

SH
206.9
A84
#86/1

#125

ASEAN-US CRMP WP 86/1

**ASEAN-US Cooperative Program on Marine Science:
Coastal Resources Management Project
Suggested Guidelines for Project Implementation
and Evaluation**

Revised June 1986



**Association of Southeast Asian Nations
United States Agency for International Development
International Center for Living Aquatic Resources Management**



Anal. 0

ASEAN-US CRMP WP 86/1

✓
**ASEAN-US Cooperative Program on Marine Science:
Coastal Resources Management Project
Suggested Guidelines for Project Implementation
and Evaluation**

Revised June 1986



ICLARM



**Association of Southeast Asian Nations
United States Agency for International Development
International Center for Living Aquatic Resources Management**

SH
206.9
A84
#86/1

APR 12 1995

ASEAN-US Cooperative Program on Marine Science
Coastal Resources Management Project
Suggested Guidelines for Project Implementation
and Evaluation

ASEAN-US



ASEAN-US

ASEAN-US Cooperative Program on Marine Science
Coastal Resources Management Project
Suggested Guidelines for Project Implementation
and Evaluation

11761

Contents

ASEAN-US Cooperative Program on Marine Science: Coastal Resources Management Project Suggested Guidelines for Project Implementation and Evaluation

Background	1
Implementation	2
Project Administration and Operation	14
Project Operational Budget	19
Project Implementation and Evaluation	29

Attachments

1: A Proposed Conceptual Approach to the Development of Country Program Plans for the ASEAN-US Coastal Resources Management Project: An Example Using the Lingayen Gulf, Philippines	31
2: Establishment of a Network on Coastal Resources Research and Management	44
3: Training Course 1: Principles in Coastal Resources Management	46
4: Training Course 2: Information Research and Management	47
5: Training Course 3: Remote Sensing Application in Coastal Resources Management	48
6: Training Course 4: Methods of Socioeconomic Analysis in Coastal Resources Management	49
7: Training Course 5: Integrative Methods	50
8: ASEAN-US Cooperative Program on Marine Sciences: Coastal Resources Management Project Fellowship Nomination Form	51
9: International Center for Living Aquatic Resources Management Personal Data Form	52
10a: Direct Disbursement Request - Procurement Form	55
10b: Direct Disbursement Request - Recurring Form	56
11: Payroll Sheet Form	57
12: Operating Fund Status Report Form	58
13: Quarterly Financial Report Form	59
14: Quarterly Progress Report Form	61
15: ASEAN-US Cooperative Program on Marine Sciences: Coastal Resources Management Project Annual Report Summary Form	63
16: ASEAN-US Cooperative Program on Marine Sciences: Coastal Resources Management Project Individual Project Task Report Form	64

GIFT

JUN 14 '94

**ASEAN-US Cooperative Program on Marine Science:
Coastal Resources Management Project
Suggested Guidelines for Project Implementation
and Evaluation**

Background

Objectives

The United States Agency for International Development (USAID) has provided a grant for the implementation of a coastal resources management project (CRMP) designed to strengthen the capability of the countries within the Association of Southeast Asian Nations (ASEAN) to develop their renewable resources on a sustainable basis. This project will help ensure the long-term productivity of coastal fisheries, aquaculture, forestry and other forms of primary resource-dependent development (Project Document, rev. August 1985). The International Center for Living Aquatic Resources Management (ICLARM) has been chosen to execute the project in close collaboration with the ASEAN countries. The grant is also used to strengthen the capacity of ICLARM to provide the necessary technical and administrative support through the augmentation of its technical and administrative staff.

The immediate objective of the project is to help develop improved technical and institutional approaches for managing living coastal resource systems in the ASEAN countries through:

- Analyzing, documenting and disseminating information on trends in living coastal resources exploitation;
- Focusing attention on the importance of better resource management policies, and identifying the critical information and manpower requirements needed to bring about improvements in management for sustainable development;
- Developing institutional arrangements that link applied environmental and socioeconomical research to coastal resources assessment, planning and management; and
- Encouraging technical and institutional solutions to resource use conflicts and the loss of coastal development opportunities.

Targets

The project is expected to produce the following results after four years:

1. Increased awareness among decisionmakers of trends in renewable coastal resources depletion, and greater attention to the importance of sound coastal resources management (CRM) policy;
2. Improved assessments of the capacity of living coastal resource systems to sustain intensive, multiple use forms of development;
3. Promotion of cooperative research on topics relevant to CRM such as improved forecasting techniques on demands for resources, and the identification and resolution of sociopolitical/legal problems of managing common property resources;

4. Derivation of management concepts and procedures for allocating and developing coastal areas for sustainable use; forms of coastal resource use; and the development of site-specific CRM plans;
5. Strengthened ASEAN regional information dissemination channels on renewable CRM, which include the publication of a regional newsletter, technical reports, reviews, site-specific coastal resource atlas and other educational materials to stimulate public awareness;
6. Strengthened ASEAN manpower base in renewable coastal resources assessment, research, planning and management through the provision of short- and medium-term (masteral level) training; and
7. Strengthened capability of ASEAN national institutions in association with an international center, ICLARM, to facilitate and support the type of outputs specified in (1) through (6).

Duration

The project is initially targeted for four years. However, achievement of the overall objectives should be viewed as longer-term. Continued research, extended development and application of comprehensive approaches in CRM and full incorporation of research results into supporting regional and national policies and development strategies will extend beyond four years.

