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International Coastal Resources Management Project

The University of Rhode Island

The four major goals of the AID/URI Coastal Resources Management Project (CRMP) are: 1) to apply, as appropriate, existing experience in coastal resources management to developing countries; 2) to assist three developing nations in the design and implementation of integrated coastal resources management programs; 3) to advance the state-of-the-art of coastal resources management in developing countries; and 4) to build URI's capability to assist developing nations with coastal resources management.

The CRMP will work with the cooperating pilot countries to:

- develop procedures for the assessment of the impacts of coastal development proposals
- develop institutional and technical solutions for resource use conflicts
- support research to better understand the issues that affect the condition and use of coastal ecosystems
- improve the capabilities of in-country professional staff to plan for and manage coastal development

The countries selected for pilot projects are Ecuador, Sri Lanka and, tentatively, Thailand.

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For information on the project, contact:

Stephen Olsen, Project Director
AID/URI Coastal Resources Management Project
Coastal Resources Center
URI Bay Campus
Narragansett, RI 02882-1197
U.S.A.

Cable Address: RIMARDEC
Telex: 6974611RI ICMRD
Telephone: (401) 792-6224

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URI/AID COASTAL RESOURCES MANAGEMENT PROJECT

PROGRESS REPORT

January 1, 1986 - December 31, 1986

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COASTAL RESOURCES MANAGEMENT PROJECT

PROGRESS REPORT

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I. INTRODUCTION

On May 16, 1985, The University of Rhode Island (URI) and the US Agency for International Development, Bureau of Science and Technology, Office of Forestry, Energy and Natural Resources (AID/S&T/FENR) signed a cooperative agreement to support a coastal resources management project (CRMP) that will launch pilot projects in integrated coastal resources management in three developing nations--Ecuador, Thailand and Sri Lanka. The Cooperative Agreement calls for progress reports to provide an analysis of the project's activities and accomplishments.

This report is the second such report and covers the January 1 to December 31, 1986 period. It draws on the more descriptive, activity-oriented reports produced quarterly by In-Country Project Managers and US-based staff. In the future, progress reports will be prepared semi-annually.

II. CHRONOLOGY OF EVENTS AND HIGHLIGHTS OF THE DECEMBER 1985 - DECEMBER 1986 PERIOD

December 1986, marked the end of the first 18 months of the URI/AID CRMP and--in our view--the Project's start-up phase. Detailed annual reports prepared by the In-Country Project Managers and internally conducted management reviews of pilot project progress will soon be available for both Sri Lanka and Ecuador. The reader is referred to these documents for more specific information on the activities of each pilot project. Major project events which occurred during the projects first 18 months are listed in tables at the end of this section and products generated by the CRMP during this period are listed in Appendix I. Major project accomplishments include the following:

Domestic

- o Approval and initiation of a Year 2 Work Plan which called for a substantially enhanced training and outreach component.
- o Formation of an Institutional Analysis Issue Team to prepare a manual on approaches to conducting institutional analyses for CRM program development and implementation.
- o Formation of a Training Issue Team to develop a strategy for the CRMP's training program. The Issue Team completed its work in December 1986.

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- o Consolidation of CRMP technical and support services at the University of Rhode Island's Graduate School of Oceanography. This consolidation should significantly enhance administrative efficiency at URI.

Ecuador

- o Establishment of CRMP and DIGEMA offices in Guayaquil.
- o Completion of an in-depth analysis (background documents and workshop) of the shrimp mariculture industry as a major coastal use in Ecuador, and development of an integrated strategy for sustainable development of the industry.
- o Completion of a legal and institutional analysis of two key coastal issues in Ecuador--shrimp mariculture and water quality.
- o Initiation of a provincial profiling task to identify and analyze key coastal issues other than shrimp mariculture.
- o First annual review of CRMP-Ecuador goals, objectives, accomplishments and weaknesses by principal project participants; and the subsequent restructuring of the program to enhance the role of the Ecuadorian counterpart organizations.

Sri Lanka

- o Completion of coastal mapping and coastal habitat information synthesis tasks for use in coastal habitats workshop.
- o Planning and execution of a four-day interagency, facilitated workshop on the management of coastal natural habitats in Sri Lanka. This was the first such workshop in Sri Lanka. Its findings were used to prepare the coastal habitat chapter of the Coastal Management Plan.
- o Completion of a review draft of the first national Sri Lanka Coastal Zone Management Plan (CZMP). The CZMP includes findings and management strategies for coastal erosion, natural habitat protection, and protection of archeological, historic and cultural sites. The Sri Lanka CZMP represents a major milestone in the evolution of CZM in Sri Lanka.
- o A visit by the Sri Lanka Minister of Fisheries and the Director of CCD to the US to view and discuss coastal management initiatives in the US.

Thailand

- o Selection of Thailand as the third pilot project for the URI/AID CRMP.

- o USAID/Thailand agrees to add approximately \$1.2 million to the Thailand pilot through its Emerging Problems in Development II (EPD II) program.
- o. Reciprocal visits to Thailand and the US by key project personnel, including a 12-day planning visit to the US by eleven Thai government and USAID/Thailand representatives to view and learn from US experience in CRM.
- o Completion of draft versions of a MOU and Phase I Work Plan.

TABLE 1. Major Project Events During the Period May 1985 - December 1986.

