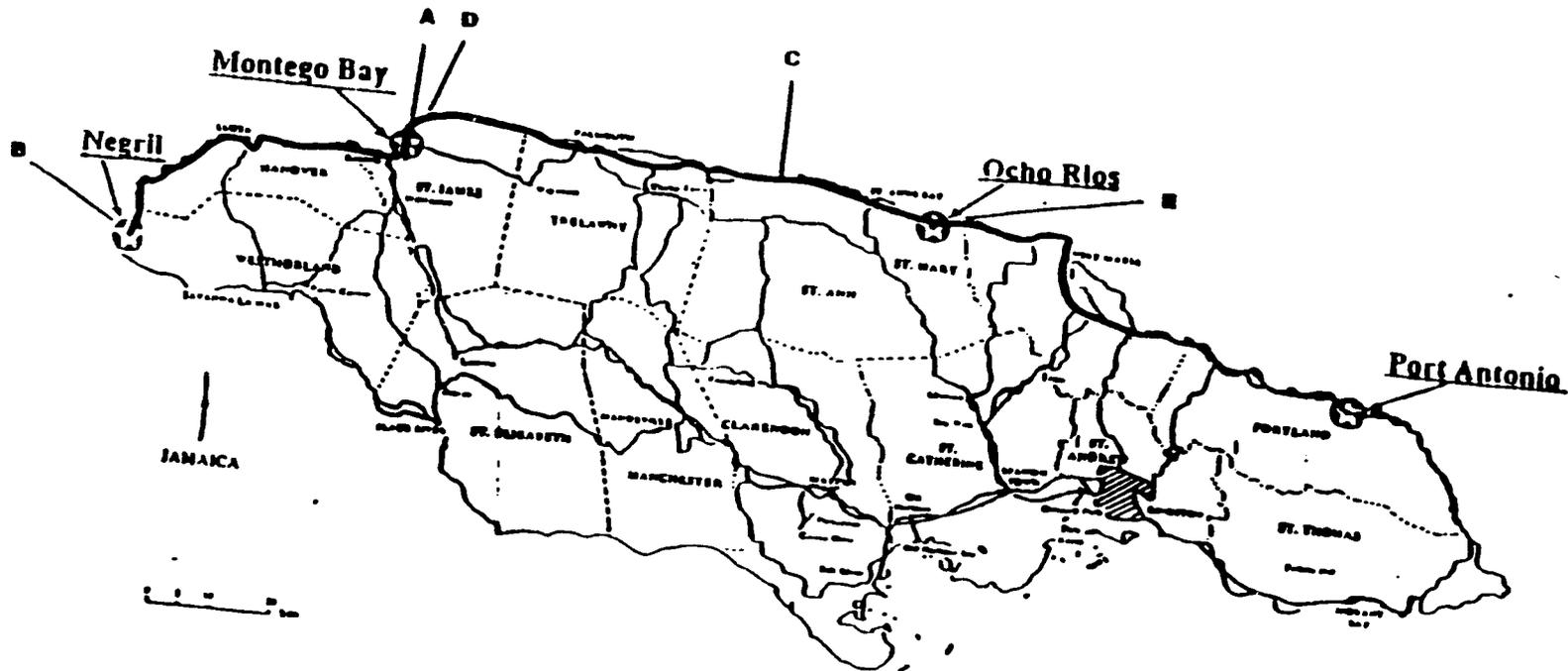
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7. The OECF Mission, the USAID representatives and PIQJ Officials agreed that the detailed design/construction supervision consultant should be selected by using short list in accordance the OECF guidelines , relying on advertisement to develop the short list.

