

IDENTIFICATION DATA

9D-ARM-907

A. Reporting A.I.D. Unit: Mission or AID/W Office _____ _____ (ES# _____)	B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan? Yes <input type="checkbox"/> Slipped <input type="checkbox"/> Ad Hoc <input checked="" type="checkbox"/> Evaluation Plan Submission Date: FY _ 9 _	C. Evaluation Timing Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Ex Post <input type="checkbox"/> Other <input type="checkbox"/>
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D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project / Program	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
	North Coast Development Support Project funded by USAID's component of the Northern Jamaica Development Project (funded by OECF)	1991	7/97	US\$5,000	US\$4,773

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required 1. Amend Technical Assistance contract by restructuring it to make it more relevant to project needs.	USAID	Amendment #3 to contract - 01/19/96
2. Amend Technical Assistance contract to match the life of OECF loan.	USAID	Amendment #3 to contract -01/19/96
3. Extend PACD to match life of OECF loan.	USAID	Amendment #6 to Pro Ag - 07/10/95
4. Share with USAID/W and other Missions lessons learned from co-financing with OECF.	USAID	Cable to USAID/W - 07/06/95
5. Train National Water Commission personnel in environmental monitoring.	USAID/NWC	Training program initiated 06/95 due for completion 07/31/96
6. Project Management Unit (PMU) to modify Management Information System.	PMU	PMU confirmed in PIL #27 dated 1/31/95.
7. USAID ensure it has engineering staff capability to manage project	USAID	Capability available through 5/17/97

APPROVALS

F. Date of Mission Or AID/W Office Review Of Evaluation: \_\_\_\_\_ (Month) \_\_\_\_\_ (Day) \_\_\_\_\_ (Year)

G. Approvals of Evaluation Summary And Action Decisions:

Name (Typed)	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission of AID/W Office Director
Signature	Hasan A. Hasan	Garth Jackson	Joanne Feldman	Carol H. Tyson
Date	3/12/96	March 25, 1996	March 27, 1996	June 14, 1996

**ABSTRACT**

H. Evaluation Abstract (Do not exceed the space provided)

**GOAL AND PURPOSE:** The goal of the project is to increase employment and foreign exchange earnings through tourism. The purpose is to provide adequate infrastructure in support of tourism on the North Coast of Jamaica.

**DESCRIPTION:** The parent project is a co-financed effort with the Overseas Economic Cooperation Fund (OECF) of Japan. The OECF provided a ¥8.6 billion loan (\$82 million at 105:1) to finance the design and construction of five infrastructure subprojects: (1) Water Supply in Negril, (2) Wastewater Treatment in Montego Bay, (3) North Coast Highway Improvements, (4) Drainage and Flood Control in Montego Bay, and (5) Port Improvements in Ocho Rios. The \$5.0 million USAID grant project financed technical assistance, the Project Management Unit (PMU), the Water Loss Management Program in Negril (WLMP) and the Montego Bay Environmental Monitoring Program (MBEMP).

**SCOPE OF THE MID-TERM EVALUATION:** The evaluation reviewed project progress over the first thirty months of its life. Specifically, it addressed (1) the USAID project, (2) effectiveness of co-financed arrangements, (3) effectiveness of project administration, and (4) principal causes for considerable delays.

**EVALUATION FINDINGS:**

1. The USAID project was on schedule and had achieved its objectives thus far. The technical assistance effort was only moderately successful. The WLMP in Negril corrected erroneous assumptions about water production and water losses and resulted in a savings in costs. The MBEMP generated data that shaped the design of new treatment facilities into a more environmentally efficient undertaking.
2. The co-financing effort was successful: it provided more assistance to the GOJ than would otherwise have been possible; it took advantage of OECF's capital resources and USAID's field presence. Better definition of donor roles would have made the effort more successful.
3. The three-person PMU was unable to expedite progress as much as it should have because the relationship between the PMU and the implementing agencies was vague and was not defined in written agreements.
4. Perceived project delays were the result of optimistic implementation schedules that did not allow adequate time for implementation actions given the complexity of the project and the many players.

**RECOMMENDATIONS:** The evaluation recommends extending the USAID project to match the terminal date of the OECF project; restructuring the technical assistance contract to match the evolving needs of the parent project; publish lessons learned from co-financing; and train NWC personnel in environmental monitoring.

**IMPACT OF THE PROJECT:** The WLMP in Negril increased the water supplies by about 75 percent to the tourism-rich areas through leak repairs and conservation. The MBEMP enabled the GOJ to select the optimum alternative for handling effluent from sewage treatment and heightened public awareness of environmental issues.

**COSTS**

**I. Evaluation Costs**

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds
Name	Affiliation			
Allison B. Herrick		532-0168-00-5006-00	\$21,301.00	NCDSP (Project funds)
Charles R. Matthews		532-0168-00-5007-00	\$20,000.00	NCDSP (Project funds)
2. Mission/Office Professional Staff Person-Days (Estimate) <u>15 person days</u>		3. Borrower/Grantee Professional Staff Person-Days (Estimate) <u>10 person days</u>		

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## A.I.D. EVALUATION SUMMARY - PART II

### SUMMARY

**J. Summary of Evaluation Findings - Conclusions and Recommendations (Try not to exceed the three (3) pages provided)**

Address the following items:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>● Purpose of evaluation and methodology used</li> <li>● Purpose of activity(ies) evaluated</li> <li>● Findings and conclusions (relate to questions)</li> </ul> | <ul style="list-style-type: none"> <li>● Principal recommendations</li> <li>● Lessons learned</li> </ul> |
|--|--|

Mission or Office  
USAID/Jamaica

Date This Summary Prepared:  
February 22, 1996

Title And Date Of Full Evaluation Report: Mid-Term  
Evaluation Dated November 18, 1994

#### A. PURPOSE OF EVALUATION AND METHODOLOGY USED

The purpose of the evaluation was to review the design, implementation and current status of the project, and make recommendations for actions to be taken by USAID and the PMU during the two remaining years of the USAID project. Specifically, it was to assess the degree to which the USAID-financed project has progressed toward achieving its intended objectives, and also to focus on three specific aspects of the co-financed project: (1) the degree of success of the co-financing arrangements; (2) the effectiveness of administrative arrangements for implementation of the co-financed project; and (3) the principal causes of the lengthy delays in implementation.

The two-person evaluation team met with the OECF project officer in Washington. In Jamaica, the team met with key officers of the implementing agencies, reviewed project files, visited project sites, and had in-depth discussions with the project's consulting engineers. The team also held meetings with the World Bank, Inter-American Development Bank and the European Union. A draft evaluation report was circulated to USAID and responsible Jamaica government agencies for their comment. All inputs were discussed at a general meeting on November 14, 1994. The comments were incorporated into the final report which was presented to the Mission on November 18, 1994.

#### B. PURPOSE OF ACTIVITIES EVALUATED

The purpose of the project is to assist in the provision of adequate infrastructure facilities in Jamaica's key tourist areas on the North Coast to permit tourism growth at a minimum of 5 percent per annum until the year 2000. The objective of the project is to enhance the ability of the Government of Jamaica to increase employment and foreign exchange earnings through tourism.

To that end, the OECF loan financed five subprojects: (1) Montego Bay Sewerage; (2) Montego Bay Drainage and Flood Control; (3) Negril Water Supply; (4) Ocho Rios Port Expansion; and (5) North Coast Highway Improvement. The USAID grant funded the salaries of the PMU staff, a management information system, technical advisory services to the PMU, an Environmental Monitoring program in Montego Bay (MBEMP), and a Water Loss Management Program in Lucea/Negril (WLMP).

#### C. FINDINGS AND CONCLUSION

The principal findings/conclusion of the evaluation were: (1) there were shortcomings in the feasibility studies that had formed the basis of the project design; (2) the project implementation schedule was overly optimistic and failed to anticipate the time needed for land acquisition and relocation of utility poles along the North Coast highway; (3) the USAID financed MBEMP and WLMP made a significant contribution to the shape and potential success of the project as a whole; (4) the overall project is now almost two years behind the optimistic schedule projected in the USAID Project Paper; and (5) despite collaborative original discussions between USAID and OECF, the project structure failed to promote a USAID role in monitoring the OECF aspects of the project.

**D. RECOMMENDATIONS**

1. The PMU should propose to USAID a plan for the most productive structure for the technical services under the USAID-financed contract, specifying those services that should be performed by the Project Advisor and those that should be provided through short term expertise.
2. USAID should consider extending its institutional contract to accommodate the full level of effort of technical advisory services to ensure that short term services will be available to the PMU during the project construction stage.
3. To fulfill the spirit of its commitments to OECF and the Government of Jamaica to co-finance this project, USAID should extend the PACD of its grant to match the timing of the OECF loan.
4. USAID/Jamaica should share with OECF, with other USAID missions, and with USAID/Washington lessons learned from this collaboration with OECF on a co-financed development effort.
5. The National Water Commission should train Commission personnel to continue the evaluation monitoring of the Montego Bay area following completion of the USAID-funded work.
6. The PMU should draw from the Project Management Information System the features it finds most useful and incorporate these features into the present reporting system.
7. USAID should ensure that it has engineering expertise to monitor the USAID project until the PACD.

**E. LESSONS LEARNED FROM CO-FINANCING WITH OECF**

1. Feasibility: Preparation at feasibility level would have led to a more realistic time schedule and a more accurate estimate - the feasibility of each of the five OECF-financed subprojects was tested but the feasibility of combining all five into one project was not tested.
2. Procurement: Procurement procedure vary between USAID and OECF, agreement should be reached beforehand on procedures acceptable to both.
3. USAID's role: USAID's role should be well-defined, such as designating it the on-site representative of both donors, through written agreements beforehand.
4. Project Management Unit (PMU): If creating a PMU is justified, then its role and relationship with other implementation agencies should be clearly defined and agreed upon through memoranda of understanding.
5. Delays: The original schedule overly optimistic - given the complex nature of a two-donor project, the schedule should have been more realistic, even conservative.
6. Donor Coordination: Informal, timely exchange of information and consultation through the telephone and through e-mail have proven more effective than the periodic formal donor meeting which proved ceremonial than substantive. Both types are needed, however.

## ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation summary: always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

Evaluation Report attached.

## COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

### COMMENTS BY MISSION AND BY BORROWER/GRANTEE

The evaluation team received and considered comments from USAID/Kingston and by agents of the borrower/grantee at the time the evaluation report was in draft. A general meeting was held on November 14, 1996 during which all comments were discussed. Several follow-up individual meetings between the team and all the USAID project officer and between the team and the officials of the Borrower/grantee were held on November 15-16, 1994. All views, comments, feedback and factual corrections were incorporated in the Evaluation Report.

### COMMENTS BY USAID/WASHINGTON OFFICES

XD-ABM-907-A

**MID-TERM EVALUATION**

**North Coast Development Support Project**

**Jamaica  
USAID Project No. 532-0168**

**Prepared by**

**Allison Butler Herrick  
and  
Charles R. Mathews**

**November 18, 1994**

Mid-Term Evaluation  
North Coast Development Support Project  
USAID Project No. 532-0168

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MID-TERM EVALUATION  
North Coast Development Support Project

USAID Project No. 532-0168 in support of the  
Northern Jamaica Development Project

Executive Summary

The Northern Jamaica Development Project, to which the USAID project contributes, is innovative and complex in terms of its implementation structure and financing. It has presented unprecedented challenges to the several financing and implementing bodies involved. In the context of high level Jamaican Government commitment to the project, and general concern about its timely implementation, the Jamaican implementing agencies are at a critical juncture. They have learned a lot from experience, have persevered to solve problems and have by now committed staff and budgetary resources to move toward project completion.

The project, which involves three governments, three line agencies of the Jamaican Government, a specially created Project Management Unit (PMU), one U.S.-funded technical assistance contract, three Japanese-funded engineering services contracts, and up to seven construction contracts, is seriously behind schedule. The U.S. technical advisor to the PMU will complete his term before the construction work is completed, and U.S. financing of the PMU itself is scheduled to terminate before the Unit can complete its coordinating responsibility.

The total project of approximately US\$85 million is financed by a ¥8,606 million (US\$63.7 million equivalent at ¥135=US\$1) loan from the Overseas Economic Cooperation Fund of Japan (OECF), a US\$5 million grant from USAID and over US\$15 million equivalent in Jamaican dollars from the development budget of the Jamaican Government.

The objective of the overall project is to improve infrastructure along the north coast, the tourist coast, of Jamaica. The OECF loan is directed to improvement of infrastructure that has been impacted by tourism. The goal of the USAID grant is to enhance the ability of the Government of Jamaica to increase employment and foreign exchange earnings through tourism. Its purpose is to assist in the provision of adequate infrastructure facilities in Jamaica's key tourist areas on the North Coast to permit tourism growth at a minimum of 5% per annum until the year 2000.

The USAID grant finances the salaries of staff for the PMU, the newly established project coordinating body within Special Projects Division of the Planning Institute of Jamaica (PIOJ). Through an institutional contract with Louis Berger International Inc., the grant finances a full time technical advisor, short term engineering expertise, a project management information system, and two special studies directed to environmental monitoring at Montego Bay and water loss management at Negril. The OECF loan finances engineering services and construction of the five sub-projects and a financial management system for the PMU.

The five construction projects financed by OECF are the responsibility of three agencies:

National Water Commission

Montego Bay Sewerage  
Lucea-Negril Water Supply

Ministry of Construction

North Coast Highway  
Montego Bay Drainage & Flood Control

Port Authority of Jamaica

Ocho Rios Port Expansion

The evaluation concentrates on the USAID portion of the total project. It reviews the design, implementation and current status of the project and offers recommendations for actions to be taken by USAID and the PMU during the remaining life of the project. The evaluation also reviews the co-financing arrangements between the United States and Japanese agencies. It does not offer suggestions for decisions or actions that may be taken in future by OECF.

## **FINDINGS OF THE EVALUATION TEAM**

### **Project Design**

The aggregation of five capital projects into a single effort has put tremendous pressure on project implementors who are attempting to complete the project within a shrinking time frame.

The project was conceived on the basis of separate studies of discrete potential projects, ranging in quality from shallow to substantial. The feasibility of combining five sub-projects into a single coordinated project under a tripartite financing scheme was assumed rather than investigated.

During the course of the project, both the USAID special studies and the preliminary work by engineering consultants revealed shortcomings in the studies that had formed the basis of project design.

The project schedule was overly optimistic in its failure to anticipate a congeries of factors: the number of steps involved in implementation, the challenges of coordination, and the time required for OECF approvals, the budget allocations and time needed for acquisition of land and relocation of utility poles along the north coast highway.

### **The USAID Grant**

Following signature of the grant and loan agreements by USAID and OECF, respectively, the project was mobilized promptly, and the U.S.-financed elements moved forward expeditiously.

The U.S.-financed Montego Bay environmental monitoring and Lucea-Negril water loss management programs have made signal contributions to the shape and potential success of

the project as a whole. USAID-generated baseline data precipitated a change in the location for discharge of effluent that will save the Bogue Lagoon of the Montego Bay area from the disastrous effects it would have suffered under the original plan. The initial water loss management study indicated that shortages of water were due to a greater extent than had been realized from shortfalls in production and unaccounted usage, and to a lesser extent from leakage. The study enabled a saving in costs that could be applied to improvements in water treatment and production.

The Technical Advisor to the PMU was effective in facilitating the special studies conducted at Negril and Montego Bay, in review of pre-qualification data and evaluation of tenders, and in procurement of short term expertise to review engineering designs and bid documents. Because of mutual shortcomings in the working relationship between him and the Program Manager, his contributions to the coordinating and monitoring functions of the Unit have been significant, but not optimal.

### Project Administration

The Project Management Unit, charged with the responsibility to see that this complex project moves forward in accordance with the procedures laid down by the Government of Jamaica and each of the two donor agencies, has faced a monumental task.

The PMU initially was not able to expedite the procurement of engineering services according to the original established schedule. Two of the three Jamaican Government implementing agencies slipped behind the schedule of the Project Paper by about a year, and the third by a year and a half due to an over-optimistic schedule and unanticipated delays in approval processes of OECF and the Government of Jamaica.

After a few rounds of the OECF approval process, with the cooperation of the implementing agencies, the PMU has succeeded in improving the process on both sides.