Activities

The project shall undertake two major categories of activities. Under component 1 of the project, the activities are living resource assessment, planning and research; while those under component 2 cover training and information dissemination. Activities under the former will be fully undertaken by nationals of participating countries with technical assistance from ICLARM and complemented with additional expertise recruited from other technical agencies for the said purpose. Activities under component 2 will essentially be organized through the executing agency and will involve the full participation of all ASEAN nations.

ICLARM is tasked to execute and implement the project activities in accordance with project documents guided by the Memorandum of Agreement (MOA) between USAID and ICLARM, and the Memorandum of Understanding (MOU) between ASEAN and USA. The Project Steering Committee (PSC), consisting of representative from each of the ASEAN countries, will provide the overall policy direction under which ICLARM will execute the project activities.

Implementation

Start-up Phase (11 months: August 1985-June 1986)

After the signing of the MOU (ASEAN-US) and the MOA (USAID-ICLARM), the project enters into its first phase of activities. The PSC will meet to provide the general policy guidelines in project implementation, approval of program and annual workplans and to establish budget requirements.

The start-up phase of project implementation includes the following activities (Table 1):

- Signing of the MOA between USAID and ICLARM;
- Signing of the MOU between ASEAN and USA; and
- Establishment of the project office at ICLARM, Manila (recruitment of the Project Coordinator, Technical Advisor, Project Specialist, Project Assistant and Project Bookkeeper; and procurement and installation of project facilities).

Table 1. Schedule of activities of start-up phase.

Activities	Date
Project approval by USAID	
Memorandum of Agreement between USAID and ICLARM	30 August 1985
Memorandum of Understanding between ASEAN and USA	09 May 1986
Establishment of project office	
Personnel	
Appointment and arrival of Project Coordinator	12 Nov 1985/16 Jan 1986
Appointment and arrival of Technical Advisor	18 Nov 1985/3 Feb 1986
Appointment and arrival of Project Specialist	30 Jan 1986/3 Mar 1986
Appointment and arrival of Project Assistant	28 Jan 1986/3 Mar 1986
Appointment and arrival of Project Bookkeeper	30 Jan 1986/17 Feb 1986
Facilities at ICLARM Headquarters	Completed 15 Apr 1986
Preparation of program and annual workplans	Mar - Apr 1986
First Project Steering Committee meeting	21-23 May 1986
Release of first cash advance for project implementation	Jun/Jul 1986

Preparation of program and annual workplans

The planning of detailed project activities is guided by the overall objectives outlined in the project document. It is essential that each project activity is clearly identified with measureable targets within a defined time frame.

In the preparation of the program plan, the total project work is best divided into major groups and then subdivided into tasks or subtasks (and specific activities if relevant) (Fig. 1). The task should be visualized as a complete entity with well-defined beginning and end points. Task size or activity should be large enough to permit adequate control and visibility without creating an unwieldy administrative burden.

The CRMP program of activities covers four main areas:

1. Area-specific coastal zone assessment and planning;
2. Cooperative research on CRM and planning;
3. Training; and
4. Information dissemination.

Area-specific coastal zone assessment and planning

The ASEAN countries have already selected specific coastal zones as pilot areas for conducting comprehensive coastal zone assessments aimed at providing the necessary information for the formulation of management strategies and coastal development plans. The selection of pilot areas based on mutually agreed criteria set up by the ASEAN countries occurred during the presentation of proposals at the ASEAN/Committee on Science and Technology (COST)/Working Group on Marine Science (WGMS) meeting in May/June 1985.

Task Classification and Coding

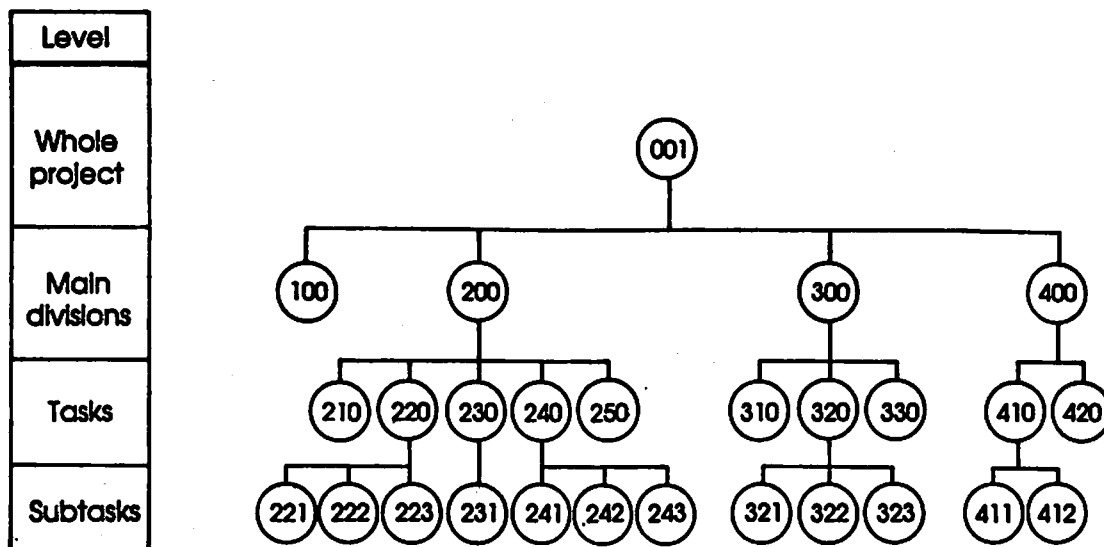


Fig. 1

The next step recommended to facilitate project implementation requires each cooperating country to refine its proposal within the context of an integrated, interdisciplinary and multisectoral CRM concept, breaking down proposed components into specific tasks and activities (where warranted) within an overall program framework. In finalizing the program plan, it is important to ensure that all activities are directed towards attaining program objectives.