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Project Location Map

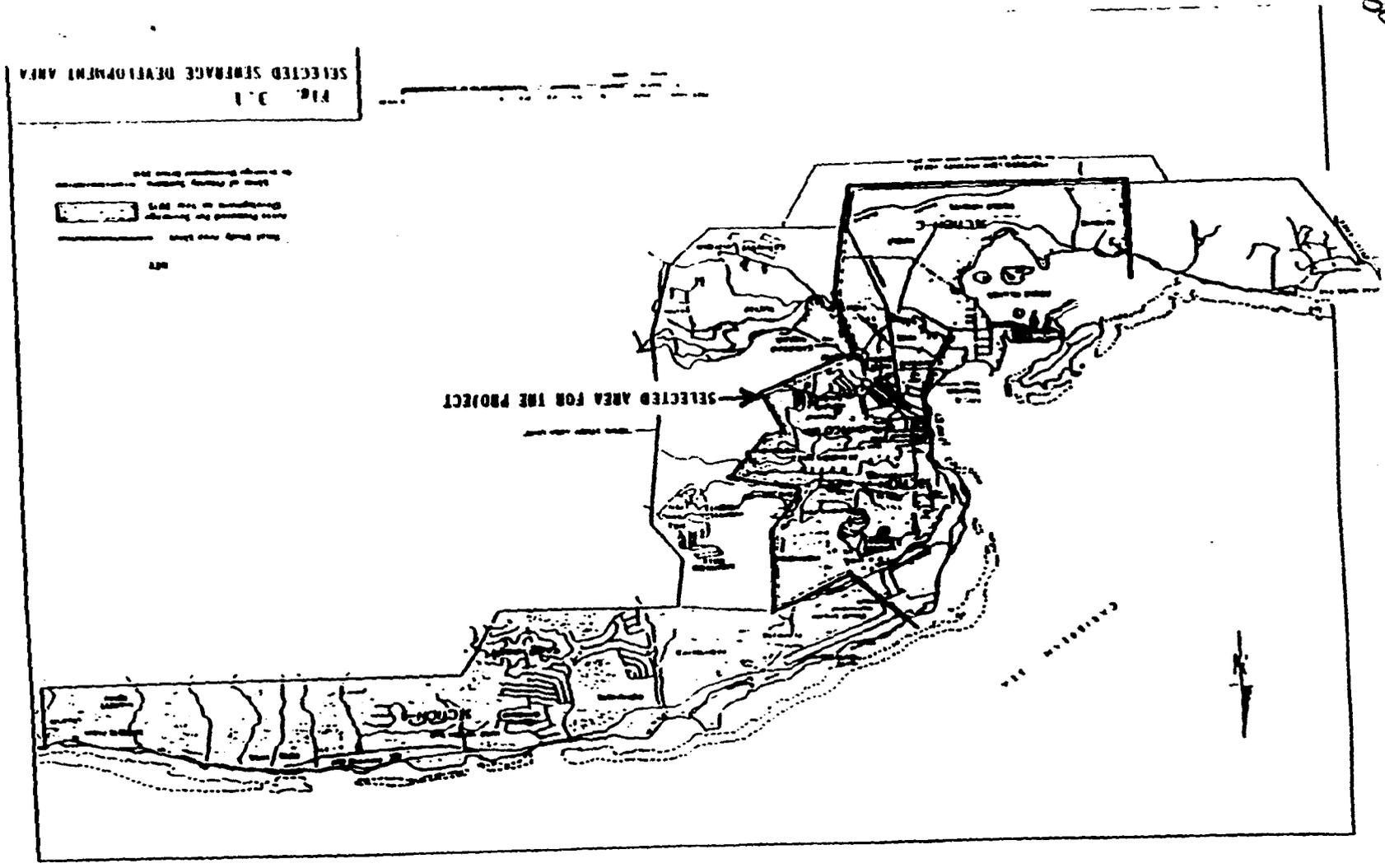


- A. Montego Bay Sewerage System Improvement Project
- B. Lucea-Negril Water Supply System Expansion Project
- C. Northern Coastal Highways Improvement Project
- D. Montego Bay Drainage System Improvement Project

Attachment 1

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FIG. 1-1 ATTACHED SEWERAGE DEVELOPMENT AREA