The Program Manager has dedicated energy and skill to the challenge, and has had increasing success in his coordination role. On the technical side, each of the two professional engineers of the PMU, the Program Manager and the U.S. Technical Advisor, has made significant contributions to project implementation through formal and informal contacts with responsible officers of the three line agencies charged with implementing the project.

However, in the coordination and facilitation of procedural steps to ensure optimal adherence to the rules for international competitive procurement, the PMU might have been more effective had the two professionals worked less as individuals, and more as a team.

By mid-1993 the extent of delays in the Japanese-funded elements of the project caused consternation at the highest levels of the Jamaican Government. Subsequent instructions from Cabinet effected a larger commitment of resources to the project and improved inter-agency coordination.

Periodic meetings in Jamaica of the two donors, with each other and with Jamaican Government officials, have served to emphasize the need for strong project management, improved conformance to approval procedures and attention to the exigencies of the schedule.

### Delays in Implementation

The overall project is now almost two years behind the schedule projected in the USAID Project Paper. It has suffered incremental and cumulative delays, to the point that completion of construction of all sub-projects will not fall within the limits of project activity established by either the OECF loan or the USAID grant.

Although the donors saw the need to establish a coordinating agency, they did not foresee either (a) the difficulties the PMU would face in establishing procedures for coordination of the work of established agencies or (b) the number and duration of steps in the process leading to the award of construction contracts.

Until the documentation requirements of the OECF were fully understood by the PMU, and conveyed to the implementing agencies, the delays within the ambit of the Jamaican agencies were compounded by the time required for review, questions, and approval by OECF.

The feasibility studies upon which the shape of the sub-projects depended were of inadequate quality to serve as preliminary designs. The inability to meet the early benchmarks in the project schedule can be attributed in part to the failure to include sufficient time for a full, two-phased, design of each sub-project.

### The Co-financing Experiment

This project is co-financed in the sense that both USAID and OECF contributions are essential to implementation of the overall project. The project is not co-financed to the extent of the co-mingling of funds or the integration of the donors' implementation procedures.

No part of the project is truly discrete. The OECF loan finances the major costs of the needed rehabilitation and construction of facilities. The USAID grant enables the Government of Jamaica to manage implementation of the loan-financed operations, finances studies to provide the basis for planning of construction of water and sewerage facilities and supports interim improvements in water supply and sewage treatment. The Jamaican Government is responsible for overall implementation as well as for any costs that are not covered by the loan.

The structure of the project, with the financing of major works coming from OECF and the USAID role concentrated on advisory services to the PMU and two special studies, is such that the implementing agencies of the Jamaican Government have tended to compartmentalize their dealings with the two agencies.

Despite the apparent direction of the very collaborative original discussions between USAID and OECF, the project structure failed to promote a USAID role in monitoring the OECF aspects of the project. Although the USAID Project Paper reflected USAID's understanding that it would monitor implementation of the entire project and would notify OECF of serious problems observed, such a role was never recorded in a memorandum of understanding.

On the whole, the competitive procedures dictated by both donors and followed by the Jamaican Government, with advice from U.S. advisors, were fair and open. Firms from the United States and about a dozen other countries availed themselves of the opportunities to participate in this transparent process.

Benefits derived from the joint design and commitment to the Northern Jamaica Development Project stem from:

- (1) the availability to the recipient government of a larger package of assistance than might have been accessible through separate donor project commitments;
- (2) the opportunity for the United States to participate in a major capital project without committing a major proportion of the total funds required;
- (3) the ability of the United States to complement a loan with grant funds to provide technical services to support implementation of that loan; and
- (4) the confidence of the Japanese government that it would not be necessary to put in place a Japanese technical assistance firm to be responsible for conformance to procedures in the procurement process and coordination of project implementation.

## **CONCLUSIONS**

### **Impact of USAID-financed Project Elements**

The efforts of the Technical Advisor, in preparing procedural guidelines and evaluation precepts to help ensure conformance to international standards for transparency in competitive international bidding are likely to be of continuing usefulness to the PIOJ in its responsibility for externally financed projects. Unless the USAID grant is extended, neither long or short term technical advisors will be available to help in the supervision of construction as contemplated in the Project Paper, but they will have made a strong contribution up to the evaluation of tenders for the construction contracts.

The work of the technicians assigned to the water loss management study has carried the National Water Commission much farther toward improved water supply management than was originally expected from the effort. The Commission is treating the work as a pilot demonstration of what can be done in other parts of the country.

The environmental monitoring program at Montego Bay enabled the government to choose the optimum alternative for handling effluent from the sewage treatment plant and heightened

public awareness of environmental issues. The program was a first for Jamaica, and for the Caribbean region.

The Project Management Information System designed for the Project Management Unit has not yet completed its shake-down period and is not fully responsive to the needs of the Program Manager. The system is used sparingly, if at all, by the project engineers of the three implementing agencies. As a complete system it is not likely to become an essential monitoring tool for the project.

#### Effectiveness of Administrative Arrangements

The concept of a Project Management Unit for this project is sound, given the need to coordinate the work of three established line agencies and manage the flow of communications, documentation and financial accounts among three governments.

Following a beginning fraught with frustrations, the effectiveness of the PMU in its unprecedented task has grown. Largely as a result of the personal dedication of the Program Manager, and the productive working relationships he has established with implementing agency counterparts, the Unit has done a creditable job of coordinating project activities, organizing procedures for payment under the OECF loan, and improving the process of forwarding the documents required for OECF approval.

It is likely that the Special Projects Division, and the PIOJ as a whole, will be able to apply the experience from this project to the next complex bilaterally-funded or multidonor program. The PMU itself will be disbanded at the end of the project. However, the Division Director has been closely involved with the project and has learned the lessons in management and coordination that have evolved during the project period.

The project coordination role of the PMU will not end until all construction has been completed, or until disbursement under the OECF loan has concluded. Unless the USAID support to the PMU, which is an integral part of the total project, is extended, the Government of Jamaica will have to support the Unit from its own resources.

#### Delays in Implementation of OECF-financed Project Elements

A large capital project such as this, if it is not based on an overall, in-depth feasibility analysis, will require more than five years for implementation.

Certain of the delays can be attributed to the complexity of the project, and the requisite adjustment of the implementing agencies to the demands of two different financing agency cultures and to the role of the central coordinating unit that serves as their communication and coordination link.

Though the pace of the project has been frustrating at many levels, in the broad universe of donor-financed capital projects, a period of 12 months for mobilization of an engineering consultant, and another of two years for final design, is not unusually slow.

There is no sure remedy at this stage, but if construction time is not to exceed the outside limits of a potential OECF extension of its loan, the project needs perseverance, human and financial resources, and effective coordination and management on the part of the Jamaican Government.

### Success of the Co-financing Experience

The challenges presented by this complex project should not lead to a negative view of options for co-financing. Such complications as dual procurement regulations, differences in project implementation periods, and differences in degrees of flexibility in the structure of the co-financed donor project can be managed with strong leadership and determination. Careful advance planning and an agreement on a comprehensive three-way memorandum of understanding among governments are essential.

USAID and OECF differ in their general approaches to design and supervision of implementation. A significant element of the project was the agreement that USAID would support, and provide technical expertise to, a Project Management Unit charged with coordination of the project as a whole.

The USAID and OECF approval procedures for commitments and payments during implementation cover essentially the same steps in the process and are similarly rigorous. None were curtailed or eliminated for purposes of this project. Indeed, OECF agreed that the government should conform to the usual USAID practice to follow competitive procedures to in the short-listing of engineering consultants.

Until or unless joint donors agree to a single set of implementation procedures to govern a single project, the coordinating role of a central body in government will be essential for successful implementation of a co-financed project.

It would be possible to improve collaboration in order to smooth and ease project implementation:

- (1) When USAID is providing technical expertise to complement OECF loan financing, the two agencies might agree on a procedure whereby USAID would conduct a preliminary review and prepare a report to OECF on the Jamaican Government's requests for approvals of project actions. The time consumed by OECF reviews might thus be reduced.
- (2) If sufficient resources are accessible to the USAID Mission (as they apparently were not in this instance), USAID might finance the design work that must precede award of construction contracts. It would then be possible for OECF and USAID to make a joint commitment to the project, but for OECF to establish a future date for effectiveness of its loan in order to accommodate the time needed for final design., one that would not occur until the anticipated date of completion of final designs.

## RECOMMENDATIONS

- A. The Program Manager should devise and propose to USAID a plan and schedule for the most productive structure for the technical services still potentially available under the U.S. contract with Louis Berger International Inc., specifying those services that should be performed by the Project Advisor and those that should be provided through short term expertise.
- B. USAID, in consultation with the PMU, should consider extending its institutional contract to accommodate the full level of effort of technical advisory services permitted by the contract in order to ensure that short term services will be available as needed by the PMU for evaluation of tenders, supervision of construction, analysis of contractor claims, or other relevant functions.
- C. To fulfill the spirit of its commitments to OECF and the Government of Jamaica to co-finance this project, USAID should extend the PACD of its grant to match the final disbursement date of the OECF loan.
- D. At the conclusion of the USAID project, USAID/Jamaica should share with OECF, with other USAID missions and with USAID/Washington the lessons learned from this collaboration with OECF on a co-financed development effort.
- E. The National Water Commission should proceed immediately to begin a training program to equip Commission personnel to continue the environmental monitoring program of the Montego Bay area following completion of the USAID-funded work.
- F. The Program Manager should draw from the Project Management Information System, as it has been developed to date, the features he finds most useful and incorporate these features into the reporting system he has developed on his own.
- G. USAID should ensure that it has engineering expertise available to monitor USAID support to the PMU until the PACD.

## PROJECT IDENTIFICATION DATA

1. Country: Jamaica
2. Project Title: North Coast Development Support
3. Project Number: 532-0168
  
4. Project Dates:
  - a. Project Agreement: Aug. 27, 1991
  - b. Planned Final Obligation Date: FY 1994
  - c. Project Assistance Completion Date: July 31, 1996
  
5. Project Funding:
  - a. USAID Bilateral Grant: US\$ 5,000,000
  - b. OECF (Japan) loan (designated in Yen): US\$ 63,748,148  
¥8,606,000,000 at ¥135=US\$1
  - c. Government of Jamaica, J\$ equivalent: US\$ 15,055,000
  - TOTAL US\$ 83,803,148
  
6. Mode of Implementation:
  - a. Support to the Project Management Unit for salaries and equipment
  - b. Direct U.S. contract with Louis Berger International Inc. (LBII)
  - c. USAID personal services contract with Hasan A. Hasan
  
7. Project Designers:
  - a. Planning Institute of Jamaica (PIOJ), Ministry of Finance,  
Government of Jamaica
  - b. USAID/Jamaica
  - c. Overseas Economic Cooperation Fund (OECF), Government of Japan
  
8. Responsible USAID Mission Officials:
  - a. Mission Directors: William Joslin  
Robert Queener  
Carole Tyson
  - b. Project Development Officers: Melanie Chen  
John Tennant
  - c. Project Engineers: Charles Scheibel  
Hasan A. Hasan
  
9. Previous Evaluations: None

Acronyms Used in the Evaluation Report

AASHTO	American Association of State Highway and Transportation Officials
CIDA	Canadian International Development Agency
ESF	Economic Support Fund
FARA	Fixed Amount Reimbursement Agreement
NWC	National Water Commission
OECD	Organization for Economic Cooperation and Development
OECF	Overseas Economic Cooperation Fund, of Japan
PACD	Project Assistance Completion Date
PIOJ	Planning Institute of Jamaica
PMU	Project Management Unit
SAPROF	Special Assistance for Project Formulation, a facility of OECF
USAID	United States Agency for International Development

**MID-TERM EVALUATION**  
**North Coast Development Support Project**  
**USAID Project No. 532-0168**

**I.BACKGROUND**

**A.Summary of the Project**

**1.The Multi-donor Context**

The USAID-funded North Coast Development Support Project (No. 532-0168), forms part of a collaborative project known as the Northern Jamaica Development Project, which is financed by the Governments of the United States, Japan and Jamaica. This first collaboration on a co-financed loan-and-grant project was developed by the Governments of the United States and Japan over a two-year period culminating in the signature of a Grant Agreement between USAID and Jamaica in July 1991, and a Loan Agreement between the Japanese Overseas Economic Cooperation Fund (OECF) and Jamaica in October 1991.

The total project, estimated at US\$85 million, the largest externally financed project implemented by the Jamaican Government to date, was to be supported by external financing of a USAID grant of US\$5 million and an OECF loan of ¥8,606 million (equivalent to US\$64 million at an exchange rate of US\$1=¥135 at the time of signing of the Loan Agreement) together with over US\$15 million equivalent in Jamaican dollars (see Appendix 4). The Jamaican dollars were to be budgeted by the Government from funds generated from USAID-financed Economic Support Fund programs.

This project, large and unique as it is, is a test case for donor collaboration in a large-scale effort. As the largest Japanese project ever committed to Jamaica, and the most complex, it is also a trail-breaker for Japanese-Jamaican collaboration. Officials of the responsible agencies in Jamaica indicated to the Evaluation Team their understanding that OECF's future interest in financing projects in Jamaica will depend on how successfully this Northern Jamaica Development Project is carried out.

**2. Focus on Tourism**

The total project was conceived to respond to the need for improvement of physical infrastructure along the 170 miles of Jamaica's north coast in order to further environmentally sound growth in the country's major tourism centers (see the map at Appendix 7, figure a). As tourism has been the foremost foreign exchange earner for Jamaica in recent years, the project is especially significant. The level of public awareness of the project and expectation for its accomplishments is high. At Negril in the west, a partial moratorium on new development is directly linked to the inadequacy of the service capacities of the water and sewerage systems. At Montego Bay, the best known destination for visitors to Jamaica, more sewage finds its way

into the bay than into the treatment facilities, and the South Gully drainage system through the town is not capable of handling the volume of water of heavy storms. At Ocho Rios, the piers, basin and parking lot will not accommodate the traffic of today's large cruise ships. Along the coastal highway, which is narrow in many areas and inadequately drained and surfaced, over 40 percent of the curves require vehicles to slow to 20 miles per hour or less.

Lack of adequate infrastructure in tourist areas is well-documented as a critical constraint. Anecdotal evidence of the need for improvement of the road came to the attention of the Evaluation Team. A travel agent from Atlanta visiting Ocho Rios said she would not put that tourist center on the list for her clients because of the time required and the danger involved in the road trip from the airport at Montego Bay. A T-shirt for sale at Negril says, "I survived the road trip from Montego Bay to Negril!"

Earnings in tourism, a labor intensive sector, are broadening the base of Jamaica's economy. For the past decade, foreign exchange earnings from tourism have almost completely offset the country's negative balance of imports and exports, and in several recent years net tourism earnings have exceeded earnings from sugar, as well as from bauxite and alumina. In 1993, estimated gross foreign exchange earnings from tourism were US\$950 million, an increase of 10.7 percent, and the average cash expenditure per tourist per day rose from US\$79 to US\$84. This project was designed to ensure that tourism will not be choked by road and port congestion or constraints on water supply and treatment of sewage.

### 3. Objectives of the Project

The objective of the OECF loan is to improve the infrastructure of the northern coast of Jamaica that has been affected adversely by tourism. The goal of the USAID project is to enhance the ability of the Government of Jamaica to increase employment and foreign exchange earnings through tourism. Its purpose is to assist in the provision of adequate infrastructure facilities in Jamaica's key tourist areas on the North Coast to permit tourism growth at a minimum of 5% per annum until the year 2000.

Within the USAID portfolio, 70 percent of the project is deemed to be directed to the strategic objective of increasing foreign exchange earnings and employment, and therefore to the Agency Goal of Encouraging Broad Based Economic Growth. The other 30 percent is directed toward the objective of improved environmental management and protection, and the Agency Goal of Protecting the Environment.

The focus of the overall project is on improvement of water supply, sewerage, highways, storm drainage and passenger seaport facilities at selected locations along the north coast between Negril in the west and Port Antonio in the east. USAID, having reviewed a series of feasibility studies used by the Jamaican Government to establish a list of 12 priority projects on the north coast, and OECF, having conducted an appraisal mission through its Special Assistance for

Project Formulation facility (SAPROF), determined the highest priority projects for the co-financed donor assistance in consultation with the Jamaican Government.