The main target of component 1 activities is to develop CRM strategies and to formulate a feasible CRM plan that can be implemented at the pilot site and can be used as a model plan development for other geographical regions in the world. The needed information should be clearly identified; and individual task activity, carefully designed so that data obtained could be effectively utilized for plan development. In preparing task descriptions, analytical methods should be clearly outlined to indicate how the data could be utilized. The proposed conceptual approach to the development of country program plans in Attachment 1 is a useful reference.

Each task may cover one or more activities geared towards attaining its objectives. In preparing project tasks, the following outline is recommended:

Task: Title (this reflects the broad nature of the objectives).

Task Code Number: (the code number assigned, showing its relationship with project objectives and goals, refer to Fig.1).

Target/Product: (objectives and targets should be tangible).

Task Description: (brief discussion of the task coverage, including proposed methodology).

Duration: (specified time frame; should be realistic, considering working environment).

Workplans: (itemized task activities within the projected time frame, including analytical methods planned; a monthly bar chart would be useful, Fig. 2).

Team: (name of the team's leader and members).

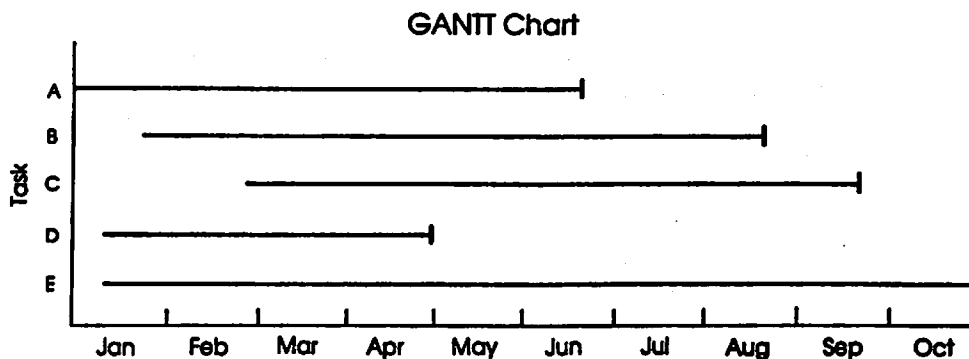


Fig. 2

Equipment: (if task activities involve procurement of equipment, specify types and quantity needed, specification and cost).

Operational Budget: (include salary and personal service allowance, services, cost of materials, travel and a monthly operational budget, indicating inputs, national and project).

Technical Assistance: (consultant(s) - specialization, man-months for budgeting purpose; each foreign consultant should be budgeted at US\$10,000 for the first month and US\$8,000 for the subsequent month(s)).

Total Budget: (includes capital and operational budget broken down into national/project inputs; budget for first-year activities should be specified quarterly for the whole year).

The provision of a detailed task description together with its respective activities and clearly defined objectives will facilitate budget projections and ensure successful completion of tasks/activities. An example of program and project task preparation is provided in Attachment 1.

Tasks and activities to be undertaken in the first year can be grouped into an annual workplan showing each activity within a defined time frame (Fig.2). The following format is suggested for the preparation of annual workplans for all site-specific resource assessment and planning activities.

Introduction

Statement of Goals and Objectives - which the government lead agency hopes to achieve out of the project in its entirety.

Institutional Description - A description of the institutional mechanism under which all national activities funded under component 1 leading to plan development will occur, e.g., lead agency, National Steering Committees (NSCs), project managers.

Site Description - A general overview characterizing the site proposed for management, including the relevant natural resource issues and the justification for its selection.

Program Framework - A general discussion describing the major activities, institutions and processes over the project's life which will lead to plan development. This is a critical section that will provide the broad project content within which the more detailed sections will provide the basis for the first year's annual workplan. This section should include paragraph summaries of major activities occurring throughout the project life, demonstrating logical interactions, compatibility and sequence leading to plan development. It would be helpful if these summaries will be broken down into biogeographical, socio-economic, legal/institutional and implementation components. A time line would be helpful.

First-Year Activities - This should be the heart of the annual workplan, providing detailed and technically defensible descriptions of the proposed first-year activities. Where warranted, the "summary" activity descriptions following the recommended format provided in the guidelines should be accompanied by detailed proposals which will be included with the workplan (as an appendix). Specific subsections should include: detailed budget summaries which will clearly demonstrate the breakdown between project and national contributions; detailed procurement summaries (following USAID guidelines); detailed (monthly) activity timeline; and possible outputs during the first year (if any).

Implementation - This section should describe the process by which the activities will be implemented. This section should include mechanisms which will ensure coordination and information exchange between the relevant institutions responsible for specific tasks; a reporting schedule detailing activity status; and a description of the monitoring and review procedure which will be employed by the lead agency.

Interproject Coordination - A final section in the workplan, this should describe how the activities, specifically, and the project, generally, will be coordinated with other related projects including those USAID-funded and other bi- and multilateral donor activities.

Both program and annual plans may have to be altered in the course of project implementation depending on the needs and externalities. Each year, the proposed plans for each country will be reviewed (based on the results and experiences gained in the previous workplan) and then reviewed, modified/refined at the PSC meeting to ensure that the project objectives are met.

Cooperative research

The resource assessment and planning activities of the countries' pilot areas will identify critical information gaps. Where warranted, research activities may be carried out in a collaborative effort by other national or international institutions in the region. Project resources can be utilized to support these activities.