Attachment 3

		N.B. Sewerage	Negril Water Supply	Northern Coastal Highways	N.B. South Gully	Ocho Rios	Total
I. Construction and Procurement							
1) Land Acquisition	L/C (J\$) F/C (US\$)	10,360.0 0	285.5 0	22,298.3 0	10,050.0 0	0.0 0	42,993.8
2) Construction and Procurement	L/C F/C	90,979.4 5,773.2	12,515.8 7,576.3	145,138.2 4,029.0	21,534.5 2,294.7	13,974.3 4,256.3	288,267.8 24,930.6
3) Contingency	L/C F/C	9,185.9 577.3	3,280.1 757.9	16,743.7 402.9	3,138.5 229.5	1,597.5 425.6	33,327.6 1,893.2
Sub-Total of I	L/C F/C	100,524.2 6,355.5	16,081.4 8,333.9	184,180.2 4,431.9	34,723.0 2,524.2	15,571.8 4,681.5	335,080.5 26,223.1
II. Engineering Service Consultants							
a) JICA							
4) USAID	L/C F/C						2,000.0 1,000.0
5) OECF	L/C F/C						2,000.0 1,000.0
Sub-Total	L/C F/C						4,000.0 2,000.0
b) Other							
2) D/S and S/W	L/C F/C						18,000.0 4,000.0
3) Other	L/C F/C	900.0	2,100.9				3,000.9
Sub-Total of II	L/C F/C						21,000.0 9,000.0
Total	L/C F/C						356,080.5 35,223.1
Grand Total							J\$391,301.0 US\$55,152.0 US\$84,391.0

Japanese Yen 11,674 million

- Detailed Design
- Supervision
- Local Cost: US\$100
- Foreign Cost: US\$100

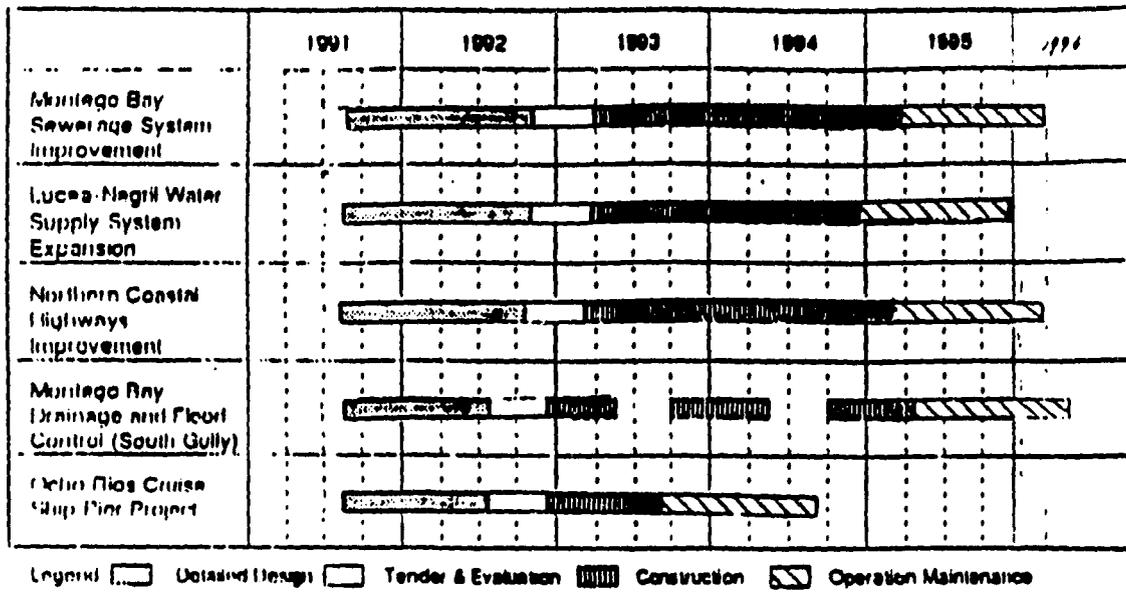
Physical Contingency = 10%
Escalation added Foreign 3.5%, Local 3.5%
Exchange Rate = US\$1 = Yen 135 = .89.26

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Attachment 4

Fig. 5.3 OVERALL IMPLEMENTATION SCHEDULE



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Attachment 5

6.3 OECF/USAID Co-financing Scheme.

Up until now, most of the feasibility study for the sub-projects have been conducted with the USAID's grant assistance. The principal idea for improvement of the tourism infrastructure which is a rather new field for USAID in Jamaica, has been well conceived through a continuous dialogue between the Government of Jamaica and USAID.