The overall project was thus divided into five construction sub-projects for which OECF financing covers engineering design and supervision services and specified amounts for construction of each sub-project, two special studies financed by USAID, and support for the staff and functions of the Project Management Unit (PMU), also financed by USAID.

The fundamental benefits of the total project will be national in scope, contributing to further enhancement and enlargement of foreign exchange inflows from the tourist sector. At the same time, direct benefits will accrue to the residents and enterprises of seven of Jamaica's thirteen parishes. And satisfied tourists can be expected to stimulate an increase in enthusiasm for Jamaica as a holiday destination. At the same time, the project will not only have improved environmental management in tourist areas, it will have demonstrated model solutions for adaptation in other parts of the country.

#### 4. Structure of the Project (see Appendix 3)

Implementation of the technical design and construction requirements of the five sub-projects was assigned to the government agencies with operational responsibility and authority in particular functional areas, as follows:

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

The two special studies, one to establish a baseline for environmental monitoring of waters of the Montego Bay area and the other to address water loss and other problems in the water supply for the area from Negril to Lucea on the west coast, fell under the aegis of the National Water Commission.

To facilitate the coordination effort required for management of a project involving three sources of finance, three implementing agencies, three contracts with consulting engineers and seven construction contracts, the three governments agreed that the Planning Institute of Jamaica (PIOJ), which is responsible for coordinating and administering all external funding, would establish a Project Management Unit to take responsibility for the overall coordination and monitoring of the project (see Appendix 7, figure b).

The USAID grant provides staff for this new Unit of the PIOJ's Special Projects Division, which takes responsibility for projects that require special attention to keep them moving forward. This staff consists of the Program Manager, a Jamaican engineer; a Technical Advisor, provided through an institutional contract with Louis Berger International Inc.; a Project Accountant; and an Executive Secretary. The grant also provides for short term technical expertise to be mobilized by the Technical Advisor as needed to review pre-qualification information, bid documents, tenders, design proposals and other documents and work of consultants and construction contractors.

No part of the project is truly discrete. The OECF loan finances the major costs of the needed rehabilitation and construction of facilities. The USAID grant enables the Government of Jamaica to manage implementation of the loan-financed operations, finances studies to provide the basis for planning of construction of water and sewerage facilities and supports interim improvements in water supply and sewage treatment. The Jamaican Government is responsible for overall implementation as well as for any costs that are not covered by the loan.

### **B. Purpose of the Evaluation**

The ever more protracted implementation period for the five sub-projects is a serious concern for all parties. USAID is scheduled to complete its contribution to the project before construction is completed. Disbursement from the OECF loan will not continue past March 1997 unless the lending agency agrees to extend the period of effectiveness of the loan. From the Prime Minister down, the leadership of the Jamaican Government is distressed at the continuing deviation from the estimated schedule for completion of the various elements of the project.

This mid-term evaluation, occurring three years after the commitments of donor funds, will review the design, implementation and current status of the project, and offer recommendations for actions to be taken by USAID and the Project Management Unit during the approximately two years remaining in the life of the USAID project.

The evaluation focuses on (1) the degree to which the USAID-financed project has progressed toward achieving its intended objectives; (2) the degree of success of the co-financing arrangements for the total project; (3) the effectiveness of administrative arrangements for implementation of the project; and (4) the principal causes of delays in implementation of the total effort. The evaluation also will offer a review of lessons learned in implementation of this first example of collaborative financing by a USAID grant and an OECF loan, and first joint U.S.-Japanese-Jamaican effort.

Because the project has not proceeded as expeditiously as anticipated in the Project Paper and Project Agreement, the external technical assistance and the support to the PMU being provided by the USAID project will terminate some eleven months before the current estimated date for completion of all construction. Moreover, it appears that construction will not be completed

before April 1996, which is the final date for activity under the OECF loan, nor even by the March 1997 terminal date for disbursement under that loan.

The evaluation concentrates on the USAID portion of the total project, which includes technical assistance closely related to implementation of the engineering services and construction of works financed by the OECF loan. The report does not offer suggestions for decisions or actions that may be taken in future by OECF.

### **C. Team Composition and Study Method**

The Evaluation Team consisted of two senior retired USAID officers, one as team leader, a program specialist and former USAID Mission Director, the other an experienced civil engineer whose career included seven years of assignment to USAID Jamaica. The evaluation took place from October 12 to November 18, 1994.

The team met first with the project officer of the Washington Office of OECF before traveling to Jamaica. Following meetings with the key officers involved in the project in each of the Jamaican Government agencies involved in the project, and a preliminary review of files, the Team visited all project sites and conferred with staff assigned to the project on a three-day field trip. Further perusal of files was supplemented by in-depth discussions with the project engineers and supervisory staff responsible for implementation of the project elements falling under the National Water Commission, the Port Authority of Jamaica, and the Technical Department of the Ministry of Construction. (See the Interview Protocol at Appendix 2 and the list of persons interviewed at Appendix 6.)

At meetings in Kingston with representatives of World Bank, Interamerican Development Bank and the Commission of the European Union, the Team discussed relevant experience with multi-donor-financed projects in general, and cooperation with the Japanese in particular.

As a mid-term evaluation, this report is intended to serve as a progress review. It does not attempt to assess impact from the project. In accordance with the Scope of Work (see Appendix 1), the evaluation focuses primarily on the USAID-financed grant project, the North Coast Development Support Project. In recognition of the broader context of the total U.S.- and Japanese-financed project, and the fact that the USAID project is, by its very intent, inextricably linked to implementation of the OECF loan, the evaluation also addresses certain major issues of the Northern Jamaica Development Project as a whole. Finally, the evaluation summarizes the experience of USAID in this co-financed project in order to draw lessons for the future.

A draft evaluation report, circulated to USAID and responsible government agencies for their comment, was discussed at a general meeting on November 14. Comments from the meeting were taken into consideration in preparation of the Team's final report.

## II. PROGRESS OF THE PROJECT

### A. Delays in OECF Loan-financed Project Elements

#### 1. Lessons from Hindsight

The degree of coordination of project activities required for the loan-financed elements of this project was untried. The Northern Jamaica Development Project was a first of its kind for both OECF and USAID, and will serve as a model (with both warts and beauty) for future like-kind co-financing arrangements. As with any undertaking, particularly one of such magnitude and complexity, hindsight is clear and useful. Not all of the delaying factors could possibly be foreseen, and allowances for contingencies in the schedule that were thought to be adequate at the outset can now be seen to be deficient.

Delays are well known to lead to escalations of costs and, therefore, project planners have incentive to make their best judgments at the outset, on all the elements of time and resources that will be needed and the factors that are likely to be encountered before reaching project completion. It is the role of feasibility investigations and analysis to determine those requirements.

The feasibility investigations upon which the five sub-projects of the Northern Jamaica Development Project were based varied in quality. Among them the Evaluation Team found examples of the use of old studies, of the updating of old cost estimates, of limitations in scope and time allowed for the investigation, and of lack of adequate criteria for carrying out the investigations.

The SAPROF Report completed on behalf of OECF in 1990 served, in effect, as an additional overall feasibility analysis. Although it was very thorough, certain of the assumptions and findings of the Report did not carry through in the makeup of the overall project. For example, the Report called for USAID funding of detailed design of sub-projects and OECF funding of the Project Management Unit. Those suggestions were reversed in the final overall project. This change undoubtedly contributed to the overly-optimistic implementation schedules of the USAID Project Paper and of the SAPROF report, which had concluded that the entire project could be completed within five years "because of its urgency."

The feasibility review undertaken by both USAID and OECF in development of the overall project was applied to the discrete sub-projects. The feasibility of combining those five into a single coordinated project under a tripartite financing scheme was assumed rather than investigated. Similarly, the feasibility of project coordination by a special Project Management Unit without direct implementation authority was not subjected to the test of feasibility. Review by hindsight does not reveal which of the actual delays could have been obviated by a proper feasibility analysis of the overall project, but it seems clear that such an analysis would have led to more efficient implementation.

The experience of USAID and OECF, as well as multilateral lenders, indicates that the time actually required in this project for award of engineering contracts and the actual design work were not inordinately long. Nor is it unusual for a newly established project implementation unit to require time to establish its credibility with and influence the actions of established line agencies.

## 2. Slippage in the Schedule

The delays experienced in the project to date have been numerous, incremental, and in some cases cumulative, though of varying degrees of importance. The early stages of the project were a trail-blazing experience which led to improved approaches and procedures. Moreover, the multiple steps in review and approval of consultant contracts, designs and construction contracts that have accounted for some of the delays are more heavily present in pre-construction stages and will be less of a factor as construction itself begins.

The first serious slippage in timely project implementation occurred in the procurement of the three contracts with consulting engineers who would design the five sub-projects, prepare bid documents and supervise construction (see Appendix 7, figure c). The engineering contract for the Montego Bay Sewerage Improvement and the Lucea-Negril Water Supply sub-projects, and that for the Ocho Rios Port Expansion sub-project, were signed in March of 1993, twelve months behind the implementation schedule set forth in the USAID Project Paper. The contract for the North Coast Highway Improvement and the Montego Bay Drainage and Flood Control sub-projects was not awarded until approximately 17 months after the scheduled date of March 1992, and issuance of a Notice to Proceed lagged by another three months. The Project Paper had allocated six months for recruitment of the three design consultants, but the Project Management Unit, which was to organize the action, was not established until after the beginning of that six-months' period.

Initial and subsequent delays are traceable to inadequate estimates of time required for recruitment of consultants, design, and construction; poor understanding of the review and approval steps required by OECF and the Government of Jamaica; initial resistance to the role of the PMU; and the lack of acceptable and uniform government procedures for evaluation of proposals in accordance with the principles of international competitive procurement. The regular quarterly reports of the Program Manager, and of the Technical Advisor to the PMU, are replete with observation of slippage in scheduled activities and suggested approaches to deal with them. The PMU efforts to expedite performance have had some effect, but frustrations continue.

Approvals by OECF in Tokyo were initially slow, requiring perhaps four to eight weeks, but once the documentation requirements were better understood, and implementing agencies were spurred to appropriate action, OECF was able to expedite the approval process.

Although the estimated duration of construction of sub-projects has had to be extended, it is the dates for the award of contracts and the start of construction that have slipped well beyond all

reasonable projections. Construction on Montego Bay Sewerage will begin eleven months later, and will require five months more, than had been foreseen. The work will not be completed until after the OECF end-of-activity date, and even after the OECF final disbursement date. Construction on the Lucea-Negril water treatment plant is estimated to begin in May 1995, sixteen months late, and the construction period will extend two months beyond the end-of-activity date.

It is not likely that the contract to construct improvements on the highway from Negril to Montego Bay will begin before 1996. Optimistic estimates indicate that the work would not be completed until several months after the OECF final disbursement date. The contract for Montego Bay Drainage and Flood Control will have slipped about a year and a half, and the work will not be completed until late 1996, well into the OECF final disbursement period. Expansion of the pier at Ocho Rios will have begun less than one year behind schedule, and will be the only sub-project to be achieved within the period authorized for activity under the OECF loan.

### 3. Factors Leading to Delays in Implementation

The undertaking of the Northern Jamaica Development Project was a new experience for all concerned, and therefore could be expected to have a longer than usual start-up period as the various parties learned to work together. In addition to the initial inadequate appreciation of the rigorous and multiple requirements for approvals by OECF headquarters in Japan, mentioned above, a number of factors became evident during the learning period. Unfortunately, the project activities leading up to construction, that might have been completed within two years, have consumed a full three years of this five-year project.

The Evaluation Team is aware of the distress and frustration that can stem from constant slippage in the implementation of the project activities, some of which are interdependent. The Team could not identify any simple mid-course correction that could compensate for time lost, but concluded that the best prospect for minimizing further delays lies in close continued monitoring and management by the PMU combined with realistic recognition of the time required for each step in review and approval.

Delays in the project to date have resulted from several factors:

#### Additional needs or implementation steps were identified after project approval.

- All five sub-projects would require acquisition of land before construction could begin.
- Utility poles (possibly 1400 of them) along the north coast highway would have to be relocated.

- The design consulting firms were charged with preparing preliminary designs prior to proceeding with final designs, a step which would require an additional round of review and approval.
- An information systems officer would be required by the PMU.
- The Attorney General would have to approve contracts with an implementing line ministry.
- There would be no exceptions to the role of the Government Contracts Committee in approval of decisions in the competitive bidding process.
- Although internal Jamaican Government procedures were well known to the respective government implementing agencies, the role and purpose of the PMU as the institution responsible to OECF was not initially understood or accepted.

Inadequate time was estimated in the original schedule.

- Once a procurement action was on its docket, the Government Contracts Committee could, and usually did, complete its review within two-three weeks, but up to five or six additional weeks were often necessary to ensure that proper procedures had been followed and that the report to the Committee was precisely correct.
- Estimates of the time needed to complete contracts with consulting engineers were deficient in both the USAID Project Paper and the PMU's schedule of March 1992.
- The time it would take for the U.S. contractor to recruit a minority-owned Procurement Services Agent to purchase commodities was not foreseen.

The North Coast Highway Improvement sub-project presented a special case.

The feasibility study upon which the sub-project was based was of insufficient depth and scope to provide the necessary basis for proceeding with the design. Early work of the consulting engineers of the project revealed significant deterioration of the condition of the highway since the study and serious deficiencies in the alignment of the highway, such that only 19 percent of the highway can be considered to be designed to the speed limit for major roads of 50 miles per hour, and only a little over half the highway is safe at 30 miles per hour. In addition, the unexpected termination of CIDA support for construction of some 40 bridges, nine of which are along the north coast highway, compounded the need for review of both design and cost factors.

The government has concluded that its expectations for improvement of the highway in 1989 were too low. The consultant has now, three years into the project, been asked to prepare a final design to the standard of the American Association of State Highway and Transportation Officials (AASHTO); that is, with two 12-foot lanes and eight-foot shoulders.

The costs have multiplied with this maturation of expectations. Thus, the OECF loan, which will cover only about one-fourth of the currently estimated total construction cost, depending upon further economic analysis, may now be directed to the western portion of the highway, between Negril and Montego Bay. On the assumption that the funds available for construction from OECF would be sufficient for only one portion of the highway, the government has asked three multilateral agencies whether they would be interested in financing a segment of the total highway. Each of the three — World Bank, Interamerican Development Bank and the Commission of the European Union — has replied that it is interested in principle but would not be able to make a decision until it has in hand a current study of economic feasibility. Indications are that the government is hoping for the largest possible European commitment of a grant under the Ivth Lome Convention before negotiating further with either or both of the multilateral banks.

Finally, it has simply taken time for all of the managing participants to learn how to work together and to develop an ethic of operating together as a team with a common objective.

At this point in the project, the delays are history and cannot be recovered. The Evaluation Team has concluded that fine tuning would not yield dramatic results. Continued diligence in pursuit of milestones in the implementation schedules is, of course, essential. And USAID should stay the course.

## **B. Contributions of USAID-financed Project Elements**

### **1. Support to the Project Management Unit (PMU)**

The USAID grant supports the PMU by covering the salaries of three key personnel and providing some equipment. It also provides one full time Technical Advisor together with specialized short term technical advisory services to help the Program Manager of the PMU carry out extraordinarily broad responsibilities for this project. The Unit must coordinate implementation of the overall project by established Jamaican Government bodies. One is the line ministry responsible for construction of public works and housing, while the other two are semi-autonomous income-generating bodies responsible for water and sanitation and for ports, respectively. The project is to be implemented through three contracts with consulting engineers and six construction contracts, each of which is to be awarded following international competitive procurement procedures.

The full time advisor serves as advisor to the PMU and the implementing agencies on procedural and technical matters in engineering design and the competitive procurement process. He also organizes recruitment of short term advisors and monitors and facilitates the other activities and personnel covered by the U.S. contract. The advisory services, which depend upon collaboration and cooperation with the Program Manager and other PMU staff, include such duties as assisting in the procurement of design engineering services, monitoring progress in implementation of the project and offering suggestions for resolution of problems, developing

precepts for evaluation of bids, and reviewing the financial status of contracts. The special activities include implementation of the Montego Bay Environmental Monitoring study, design and implementation of the Water Loss Management study, and establishment and maintenance of a Project Management Information System.