Some examples of cooperative research relevant to the overall development of the CRM plan are:

- Level of exploitation of coral reef resources for food and ornamental purposes and the socioeconomic implications in Lingayen Gulf, Philippines;
- The impacts of urbanization and land reclamation on coral reef, mangrove and beach ecosystems in Singapore;
- The ecological impacts of coastal aquaculture activities on the bay ecosystem in Phangnga Bay, Thailand.

Close cooperation and collaboration between researchers and institutions involved in coastal resources studies are essential to ensure sharing of information, approaches and methodologies and effective utilization of available technical and financial resources in the ASEAN region. The establishment of a research network of individual managers, planners and scientists and appropriate institutions is considered a viable mechanism in achieving the above objectives (see Attachment 2).

Training

The training activities of the project are designed to attain these objectives:

1. Increasing existing technical capabilities in coastal resources research and management in ASEAN countries; and
2. Upgrading knowledge on new approaches and concepts on living coastal resources management and planning among decisionmakers and planners in ASEAN countries.

Training opportunities will be made available to managers, scientists and researchers while seminars/workshops will focus on resource planners and policymakers. These training courses will be organized during the course of the project life. Involved will be ASEAN technical/project personnel either as trainers and resource speakers or as course participants.

Training Activities. Short-term training courses. A few subjects have been identified during the ASEAN-USAID Project Preparatory meeting in Manila last May 1985: principles of CRM; hydro-acoustics techniques in fish stock assessment; information systems management; methods of socioeconomic analysis; and remote sensing applications.

Each course will run for about two weeks and will have 15-20 participants. ASEAN countries are expected to host some of the courses. Considerable ASEAN cost-sharing for facilities and support services is expected. Project assistance will be primarily used for operational expenses of the training course, including travel cost of course participants and instructors/resource speakers, per diem, honoraria, materials and supplies. It may be possible to incorporate some of these courses with ongoing ones in similar areas to reduce costs. Details of each proposed course are given in Attachments 3-7.

Policy seminars and workshops. It has been considered necessary to expose resource managers (policy- and decisionmakers) to new concepts and to a multisectoral, interdisciplinary and integrated approach to CRM and to keep them informed of the results of project activities aimed at producing the needed information for planning and development of management strategies.

The policy seminars/workshops can be more effective if held immediately after the national technical workshop so that national policymakers will have an opportunity to interact with their technical personnel. The seminars shall focus on actual situations characterized by resource use conflicts in the respective countries. They will also provide opportunity to have resource speakers participate in both meetings.

According to the project document, project resources have been allocated for 8 workshops for a total of approximately 120-160 participants over the 4-year project life. There will be two seminars/workshops each year. While seminars/workshops of this nature are useful, the number may be too many for the existing body of resource managers in the cooperating countries that could be drawn out for such activities. The number of workshops/seminars, therefore, was reduced to 2 (or approximately 30-40 participants) over the project life.

Initially, the seminars/workshops (about 3 days) will focus more on principles and approaches to coastal resources planning and management; while in the last two years, the focus will be more on the actual results of the project-funded pilot activities. The course contents for each of the seminars/workshops will be developed by ICLARM upon consultation with policymakers and resource managers on their specific needs.

Project resources can be made available for the participation of technical personnel, resource managers and project staff in national, regional and international conferences/workshops to provide opportunity for interaction with other CRM scientists.

National project personnel are encouraged to participate in CRM seminars/workshops to foster better understanding of mutual problems confronting member countries and to share their working experiences in the resolution of resource use conflicts. Two regional technical/planning seminars/workshops involving national project personnel, resource managers and policymakers of the cooperating countries will be organized during the mid-project life and towards project completion to provide forum for further interaction between project personnel and managers, with special reference to research findings/conclusions that contribute to the formulation of an implementable CRM plan.

On-the-job training. Project resources are available to provide researchers, especially junior scientists, an opportunity to upgrade their technical skills in one or more aspects of coastal resources research and management through on-the-job training in the US and ASEAN countries. Selected individuals are expected to understudy a senior researcher by participating in a specific research project or activity for a certain period of time, during which the trainees will acquire the necessary technical skills needed to improve their research/management activities in their home country.

The duration should be long enough for the acquisition of the necessary skills and for the interaction between the understudy and the senior scientist (who will act as supervisor). At least 3-6 months will be needed if the training involved participation in research work.

The scheme provides training opportunities for 48-50 participants in various CRM disciplines. Placements will depend on the needs of the cooperating countries and the availability of senior scientists and facilities of the host institutions. The latter criterion will be particularly relevant for US training where logistical constraints may require placing participants in pre-programmed training activities. Training would be sought in other countries should required training facilities not be available in the US or the ASEAN countries. The project will cover travel cost, stipends and nominal training/research expenses as budgeted.

Placement for at least 42 participants which will allow equal participation by ASEAN countries is as follows:

In ASEAN countries:	6-month duration	=	12
	3-month duration	=	18
In the USA:	10-week duration	=	<u>12</u>
Total		=	42

Those not utilized will be considered as savings.

The following are potential disciplines which ASEAN countries may be able to offer for on-the-job training:

Fish stock assessment	Water chemistry
Socioeconomics	Information management
Coastal ecosystems	Microcomputer operation
Habitat assessment	Remote sensing applications
Specialized research areas in the US may be available. Some suggested areas include:	
Coastal systems management	Socioeconomic analysis
(critical habitat management)	Marine resources conservation
Remote sensing	Coastal resources mapping
Marine park management	

Medium-term academic training. Limited project funds have been allocated to provide medium-term academic training at the masteral level in universities either in ASEAN or the US. The main objective of this training is to equip ASEAN CRM personnel with the necessary scientific skills and advanced knowledge to meet the range and extent of issues which characterize the ASEAN region's coastal areas. Trained personnel are expected to play a considerable role in national CRMP activities upon completion of their training by conducting research or drawing up or planning management strategies. However, by virtue of the duration of this training, these individuals will not be available, at the earliest, until after the third year of the project.