It is imperative for both institutions, USAID and OECF, to flexibly adapt their respective procedures and criteria under the proposed co-financing scheme so that the Government of Jamaica can make best use of the external financial resources. Different from the USAID's assistance as mentioned in 6.3.1, of the SAPROF Report the OECF loan is available not only for technical assistance but also for detailed design, construction/supervision and procurement including certain percentage of the local cost to be involved.

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Taking into consideration the importance of 1) expediting smoother and earlier commencement of the project, and 2) reconciling the procedures and guidelines of the two different donors, the portions to be covered by each resource are recommended as mentioned below:

USAID - Project Management Unit

- Project Manager
- Project Advisor
- Project Accountant
- Secretary
- Other short term consultants as required
- Public Education/Awareness Programme
- Environmental Monitoring Program for the Montego Bay Sewerage.
- Water Loss Management Program for the Lucea Negril Water Supply Scheme.

- OECF -
- Detailed design for the sector projects
 - Construction/Supervision/Procurement
 - Financial Expert
 - Other specialist as required

The merits of this scheme are as follows:

1. The establishment of the PMU can proceed as soon as there is a pledge by the Government of Japan as this aspect of the project is to be funded by USAID. This will facilitate more timely and effective implementation.
2. The merging into one contract of the detailed design and construction supervision activities will facilitate smoother implementation regarding interpretation and modification if necessary. This will place the supervision of construction activities in the implementing agencies rather than in the 'offsite' project management unit.

As mentioned in Section 6.2, both donors should be kept informed of the progress and other information of the Project with periodical receipt of progress reports. They may be from time to time request to have a meeting with the GOJ at the suggestion of the PMU.

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Attachment 5b

USAID/Jamaica Proposal
for
Role for AID
under the
North Coast Development Project

Presented below is USAID/Jamaica's proposal for an alternative role for AID to fall within the guidelines agreed upon by AID/Washington and the Japanese Ministry of Foreign Affairs.

Under the following approach, AID would provide \$5 million in grant financing for five elements:

— The locally-hired Project Manager and support staff for the Project Management Unit (PMU).

USAID assistance to the PMU will help ensure that the project is implemented effectively. The PMU will coordinate the implementation of the Project's five subprojects. The PMU will be responsible for overall project management, including bid evaluation and construction management. The locally hired Project Manager will head up the PMU and will be responsible for the timely and effective implementation of the project in accordance with Jamaican laws, regulations, policies and practices. A project accountant and secretary will also be hired.

We propose approximately 56 person months for the Project Manager together with approximately the same amount of local accountant and secretarial services, for a total budget of US\$0.3 million.

— The U.S.-hired Project Advisor to assist the Project Manager, and other short term technical assistance as required.

The expatriate Project Advisor will advise the PMU on an array of implementation matters. He or she will provide advice to the Project Manager to ensure effective and efficient management of the project, i.e., to serve as a troubleshooter and general resource person for review of designs and bid evaluation, oversight of construction, maintenance of the Project's Management Information System, financial management matters, and coordination of environmental activities. Other specialized, short-term technical advice would be provided on an as-needed basis.

We propose 50 person months of long-term expatriate services, and 24 person months of short term technical services. The estimated cost of this assistance to the PMU is \$1.4 million.

-- The Environmental Monitoring Program for the Montego Bay Sewerage Project.

The feasibility study for the Montego Bay Sewerage Project did not anticipate significant negative environmental impact as a result of the planned improvements to the facilities but recommended that additional environmental studies be undertaken during the life of the project. The SAPROF consultants endorsed this recommendation and broadened it. USAID/Jamaica proposes to finance the five year Baseline Change Study and public education and community awareness program arising from these recommendations. The cost for this portion of the project will be approximately \$0.9 million.