The effectiveness of the contractor's contributions to the work of the PMU can be correlated to some extent with the degree of direct control of the PMU over an activity. The Montego Bay Environmental Monitoring study, which yielded early benefits to environmental protection and the Lucea-Negril Water Loss Management study and improvement program, which enabled the project to provide more water, sooner, to more subscribers, were discrete activities under the aegis of the PMU. The water study suffered some delays because action depended upon the ability of the National Water Commission to commit funds and staff to the program.

The achievements of the two special studies have enhanced the structure of the Montego Bay Sewerage Improvement and Lucea-Negril Water Supply projects to an extent not foreseen in the USAID Project Paper. These successes can be attributed largely to effective organization and the competence of personnel provided by the contractor. The studies were subject to standard USAID procedures, but did not depend as heavily as other elements of the contract on collaboration within the Government of Jamaica. The Technical Advisor also mobilized expertise for the design of the Project Management Information System, but that activity has not had similar success within the overall project (see below).

Differences in style, culture and motivation between the Technical Advisor and the Program Manager have presented challenges to optimal results, but the continuing experience of the PMU with its advisors shows dividends. Interactions that initially took place in an atmosphere of conflict can now transpire on the basis of better mutual understanding, and differences have narrowed (see further in Section II.C, below). Overall, the presence and inputs of the Technical Advisor have led to growth in PMU capabilities and better appreciation of a rigorous management viewpoint.

The short term technical assistance brought in by the Technical Advisor has helped the PMU in the process of procurement of services and review of designs and bid documents. At the appropriate time, specialists come to the country for a period of one to three weeks to visit the project site and analyze a preliminary or final design, or the draft bid documents. They offer professional scrutiny of draft documents to assist the government's decision process. In the instance of the water supply sub-project at Negril, for example, the review noted that the design had failed to include surge tanks in the system. Specialists have also helped on other aspects of the overall project, as for example in preparing proposals for relocation of utility poles along the north coast highway.

## 2. Montego Bay Environmental Monitoring

Among the outstanding achievements of project activity to date is the timely determination of the nature of the environmental regime in the Bogue Lagoon which is already degraded from

pollution and would be in dire jeopardy if it were the recipient of effluent discharges from the stabilization ponds as proposed in the original feasibility study for the project. Use of a computer model to analyze flushing rates in the Bogue Lagoon indicated that inflows of effluent would be retained for up to six days. The study found the eco-system to be under stress and concluded that the introduction of effluent from the ponds would exacerbate the deteriorating conditions and seriously threaten the health of the eco-system. This finding led to the decision to discharge the effluent into Montego Bay via the Montego River, thus saving Bogue Lagoon from further damage but necessitating changes in the design of the stabilization ponds. The prompt determination of baseline conditions of the Bogue Lagoon eco-system and report of its early findings was propitious, since the consultants to the National Water Commission had not yet completed the final design for the ponds.

The findings of the environmental monitoring study also helped promote a heightened awareness of the need to be alert to potential environmental degradation. Jamaican officials have shared the findings of this monitoring program, the first of its kind in the Caribbean, to serve as a model for neighboring nations of the region.

Unfortunately, because the five years of the USAID project is measured from the date of authorization, rather than the beginning of activity under the contract, the time remaining within the Project Assistance Completion Date (PACD) will not permit a full five years of monitoring of change in the quality of water in the Lagoon and the Bay. In the four and a half years of its activity, however, the study will have established an excellent basis for future monitoring, continuation of which will depend on the National Water Commission.

### 3. Lucea-Negril Water Loss Management

The water loss management study also yielded unexpected but timely and fortuitous results. The study itself produced information essential for the design of improvements to the water treatment plant at Logwood in the Lucea-Negril region. The study had shown that raw water production was 26% overstated and leaks were thus not as heavily responsible for water losses as previously believed.

In corollary work, made possible by the discovery that the reduction of water losses through leakage would not require as many resources as had been anticipated, the contractor and the National Water Commission were able to upgrade the current water supply system to the point that it has improved the reliability and accessibility of service during the period before the OECF-financed construction project is completed. The USAID contractor provided guidance for the Commission's work, financed by a Fixed Amount Reimbursement Agreement (FARA), to upgrade the treatment plant at Logwood and expand and upgrade the capacity of the distribution system. Moreover, through improvements in operations and maintenance, by the end of the USAID effort, unaccounted usage of water had been reduced from 55 to 29 percent of production. The National Water Commission sees this work as a model for application island-wide.

#### **4. Project Management Information System**

The Project Management Information System (PMIS) intended as a facilitator of progress in the overall project, can now be seen to have been of marginal utility. The first design of a system by the contractor, deemed by USAID to be too elaborate and too costly, was modified to reduce its complexity and requirements for hardware. The system as finally designed, and as presented in training sessions to representatives of all the implementation units of the project, relies on software that is not otherwise in use within the government and is regarded as not being user friendly. From one month to the next, the Information Systems Officer of the PMU and the Technical Advisor hope for adequate reporting from the implementing agencies and a good test of the system's utility. In spite of their good faith efforts, the Program Manager has yet to use the system for his own reports, and the agencies use it reluctantly to provide project data.

#### **5. Engineering Expertise at USAID**

USAID recognized that for management of this project, under which various types of civil works are to be constructed by a number of agencies with differing responsibilities and missions, the multi-disciplinary skills of a professional engineer experienced in the design and management of capital projects for USAID would be required. The Project Officer financed by the project has supported the work of the PMU and the U.S. institutional contractor through professional advice and expeditious processing of necessary documents and approvals. His diligent monitoring of the project has helped ensure that USAID is fully informed on project activities and issues.

### **C. Project Administration and Oversight**

The primary responsibility for coordination of the total project rests with the Planning Institute of Jamaica through its Special Projects Division and the Project Management Unit set up specifically to implement the Northern Jamaica Development Project. Coordination functions within the Government of Jamaica are carried out also through the periodic meetings of the Project Coordination Committee chaired by a representative of the PIOJ, the Task Force on Land Acquisition chaired by the Director of the Special Projects Division, and the Task Force on Utility Pole Line Relocation chaired by the Program Manager of the PMU.

The project is unusual, moreover, in the degree of attention and commitment it has attracted from the Prime Minister, Ministers of Government and the Cabinet as a whole. As the Acting Director General of the PIOJ pointed out at the Donors' Meeting of July 1993, the Northern Jamaica Development Project, representing eight percent of the capital budget for financial year 1993/1994, was the only development project for which the annual budget request was fully supported.

## 1. The Project Management Unit (PMU)

As is customary for externally financed projects, the Government of Jamaica designated the Planning Institute of Jamaica as the monitoring and coordinating agency for implementation of the project. In accordance with the USAID grant, and the desires of OECF, the PIOJ organized a Project Management Unit dedicated to monitoring and coordination of Northern Jamaica Development Project as a whole. A staff of three persons for the PMU is financed by the USAID grant, which also provides a civil engineer as Technical Advisor to the Unit and the project.

Modeled on the PMU established under the USAID-financed Protected Areas Resource Conservation (PARC) project, the Project Management Unit for the Northern Jamaica Development Project was intended to have responsibility for working with the line agencies responsible for implementing the sub-projects to ensure efficient implementation; facilitating and expediting the consent of the OECF and USAID on matters requiring their approval; facilitating all budgetary and financial transactions necessary for project implementation; convening meetings of donors or line agencies as necessary to deal with project issues; and preparing periodic progress reports.

The PMU has made a good start, but suffered some internal growing pains that have never been completely alleviated. It has established cordial and respectful relations with the responsible staff of the implementing agencies and has made a creditable effort to expedite the project. During the first round of the competitive selection process—when the role of OECF in approval of the separate steps was less well understood and tested—progress in preparation of documents, technical review and submission of reports to Tokyo suffered. The coordinating process improved with experience, however, and the PMU found ways of streamlining the process.

By the time of the first Donors' Meeting in July 1992, USAID and the OECF both were aware that neither the pre-qualification of interested firms of consulting engineers, nor the preparation of terms of reference, nor the evaluation of proposals for engineering contracts had not proceeded altogether smoothly or in accordance with schedule. The OECF, having counted on the PMU to use the U.S. external advisory resources and the Japanese-financed financial advisor to assist in active project management, took the lead in urging the PMU to make better use of its outside advisors as a resource to provide service, resolve problems and keep the project on schedule.

The meeting of donors formally adopted an agreement that a strong and effective PMU should play a central role in project implementation activities, one that was to include:

- maximizing the efficient and effective use of donor-provided financial and human resources;
- ensuring compliance with applicable government and donor regulations and procedures (for consultant and contractor selection, etc.);

- standardizing, as appropriate, documents (bidding, tender, evaluation and other reports, etc.);
- working in conjunction with relevant agencies, maintain and ensure timely execution of the overall schedule of project activities;
- monitoring and accounting of project progress and expenditures; and
- providing technical and financial advisory services to implementing agencies.

In spite of this push by the donors, the PMU faced certain chronic problems: (1) a continuing lack of project implementation plans, (2) lengthy response times to PMU requests for information, (3) lack of preparation for decision-making meetings, and (4) inadequate communication within implementing agencies themselves. The Program Manager at PMU is an engineer, not as experienced as the implementing agency managers of the project, but a quick learner and hard worker who gained their respect and appreciation for his ability to resolve certain problems. The U.S. technical advisor proved to be effective in working directly with engineers and other field managers on the project. Unfortunately, the fact that the work of the two individuals never evolved into a true team effort affected progress of the project, because the Technical Advisor initially could not gain the degree of credibility within the PMU or with the key staff of the implementing agencies that might have enabled him to be most effective in helping expedite necessary project actions.

Each of the persons involved in this awkward situation has been counseled by colleagues or supervisors. In the early days the predicament came to the attention of the top management of USAID and the PIOJ, who resolved that the situation was not sufficiently aggravating for drastic measures and that the individuals should work out their differences and seek to achieve a higher degree of mutual respect and cordiality. The working situation appears to have improved. The Evaluation Team considers it to be acceptable, though not optimal. Seeing no practicable way of further alleviating the problem, and finding that it is no longer detrimental to the project, the Team does not offer a recommendation directed specifically at improving interpersonal relationships.

The Team does note a lesson, however, that might guide the structure of a future collaboration. Apparently, the reporting relationships of the Technical Advisor, whose services were procured not by the Government of Jamaica but by a direct USAID contract that was awarded before the PMU was established, were not specified. The Program Manager, who was charged with overall responsibility, was frustrated by his lack of direct control over contract actions. In a future project, institutional relationships should be made sufficiently clear that such a dilemma will not impede the work of a key program manager.

## 2. The Project Coordinating Committee

The Project Coordinating Committee was set up to ensure achievement of maximum inter-agency cooperation on the project by resolving issues that cannot be handled at the working level or by one agency alone. Chaired by the Planning Institute of Jamaica, the Committee meets on an *ad hoc* basis. The first meeting was held on April 1, 1992, the second on February 2, 1993 and the third on August 24, 1994. Members include the Director of the Special Projects Division, the Program Manager and Technical Advisor from PMU, representatives of the implementing agencies (officially at permanent secretary or director level) and representatives of the Ministries of Finance, and of Tourism. The Chair has used the Committee to alert the implementing agencies to the concerns of the PMU and to the cross-cutting issues in project implementation that require attention. Because attending members do not consistently represent the higher managerial or policy-making levels of their agencies, however, the Committee can only agree that action is necessary and urge the agency representatives to seek necessary high level support within their own institutions.

The first meeting of the Committee, chaired by the Director General of the PIOJ, focused on operational issues, such as the role of the PMU, prompt payment of contractors under the OECF loan, and the requirement for all contracts, without exception, to be approved by the Government Contracts Committee, concurred in by the Ministry of Finance and ratified by the Cabinet.

The second meeting, chaired by the Director of PIOJ's Special Projects Division, discussed a number of issues, including acquisition of land, recognizing that the Land Acquisition Act would have to be invoked for compulsory acquisition of those parcels of land required for the project which owners were reluctant to release, and that the implementing agencies should engage legal and land valuation specialists as needed to supplement staff capability to handle land acquisition issues. At a later date the Prime Minister confirmed his willingness to support use of the land acquisition authority if all other measures had not succeeded. Other issues included the question whether sufficient financial and personnel resources had been made available for project implementation (the agencies assured that they had the power to employ additional personnel for specific projects and would assign resources as needed), the need to ensure that payment procedures under the OECF loan were understood and operating effectively, and the frustration caused by slow processing of duty-free entry for donor-financed commodities. Ultimately, the Minister of Finance approved a delegation of authority to the Program Manager to issue the documents needed to instruct customs officials to waive duties on goods imported for purposes of the project.

The major operational issues having been taken care of at higher level, the third meeting, which was not held until eighteen months later, focused more on exchange of information. The Committee reviewed the status of decisions on the north coast highway sub-project and the problem posed by the failure of the Carib Engineering Co. Ltd. which was to implement the construction of the expanded water distribution network at Negril, to obtain approval for sufficient amounts in the 1994/1995 budget to cover the costs of the project. This lack of funds

had forced a delay in the release of tender documents. Committee members agreed to support a request for supplementary funds. The decision to release the necessary funds was ultimately made at ministerial level.

### 3. Donor Oversight

Although the intention was to hold semi-annual meetings of the two donors with Jamaican Government representatives, to date it has not been possible for Japanese representatives to get to Jamaica for more than three formal meetings. Through those meetings, and visits by high level representatives from Japan and its Washington Office, however, OECF has conducted more unusually frequent oversight of the project. The presence of the USAID Mission in Jamaica makes it possible for USAID to accommodate any meeting date that is convenient for the other two governments. Meetings have been held in July 1992, July 1993, and February 1994. The next one is tentatively scheduled for February 1995.

In the view of all three governments, the Donors' Meetings have been very useful, to emphasize the role assigned to the Project Management Unit, negotiate agreement on the number of construction contracts to be included in the project, inform the OECF representatives of progress and bottlenecks in the project, discuss of OECF financial and approval procedures, and clarify the firmness of OECF funding ceilings. The most useful format for the visits of Japanese representatives has proved to be one that begins with meetings among the two donors, moves to separate meetings with the leadership of each implementing agency, and concludes with a plenary session, and sometimes a field trip.

The first meeting, in July 1992, recorded an agreement reached on the role of the Project Management Unit, whose performance in coordinating the project had so far not been as strong as OECF and USAID had anticipated. The meeting also affirmed OECF's insistence that it would finance no more than seven construction contracts. The OECF view stemmed in part from a conviction that contract packages should be large enough to attract international competition but also from recognition of its own staffing constraints (the Fund has a total of less than 300 employees) and its desire to constrain the burden of project review and approvals. Other issues covered included the disbursement procedures to be followed for payment by OECF to local suppliers and the need for the Jamaican Government to finance the relocation of utility poles.

By the time of the second Donors' Meeting, in July 1993, OECF had had experience reviewing various reports and requests for approvals forwarded by the PMU and had had occasion to return some documents to PMU for further clarification or for revision to conform to guidelines. The meeting was used to review progress on the project, explain the ceilings on the transfer of contingency funds under the OECF loan agreement, and discuss various procedures. Among matters discussed were the differing OECF provisions for financing foreign and local currency expenditure, procedures for pre-qualification of prospective tenderers, procedures for selection of contracting firms and approval of construction contracts.

At the third Donors' Meeting, of February 1994, OECF made a point of recognizing the valuable contribution made by the USAID-financed environmental monitoring and water loss management studies in establishment of an improved technical basis for engineering designs for the OECF-financed sewerage and water supply sub-projects. OECF also stressed the need to keep implementation as close as possible to the terms stipulated in the Loan Agreement with respect to scope, cost and timing. The Project Completion Date by which physical work should be completed is April 1996, and the final disbursement date occurs in March 1997. Representatives urged the Jamaican Government agencies to reduce the time spent in reviewing submissions and granting approvals, pointing out that OECF had achieved a significant improvement in response time. USAID and PMU had recorded times of 45-50 days in the earlier part of the project, but approval of the contract for extension of the pier at Ocho Rios, the first construction contract, had been processed within two weeks.

#### 4. Cabinet Attention

Concern about delays in the project culminated at one of the periodic retreats of the Cabinet, in mid-1993, when the Prime Minister and Cabinet Minister learned that no construction would begin until 1994. Appalled at the situation, the Cabinet reviewed the constraints as presented by the PIOJ and directed that: (1) a Memorandum of Understanding was to be executed by the PMU and the implementing agencies to clarify their respective roles; (2) each agency was to assign a project engineer and other required staff full time to the project; (3) responsible agencies were to expedite the clearance of project commodities; (4) priority was to be given to acquisition of land; and (5) the Jamaican Ambassador to Japan was to urge OECF to expedite the approval process.