Training in the USA will preferably include senior government resource planning officials who may play an active role in resource management of their country. The one- or two-year post-graduate (masteral level) training course on marine affairs conducted by some US academic institutions, such as the universities of Washington, Michigan and Rhode Islands, may be appropriate programs for ASEAN participants.

Some ASEAN academic institutions may be identified to accept ASEAN scholars for post-graduate (masteral level) studies over a two-year period. In most ASEAN universities, course work is generally required to be completed in the first year and a short research project to be carried out in the second year, resulting in the submission of a thesis. Whenever possible, the post-graduate research studies should be part of the ongoing research study of the existing CRMP in the home or participating country. The research conducted should also be of immediate importance for the preparation of the CRM plan.

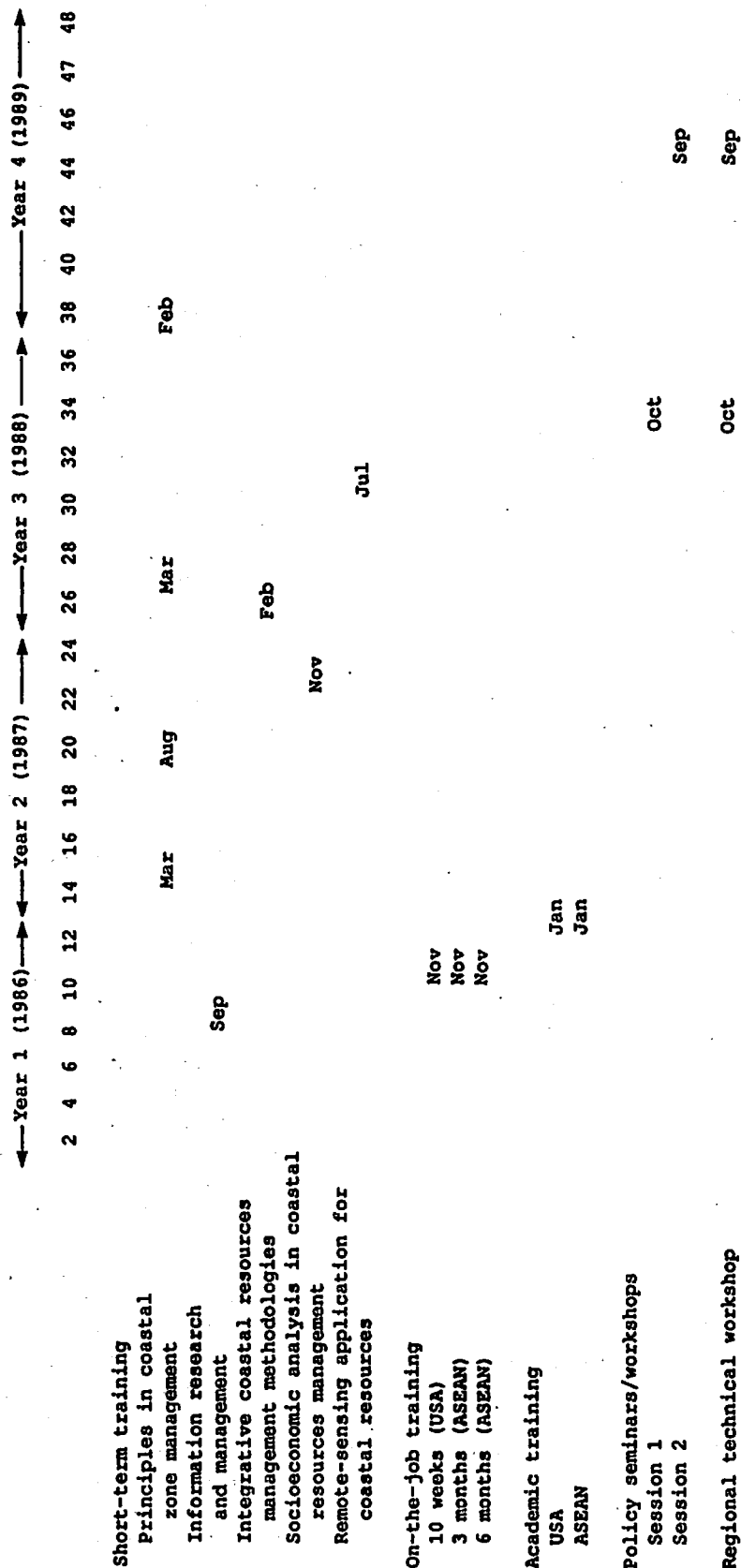
Six post-graduate fellowships (masters degree) for training in the US on coastal zone management or marine affairs with relevance to tropical situations have been budgeted for to include Brunei Darussalam's participation. However, academic training in ASEAN universities will be deferred as agreed upon by the PSC members.

ICLARM will compile a list of appropriate US universities with their entry requirements for circulation. Academic training in the US can only be targeted for September 1987 at the earliest.

It may be opportune within the project life to design a post-graduate training curriculum on CRM which can be included as a specialized subject of the marine science or fisheries curricula in ASEAN universities. The project will be able to strengthen existing technical manpower in the ASEAN region to undertake training responsibilities in ASEAN universities. A 5-7-man task force composed of CRM specialists and educators of fisheries institutions can be formed to jointly formulate the course curriculum which should be applicable to the local conditions in the ASEAN region and which should also consider the diversification of educational systems in the region.