MAJOR CRMP EVENTS: DOMESTIC	
<u>May 1985 - December 1986</u>	
<u>1985</u>	
May	o Cooperative Agreement Signed
June	o Marine Specialist Begins Work o Briefings on Project in Washington o Technical Committee Begins Meetings
September	o Graduate Assistant Hired o AID/W Project Officer Changes
October	o CRMP Board Meeting
November	o URI/WHOI Technical Committee Abolished
December	o Technical Advisor to AID Project Officer Retires
<u>1986</u>	
February	o AID Approves Tropical Ecologist and Assistant Director Positions
March	o WHOI Withdraws as Major Project Subcontractor o First Work Plan Approved
April	o Thailand Chosen as Third Pilot Project o Institutional Analysis Team Begins Work o Project Funding Ceiling Increased to \$8.4 million to Allow Mission Buy-ins
May	o Initial Meetings at URI to Develop Training Strategy
July	o CRMP Board Meeting o Approval of Second Year Work Plan Including Initiation of Training/Outreach Program
August	o First draft from Institutional Analysis Team reviewed
September	o Training Issue Team Begins Work o AID/W Project Officer Changes o Recruitment for Tropical Ecologist Begins
November	o Project Support Services Moved to Graduate School of Oceanography o CRMP Asst. Fiscal Management Officer Position Created
December	o Training Issue Team completes work, draft final reports prepared.

MAJOR CRMP EVENTS: ECUADOR

May 1985 - December 1986

1985

- May-June
 - o First Drafts MOU and 1st Annual Work Plan
 - o CRM Workshop in Guayaquil
- September
 - o Background Document Collection Completed (U.S.)
 - o Final Drafts MOU and 1st Annual Work Plan
 - o Shrimp Project Defined
- November
 - o U.S. Training Session for Core Ecuadorian Personnel

1986

- February
 - o MOU Signed
 - o US/Ecuadorian Team Selected for Shrimp Mariculture Project
- April
 - o Preliminary In-Country Shrimp Workshop Preparations
 - o AID/Washington Approves 1st Annual Work Plan
- May
 - o Consultancy on Public Education Program Design
 - o Teacher Training Program in El Oro
 - o DIGEMA Counterpart Named
- June
 - o Pre-Workshop Shrimp Mariculture Meeting for Expat. Resource Team (New Orleans)
 - o Example Provincial Profile Completed
- July
 - o Perez Visits URI: Institutional Analysis
- August
 - o Towards Development of a Sustainable Shrimp Mariculture Industry in Ecuador Workshop
 - o Technical Assistance on Creation of Coastal Information Network
- September
 - o Fundacion Maldonado Begins Work on Provincial Profiles
- October
 - o Shrimp Post-Larvae Mortality Study Commences
 - o Evaluation of Year 1 Progress/Preparation of Year 2 Work Plan
- December
 - o First Collaborative Review of Provincial Profiles
 - o Restructuring of In-Country Project Administration

MAJOR CRMP EVENTS: SRI LANKA

May 1985 - December 1986

1985

- July
 - o Orientation for CCD at URI
 - o 1st Drafts MOU and 1st Work Plan
- August
 - o U.S. Training for CCD Staff Planner
- October
 - o Retreat on CCD Plan Design/Scope
 - o MOU Signed
 - o Final Draft 1st Work Plan
 - o In-Country Administrator Selected
- November
 - o NARA Librarian at URI

1986

- January
 - o AID/W Approves MOU and 1st Work Plan
- February
 - o Sri Lanka Bibliography Completed
 - o Introductory and Erosion Management Chapters of CZMP Completed
- April
 - o CCD Chief Planner to U.S. to attend Marine Parks and Protected Areas Seminar
 - o Draft Background Synthesis Paper on Coastal Habitats Completed
 - o Maps of Coastal Habitats Prepared
- May
 - o Management of Coastal Natural Habitats Interagency Workshop
- August
 - o Inventory of Coastal Archeological/Historical/Cultural Sites Completed
- September
 - o SL Minister of Fisheries, Director CCD to U.S. for Study Tour of CRM in U.S.
 - o Draft of Sri Lanka CZMP Completed
- December
 - o Sri Lanka CZMP Approved by Coastal Advisory Council

MAJOR CRMP EVENTS: THAILAND

May 1985 - December 1986

1986

- March o Tentative Selection by USAID of Thailand as Third Pilot
- April/May o Project Planning Visit to Thailand, Consensus on Project Objectives and Approach
- July o Visit to URI by USAID Thailand Project Manager--Project Planning
- September o Project Planning Visit to Thailand
 o Decision by AID/Thailand and the Thai Department of Economic and Technical Cooperation to "Buy-Into the URI/AID CRMP Thailand Pilot.
- December o Project Planning Visit to US/Review of US CRM Programs by Principal Thai and USAID/Bangkok Project Personnel

III. ANALYSIS OF CHRONOLOGY

In reviewing the first eighteen months of the project, we must look at both the process of project development and implementation, and specific project outputs. During this first phase of the project, URI stressed a process-oriented approach to project development. Our primary objective was to establish trust and credibility with our pilot country counterparts and develop a collective vision of what the project should be, and how it should be structured and implemented to maximize its chances of reaching its objectives. We assumed that we were on the steep rise of a learning curve and that all project participants had much to learn about how to most effectively design and implement a project to develop or enhance sustainable CRM programs in the pilot countries. Throughout this period, pilot project objectives and priorities, program structure, operating procedures, and roles for the key players were constantly reexamined to see if the project was moving towards its overall objectives. The core group at URI insisted on retaining sufficient flexibility to alter staffing, subprojects and management structures. This included minimizing commitments to potential US participants until in-country issues, capabilities and needs were better known.