The Cabinet action, coming a year after the July 1992 Donors' Meeting had emphasized the need for a strong PMU, brought a special sense of urgency to the project, and enhanced the confidence of the PMU in dealing with the established agencies that were implementing the project. The resulting Memorandum of Understanding of September 1993 called for the PMU to play the central role in the project, citing the duties the donors had agreed to, and to manage the entire project on behalf of the government. The main responsibilities were to be the overall coordination of engineering designs, contracting, procurement and construction as well as financial and accounting matters. Even so, and in spite of the strong personal dedication of the Program Manager, the PMU cannot actually do the job of the other agencies.

At a second review of project status by the Cabinet in March 1994, certain decisions were taken, namely that: (1) funds were to be sought to cover the shortfall of funds for the north coast highway; (2) OECF should be asked to agree to the use of its funds for the eastern section of the highway because it was in the worst shape and the area needs opening to tourism (this conclusion was later reversed); (3) the Government Contracts Committee should meet more frequently in order not to delay the project; and (4) there should be an increase in contractor mobilization allowances.

### **III. CO-FINANCING MECHANISMS**

For OECF, the term co-financing refers to parallel financing accompanied by some sort of linkage between the financing parties. For USAID, the term usually refers to joint financing through a single instrument or a strong set of cross clauses in formal agreements. This USAID-OECF project, the most integrated of any such collaboration to date, can be defined as co-financed in terms of its intention that USAID-financed technical services will be integral to implementation of an OECF loan. The structure of the project does not extend to the comingling of funds or the delegation of approval procedures by one donor to the other (the latter is not possible in accordance with either agency's enabling legislation).

In previous instances of USAID-OECF collaboration, in Indonesia and India, OECF maintained local offices in the country. The linkage between donor commitments consisted in no more than the coordinated timing of separate project agreements, each covering distinct aspects of a total project. The Evaluation Team learned also that the so-called co-financing between OECF and multilateral development banks does not usually involve either co-mingling or co-management of projects.

#### **A. Lessons of the Jamaica Project**

##### **1. Untied Procurement and International Competitive Bidding.**

The Japanese portion of a co-financed project is more likely to be untied than the U.S. portion. Whereas in 1986, procurement from OECD countries was permitted in something over half the OECF loans, by 1991 the proportion had risen to 90 percent. Under guidelines published in November 1987, international competitive bidding is required. In 1991, 69 percent of goods and services under OECF loans were procured outside of Japan.

Under the USAID-financed grant to the Northern Jamaica Development Project, only U.S. and Jamaican sources of procurement are eligible for financing, but the OECF loan finances procurement from any developing country or OECD member country.

On the whole, the competitive procedures followed by the Jamaican Government in accordance with its own practice and with OECF guidelines, and with advice from U.S. advisors, were fair and open. Firms from the United States and about a dozen other countries availed themselves of the opportunities to participate in this transparent process.

##### **2. Local Costs and Host Country Contribution**

USAID covers both off-shore and local costs of a project, the former usually being predominant in the financing package. USAID also requires that a certain proportion of a project (at least 25 percent, in accordance with USAID's authorizing legislation) be financed by the recipient

government; the amount to be committed, which is specified in the Project Agreement, most often covers local cost elements of the project as well as in-kind contributions by the government.

Until recently, OECF has limited its financing to imports of goods and services needed for a project, but the Fund now is more likely to finance the costs of locally produced equipment or services as required for project implementation. Although OECF expects a borrower to take significant responsibility for a project, it does not specify an amount to be committed. The loan agreement with the Government of Jamaica for the Northern Jamaica Development Project establishes separate ceilings on the proportion of civil works in each sub-project that is eligible for financing; those ceilings range from 11 to 80 percent. The agreement contains a covenant that: "Should the funds available from the proceeds of the Loan be insufficient for the implementation of the Project, the Borrower shall make arrangements promptly to provide funds as shall be needed." This covenant apparently refers to both local and foreign exchange costs.

### 3. Design and Implementation

USAID and OECF differ in the intensity of their approaches to design and implementation.

The field-based USAID mission generally follows a rigorous design procedure and monitors progress on its portion of the project on a regular basis, keeping in close touch with the implementing agencies. USAID is amenable to modifications within the project as needs arise.

OECF, at a great distance, once it has analyzed the feasibility of a project, relies on the borrowing government to manage implementation. OECF does not rely on representatives at the local Japanese diplomatic mission for information on the project, but may monitor progress through a Japanese technical assistance contractor in the country.

In the Northern Jamaica Development Project, OECF modified its usual approach in a number of ways: firstly by using SAPROF to review the feasibility of the project, secondly by agreeing to advertisement and competition for short-listing of consultants, and thirdly by increasing the usual frequency of supervision missions, mostly in conjunction with formal Donors' Meetings. In addition, OECF keeps up to date on the project through the PMU's quarterly reports, the clearance and approval process for procurement of services, informal communication with USAID and the PMU.

Within the total OECF loan, amounts are specified for each sub-project, as are ceilings for additions to each that can be drawn from contingency funds. To date, in response to questions from Jamaican project managers, OECF has not, with one exception, been prepared to discuss modifications within the project. In the North Coast Highway Improvement sub-project, for which Jamaican Government expectations have changed significantly since the OECF loan was committed, the OECF credit will now be concentrated on one section of the highway rather than spread over the entire 170 miles.

#### 4. Approval Procedures

The USAID and OECF approval procedures for commitments and payments during implementation cover essentially the same steps in the process and are similarly rigorous.

For this project, OECF agreed to follow procedures suggested by USAID to the Government of Jamaica to ensure competition in the process of identifying a short list of firms qualified to bid on a contract. However, no further efforts were made within the mutual project to accommodate one agency's system to the other in order to simplify implementation for the Government of Jamaica.

The field presence of USAID appears to have made a difference, however, as USAID-financed experts were available to collaborate with and instruct project personnel on documentation and approval procedures and therefore to reduce both turnaround time and frustrations.

#### 5. Integration of Implementation Responsibilities

Although each donor executed a bilateral agreement with the Government of Jamaica, no memorandum of understanding regarding responsibilities for the project was executed between USAID and OECF or among the three governments. Such an instrument might have been helpful, especially since there had been a complete turnover in personnel at USAID and changes in the head office of OECF since completion of the collaborative effort and cultivation of mutual understanding by the two agencies during the preparation phase of the project.

Despite the apparent direction of the original discussions between USAID and OECF, the project structure failed to promote a USAID role in monitoring the OECF aspects of the project. Although the USAID Project Paper reflected USAID's understanding that it would monitor implementation of the entire project and would notify OECF of serious problems observed, such a role was never recorded in a memorandum of understanding.

The structure of the project, with the financing of major works coming from OECF and the USAID role concentrated on advisory services to the PMU and two special studies, is such that the implementing agencies of the Jamaican Government have tended to compartmentalize their dealings with the two agencies.

#### Recommendation:

At the conclusion of the USAID project, USAID/Jamaica should share with OECF, with other USAID missions and with USAID/Washington the lessons learned from this collaboration with OECF on a co-financed development effort.

## **B. Implications for Future Collaboration**

The challenges presented by this complex project should not lead to a negative view of options for co-financing. Such complications as dual procurement regulations, differences in project implementation periods, and differences in degrees of flexibility in the structure of the co-financed donor project can be managed with strong leadership and determination. Careful advance planning and an agreement on a comprehensive three-way memorandum of understanding among governments are essential.

Until or unless joint donors agree to a single set of implementation procedures to govern a single project, the coordinating role of a central body in government will be essential for successful implementation of a co-financed project.

The mutual benefits derived from the joint design and commitment to the Northern Jamaica Development Project stem from:

- (1) the availability to the recipient government of a larger package of assistance than might have been accessible through separate donor project commitments;
- (2) the opportunity for the United States to participate in a major capital project without committing a major proportion of the total funds required;
- (3) the ability of the United States to complement a loan with grant funds to provide technical services to support implementation of that loan; and
- (4) the confidence of the Japanese government that it would not be necessary to put in place a Japanese technical assistance firm to be responsible for conformance to procedures in the procurement process and coordination of project implementation.

It would be possible to improve collaboration in order to smooth and ease project implementation:

- (1) When USAID is providing technical expertise to complement OECF loan financing, the two agencies might agree on a procedure whereby USAID would conduct a preliminary review of the government's requests for approvals of project actions. The time consumed by OECF reviews might thus be reduced.
- (2) If sufficient resources are accessible to the USAID Mission (as they apparently were not in this instance), USAID might finance the final design work that must precede award of construction contracts. It would then be possible for OECF and USAID to make a joint commitment to the project, but for OECF to establish a later date for effectiveness of its loan, one that would not occur until the anticipated date of completion of final designs.

The advantages to the borrowing government of such modifications would be (a) that project implementation could be expedited and (b) that the grace period of the loan would not commence until the loan-financed construction was ready to start.

#### **IV. OUTLOOK FOR THE PROJECT AS A WHOLE**

##### **A. Impact of USAID-financed Project Elements**

The overall project promises to improve Jamaica's foreign exchange earnings from tourism by improving capacity to handle larger numbers of visitors. The project will increase employment, safety, comfort, the aesthetic outlook and quality of water for drinking and bathing in the country's prime tourist areas. The USAID grant is contributing to the objectives of increased earnings and expanded employment through its contributions of technical expertise and management skills and its support of the Project Management Unit. Beyond that, the grant is making special contributions to improvement of the environment through its work in environmental monitoring in the Montego Bay area and in development of water supply in the Negril area.

Lessons from the work and example of the Technical Advisor, in the form of procedural guidelines, evaluation precepts to help ensure conformance to international standards for transparency in competitive international bidding, and application of management principles are likely to be of continuing usefulness to the PIOJ in its responsibility for externally financed projects. The Project Management Unit established for this project within the Special Projects Division of the PIOJ will be disbanded at the end of the project. However, the Division Director, who has been closely involved with the project, has benefited from the lessons of this complex project and the technical advice in management and coordination offered during the project period. Given continuity of personnel, the Division, and the PIOJ as a whole, will be able to apply these lessons to the next complex bilateral or multidonor project.

The work of the technicians assigned to the water loss management study has carried the National Water Commission much farther toward improved water supply management than was originally expected from the effort. In the interim, before the new water treatment facility is completed, the USAID effort will have helped diminish the gap between supply and demand by increasing the water supply (through improvements in pumping and filtering and innovative techniques for increasing pressure and flows in distribution lines) and decreased the wasted consumption of water (by installing meters at strategic locations, controlling the flow at standpipes, and improving bill collection). The experience gained in improved operations and maintenance of the water supply system will lead to a continuing favorable impact for consumers and improved National Water Commission revenues. The Commission is treating the work as a pilot demonstration of what can be done in other parts of the country.

The environmental monitoring program at Montego Bay was a first for the Caribbean region, and has been well received by the environmental community. The National Water Commission

is drafting plans to carry the program forward at Montego Bay and replicate it elsewhere. In addition to having precipitated a pivotal change in the design of the sewage treatment system, USAID, through a Fixed Amount Reimbursement Agreement, will have addressed the serious problem of untreated sewage flows into Montego Bay, that endanger the health of residents, pollute tourist beaches and threaten living coral. The problem would otherwise have continued for two more years pending completion of the new sewage treatment facilities. The existing Montego Bay sewage treatment plant has a design capacity for only about 75 percent of the flow that reaches it. The excess by-passes the plant and flows into the Montego River, which flows into the bay. The plant itself, being in a poor state of repair, does not operate at its design capacity, thus compounding the problem of raw sewage reaching the bay. In addition, the collection system pumping stations, which are frequently out of operation, allow further overflows toward the bay. The interim improvement measures will improve the environment and the ambiance by reducing the contaminants reaching the bay.

The Project Management Information System designed for the PMU is not yet in sufficiently good working order to be useful for monitoring the costs and schedules of the Northern Jamaica Development Project as a whole. A recent run of the system's report, shown to the Evaluation Team, contained inconsistencies in figures for budgeted amounts for several project elements, produced tables in which the figures were not aligned within columns, and contained large gaps in narrative sections. The system is not currently used by the Program Manager and is resisted by the assigned project engineers in the three implementing agencies. One engineer, who is computer-literate and uses computer software regularly, produces reports for the agency using a different program that is considerably more user friendly. Considering that the system is not likely to become useful and accepted for monitoring either this project or future Government of Jamaica projects, the Evaluation Team concludes that further refinement of the system would not be productive.

#### Recommendations:

In order to assure continuity of the environmental monitoring program in the Montego Bay area, the National Water Commission should immediately begin a training program to equip Commission personnel to carry out the program following completion of the USAID-funded quarterly updates.

The Program Manager should draw from the Project Management Information System, as it has been developed to date, the features he finds most useful and incorporate these features into the reporting system he has developed on an *ad hoc* basis.

#### **B. Completion of Sub-projects**

The anticipated five-year period for implementation of design and construction under the OECF loan was based on recognition of the urgency accorded to the project by the Jamaican

Government rather than on detailed feasibility and design. Following an approach unlike that of the multilateral development banks and most bilateral donors, both preliminary and final designs were financed by the same loan as the construction. Thus, construction contracts could not be awarded until those project preparation steps had been completed.

The five-year implementation schedule prepared in the design of the USAID project, which is supporting the Project Management Unit and providing technical advisory services for project management and coordination, has proved to have been overly optimistic. The PMU's current schedule is more realistic, but overruns both the end-of-activity and final disbursement dates of OECF.

It now appears that there will be six construction contracts under the supervision of three engineering consultants, responsible for three, two and one contract respectively. Both the Montego Bay Sewerage and the North Coast Highway Improvement sub-projects will require more time than is now authorized for activity under the OECF loan. An extension will be necessary if the Government of Jamaica is to have access to the loan funds until the sub-projects are all completed.

The current outlook is worst for the sewerage sub-project, which is now estimated to require 25 months for construction. The tender inviting bids calls for unit cost data for specified aspects of construction of stabilization ponds, leaving open certain decisions on the final design of the ponds. The PMU will have to monitor carefully the decision-making, final design and progress to a final contract award.

It also seems clear at the time of this evaluation that the OECF financing available for North Coast Highway Improvement will be concentrated on the highway segment between Negril and Montego Bay. Since this sub-project has an estimated construction period of 18 months, and tendering is not expected to be possible before January 1995, final decisions respecting definition of this effort must be given high priority.

An unfortunate consequence of the inclusion of design work in the OECF loan, and the delay of construction until three or more years into the project, is that a like number of years of the seven-year grace period on repayment of principal are passing by before any economic benefit from the loan is possible. If, in the event, a total of seven years or more are required for completion of the project, the grace period will have been dissipated, and the government's amortization payments, which must begin in October 1998, may start before disbursements have been completed.

### **C. A Continuing USAID Role**

Although USAID and OECF both intended this co-financed project to be implemented within five years, each calculated the five year period from a different beginning point. The Project Assistance Completion Date, at which all activity on the USAID project must be completed, will

occur in July 1996, five years from the authorization of the project by the USAID Mission Director to Jamaica. The terminal disbursement date for USAID funds will occur at the end of May 1997. The OECF loan did not become effective until March 1992, but the final date for activity under the loan occurs only four years later, in April 1996. Allowing for a year of warranty by the contractors and of maintenance of the new structures by the government, the end of the fifth year, and the final disbursement date for loan funds falls in March 1997.

The OECF historically has been reluctant to extend the final disbursement date of a loan. For all practical purposes, an extension beyond eight years is impossible. The Government of Jamaica has had informal indication that when construction of sub-projects is finally underway OECF would consider a request for extension of the loan. An opportunity for discussion of such a request will occur at the next Donors' Meeting, now scheduled for February 1995.

In any case, USAID is faced with a decision as to whether to extend (1) its contracted technical advisory services beyond the current terminal date of December 1995, and (2) its support to the PMU beyond the current PACD of July 31, 1996.