Training Schedules. The schedules for the various training activities under component 2 of the project document are outlined in Fig. 3. Short-term technical courses designed to provide necessary skills in improving project work quality are scheduled for the first two years to enable trained personnel to actively participate in the pilot project activities. Similarly, scholars selected for medium-term academic training will be sent in the first year or the beginning of the second year so they could return to their respective countries and participate in the project activities during the third or fourth years. While on-the-job training in specialized fields in US institutions should be implemented as soon as possible to ensure trainee participation in project activities, the training of scientists in ASEAN countries through participation in ongoing research activities can be spaced out over the first three years of the project life.

Fig. 3. Schedules of training programs (1986-1989).



Nomination of Candidates. Each cooperating country will be allotted an equal number of candidates. In the event that a cooperating country is not able to avail itself of all the slots allotted, the additional vacancies will be given to the most qualified candidate(s) of other cooperating countries unless otherwise directed by PSC.

Nomination of candidates for all training schemes should be forwarded by NSCs to ICLARM with copies furnished to the PSC chairperson. The deadline for submission of nominations is 30 October 1986. It is expected that the nominated candidates' potential contribution to project objectives will be adequately assessed and considered by the local steering committee (Fig. 4).

Cooperating countries can indicate the types of training needed within the framework of academic training concept and can nominate the candidates for the prepared training. ICLARM will also make the necessary arrangements with training institutions to secure training opportunities for ASEAN scholars nominated. Each cooperating agency will be requested to nominate three candidates for the sections, in order of priority. Nomination should be made on prescribed application and nomination forms provided by the executing agency (Attachments 8 and 9).

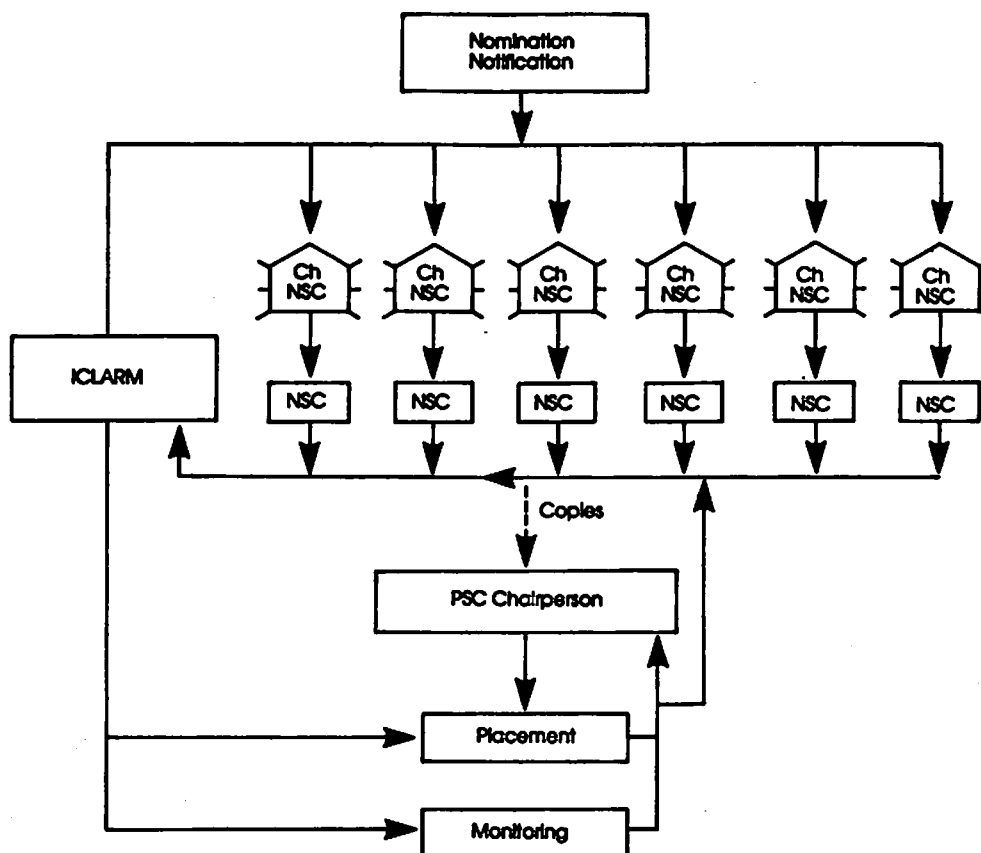


Fig. 4. Steps in nominating and selecting candidates for training.

PSC - Project Steering Committee
 NSC - National Steering Committee
 Ch - Chairperson

Implementation of Training Activities. The training program involves a fairly large number of activities and participants. Proper implementing procedures are needed to ensure smooth implementation of the program. The role of ICLARM as executing agency is to develop and execute training courses in cooperation with host agencies of the cooperating countries; arrange appropriate

placements for selected participants; monitor progress of trainees during their training and post-training activities throughout the project life; and ensure timely project inputs in terms of training equipment, materials and supplies, resource speakers/consultants, etc.

Cooperating countries or agencies nominating the candidates are expected to comply with the standard requirement practiced by the organizers of international/regional training courses by continuing the provision of salary/allowance (where applicable) and health and personal accident (if any) insurance to their candidates while on training. The project, on the other hand, will provide group insurance to candidates during the training duration.

Information dissemination

The project is designed to undertake a number of information dissemination activities to attain the following immediate objectives:

- Provide up-to-date information on trends of living coastal resource exploitation, socioeconomic status of coastal communities, coastal zone management, etc.;
- Promote the concept of an integrated multisectoral approach on CRM in ASEAN countries;
- Create public awareness of the socioeconomic and nutritional importance of living coastal resources to coastal communities and of the rationale for CRM.