While this approach was appropriate for the project's start-up phase, it will not serve the project as effectively in the future. In both the domestic and pilot programs, overall objectives are now clear, and a core team in place. Emphasis now must be on providing the resources and structure to move forward on these objectives.

Review of Distribution of Core Staff Time:

The CRMP is structured with separate domestic and pilot project budgets and work plans. In actuality, significant portions of the "domestic" budget are spent on activities included in pilot project work plans. During 1986, core staff time can be allocated as follows:

Project Director (serving 70 percent of his time on this project)

Domestic	20%
Ecuador	30%
Sri Lanka	15%
Thailand	10%
Training/Outreach	25%

Asst. Project Director (Serving 100 percent of her time on the project)

Domestic	50%
Ecuador	5%
Sri Lanka	15%
Thailand	10%
Training/Outreach	20%

ICMRD Information Service (.75 FTE) . . .

Domestic	25%
Ecuador	50%
Sri Lanka	10%
Thailand	15%

IV. ANALYSIS OF SELECTED ISSUES

A. The Pilot Countries as Demonstration Projects

AID/S&T/FENR was responsible for selecting pilot countries that would be included in the URI/AID CRMP. Pilot country selection was made on the following criteria:

- Significance of expected pilot program outcome.
- Regional applicability of the country's coastal resource problems, development opportunities and probable institutional solutions to CRM.
- The nature and commitment of Mission resources to the pilot programs.
- The host country commitment and contribution including recognition of the need for CRM and evidence of the political will to give institutions the mandate and enforcement capacity to improve CRM; host country capacity in terms of trained personnel available to work with the CRM pilot program; economic importance of the country's coastal resources, including their economic development potential and the costs of resource degradation problems.
(from AID CRMP Project Paper, 1984, p. 13)

It is our opinion that the pilots selected share enough commonalities and differences to serve this purpose. Basic facts about the countries are presented in Table 1. Table 2 lists major coastal issues in each pilot country. There are remarkable similarities among the issues faced by the pilots. They are, however, quite different in their status of evolution in developing management strategies to address priority CRM issues, in the apparent commitment of the host country to CRM and to the CRMP, and in the Mission's commitment and fiscal support of the project.

Table 1
Characteristics of the Pilot Countries

	Ecuador	Sri Lanka	Thailand
Land Area* (km ²)	284,000	66,000	514,000
Shoreline* (km)	2,237	1,340	3,219
Estimated Population in millions (1985)	14.6	16.4	51.6
Population Density* (persons/km ²)	33	250	100
Per Capita GNP (1983) ¹ (US\$)	1,420	330	810
CRM Legislation	no	yes	no
Localized CRM Plans	no	yes	yes

*World Resources 1986, World Research Institute and the International Institute for Environment and Development, New York.

Table 2
Major CRM Issues in the Three Pilot Countries

	Ecuador	Sri Lanka	Thailand
Institutional Issues			
Overlapping jurisdictions/interagency conflict	P	P	P
Inadequate public support for management initiatives	P	P	P
Inadequate implementation of existing regulations	P	X	P
Resource Issues			
Coastal erosion	X	P	X
Mineral or sand mining on beaches	-	P	X
Poor shorefront development practices	X	X	X
Degraded water quality in estuaries	P	X	P
Losses in estuarine-dependent fisheries	X	P	P
Destruction of mangroves	P	X	P
Degradation of scenic/cultural resources	X	P	P
Conversion of wetlands to aquaculture ponds	P	X	P
Ocean storms and/or severe flooding	X	X	-
Dams on major rivers	P	P	X

P = priority issue, X = significant issue

Stages in Project Development

The three pilot countries are in different stages of program development; consequently, there is ample opportunity through the CRMP to gain insight into all phases of the cycle of CRM program development and implementation in developing countries. The URI/AID CRMP Institutional Analysis team has developed the following conceptual framework for viewing the stages of CRM program design and implementation:

- Step 1. Problem Identification
- Step 2. Problem Definition and Estimation
- Step 3. Simplification and Expansion
- Step 4. Development of Management Options
- Step 5. Selection of Management Scheme
- Step 6. Implementation
 - a. Design of implementation structure.
 - b. Initiation and operation
 - c. Evaluation and readjustment
- Step 7. Changes in condition of targeted issues

It is the URI/AID CRMP approach to try to complete this cycle as frequently as possible for key coastal issues, rather than to work sequentially through this process for one "integrated" CRM program. In this way experience is gained and incorporated in program design. If the pilots are viewed within this framework, they may be arrayed as follows:

Ecuador: Ecuador is in the initial phase of program development. At the start of the project, with the exception of shrimp mariculture, the major coastal problems had been only tentatively identified. During the pilot's first year an in-depth analysis of the shrimp mariculture issue was undertaken (preparation of the background documents for the workshop), a management strategy developed (Guayaquil Workshop proceedings/strategy document), and implementation of elements of that strategy began (post-larval mortality studies, development of TV spots on the problem). The identification, definition and estimation of other coastal problems has been slower. Problem identification and analysis (through the Provincial Profiling Task) did not get underway until September of 1986 and will not be complete until September of 1987. In project Year three, the major emphasis of the project will move to development of integrated management options for the coastal issues selected as the core for a national CRM initiative. At this point, we expect those issues to include water quality, development of mangrove habitat protection, and management of coastal development through a shoreline/water classification system.

Project elements that are currently or projected to be included in the Ecuador CRMP are arrayed within a simplified version of this conceptual framework in Figure 1.