If USAID chooses not to extend the contract, the PMU and the implementing agencies will have had the benefit of advisory services until construction contracts for four of the five sub-projects have been awarded, but not during the period of construction as contemplated in the USAID-OECF project. Supervision of construction would be carried out by the engineering consultants in accordance with their contracts and as monitored by the implementing agencies. Considering the challenges still facing the PMU, and the contributions of the advisory services to date, the Evaluation Team believes that USAID should extend the current institutional contract until the present or revised Project Activity Completion Date of the project in order to provide continuing services in accordance with the priorities of the PMU. The contract permits extension of the level of effort for technical advisory services by up to 10 percent.

An important consideration for USAID should be the expectations of OECF in the context of the joint financing of the project. In view of the commitment of USAID to a collaborative effort that is financed by three governments, and the fact that the Project Management Unit was established, with USAID assistance, for the purpose of monitoring and coordinating project as a whole, USAID ought to extend its grant, and its support for the PMU in particular, for as long as the OECF loan activity is authorized. Failure to do so would be a derogation of USAID's commitment to collaboration with OECF.

Extension of the USAID grant would also permit continuation of the periodic measurements under the environmental monitoring study to continue for the full five years originally anticipated and allow time for the National Water Commission to train staff to take over the activity.

If USAID does not extend the PACD of the grant project, the Jamaican Government would have to continue the functions of the PMU on its own account until the final OECF disbursement date. That date, which is now March 1997, is likely to be extended in response to a request and justification by the Government of Jamaica. Moreover, an extension of the PACD may be

necessary to allow time for the Government of Jamaica to complete its commitment to provide the equivalent of US\$15,055,000 to the project.

The current contract for engineering expertise at the USAID Mission to monitor the project on behalf of USAID will be completed in September 1995. USAID may want to ensure that it has such expertise available, on a full or part time basis, to assist the Project Management Unit and monitor project activities until the USAID support to that Unit has concluded.

The Evaluation Team is aware that the amount of contingency funds remaining uncommitted under the USAID project is inadequate to cover the possible additional services outlined above. In order to carry out the recommendations set forth below, USAID may have to take steps to add funds to the project.

**Recommendations:**

Considering the severe pressures facing this critically delayed project:

The Program Manager should devise and propose to USAID a plan and schedule for the most productive structure for the technical services still potentially available under the U.S. contract with Louis Berger International Inc., specifying those services that should be performed by the Project Advisor and those that should be provided through short term expertise.

USAID, in consultation with the PMU, should consider adding funds to its contract with Louis Berger International Inc. to extend the level of effort of technical advisory services to the maximum permitted by the contract in order to ensure that short term services will be available as needed by the PMU for evaluation of tenders, supervision of construction, analysis of contractor claims, or other functions covered by the contract.

To fulfill the spirit of its commitments to OECF and the Government of Jamaica to co-finance this project, USAID should extend the PACD of its grant to match the final disbursement date of the OECF loan.

USAID should ensure that it has engineering expertise available to manage the project until the PACD.

# SCOPE OF WORK MID-TERM EVALUATION NORTH COAST DEVELOPMENT SUPPORT PROJECT

## I. ACTIVITY TO BE EVALUATED

Project Title : North Coast Development Support Project (NCDSP)

Project Number : 532-0168

Life of Project Funding : \$5,000,000

Authorization Date : 7/19/91

Project Assistance Completion Date (PACD) : 7/31/96

## II. PURPOSE OF THE EVALUATION

This is a mid-term evaluation of the project, about 30 months after authorization. This evaluation was contemplated in the Project Paper to (1) look at the process of providing program inputs; (2) make a preliminary determination of the effectiveness of implementation mechanisms; (3) measure progress in producing anticipated outputs; and (4) identify problem areas and make recommendations for necessary changes.

The findings, conclusions and recommendations of the evaluation will be used to take corrective measures and introduce mid-course adjustments in the implementation of the project as may be necessary.

## III. BACKGROUND

This project, is part of a collaborative, co-financing effort between USAID and the Overseas Economic Cooperation Fund (OECF) of Japan to assist in the revitalization of the tourism sector in Jamaica. The following detailed background should give the Evaluation Team (ET) a good understanding of the project.

1. **Project Title:** The co-financed effort was originally titled the "North Coast Development Project" and the USAID-financed portion was titled the "North Coast Development Support Project (NCDSP)" to distinguish it from the parent effort. The Government of Japan later requested that the title be changed to the "Northern Jamaica Development Project (NJDP)" and the Government of Jamaica (GOJ) obliged. The title was officially

changed through an exchange of diplomatic notes in February 1992, but the working title of the project remained "North Coast Development Project." Later on, the working title was also changed to "Northern Jamaica Development Project." The ET should keep this in mind as it reviews documentation because these titles have been used interchangeably. Also the words "project" and "program" have been used interchangeably. For the purpose of this scope, the term "Project" shall mean the NCDSP and the term "Parent Project" shall mean the total effort.

**2. Goal and Purpose:** The goal of the project is to enhance the ability of the Government of Jamaica (GOJ) to increase employment and foreign exchange earnings through tourism. The purpose is to assist in the provision of adequate infrastructure facilities in Jamaica's key tourist areas on the North Coast to permit tourism growth at a minimum of 5% per annum until the year 2000.

**3. Tourism Development:** Tourism is one of the major earners of foreign exchange for Jamaica. Most tourism facilities are located on Jamaica's north coast, extending over a 170 mile coastal strip from the western tip of the Island to the eastern part. This strip includes the major towns of Negril, Montego Bay, Ocho Rios, and Port Antonio.

The Jamaica Tourism Action Plan (TAP), which was developed in the late 1980s, identified the lack of adequate infrastructure on the north coast as a major constraint to the growth of tourism. In 1990 the GOJ asked OECF and USAID for assistance in this area. The Planning Institute of Jamaica (PIOJ) had explored the types and locations of infrastructure needed, and had developed a priority list which consisted of twelve (12) discrete subprojects for the consideration of the donors. The twelve included water, sewerage, roads, airports, shipping ports, storm drainage, flood protection, etc. The co-financed effort was to finance as many of the subprojects on the priority list as was possible.

**4. Funding Levels and Subproject Selection:** Discussions between USAID and OECF on a co-financing package began in 1990. Discussion focused on how many of the 12 subprojects the donors could fund. Ultimately, the donors agreed to include the top five. These were (1) Montego Bay Sewerage System Improvements; (2) Lucea-Negril Water Supply System Improvements; (3) Northern Coastal Highway Improvements; (4) Montego Bay Drainage and Flood Control; and (5) Ocho Rios Port Development.

The funding levels were set as follows: 8.606 billion yen (\$63.75 million at the exchange rate of 135:1) from an OECF loan, a \$5.0 million USAID grant, and \$15.5 million in Jamaican dollars, mostly from ESF generations.

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The five subprojects had been the subject of feasibility studies before, and USAID contributed \$600,000 to update these studies. The OECF conducted a final feasibility study of the five subprojects package in November 1990.

**5. Co-Financing Arrangements:** USAID and the OECF considered different schemes for the use of the funding package. They settled on the following scheme which was ratified by both donors and by the PIOJ/GOJ on March 13, 1991:

- USAID to finance (1) the Program Management Unit (PMU) to be established and staffed with local personnel to coordinate the implementation of the project; (2) technical assistance to the PMU in the form of a long-term, full-time technical advisor supported with short-term advisors as required in order to enhance the PMU's management and technical capabilities; (3) an Environmental Monitoring program for the Montego Bay Sewerage subproject to ascertain that environmental conditions in the Bay do not deteriorate as more effluent is introduced; and (4) a Water Loss Management Program for the Lucea-Negril Water subproject to reduce losses due leakage and wastage.

- OECF to finance (1) 100% of the engineering and construction supervision for all five subprojects; (2) approximately 84% of construction for all subprojects; and (3) a financial advisor to the PMU for a total of ten work-months over the life of the project.

- GOJ to finance local construction costs (estimated at about 16% of the construction costs of all subprojects), land acquisition and any cost overruns.

**6. Implementation Plan:** The five subprojects fell under the jurisdiction of three agencies of the GOJ. It was agreed that these agencies, and not the PMU, would be the implementing agencies of their respective subprojects, and would be the signatories of all contracts. The three were (1) the National Water Commission (NWC) to implement the Montego Bay Sewerage and Negril Water subprojects; (2) the Ministry of Construction (MOC) to implement the Highway Improvements and the Montego Bay Drainage subprojects; and (3) the Port Authority of Jamaica (PAJ) to implement the Ocho Rios Port subproject. The PMU was to coordinate all activities and be a point of contact with the donors.

The implementation of the parent project was divided into four distinct phases: (1) the selection and contracting of engineering consultants; (2) the detailed design, preparation of tender documents, tendering and award of construction contracts; (3) construction; and (4) one year of operation of completed facilities under warranty.

The Government of Japan agreed to "untie" procurement with its loan funds. Consequently, all international firms, with minor exceptions, could participate in the provision of goods and services. Only U.S. and Jamaican firms could participate in procurement with USAID grant funds.

7. **Parent Project Start-up:** USAID signed its grant agreement with the GOJ on August 27, 1991, and the OECF signed its loan agreement on October 29, 1991. USAID signed the technical assistance contract to the PMU with a U.S. consulting firm on October 10, 1991. The staff of the PMU were selected and contracted in September-October, 1991. The Technical Advisor to the PMU, provided by the U.S. consulting firm, arrived in Jamaica in early November, 1991. The PMU was fully staffed and began work on November 18, 1991.

#### **IV. STATEMENT OF WORK**

It would not be possible to evaluate the project (NCDSP) independently and still have an effective evaluation; it must be evaluated within the context of the parent project, the NJDP. In a sense, the ET will be conducting two evaluations, one of the USAID effort and the second of the co-financing effort.

This mid-term evaluation, the first evaluation to be undertaken since the project began, will seek to answer the specific questions listed below. In general, it will address all questions related to the design, implementation, and current status of the Project. The evaluation should provide sufficient information, reach conclusions, and formulate recommendations based on its findings. The recommendations will be used by USAID to introduce mid-course corrections to the implementation of the project in order that implementation may proceed easily, efficiently, and on a timely basis toward goal achievement.

The ET shall also address the specific points listed below for the parent project and shall identify the lessons learned from its findings and analysis.

The ET shall focus its efforts on four general areas: (1) the degree to which the USAID-financed project has progressed toward achieving its intended objectives; (2) the degree of success of the co-financing arrangements for the parent project; (3) the effectiveness of administrative arrangements for the implementation of the parent project; and (4) the principal causes of the delays in the implementation of the parent project. Following is a preamble for each of these general areas and a listing of specific tasks which the ET will undertake under each area.

## 1. The USAID-Financed Project

The ET shall determine where the USAID-financed project stands after about 30 months into its life when compared with its original targets. This general overview shall, in particular, focus on the following:

1.1. Determine to what extent the USAID-financed activities have progressed toward achieving their objectives. Also identify any critical impediments to goal achievement and what could be done to alleviate them in the future.

1.2. Determine what benefits have accrued, to date, to the beneficiaries in the project area, to the environment of Jamaica, and to the parent project due to the investment of USAID resources.

1.3. Assess the effectiveness of coordination between activities under the project and activities financed by other donors in the relevant sectors and geographic areas and recommend measures for improved coordination whenever needed.

1.4. Assess the continuing need, timing and priorities for the use of USAID resources to support the parent project. In making this assessment, the ET shall consider all relevant factors including (a) that one USAID-financed activity, Water Loss Management, will be completed by late summer of 1994; (b) a second USAID activity, Environmental Monitoring In Montego Bay is being redesigned and could have a shorter life than originally anticipated; (c) the extent to which USAID resources have, and will, contribute to the success of the parent project; (d) to what extent these resources would be desired by the host government; and (e) how effective the use of these resources will be once construction activities under the parent project begin in early to late 1995.

1.5. Based on the above assessment, recommend adjustments, if appropriate, to the allocation of funds and to the current Project Assistance Completion Date (PACD) of July 31, 1996.

## 2. Co-Financing Arrangements

The co-financed effort was designed to take advantage of the strengths of the two donors: USAID's field presence and OECF's capital resources. The co-financing agreement took a long time to negotiate and it was considered a "first" in donor cooperation. It was to be an experiment to test a hypothesis that, despite differing international assistance philosophies, different procurement procedures, and different ways of doing business, two donors can co-finance a project and achieve results that would make the enterprise advantageous to the donors and to

the host country, and that the co-financing arrangement would result in a more efficient use of resources and better implementation time.

Against this background, the ET shall evaluate the co-financing arrangements and how well they have worked. Specifically, the ET shall:

2.1. Review all relevant project materials and documentation relating to the co-financing arrangements, particularly minutes of negotiating meetings between USAID and the OECF, memoranda of understanding, etc.

2.2. Outline the "lessons learned" from the co-financing arrangement thus far that should be taken into consideration in replicating this effort in Jamaica or in other countries and regions.

2.3. Make suggestions as to what mid-course corrections and operational and procedural changes could be made to make the co-financed arrangement work better, keeping in mind the regulations of USAID and the OECF.

### 3. Project Administration

The designers of the parent project realized from the outset that the involvement of two donors, three implementing agencies, several oversight GOJ agencies, and the construction of five discrete subprojects required careful orchestration for its implementation. The designers concluded that a central body would be required to "coordinate and manage the components, to ensure the efficient and expeditious execution" of the parent project. To that end, the PMU was created. The staffing of the PMU was carefully considered and three options were evaluated. One option was to fully staff the PMU so that it would be technically and legally self-sufficient. Another option was to staff the PMU with technical but not legal expertise. The third option was to limit the staff of the PMU and augment its capabilities with technical advisory services through an institutional contractor. The designers selected the third option and settled on a PMU consisting of three persons, to be supported by an institutional contractor to give it depth and provide it with the necessary staff and skills to carry out its mandate.

Against this background, the ET shall assess the effectiveness of the administrative arrangements and recommend remedial measures as appropriate over the remaining life of the project to make them work better. Specifically, the ET shall:

3.1. Review the relevant parent project documentation to get a clear picture of how the administrative arrangements were planned to work, including the roles and effective authority assigned to the different parties such as the PMU, the implementing agencies, regulatory and oversight agencies, the institutional contractor, and the donors.

3.2. Review the donors' experience in contributing to timely implementation of the parent project, particularly in releasing funds and providing information on disbursements made directly by the donors, monitoring progress, and in granting the required approvals, concurrences, and clearances on a timely basis, as well as the flexibility displayed towards the implementation/financing arrangements initially established for the parent project.

3.3. Review the experience of the implementing agencies in contributing to timely implementation of the parent project, particularly granting timely concurrences and coordinating, and coordinating effectively with the PMU.

3.4. Evaluate the effectiveness of the PMU in coordinating with the implementing agencies, managing resources, including the technical and financial advisory services provided through donor funds, and directing the overall implementation effort. Wherever applicable, identify institutional and/or procedural constraints and recommend measures to alleviate these constraints and increase effectiveness.

#### 4. Delays

Implementation of the Project has slipped substantially behind schedule. The ET shall assess the extent of delay for each subproject, identify problems, and make remedial recommendations. Specifically, the ET shall:

4.1. Review the original implementation schedule of the parent project and determine whether it was realistic given its complexity, donor/GOJ procurement procedures, and the level of preparedness provided by the pre-implementation reports for the various sub-projects.

4.2. Determine to what extent the requirements of the donors (including contract packaging strategies) and the GOJ may have contributed to these delays and what changes in process could be made to avoid or mitigate against further delays.

4.3. Determine to what extent the requirements of the PMU and/or the implementing agencies may have contributed to these delays and how to avoid or mitigate against such future delays.

4.4. Based on the above, provide a reasoned estimate of the time of completion of the different subprojects under the parent project.

## V. METHODS AND PROCEDURES

1. **Review of Documentation:** The ET shall review all pertinent documentation available in Jamaica at USAID, the PMU, and the three implementation agencies: the NWC, the MOC, and the PAJ. The ET shall also review whatever documentation the office of OECF in Washington, D.C. may choose to make available. Such documentation to include, but not be limited to, feasibility and other preparatory studies, Project Papers, USAID and OECF Project Agreements, project letters of implementation, quarterly and other progress reports, financial data, correspondence, contracts and contract amendments, and all other documentation available that may contribute to better understanding of the project and the parent project and which would help produce an effective evaluation.