These objectives can be achieved by establishing an effective communication mechanism by which physical and social scientists, users and managers of coastal resources can speedily obtain information and maintain interaction. The preparation of the following materials are expected to accelerate and effect information dissemination.

Regional Newsletter. The project will publish a regional newsletter which will provide up-to-date information resource distribution and trends of coastal resource utilization; socioeconomic characteristics; and interdependency of coastal communities, management and coastal zone planning; etc. ICLARM will target for 2-3 issues per year, initially, and increase the frequency to a quarterly basis. The newsletter will focus on but not be limited to CRM in ASEAN countries. Sections of the newsletter will be on the: progress of project activities, including research done by the ASEAN nations; project-related activities of institutions and members of the research network; objective description of certain CRM issues; coastal use conflicts and their resulting socioeconomic implications.

The newsletter will also document reports from public or national/international agencies on coastal resources degradation. A "public corner" section for the expression of varying perceptions on CRM issues and a "manager corner" for the discussion of management/policy options to resolve the issues will also be featured. Information on improving public knowledge of the coastal systems; the interplay among the various coastal ecosystems; and the impact of human interference; and the like issues will also help widen public perspectives on CRM.

The regional newsletter will be mailed directly to personnel and institutions involved in the project. Additional copies will also be sent to the NSC for further in-country distribution.

Technical Publications. Emanating from the various project activities will be a series of technical publications in the form of technical reports,

reviews, monographs, manuals, lecture series and proceedings of workshops/seminars.

Technical reports/reviews/monographs - will be generated from activities in country pilot areas and from cooperative research of member institutions and scientists of the coastal research and management network; ASEAN coastal resources profiles, etc.

Training manuals and lecture series - generated from training courses, short-term and on-the-job, etc.

Proceedings of workshops/seminars organized by the project - include workshop reports, technical papers and reports on round-table discussion, etc.

Site-specific management plans - management plans developed by each cooperating country, which include technical data, resource mapping, etc.

Educational Materials. The project will also produce or assist cooperating agencies to produce educational materials on coastal environments (critical coastal habitats, coastal ecosystems, etc.). These materials will be prepared for all levels of the population, taking into account existing materials to create public awareness on the importance of rational exploitation of living coastal resources, environmental conservation, integrated CRM, etc. The following communication vehicles are considered effective for this purpose:

Leaflets/booklets - in various local languages; to be produced in collaboration with the existing information unit of the cooperating countries.

Audiovisuals - production of videotapes for TV broadcast.

School materials - supplementary reading materials for primary and high school levels.

The following topics are especially useful and popular for resource managers, policymakers and educators in the ASEAN region:

Mangroves	Beaches and tourism
Coral reefs	Tin prospecting
Mudflats	Coastal land reclamation
Coastal environment	Coastal fishing village
Living coastal resources	Coastal fisheries
Coastal aquaculture	Marine parks and reserves
Coastal human communities	Intertidal zone
Marine mammals	Coastal wildlife
Nutrition of coastal inhabitants	Management of coastal environment

Popular videotapes can be produced for screening in local TV channels. Topics such as "toward a rational exploitation of renewable living coastal resources" and "our coastal environment" can be prepared in different local languages.

One potential activity suggested in the project document is the preparation of an ASEAN CRM Data Atlas. The atlas aims to present current information on resource distribution, conservation and utilization in the ASEAN region. However, it should be noted that the atlas will be produced based on sufficient data gathered at the pilot areas. It will incorporate thematic mapping of the principal resources attributes, uses and management characteristics for each of the pilot areas. It will form part of the basis for policy coordination and management strategies in coastal zone planning. It should be noted, however, that there already exists a regional atlas for marine policy in Southeast Asia which includes coastal resources. The atlas costs about

US\$100, which is beyond the reach of most researchers in the region.

Information Service. The project will establish an information service mechanism to provide the various users of the cooperating countries with the needed literature. The main services will include:

1. Literature searches for project personnel in cooperating countries and for members of the network through collaboration with ICLARM's Information Program and the selective information service system;
2. Providing photocopies of relevant literature requested by cooperating countries, institutions and members; and
3. Providing up-to-date information on the contents of current journals/bulletins on CRM.

Project resources will be used for enlarging, diversifying and beefing-up existing ICLARM library collections. These will be made available to national project personnel, participants of training courses or workshops and other potential users. Active cooperation from participating institutions and individuals will be required to obtain much of the site-specific literature.

Project Administration and Operation

Project Steering Committee (PSC)

The responsibility for project direction, policies and decisions lies directly with the ASEAN PSC which will report to the ASEAN COST/WGMS. The Philippines has been elected to chair the PSC. Under the general category of project policy, PSC responsibilities will include:

1. Providing project direction and guidance;
2. Serving as a focal point for project coordination;
3. Establishing general operating procedures;
4. Promoting the sharing of project-funded results;
5. Reviewing and approving proposed areas for academic training activities;
6. Providing a means for promoting regional interproject coordination;
7. Monitoring, reviewing and evaluating project progress to meet project objectives; and
8. Approving ASEAN CRM country programs and annual workplans.

In addition to the actual PSC members, representatives from ICLARM, as executing agency, and USAID, as funding agency, will attend committee meetings on an ex-officio basis. Project funds has been allocated for annual meetings with a rotating venue.