Thailand: The Thailand Pilot is just getting underway and its specific objectives and scope have not yet been finalized. Thailand is further along than Ecuador in terms of CRM program development. From a

national perspective the need to manage coastal resources for sustainable development has been recognized and incorporated as an objective within the country's sixth five year plan which went into effect in October, 1986. The primary problems which a CRM program must address from the national level have also been identified --coastal habitat degradation and destruction, loss of fisheries resources, degradation of water quality, degradation of scenic qualities and amenities of crucial importance to Thailand's booming tourism industry.

While much relevant information exists on these problems, it needs to be organized and synthesized into a document which presents a useful definition and estimation of the problem so that management options can be formulated. Most of the effort at the national level during the first phase of the Thailand CRMP will be to move through the first four steps of program formulation. In keeping with the CRMP's basic approach of "completing the cycle," concurrent with the national effort to develop policy, will be a provincial demonstration CRM project in Phuket and testing of management strategies for coastal parks and protected areas. In the Phuket project, we can accelerate the steps of program development and complete the first five steps of the process during the first phase of the project, allowing the national effort to learn from the provincial level implementation experiment.

Sri Lanka: Sri Lanka is farthest along on the project development continuum. National CZM legislation has existed since 1981, a lead agency (the Coast Conservation Department [CCD]) has been developing and implementing a national program since 1983, and an interagency council (Coast Conservation Advisory Council) exists for addressing CRM issues. The CCD has just completed the nation's first CZMP. The Plan identifies and analyzes three major coastal issues (erosion management, coastal habitat degradation, and protection of archeological, historic, and religious sites), and sets forth a management strategy to address the issue. CCD is well into Step 6 of implementing their management schemes. As they move into Year 2 of the Pilot Project, they are beginning to evaluate and experiment with ways to re-adjust their currently highly centralized management and implementation systems.

Host Country and Mission Commitment to CRM and to the CRMP

The success of the URI/AID CRMP is closely tied to maintaining and enhancing the host country's interest both in CRM and in the CRMP as a useful vehicle for furthering that interest. As stated above, host country commitment to CRM was one major factor in the selection of pilot project sites. Selection of Ecuador and Sri Lanka as pilot project sites was made in 1982, Thailand was selected in 1986. Interest in and commitment to the issues and the project by both the host country and mission is currently high in both Sri Lanka and Thailand. In Ecuador, the situation is currently ambiguous.

There was close to a three-year lapse between pilot site selection and project initiation. In the case of Ecuador during this period there were significant changes among the people in key positions in the government and in the AID Mission. It should be emphasized, however, that a backdrop of change is not uncommon for a new program; and the

need to retain sufficient flexibility to adapt to changing in-country conditions is essential to the project. At the same time the project must have sufficient inherent stability to maintain its integrity in the face of fluid political conditions in some pilot countries.

Ecuador: Interest in CRM by the government of Ecuador (GOE) first crystalized during a UN-sponsored seminar in 198-. A lead-off URI/AID CRM workshop in May of 1985 rekindled interest in the project as a whole and eliminated in the GOE designating the Department of the Environment (DIGEMA), a new small environmental agency within the then-Ministry of Energy and Natural Resources as the lead agency for CRM and the CRMP's counterpart agency. By the time the project MOU was signed in March of 1986, the Ministry had been reorganized to the Ministry of Energy and Mines with responsibility for living natural resources (including fisheries) being transferred to another agency. DIGEMA has no legal mandate for coastal management and at the beginning of the project, no presence on the coast. During the period from pilot project selection to project implementation, Ecuador had also undergone a fiscal crisis due to reduced oil prices. The need for fiscal austerity has made it difficult for the GOE to meet its in-kind contributions to the project and fully staff the Guayaquil office of DIGEMA.

The CRMP has, however, successfully captured the GOE's attention with its work on the shrimp mariculture issue and interagency working group on mangrove management and water quality and is beginning to develop a coordinated approach to coastal problems. The Ecuador Mission's commitment to the CRMP is currently somewhat ambiguous. Interest in doing followup work based on recommendations from the shrimp mariculture task is high. There is less immediate interest in other project elements.

Thailand: The current level of commitment to CRM and the URI/AID CRMP by both the Royal Thai Government (RTG) and USAID/Thailand is high. The RTG--both through the Office of the National Environmental Board (ONEB) and the National Economic and Social Development Board (NESDB)--has made significant staff commitments to the project during its start-up phase. USAID/Thailand has agreed to add \$1.3 million dollars to the Thailand CRMP, matching the S&T funding two to one.

Sri Lanka: The government of Sri Lanka (GSL), through the Coast Conservation Department (CCD) has shown a solid and growing commitment to the project. GSL contributions to the CRMP are substantial, and approximately equal S&T funding levels. While interest in the CRMP by the Mission was initially low, interest is increasing. This was evidenced by a request for a briefing on the project by the new Mission director and subsequent interest in proposals from CCD for supplemental funding.

B. Structuring the Pilot Projects

The URI/AID CRMP is very concerned about the sustainability of CRMP initiatives after the project is completed. It is of crucial importance that each pilot project be structured to emphasize

host-country identification with and responsibility for in-country CRM initiatives. During the January 1986 to December 1986 period, both the Ecuador and Sri Lanka pilots were fully operational. The two projects were structured differently. In Ecuador, an expatriate in-country manager was hired by URI to be responsible for implementing the programs activities in Ecuador. In Sri Lanka, the project was managed by a host-country national In-Country Administrator. These different administrative structures were called for in the Project Paper (p. 23; p. 27) and implemented by URI.