2. **Contacts and Interviews:** The ET shall contact all personnel in these agencies with any parent project responsibility and obtain their inputs. The USAID project officer will be assigned the responsibility of back-stopping the ET, will assist them in making appointments and will be available to them at all times. The ET will not be required to interview personnel from USAID/Washington, but will be required to meet with the officials of OECF in Washington.

3. **Field Visits:** The ET shall work primarily in Kingston, but may make one visit to the field to acquaint itself better with the project and the parent project.

4. **Work Schedule:** The ET shall work a minimum of eight hours a day, six days a week. Work on Sundays is not contemplated but could be authorized in writing if required.

5. **Logistical Support:** USAID will provide the ET with limited logistical support, including transportation for one trip to the North Coast.

USAID will also provide one office for the use of the team, but clerical support shall be the responsibility of the ET.

6. **Level of effort:** The tentative schedule calls for a total level of effort of twelve person weeks to be completed within a six-week period. Members of the ET shall conduct all of the work jointly and shall submit a final report at the end of the six week period and prior to departing Jamaica.

## VI. EVALUATION TEAM COMPOSITION

The ET shall consist of two specialists as follows:

**A Senior Project Development or Program Specialist/ Team Leader:** This individual is to have had at least twenty years of experience in project planning, design, implementation, and evaluation; with at least six years in senior management positions of project portfolios at a country or regional level. Extensive prior experience in developing countries is required. History of involvement in complex, multi-donor projects is desirable.

**A Senior Civil Engineer:** This engineer is to have had a minimum of twenty years of professional experience in all fields of civil engineering (water and waste water, highways, drainage, structures, port development), including extensive experience at senior levels of responsibility in developing countries on donor-financed infrastructure projects.

## VII. REPORTING REQUIREMENTS

**Interim Report:** The ET shall prepare and submit to USAID for review and comment a final draft of the evaluation report at least ten days prior to the ET's scheduled departure from Jamaica. USAID will distribute this interim report immediately and will arrange a meeting not less than three days later, in which the PMU and others may participate, to provide comments and feedback to the ET regarding the report's contents. USAID will also share the interim report with the OECF and solicit their comments. The ET will take these comments into consideration while preparing the final report.

**Final Report:** The final report of the evaluation shall contain at minimum the following sections:

- Executive Summary
- Project Identification Data Sheet (a USAID form)
- Table of Contents
- Body of the Report
- Appendices

The Executive Summary shall state the development objective of the project, purpose of the evaluation, methodology, findings, conclusions, recommendations and lessons learned.

The body of the report shall include discussion of (1) the purpose and study questions of the evaluation, (2) the political, economical and social context of the project, (3) team composition and study method, (4) evidence/findings of the study concerning the evaluation questions, (5) conclusions from the

findings, stated in succinct language, and (6) recommendations based on the study's findings and conclusions, stated as actions to be taken to bring the project to a successful conclusion. The report shall not exceed forty pages, exclusive of appendices.

Appendices shall include a copy of the evaluation scope of work, a list of the documents consulted, and people contacted. This section may also include a discussion of the methodology employed and technical topics as may be necessary to make the report an independent document that can stand alone.

Ten copies of the final report shall be delivered to USAID/Jamaica prior to the ET's departure from Jamaica.

#### **VIII. FUNDING**

The funding for this evaluation will be provided from the North Coast Development Support Project.

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Interview Protocol  
Mid-Term Evaluation  
North Coast Development Support Project  
USAID Project No. 532-0168

Name:

Position:

Address:

Telephone:

Introductory remarks about the evaluation:

- serves mainly the need of USAID for a review of progress
- will not attempt to measure achievement of ultimate objectives, or the economic and social impact of the project
- is concentrated on institutional arrangements, and their effectiveness:
  - role of the Project Management Unit
  - technical assistance through USAID
  - collaboration among OECF, USAID, & PMU

1. What is the relationship of your organization to the Northern Jamaica Development Project? What is your particular responsibility?
2. How would you assess the project to date?
3. In your view, does this project:
  - a. operate under unique or unusual interesting circumstances?
  - b. present special challenges?
  - c. offer certain advantages?
4. Specifically, from the point of view of your organization, how do you view the following:
  - a. Relations with, and effectiveness of the Project Management Unit
  - b. Relations with OECF

- c. Relations with USAID
  - d. Relations with, and effectiveness of Louis Berger International Inc. (LBII) in its:
    - technical advisory services to PMU
    - assistance in water loss management at Lucea-Negril
    - assistance in environmental monitoring at Montego Bay
  - e. The process of selection of consulting engineers, and of construction contractors
  - f. Project reporting and financial information
  - g. The role of the Project Coordination Committee
  - h. The role of Donors' Meetings
5. What improvements, if any, would you recommend for:
- a. The competitive selection process
  - b. The donor approval process
  - c. The services of LBII
  - d. Coordination among PMU, OECF and USAID
  - e. Management of the project by the PMU
  - f. Financing and Accounting
6. How could the delays in the Northern Jamaica Development Project have been avoided? The project will now require extension from mid-1996 to some time in 1998 in order to accommodate the time required to complete construction.
7. Should current USAID support for institutional arrangements be continued beyond current terminal dates?
- a. LBII technical advisory services beyond December 1995?
  - b. The management and financial staff of the PMU?
8. Do you have other comments on the project, or on its implementation?

## Northern Jamaica Development Project

Description of Project Elements  
(See also Appendix 7, Figure b)

1. USAID Technical Support, of US\$5 million
  - a. Reimbursement of the salaries of three key staff of the Project Management Unit (PMU), which was established to coordinate and monitor the project (see page 3 below for the full list of its responsibilities).
  - b. Through direct contract with a U.S. firm:
    - One full time technical advisor to the PMU to assist in procurement of engineering and construction services, monitoring and technical review of design estimates, and review of contract documents and payment claims; also to be responsible for procurement of short term services as needed, and facilitation of the two special studies and the management information system to be carried out under the contract
    - 24 person-months of short term services, as needed, for review of design and bid documents, analysis of the need to relocate utility poles along the highway, and other matters requiring specialized technical expertise.
    - A water loss management program for the Lucea-Negril water supply system to determine the causes of gaps between the magnitude of the water supply produced at the treatment plant and the amounts reaching customers, and to identify ways to narrow the gap
    - Baseline data to determine the environmental condition of the waters near Montego Bay, assessment of the potential impact of the sewerage improvement project, and a five-year environmental monitoring program.
    - A Project Management Information System to help consolidate the project information generated by the PMU and the implementing agencies
2. OECF Loan-financed Engineering Design, Construction Supervision and Construction of Works, of ¥8606 million (equivalent to US\$63.7 million in 1991 at an exchange rate of US\$1 = ¥135, but to US\$86 million or more in late 1994).
  - a. Ten months of financial advisory services to design and install an expenditure reporting system, draft an operations manual, and train and supervise PMU staff.

- b. Three government contracts with engineering consultants, one for each of three Jamaican agencies charged with implementation of project elements
- National Water Commission for Lucea-Negril Water Supply System and Montego Bay Sewerage Improvement
  - Ministry of Construction for Northern Coastal Highways Improvement and Montego Bay Drainage and Flood Control
  - Port Authority of Jamaica for Ocho Rios Port Expansion
- c. Six or seven construction contracts
- Two contracts for Lucea-Negril Water Supply System, one to increase the supply of raw water and to replace and expand the capacity of the treatment facility, the other to extend the distribution network
  - One contract for improvement of the sewage collection and treatment systems at Montego Bay to eliminate the overload on plant capacity, improve treatment by addition of stabilization ponds, and expand the area serviced.
  - One or more contracts for highway construction, originally intended for resurfacing and minor improvements to the entire North Coast Highway, but likely to be limited to realignment and construction to a higher standard on the western section between Negril and Montego Bay
  - One contract for construction of a new drainage channel along the course of the South Gully, to improve drainage and accommodate the flows resulting from storms occurring on average at nine to ten-year intervals.
  - One contract for extension of Berth #2 at Ocho Rios Port by 210 feet in order to accommodate super-liners, widening of the access road and extension of the parking lot.
3. Jamaican Government contribution, of at least US\$15 million equivalent from funds generated under the U.S. Economic Support Fund program, for such purposes as acquisition of land, relocation of utility poles, dredging of Ocho Rios Port, local purchases to support the sub-projects, and staff costs.

**Responsibilities of the Project Management Unit  
under USAID Project No. 532-0168  
North Coast Development Support**

1. Liaising with the line agencies responsible for implementing the subprojects, to ensure efficient implementation
2. Convening meetings as necessary of the Project Coordinating Committee to discuss issues related to the project
3. Facilitating and expediting the consent of the OECF and USAID on matters requiring their approval:
  - with the expertise of long and short term consultants, assisting in the preparation and evaluation of tenders in accordance with OECF guidelines
  - assisting in contract negotiations with the selected consultant or contractor
  - assisting in obtaining the approval of the OECF for contract awards
4. Facilitating all budgetary and financial transactions necessary for project implementation:
  - preparing annual budgets for the project and estimates of projected expenditures for the Public Sector Investment Programme
  - based on projected estimates of expenditure, requesting quarterly disbursement of funds from the Ministry of Finance to implementing agencies
  - verifying requests for payment from contractor and suppliers
  - monitoring transactions related to the project's special account in conjunction with the Ministry of Finance and the Bank of Jamaica
  - authorizing requests for replenishment of the Foreign Currency Special Account
5. Convening meetings of donors and/or line agencies as necessary to deal with project issues
6. 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

## Northern Jamaica Development Project

OECF Loan No. JM-P5

The loan agreement, signed by the Overseas Economic Cooperation Fund and the Government of Jamaica on October 29, 1991, became effective March 3, 1992 for five years, to March 3, 1997, unless otherwise agreed upon between the Fund and the Borrower. The final date for project activity is April 1996.

The term of the loan is 25 years, with 7 years grace on repayment of principal. Interest of 3 percent on principal disbursed and outstanding is payable semi-annually. Amortization begins in October 1998.

Project categories eligible for financing under the loan are as follows:

Category	¥ millions		US\$ mil.equiv.		Percentages Eligible	
	Budget	Ceiling	Budget	Ceiling	Equip/Mat.	Civil Works
M. Bay Sewerage	1,866	1,912	13.8	14.2	100	80
L-Negril Water	1,168	1,298	8.7	9.6	100	27
No. Coast Highway	2,498	2,767	18.5	20.5	100	80
M. Bay Drainage	597	690	4.4	5.1	100	80
Ocho Rios Port	601	668	4.5	4.9	100	11
Consulting Engr.	1,016	n/a	7.5	n/a	100	100
Contingency	860		6.4		n/a	n/a
<b>TOTAL</b>	<b>8,606</b>		<b>63.7</b>			

@ US\$1 = ¥135

Source: OECF-Government of Jamaica Loan Agreement

Eligible source countries for procurement of all goods and services are the members of OECD and developing countries, as defined in Section I.1.(b) of the Memorandum of Understanding on Untying of Bilateral Development Loans in Favour of Procurement in Developing Countries agreed by members of the Development Assistance Committee of the OECD in June 1974.

Procurement of goods and services, and of consultants, is to follow, respectively, the Guidelines for Procurement under OECF Loans and the Guidelines for the Employment of Consultants by OECF Borrowers, both dated November 1987.

Approval of OECF is required for various steps in procurement of goods and services, as follows:

- bidding procedures if they are other than those of International Competitive bidding (ICB);
- the list of firms pre-qualified and a report of the selection process;
- the analysis of bids and proposal for award, with relevant documents;
- the rejection of bids or decision that negotiation is necessary to reach a satisfactory contract;
- the contract award; and
- any modification or cancellation of a contract, if the change will affect the contract price.

For procurement of consultants, OECF requires the following:

- the Terms of Reference, for approval;
- the short list of consultants, for approval;
- the Letter of Invitation, for approval;
- the report of evaluation of proposals, for approval;
- in the case of failure of negotiation with the top-ranked firm, the reasons, for reference;
- the Terms of Reference and Letter of Invitation if a specific consultant is desired, for concurrence;
- the signed contract, for approval; and
- any important modification of a contract, or one that affects price, for approval.

## North Coast Development Support Project

USAID Grant Project Number 532-0168  
Commitments, in US\$ thousands

The project was authorized July 19, 1991. The Project Assistance Completion Date is July 31, 1996, and the Terminal Disbursement Date falls nine months later.

Project Element		Budget of Proj. Agmt. Aug 1991	Budget as of Contract w/ LBII	Revised Budget of July 1994
1	Project Management Unit	300	300	300
2	Project Advisor, Short Term Expertise, and Management Inform. System	1160	1258	1258
3	Environmental Monitoring	900	671	671
a	Baseline Change Study	(760)	(671)	(671)
b	Public Educ. & Awareness	(140)	0	0
4	Negril Water Loss Mgt.	2100	1802	1678
a	U.S. Contract	(1020)	(722)	(1108)
b	Reimbursement of NWC †	(1080)	(1080)	(570)
2+3+4a	[U.S. Contract with LBII]	[3080]	[2652]	[3038]
	Engineer at USAID	240	240	500
6	Evaluation and Audit	150	150	150
7	Contingency	150	578	*443
TOTAL US\$		5000	5000	5000

Sources: USAID-Government of Jamaica Project Agreement; USAID Contract with Louis Berger International Inc.; USAID data.

† Under Fixed Amount Reimbursable Agreements (FARA) No.1 and No.2

\* A proposed FARA No. 3 would require \$400,000 of this amount.

## Northern Jamaica Development Project

### Commitments by the Government of Jamaica

Under the USAID Grant Agreement, the Government of Jamaica is committed to provide the equivalent of US\$15,055,000 to the project.

Under the OECF Loan Agreement, the Government is committed to provide any funds that may be needed for implementation of the project, should the funds available from the proceeds of the loan be insufficient for implementation of the project.

As of November 1991, the Government estimated its contributions at US\$16,255,000 equivalent at an exchange rate of about J\$12 to US\$1. As of June 1994 the estimate had risen to US\$16,696,600, calculated at an exchange rate of J\$33 to US\$1.

The USAID Grant Agreement assumed that the Government of Jamaica would contribute its share of US\$15,055,000 from its holding of local currency generated from U.S. commitments of Economic Support Funds (ESF). Such Jamaica dollar currency generations are placed in a special account in accordance with U.S. Grant Agreements. Until April 1993 all local currency generations were programed for support to specific USAID projects, as agreed with USAID. Since then, in accordance with a Memorandum of Understanding, the Government is required only to program the currency in its annual budgets as generalized budget support.

Because the budget process requires any expenditures relating to externally financed projects to have been approved for the relevant fiscal year, the Ministry of Finance does show the amounts budgeted for each project. However, it is not possible, nor is it necessary, for the budget to identify the source of the amounts so budgeted.

Actual expenditures shown in the Project Management Unit report of June 30, 1994 totaled US\$997,774 equivalent. When construction begins, the rate of Government expenditure will increase.

## Sources Consulted

Government of Jamaica. *Progress Report*, nos. 1-10. Submitted to Overseas Economic Cooperation Fund and United States Agency for International Development by the Planning Institute of Jamaica, Special Projects Division, Project Management Unit, Kingston, Jamaica, as of March 31, 1992 through June 30, 1994.

Government of Jamaica. "Loan Agreement for North Coast Development Project, Between The Overseas Economic Cooperation Fund, Japan and the Government of Jamaica." October 29, 1991.

Government of Jamaica. "Northern Jamaica Development Project: Memorandum of Understanding between the Project Management Unit and National Water Commission/Ministry of construction/Port Authority of Jamaica." September 1993.

Government of Jamaica. "Northern Jamaica Development Project: Notes on Project Status and Progress to October 1994." [Prepared by Project Management Unit, n.d.]

Hasan, Hasan A. "Memorandum to the Director [or to the Files]". USAID/Jamaica, Office of Energy and Engineering, various dates, approximately monthly, from October 23, 1991 to October 27, 1994.

Hasan, H.A., and J. Tennant. "USAID/Jamaica, North Coast Development Program, a Co-financed Project by USAID & OECF: Lessons Learned After Two Years of Implementation." [Draft, August 27, 1993; redraft by Hasan, October 1994]

Louis Berger International, Inc. *Quarterly Reports*, nos. 1-10, prepared for the Office of Engineering, Energy and Environment, United States Agency for International Development. Kingston, Jamaica, covering the period January 1992 through June 1994.