-- The Water Loss Management program for the Lucea-Negril Water Supply Project.

This program will reduce water losses in the Lucea-Negril water supply system by improving the condition of water mains, installing meters and repairing leaks and is viewed by USAID/Jamaica as an integral part of the overall effort to increase Negril's water supply to Negril. The feasibility study estimated the potential for water losses at 30-35% of system flow and strongly recommended a leakage control program. The cost, in 1988 prices, was estimated at \$2.1 million, although the cost in present prices might be greater. AID would finance as much of the program as possible, depending on the cost of the first three items and given an overall AID grant project budget of \$3 million.

-- Evaluation, Audit and Contingency.

Evaluation, audit and contingency, which are standard AID project items, are budgeted at \$0.3 million.

In sum, we propose that AID's role be to finance a \$3 million package consisting of technical assistance to the PNU, the environmental monitoring program for the Montego Bay Sewerage subproject and a water loss management program for the Negril Water subproject. In addition, we are prepared to program US\$13 million in local currency resulting from our MF cash transfer programs toward this project.

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Attachment 6

**Terms of Reference
for Detailed Design and Supervision**

The scope of work to be performed by the consultant(s) for D/D and Supervision shall include, but not limited to the following:

- (1) To review all available data and information such as existing studies, maps, drawings, aerial photographs, environmental studies and others related to the Project;
- (2) To carry out field surveys and topographic survey, soil investigation, hydrological test and others required for the detailed design;
- (3) To prepare the basic design criteria and preliminary cost estimate for prior consent of PMU and all agencies concerned;

For Highway Project, the prioritization of type and route of the upgrading/rehabilitation work should be made. For the major relocation sections prepare required environmental assessments;

- (4) To prepare the drawings, outline, implementation schedule and annual cost estimate based on the agreed design criteria;
- (5) To provide the Executing Agency with the information required to permit the acquisition of lands on which to construct pipelines, storage reservoirs pumping stations etc.;
- (6) To prepare detailed drawings, specification, bills of quantities and general conditions;
- (7) To make consultation with the result of PMU's environmental monitoring survey and make modification if necessary;

In particular for Sewerage and Water Supply Project, even the basic design should be reviewed if it may be deemed to cause the adverse effect on the environment;

- (8) To prepare the necessary documents for International Competitive Bidding (ICB) in compliance with the Guidelines for Procurement under OECF Loans;

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- (9) To prepare the evaluation criteria and evaluation procedure for consent of OECF and PMU.
- (10) To assist tender announcement, pre-bid conference, answer to inquiries and other activities related to tender;
- (11) To assist in preparing the tender evaluation report;
- (12) To assist in the contract negotiation with the evaluated bidder and documentation for the contract;
- (13) To inspect and supervise the work to ensure that the construction is carried out in accordance with the plans and specifications;
- (14) To review and make recommendation on the Contractor's schedule and funds;
- (15) To prepare the progress report with recommendation on the actions to be taken by the relevant agencies including OECF and USAID;
- (16) To prepare the annual disbursement schedule and monthly fund requirement with the evidence of the previous disbursement made;
- (17) To assist with the necessary materials for discussion (such as Project Coordination Committee, Donors' meeting etc.).

Attachment 7

Terms of Reference

Project Management Unit - North Coast
Development Project

The main function of the Project Management Unit (PMU) will be to coordinate and manage the components of the North Coast Development Project to ensure the efficient and expeditious execution of the Project.

Specifically, the Unit will be responsible for:

- (a) Liaising with those line agencies responsible for implementing the sub-projects, to ensure efficient implementation of the sub-projects are met;
- (b) Facilitating and expediting the consent of the USAID and OECF on matters which require their approval;
- (c) Preparing annual budgets for the Project as well as estimates of projected expenditure for the Public Sector Investment Programme (PSIP);
- (d) Based on projected estimates of expenditure, to request of the Ministry of Finance, Development and Planning, quarterly disbursements of funds to the Project;
- (e) With expertise of long and short term Consultants assist in tender evaluation based on the requirements of tender documents in accordance with OECF guidelines;

Assisting in contract negotiations with the lowest bidder.