The rationale for using an expatriate in-country manager in Ecuador, as stated in the AID Project Paper, was that he would bring expertise in CRM to the host country and, "working through host country counterparts, foster the development of a permanent institutional arrangement responsible for coastal development activities" (p. 23). By the end of his tenure, the manager would be able to hand over the project's activities to host-country nationals trained and supportive of CRM initiatives that had been carried out by the project. The year-end evaluation of the Ecuador project suggests, however, that the presence of an expatriate running the program in-country was a major impediment to Ecuadorians assuming responsibility for and leadership in the program and generating the ideas and policies that will shape CRM in Ecuador. During the project's first year the expatriate Project Manager assumed the dominant role in all major substantive negotiations with subcontractors and agencies, resulting in the in-country perception that the resources and power of the project are more closely tied to him rather than shared with his Ecuadorian counterparts. A second problem with the expatriate in-country manager structure is the difficulty in filling this position with an individual knowledgeable about CRM and also experienced operating in the host country. In the case of Ecuador, a manager knowledgeable about Latin America was selected. He had, however, no expertise in CRM. Despite this lack of expertise, the in-country manager was viewed by the Ecuadorians as technically expert. A final consideration regarding the expatriate in-country manager structure is budgetary. The cost of maintaining an expatriate manager in a foreign country is approximately \$70,000 to \$100,000 per year. An equally qualified host country national in-country manager/administrator requires about \$30,000 per annum to maintain. Hence, it seems that there must be an overwhelmingly persuasive reason to allocate so much of a project's limited budget to one individual. Based on the above consideration, and after a lengthy consultation process with AID/S&T/FENR, USAID/Quito, and our counterpart agency, URI decided to terminate the position of expatriate in-country manager in Ecuador and restructure the project to have it managed by a host country national manager.

In Sri Lanka, project administration has been quite smooth. The Director of CCD--the URI/AID CRMP counterpart--has been the key contact in-country for all matters of policy and substance relating to program design and implementation. The in-country administrator is viewed as part of his "team" but with responsibilities for implementing a specific project (i.e. the URI/AID CRMP). He is integrated into and knowledgeable about in-country CRM-related initiatives and able to recognize and capitalize on opportunities for the agency and project.

The CRMP project paper envisioned an administrative structure for the third pilot similar to Ecuador, i.e. an expatriate in-country manager responsible for project implementation. Based on the experiences in Sri Lanka and Ecuador, URI began discussions with USAID (both S&T and the Thailand Mission) during the first planning visit to Thailand (April 1986) and recommended adopting the Sri Lanka model. From the above experiences, URI currently views the preferred in-country/URI administrative model for the CRMP pilot projects as follows:

1. In-country project implementation responsibility resting with the designated head of the in-country counterpart organization.
2. CRMP funds being used to augment counterpart staff capability to effectively implement the project in-country (hiring one or two host country professionals as in-country manager/administrators) plus secretarial and fiscal support staff.
3. Hiring an In-Country Manager who is a competent, politically astute administrator who can effectively utilize both local and expatriate expertise and is able to work with policy-level people in-country.
4. URI backstopping the in-country manager with a "Desk Officer" located at CRC. The Desk Officer and In-Country Manager should work closely on guiding and monitoring all pilot project activities and anticipating and solving problems as they arise.
5. The use of consultants for expertise in key program areas. Where possible, the same consultant should be utilized over the life of a project. This helps to build solid relationships with host country colleagues and reduces transaction costs. The respective roles of expatriate and in-country consultants are different. The use of in-country consultants is encouraged for broadening the base for CRM in the pilot country and enhancing in-country expertise and experience.

Dr. G. Kem Lowry, University of Hawaii, and an advisor/consultant to the CRMP, has characterized the contributions of expatriate consultants as follows:

1. motivation
2. verification
3. technical assistance.

We agree with this model.

The preferred administrative structure described above and the responsibilities of key participants are summarized in Table 3.

TABLE 3. URI/AID COASTAL RESOURCES MANAGEMENT PROJECT
 Model Pilot Project Administrative Structure and Responsibilities

<u>PILOT COUNTRY</u>	<u>RESPONSIBILITIES</u>	<u>US</u>
DIRECTOR, COUNTERPART PROJECT AGENCY	<ol style="list-style-type: none"> 1. Project Design (JPA) 2. Annual Work Plan Scope and Objectives 3. Communication w/Policy Committees, USAID/ Washington/Missions 	URI/AID DIRECTOR
IN-COUNTRY MGR/ADM (Project Contractor)	<ol style="list-style-type: none"> 1. Preparation of Annual Work Plans 2. Identification of Staff/ Contractors to Implement Sub-Project 3. Monitor Sub-Project Progress 4. Maintenance of Communication Among Sub-Projects 5. Preparation of Required Reports 6. Communication to Respective Director regarding items requiring attention 	DESK OFFICER (CRC Staff)
TECHNICAL STAFF/ STAFF CONSULTANTS	<ol style="list-style-type: none"> 1. Advice to Mgr/Desk Officer on design of sub-projects 2. Responsibility for task implementation 	TECHNICAL CONSULTANTS

C. Development of a Training and Education Program for the CRMP

The URI/AID CRMP project paper identified "insufficient and inadequately trained management personnel in pilot countries" as a major impediment to effective CRM program development. This theme of a priority need for training is carried through the Cooperative Agreement signed by the URI and AID which lists training as one of five major project components. As such, training is an element of each pilot project and is addressed annually in work plan formulation. This annual iteration of country-specific needs and programs is developed by URI and in-country personnel, in-country advisory committees, and in some cases consultants.