Overseas Economic Cooperation Fund. *Guidelines for the Employment of Consultants by OECF Borrowers*. Tokyo, November 1987.

Overseas Economic Cooperation Fund. *Guidelines for Procurement under OECF Loans*. Tokyo, November 1987.

Overseas Economic Cooperation Fund. *What is OECF?* Tokyo, Japan, November 1992.

Overseas Economic Cooperation Fund. *Annual Report 1993*. Tokyo, Japan, October 1993.

SAPROF. *Final Report on Tourism Project in Jamaica, prepared by a Special Assistance for Project Formulation (SAPROF) Team*. November 1990.

United States Agency for International Development. *Jamaica: Project Paper: North Coast Development Support*. Washington, D.C., July 7, 1991.

United States Agency for International Development, Mission to Jamaica. "Action Memorandum to the Director: North Coast Development Support Project No. 532-0168, Proposed Amendment to Permit Renovation of Sewerage Treatment Plant in Montego Bay." June 20, 1994.

United States Agency for International Development, Mission to Jamaica. "Action Memorandum to the Director: North Coast Development Support Project No. 532-0168, Water Loss Management Program." May 21, 1993.

United States Agency for International Development, Mission to Jamaica. *Action Plan, FY 1995/96*. February 1994.

United States Agency for International Development, Mission to Jamaica. "Contract no. 532-0168-D-00-2004-00, with Louis Berger International, Inc. October 10, 1991."

United States Agency for International Development, Mission to Jamaica. "Project Grant Agreement Between the Government of Jamaica and the United States of America for the North Coast Development Support Project." August 27, 1991, as amended.

World Bank. *Jamaica: A Strategy for Growth and Poverty Reduction: Country Economic Memorandum*. Washington, D.C., April 12, 1994.

**NORTH COAST DEVELOPMENT SUPPORT PROJECT**  
Midterm Evaluation

**Persons Interviewed**

**Organization**

**Person**

**USAID/Jamaica**

Carole Tyson, Director  
 Donald Smith, Dep. Director  
 Hasan A. Hasan, Chief Engineer  
 Office of Engr. and Energy  
 Herrol Sadler, Asst.Genl.Engr.  
 Kirk Dahlgren, Actg.Prog.Officer  
 Joanne Feldman Lawrence,  
 Senior Proj.Devt.Specialist  
 Adebola Arogbodun,  
 Deputy Controller  
 Melbourne Smart, Accountant

**GOVERNMENT OF JAMAICA**

Ministry of Finance  
 Planning Institute of Jamaica

Marjorie Henriques,  
 Actg. Director General  
 Merle Henry, Director,  
 Special Projects Division  
 Garth Jackson, Project Manager  
 Lloyd Thompson, Proj. Acct.  
 Audrey Ellis, Info. Officer

Project Management Unit

National Water Commission

Claude B. Stewart, President  
 J. Anthony O'Connor, Manager  
 Engr. and Capital Projects  
 Ana Solis-Oriega de Treasure,  
 Project Engineer  
 Herman Dennis, Field Coordinator

Western Region

Auldie Brown, General Manager,  
 Orville LueLim, Operations Assistant,  
 Michael Siva, Community  
 Relations Officer

Ministry of Construction

Project Unit Office

Joseph Hibbert, Chief Technical  
Director, Chair of Government  
Contracts Committee  
Karl Martin, Proj. Director  
Allison McCalla, Project Accountant  
Herbert Darby, Surveyor

Ministry of Water and Transport  
Port Authority of Jamaica

Ocho Rios Port

Albert S. Edwards, Vice Pres.  
Engineering and Port Devt.  
Mervis Edgill, Senior Engineer  
Mr. Holeness, Port Manager

**GOVERNMENT OF JAPAN**

The Overseas Economic Cooperation Fund (OECF), Washington Office

Junichi Hasegawa, Chief Repr.  
Peter Ide, Project Officer

**OTHER DONORS**

European Union

Peadar G. O'Sullivan,  
Water Sector Engineer

Interamerican Development Bank

Robert Kestell, Representative  
James Campbell, Sectoral Spec.

World Bank

Van Pulley, Resident Repr.  
Elizabeth Rankin, LA Dept.

**CONSULTING FIRMS**

DHV International (U.K.) Ltd.

Cor Jelier, Project Manager

Louis Berger Intl. Inc.

Kent O. Lande, Team Leader and  
Technical Advisor to the PMU  
Richard P. Oxton, Water Engineer

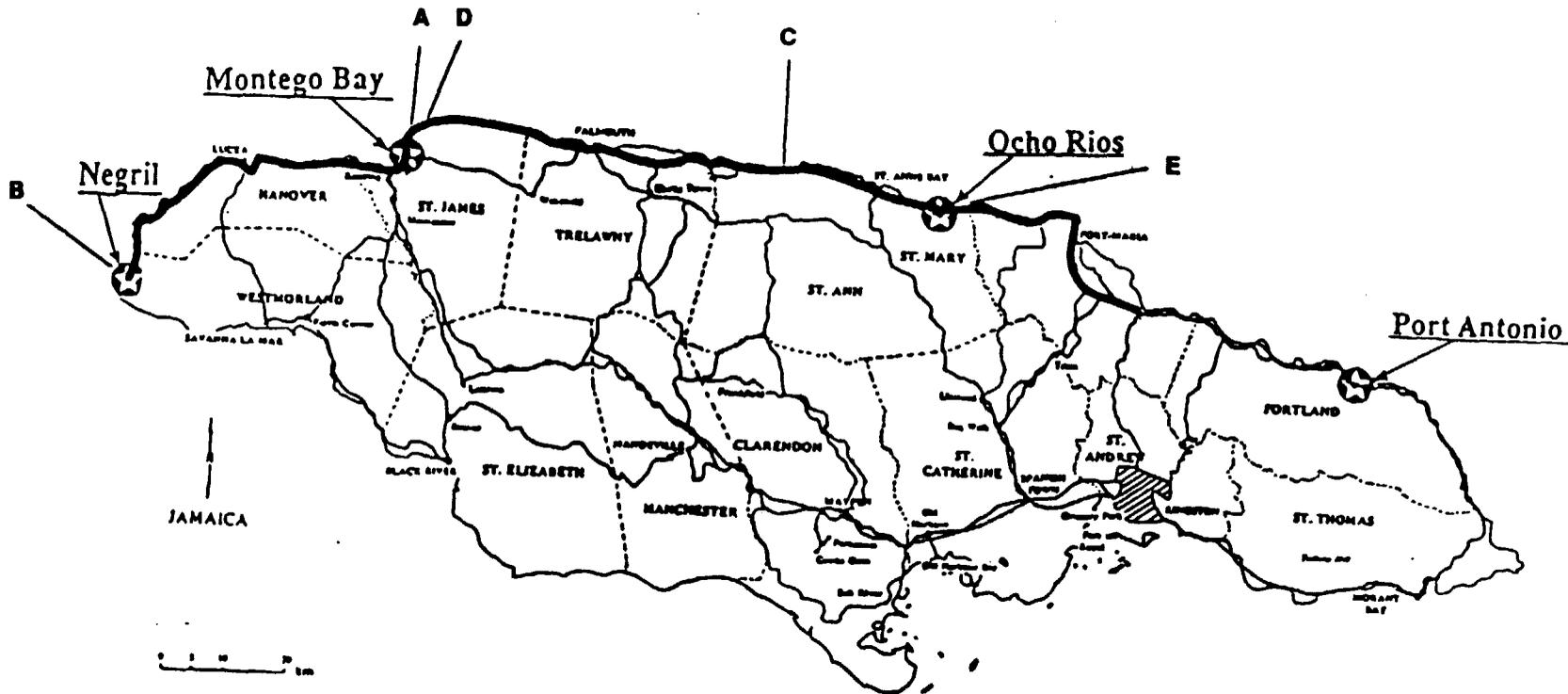
Stanley Consultants Inc.

Robert Jacobs, Project Manager  
Timothy Crall, Asst. Proj. Mgr.

Wallace Evans (Jamaica) Ltd.

Cowell Lyn  
Paul Hoo

## Project Location Map



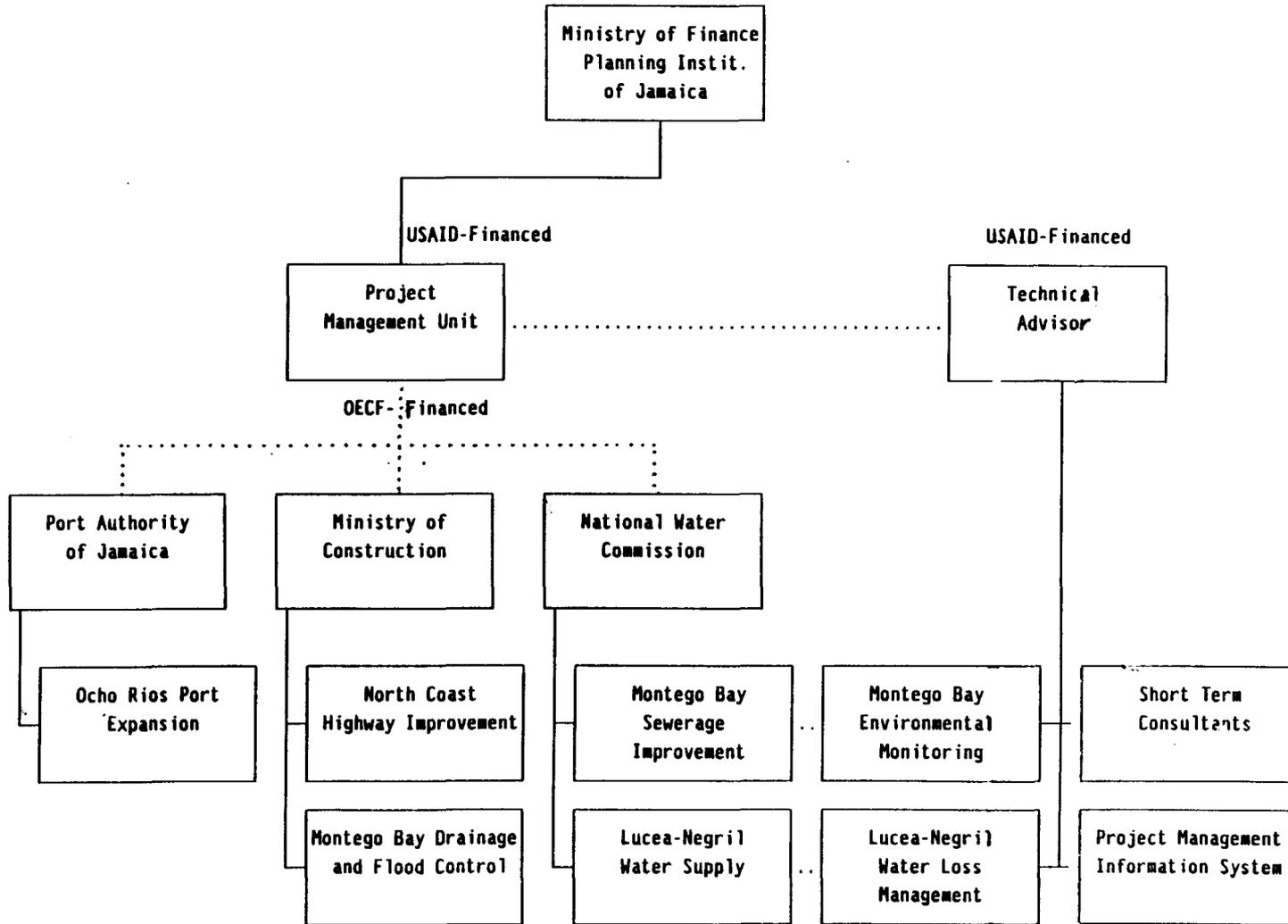
- A. Montego Bay Sewerage System Improvement Project
- B. Luca-Negril Water Supply System Expansion Project
- C. Northern Coastal Highways Improvement Project
- D. Montego Bay Drainage and Flood Control Project (South Gully)
- E. Ocho Rios Cruise Ship Pier Project

Source: SAPROF Report

Northern Jamaica Development Project

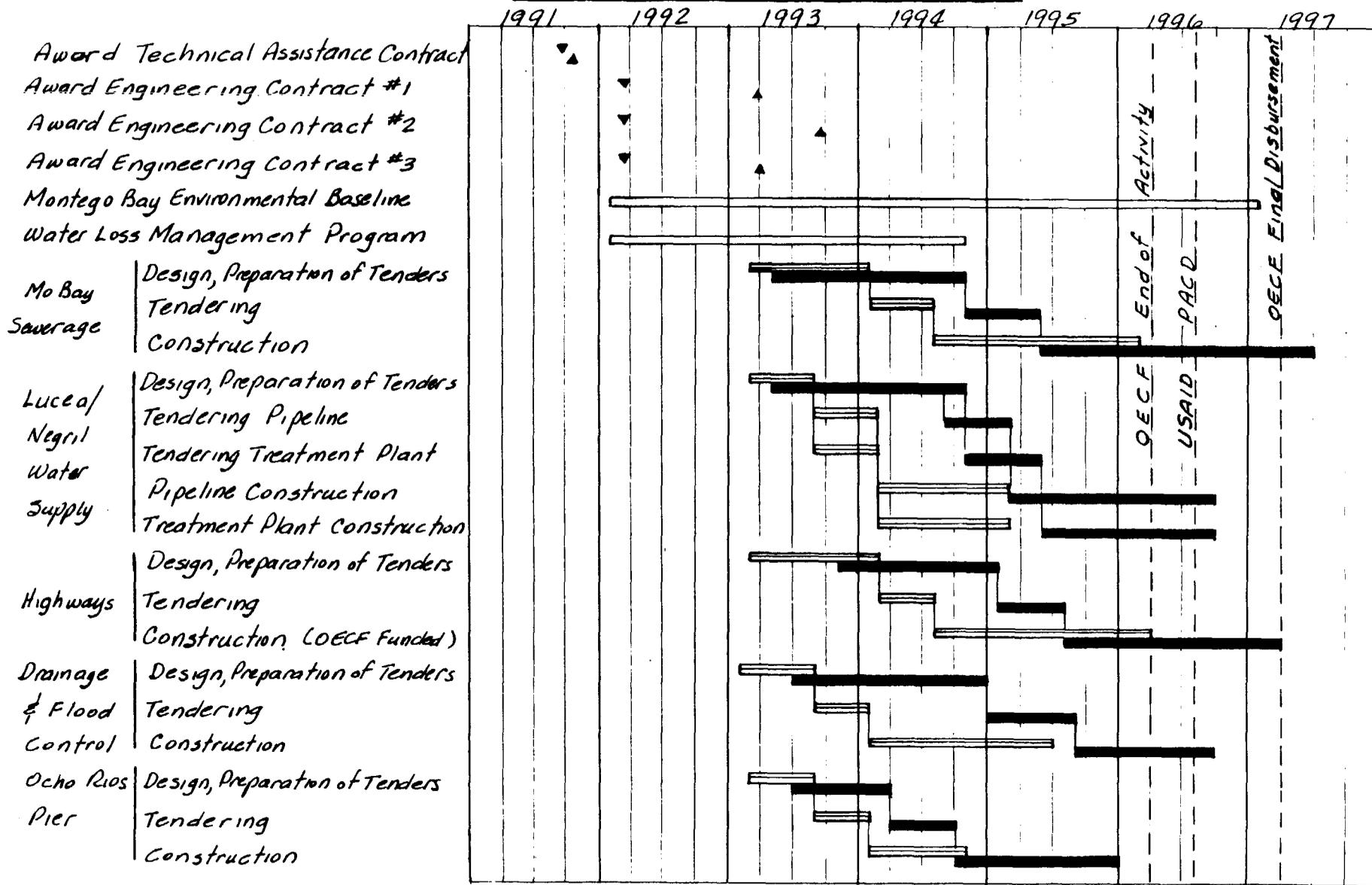
USAID Project No. 532-0168

OECF Loan JM-P5



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# PROJECT SCHEDULE



## LEGEND

- ▼ Project Paper Schedule
- ▲ Actual Event

- Environmental Monitoring & Water Loss Management Programs
- ▒ March 1992 Schedule
- October 1994 Schedule

Source: Project Paper; PMU Notes On Project Status & Progress to October 1994