Assisting in obtaining the approval of the OECF for contract award and its enactment; complying with all related government (GOJ) regulations and procedures;

- (f) Convening meetings as necessary of the Project Co-ordinating Committee (PCC) to discuss issues related to the Project;
- (g) Convening meetings of Donors and or line agencies/ Ministry as is deemed necessary;

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- (h) Verifying request for payment from contractors/suppliers;
- (i) Monitoring transactions related to the Project's Special Account in conjunction with Ministry of Finance, Development and Planning and the Bank of Jamaica;
- (j) Authorising request for replenishment of the Foreign Currency Special Account;
- (k) Preparing progress reports which will specifically identify problems and make recommendations on actions to be taken to improve project implementation and avoid time and cost overruns;
- (l) Working closely with PAMCO to monitor the financial and physical progress being made on each sub-project.

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Attachment 8

TERMS OF REFERENCE

JAPAN/USAID CO-FINANCING OF
NORTH COAST DEVELOPMENT PROJECT

PROJECT MANAGER

1. As the Head of the Project Management Unit the locally hired Project Manager shall be responsible for the timely and effective implementation of the Programme which consists of the following five projects:
 - (1) Montego Bay Sewerage System Improvement
 - (2) Lucea-Negril Water Supply System Expansion
 - (3) Northern Coastal Highway Improvement
 - (4) Montego Bay/Drainage and Flood Control
 - (5) Ocho Rios Port Expansion
2. He/she will execute his/her functions in accordance with Jamaican laws, regulations, policies and practices.
3. The overall responsibility for the coordination and execution of the project is vested in the Planning Institute of Jamaica. The Project Manager will therefore work under the general direction of the Director General of the Planning Institute of Jamaica or his designate.
4. He/she will work in close collaboration with the Heads of the implementing agencies of the projects, viz:
 - (i) Ministry of Construction (Works)
 - (ii) National Water Commission (NWC)
 - (iii) Port Authority of Jamaica
5. He/she will work in consultation with the expatriate Project Adviser who will provide advice on an array of implementation matters to ensure effective and efficient

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6. He/she will also work in consultation with short-term management consultants who will assist in providing project management services (PMS) "including but not limited to the following functions:
 - (a) overall project management services to monitor and manage the detailed design, tender process and disbursement for each project during implementation
 - (b) construction management services to collectively control and monitor the quality, progress and budget of all the sub-projects
 - (c) environmental monitoring services for the water-related sub-projects."
7. He/she shall, in regular consultation with the Heads of the implementing agencies, be specifically responsible for the periodic assessment of the project activities.
8. He/she will therefore be required to report to the PIOJ on the progress of the work of the various sub-projects for review on a quarterly basis.
9. If in his/her judgement the timely completion of project activities and outputs appears to be in jeopardy at any time, he/she shall be specifically responsible for alerting the PIOJ and recommending any decisions or corrective measures which need to be taken to put the completion of activities back on schedule.
In particular he/she shall
 - fully understand the objectives, activities and

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arrangements for the project

- plan, coordinate and monitor project activities in harmonization with implementing agencies, and other national and local authorities
- coordinate and supervise the activities of the project staff
- prepare and submit for approval to the Project Management Committee through the PIOJ, a work plan detailing the principal project activities to cover the first quarter commencing June 1, 1991, and thereafter on a monthly basis;
- prepare and coordinate annual and quarterly budgets, recommending the earmarking and commitment of funds
- supervise the maintenance of project accounts and ensure their timely presentation
- prepare and present quarterly reports on project activities in collaboration with Ministry of Construction (Works), National Water Commission and Port Authority of Jamaica and monitor performance against planned accomplishments
- prepare terms of reference and arrange contracts in consultation with the Project Advisor, supervise work and assess performance of short term consultants and provide necessary assistance to them
- evaluate results and recommend modifications in the implementation plan, reallocating resources where necessary.

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