During the CRMP's first year and a half, training efforts have included:

1. Project planning/study tours of the US for key pilot project personnel:

Ecuador:	November, 1985
Sri Lanka:	September, 1986
Thailand:	December, 1986

The primary objective of these visits was to relate the experience gained from 15 years of coastal management initiatives in the US to the design of a CRM project in the pilot country.

2. Financial support for pilot project personnel to attend relevant training programs sponsored by other organizations both in-country and in the US.
3. Brief, informal training for selected pilot project participants both in-country and in the US.
4. Financial support for relevant training programs sponsored by other organizations.

In July, just after Thailand was selected as the third pilot, the CRMP Board of Directors approved in principal the development of an enhanced training program to serve all three pilot programs. In August 1986, a training issue team based in the US was convened to work on developing a CRMP training strategy that would be supportive of in-country efforts and provide a mechanism for extending lessons gained through the project to other developing nations.

The group was composed of faculty and staff at The University of Rhode Island with experience and interest in CRM training program development. The expertise of this group was supplemented by three consultants--one with broad experience with the federal CZM program, and two with wide ranging training experience in coastal and marine management in developing countries.

The objectives of the CRMP training issue team were:

- i. To systematically review CRM training needs for short courses, study tours and academic programs and devise a strategy for the CRMP to meet these needs.
- ii. To design courses, identify faculty and available material for specialized training sessions both in the US and the pilot countries.
- iii. To identify examples from the US and other nations' CRM experiences that best illustrate various approaches or aspects of CRM and can be usefully incorporated in training programs.

The team met regularly through December, first to discuss general principles of training and specific application to CRM, then to develop an outline for a proposed core course in integrated coastal resource management and to design a training strategy. In the course of the deliberations, team members produced four background documents and reports, along with a CRMP strategy document.

1. Coastal Management in the United States. A Selective Review and Summary (Jack Archer, Sr. Fellow, Marine Policy Center, WHOI)
2. Coastal Zone Management Training Programs Sponsored by International Organizations (Stella Maris Vallejo, Office of Economics and Technology Branch, United Nations)
3. Coastal Zone Training Concepts for Developing Countries (Niels West, Brian Crawford, George Aelion, URI)
4. International Coastal Zone Education (Niels West, URI)

The Strategy Document has made a number of recommendations about possible training initiatives for the CRMP. These were made after considering the philosophy of the URI/USAID CRMP, the needs for training of coastal managers in the pilot countries and other developing countries, and existing resources for CRM training and education in the United States, in other developed countries and in developing countries.

The philosophy of education and training that emerged from the deliberations of the team were:

1. There is no formula for doing coastal management. Hence, education and training programs must teach approaches to problem solving, as well as the basic concepts of disciplines upon which coastal management draws.
2. All training must be mindful of the essential connections among planning, management, and implementation.

3. Training must be fully interdisciplinary and practical to prepare participants for integrated approaches to real problems.
4. Experiences from a wide variety of nations can be usefully adapted to any particular country, if these experiences are used as examples that must be adapted to the participant's socio-economic, political and cultural circumstances.
5. Much can be learned from interactions among individuals at similar levels in government from different countries all attempting to address similar issues.
6. Opportunities to strengthen local and regional capabilities to provide education and training in CRM should be maximized.
7. Practical, hands-on training experiences are to be favored over lectures and other passive modes of education.
8. Institution building should play an important role in the conceptual framework underlying training programs.

With this philosophy in mind, and the information gathered through the preparation of the background documents, the strategy document made the following findings. There are fairly regular opportunities for specialized training in many of the technical disciplines upon which CRM depends (i.e. remote sensing, environmental impact assessment, tropical ecology, etc). A number of degree programs in marine affairs in the US (including the Master of Marine Affairs program at URI) include course work useful to coastal resource managers and many have a significant proportion of foreign students. However, most of the course material is drawn from the US experience and, therefore, not as relevant as it might be to foreign students. There are also a number of degree programs in environmental studies and other disciplines which are relevant to the CRM program, both at URI and elsewhere.

In each pilot country there are universities with interest and some capability for offering courses, certificates, and degree programs in environmental and/or coastal management. However, there are no "training" programs (short-term, non degree) in Coastal Resource Management that are predictably given, despite several excellent "one time" programs which have been offered. The team did not find any training courses on how to put a coastal management plan together or on alternative planning strategies and institutional arrangements for the effective incorporation of coastal resource management within the framework of national development planning. Also there is no mechanism for on-the-job training in coastal management. Such practical experience could be of great benefit within a training program. Finally, training materials (written and audio-visual) useful for courses in CRM are scattered and are often of little relevance to the circumstances of developing countries.

With this information at hand, the team recommended the following training strategy:

1. Allocation of Resources

- Build upon existing programs and use existing materials whenever possible.

2. Course Development

- Initiate a core course in coastal resource management specifically aimed at developing countries;
- Design a short course for policy makers
- Explore the possibilities of an on-the-job training program
- Use the full resources of URI in the development and delivery of training and educational opportunities for coastal managers from developing countries.
- Develop and/or enhance capabilities for CRM education at universities in the pilot countries.
- Be responsive to needs of pilot countries for study tours, training courses, academic programs or on-the-job training through referral or presentation of the needed program.

3. Administrative Actions

- Hire a director of training programs;
- Appoint an advisory council on training;
- Initiate and participate in a network or consortium of groups doing CRM training to exchange information, materials and opportunities;

V. ASPECTS OF THE PROGRAM REQUIRING PRIORITY ATTENTION OR STRENGTHENING

A. Domestic

Administration

The CRMP has experienced continuing problems maintaining an adequate administrative support staff. During the Project's first year and a half, fiscal support services were handled through the International Center for Marine Resource Development on the URI main campus in Kingston. This arrangement had several problems. The two individuals largely responsible for fiscal support at ICMRD were responsible for three major and a number of minor projects and could not provide the concentrated effort required for the CRMP. Staff turn-over was high and the fiscal administrative support positions were not filled for protracted periods. In addition, responsibility for routine fiscal control was separated from programmatic control. This resulted in

delays in processing paperwork, high transaction costs between project and administrative personnel, and the project falling behind in being able to provide fiscal reports to in-country personnel and AID/Washington.

In an attempt to solve these problems, in October, URI decided to consolidate administrative and technical aspects of the program at the Coastal Resources Center. A new, full time position of Asst. Business Manager was created for the CRMP. This position was approved by the University in November, 1986. Filling the position has taken longer than expected. However, we hope to have the position filled by mid April. In the interim fiscal support has been provided by the Graduate School of Oceanography. Project staff, especially the APD, has been required to spend more time on administration than planned. We are, however, extremely pleased with the consolidation of service approach and believe the structure is in place to strengthen the project's administration and make it more efficient.

Technical Staffing

As discussed in Section III, during the project's initial start-up phase, the CRMP limited commitments to US personnel and consultants and operated with a skeleton staff. This approach was taken so that we could shape a team which would be most responsive to pilot country needs and most likely to help the CRMP meet its overall objectives.

In February of 1986, AID/S&T/FENR agreed to a core staff structure of a Project Director, Assistant Project Director and a Tropical Coastal Ecologist (TCE). The APD position was approved by URI in November of 1986. Creation of the TCE position within the University took until July 1986 and recruitment began in August. Applications for the TCE were accepted through October. Forty-five individuals applied and four finalists interviewed in early January. URI and AID concurred on selection of a candidate; however, in the interim he had taken another job. None of the other finalists were consensus candidates by URI and AID.

The creation/recruitment process for the TCE took eleven months to complete. During this period, our thinking about core staffing has evolved. During the January to March period we will be putting together a restructured staffing plan for consideration by AID.

Communications/Publications

Project accomplishments during the first 18 months have been many. We have, however, not been as effective as we need to be in informing the interested communities both in the US and abroad about project initiatives and outcomes. Such communication is of critical importance both to maintaining the integrity of the project (funding, personnel recruitment) as well as achieving a major project objective, i.e. dissemination of project results. Currently, our major outlet for project information is the ICMRD Newsletter. This publication, while useful for University purposes, is not sufficient to meet project communication needs. In addition production of products for

distribution from the pilot countries has been slow. During the first half of 1987, we are moving to increase project visibility using the following vehicles:

1. Project Booklet: Printing and widely disseminating a booklet about the project: its philosophy and approach; the work accomplished to date; and its goal for the future.
2. CAMP Network Newsletter: We will begin including Project Reports and Updates in all CAMP newsletter mailings.
3. CZ '87: The project is chairing three sessions at CZ '87. In addition, we will help organize the first CAMP network meeting just prior to CZ '87.
4. CRM Round-Table: A first all project retreat/round-table on program design and implementation will be held May 22-24, 1987.

B. Sri Lanka

The CRM pilot program in Sri Lanka is strong and flourishing. The challenge is to maintain and enhance this excellent program. The CCD operates with an extremely dedicated and able, but small core staff. With Cabinet approval of the Sri Lanka CZMP, CCD's responsibilities will increase significantly. Enhancement of CCD's institutional capability and restructuring the agency to meet these responsibilities is their most pressing need. CCD has initiated discussions about decentralization of permitting authority and a variety of techniques to enhance institutional capacity. These issues will require priority attention in the coming months.

A second area requiring priority attention is public education--about the nation's coastal resources and strategies to manage these resources. Development of a strategy to begin the long process of public education was started during this reporting period. This task must be completed and implementation efforts started over the next year.

C. Ecuador

Implementing the "model" pilot project administrative structure, i.e. hiring a host country national in-country manager, moving the project focus to Ecuadorian participants, and rebuilding project contacts and networks are the immediate challenges for the Ecuador pilot.

The Ecuador CRMP has been operating without an approved AWP since October 1, 1986. There is an agreement to continue activities initiated in year 1 and begin several initiatives on which consensus exists, such as a study of the post larval shrimp mortality problem, partial funding for the Fundacion Natura Environmental Congress, and initiation of work on a shoreline/water use classification system. There is not yet consensus among key project participants (URI, AID/S&T/FENR, DIGEMA, and USAID/Ecuador) about additional appropriate

followup activities to CRMP initiatives in developing a strategy for sustainable management of the shrimp mariculture industry that should be funded in year 2. There is, however, agreement on the following principles:

1. The CRMP should continue to take an integrated approach to shrimp mariculture as a coastal issue.
2. It is not appropriate for the URI/S&T Project to fund production-oriented activities; these should be funded through Mission and/or industry funds.
3. The CRMP should capitalize on the interest of the shrimp industry in the project's work as a means for building a constituency for CRM.

As of January 1, 1987, the CRMP expected to receive a substantial budget cut; such a cut would, obviously, affect the availability of S&T funds for the Ecuador pilot. The Ecuador Mission has also received substantial budget cuts and their FY'87 contribution is estimated at only \$78,000.

Immediate priorities for Ecuador, then are: (1) to put a new project management team in place in-country providing sufficient support to that team to effectively move ahead on project goals; (2) revise the Ecuador CRMP budget to reflect project budget cuts; and (3) continue to work with all parties towards consensus on the project's initiatives towards the shrimp industry and finalization of the year 2 work plan.

D. Thailand

The Thailand project appears headed for an excellent start. Much progress was made in defining both the content of the CRMP and the process for implementing the project during the December planning visit to the US. Our goal must now be to build on this progress, and keep the pilot's momentum going.

VI. OBJECTIVES AND TASKS FOR THE JANUARY TO JUNE 1987, PERIOD

A. Domestic

Objective 1: Staffing: Expand project's core staff to adequately meet project needs for the next three years.

- Identify staff/skill requirements.
- Prepare position descriptions/Terms of Reference.
- Review expertise/availability of URI faculty/staff

Outcomes: Year 3 Work Plan (staffing section)
New staff on-board, July 1, 1987

Objective 2: Training: Initiate, in cooperation with each pilot country, an enhanced training program

- Print and distribute Training Team Strategy Document and Background Papers
- Agree with AID on training strategy/tasks
- Prepare annotated bibliography on recommended background readings in CRM

Outcomes: Training team documents
Approved strategy and staffing plan
Annotated bibliography

Objective 3: To enhance intraproject communication

- Revise reporting procedures to enhance their utility and timeliness, distribute reports more widely
- Plan and hold first project Round Table

Outcomes: January to December, 1986 Progress Report
January to March, 1987 Activity Report
Round-Table, May 22-25, 1986

Objective 4: Project Visibility: Enhance the visibility of the CRMP within URI, USAID and the international community interested in CRM.

- Prepare and widely distribute a Project Prospectus
- Finish, print and distribute pending project documents including:
 - Institutional Analysis Team Output
 - Shrimp Mariculture Workshop documents
 - Sri Lanka coastal habitats summary and mapping project
 - Training team documents
 - Progress reports, evaluations, work plans
- Present project related papers at CZ'87
- Hold CRMP Board meeting

Outcomes: Products as listed above

B. Ecuador

Objective 1: To adjust to budget cuts and complete the transition to local management of the Ecuador Pilot to match the Sri Lanka model and assist project participants in meeting their objectives.

- Finalize Year 2 Work Plan, including S&T, GOE and USAID/EC financial commitments to the project.

Outcomes: Approved Year 2 Work Plan.

Objective 2: To complete tasks started during Year 1 and enhance communication among subprojects.

- Institutional Analysis. To publish Perez and Associates reports. To integrate study findings into Profiles and into water quality and mangrove management working groups.
- Profiles. To complete and distribute the regional overview and conduct workshops on two of the provincial issue profiles.
- Shrimp Mariculture. To complete and distribute English and Spanish versions of the shrimp mariculture background papers and strategy document.

Objective 3: To enhance communication between the Ecuador CRMP and the other pilot projects.

- Attend Project Round-Table.

C. Sri Lanka

Objective 1: To obtain cabinet approval for the CZMP

- Make final revisions to the CZMP
- Engage in discussions about the plan with interested groups, especially environmental group

Objective 2: Enhance the institutional capability of the CCD to further refine and implement the CZMP

- Initiate procedures for a university-based CRM research and policy development unit and an Advisory Committee
- Initiate discussions with districts on decentralization; begin to formulate strategy

Objective 3: Increase Public Awareness of Sri Lanka's coastal problems/management initiatives

- Devise public education strategy/hire necessary staff

Objective 4: Disseminate lessons from the Sri Lanka CZMP

- Participate in Round Table and CZ'87
- Begin work on publication document the Sri Lanka CZMP

D. Thailand

Objective 1: To start the Thailand Pilot

- Finalize and sign MOU and Phase 1 Work plan
- Execute USAID/Thailand PIOT to URI
- Hire In-Country Coordinator
- Establish In-Country project presence
- Participate in Project Round Tabel

APPENDIX I

LIST OF URI/AID CRMP DOCUMENTS AVAILABLE FOR DISTRIBUTION

Technical Reports

1. The Management of Coastal Habitats in Sri Lanka.

Working Papers

1. Memorandum of Understanding between URI and AID/S&T/FENR
2. Memorandum of Understanding between Ecuador and URI
3. Memorandum of Understanding between Sri Lanka and URI
4. First Annual Domestic Work Plan (May 15, 1985 - June 30, 1986)
5. First Annual Work Plan: Ecuador Pilot (January 1, 1986 - September 31, 1986)
6. First Annual Work Plan: Sri Lanka Pilot (January 1, 1986 - December 31, 1986)
7. First Semi-Annual Progress Report (May 15, 1986 - December 31, 1986).
8. Second Annual Domestic Work Plan (July 1, 1986 - June 30, 1986)
9. Towards Development of a Sustainable Shrimp Mariculture Industry in Ecuador: Background Documents.

Trip Reports¹

A. Sri Lanka

1. K. Lowry and S. Olsen; 11/85
2. K. Lowry, 5/86
3. L. Hale, 9/86

B. Ecuador

1. S. Olsen, 7/86
2. D. Robadue, 8/86
3. D. Robadue, 12/86

C. Thailand

1. S. Olsen, 5/86
2. K. Lowry, 9/86