National Steering Committees (NSCs)

At the national level, each ASEAN country will have an NSC whose responsibilities will include:

1. Preparing and approving annual workplans and project program plans prior to the annual meeting of the PSC;
2. Establishing country project policy guidelines;
3. Screening and selecting candidate trainees for mid-term academic training;
4. Selecting participants in the project's various activities;

5. Identifying contractors and collaborative institutions to be involved in one or more of the in-country activities;
6. Assisting in the preparation and sponsoring of various regional activities;
7. Monitoring, reviewing and evaluating in-country project progress; and
8. Providing a national focal point for all in-country project activities to interface with the PSC.

In the light of the importance of the program design, the composition of NSCs should represent a broad view of CRM and national and local institutional capabilities and constraints. Providing a mechanism for these diverse viewpoints will be the first step in the development of a successful multisectoral approach to CRM. At least one of the country's PSC representatives will be an NSC member.

Size is another consideration in the formation of NSCs. To achieve maximum effectiveness and reduce cost and logistical problems, their size should be kept relatively small and workable, perhaps averaging from 7-10 individuals. In most cases, the National PSC Chairman will be the representative to the WGMS/PSC. NSC-related expenses will be charged to the respective country's budget under component 1.

Coordinating Agency

The coordinating agency of each participating country, which serves as an NSC member, is responsible for in-country project activities which include:

1. Coordinating with subcontractors (national institutions) in implementing various activities approved by the PSC;
2. Administering, disbursing and accounting for funds allocated for in-country project activities.

To ensure successful completion of in-country activities, the coordinating agency may also appoint a National Coordinator.

National Coordinator

It is hoped that the NSCs can meet regularly and often in all likelihood. But given the NSC representatives' other duties, fully attended meetings will probably be limited. Due to this constraint and the numerous and broad range of project-related activities and responsibilities envisioned both at the national and regional levels in which the NSC need to be involved, it is recommended that the lead participating national institutions select an individual who can devote a full-time role to in-country project management. This individual, a National Coordinator (formerly Country Project Manager), can assist in the day-to-day project work. His responsibilities include:

1. Reporting to the NSC and Coordinating Agency;
2. Preparing the workplan;
3. Monitoring project progress and providing periodic reports to ICLARM CRMP staff;
4. Drafting terms of reference for contractors;
5. Contributing articles to the newsletter and participating in other information dissemination activities;
6. Assisting with logistics associated with activities at the country pilot site, the use of foreign technical assistance and regional activities;

7. Preparing and submitting financial reports/statements required by the project;
8. Serving as the principal liaison among project-related activities conducted at the national level and their implementation at the local level.

ICLARM's role

ICLARM's role as the executing and technical agency is stated in the MOU signed in Singapore on 9 May 1986. Specifically, the center's role will include:

1. Disbursing funds in accordance with agreed upon workplans and subject to availability of funds from USAID;
2. Negotiating contracts for activities to be implemented at both the national and regional levels;
3. Periodic monitoring and reviewing of project progress;
4. Providing assistance in the preparation of the country's respective annual workplan;
5. Developing a project evaluation plan; and
6. Preparing and submitting an annual overall project workplan.

In addition to these administrative duties, ICLARM can perform a number of substantive roles related to technical aspects of project implementation:

1. Identifying and recruiting of short-term technical assistance (on request and approval of the requesting country);
2. Preparing and distributing the newsletter;
3. Providing in-house technical backstopping from both CRMP staff and nonproject ICLARM staff;
4. Responding to data requests;
5. Facilitating the placement process for candidates selected for on-the-job and medium-term training;
6. Facilitating the publishing of materials generated from various countries and regionally specific project-related activities;
7. Assisting in the preparation and conducting of regional workshops, seminars and training activities;
8. Assisting in the establishment of the cooperative research network under project component 1; and
9. Assisting in promoting increased public awareness on CRM, including the development of educational and promotional materials.

An example of substantive participation of ICLARM in in-country project activities is provided in Attachment 2. Many of these activities have already been funded under the project budget. Technical backstopping by project staff for in-country activities on a limited basis and budgeted out of component 2 has been proposed for consideration at the next PSC meeting. Funding for additional efforts will have to be charged against component 1. Travel of project staff, when requested, will be charged to the appropriate budget under the center's standard fiscal operating procedures.

Project activities are managed and coordinated by the Project Coordinator with the assistance of the Technical Advisor and other project staff stationed in ICLARM, Manila. The duties of the key personnel are described, thus:

Project Coordinator

1. Managing and coordinating overall project activities;
2. Serving as ICLARM's focal point for the ASEAN-USAID project and coordinating with the USAID-ASEAN Liaison Office (ALO) and ASEAN PSC;
3. Negotiating contracts (as needed) for discrete subproject activities;
4. Coordinating with national and regional institutions in conducting regional seminars/workshops/training courses;
5. Facilitating the placement of trainees;
6. Submitting annual workplans to USAID-ALO;
7. Supervising all project personnel and specifying reporting duties.

Technical Advisor (Reports to the Project Coordinator)

1. Assisting host-country project coordinators and national teams in the conduct of resource assessments, institutional analyses, socioeconomic surveys and research designs by: direct inputs; facilitating the prudent application of short-term technical assistance; backstopping information/data requests; mobilizing ICLARM expertise; and facilitating local inputs;
2. Assisting in workplan preparation;
3. Monitoring pilot project progress and facilitating the success of the project;
4. Assisting in technical information dissemination by working with ICLARM staff in developing an information management system; organizing contributions to the project newsletters; and preparing technical reports and other materials requiring editorial help;
5. Promoting complementarity of pilot site activities among participating countries (where possible);
6. Coordinating project activities with other national and regional efforts (where possible), including data and information sharing;
7. Providing short-term assistance to workshops/seminars/training courses.

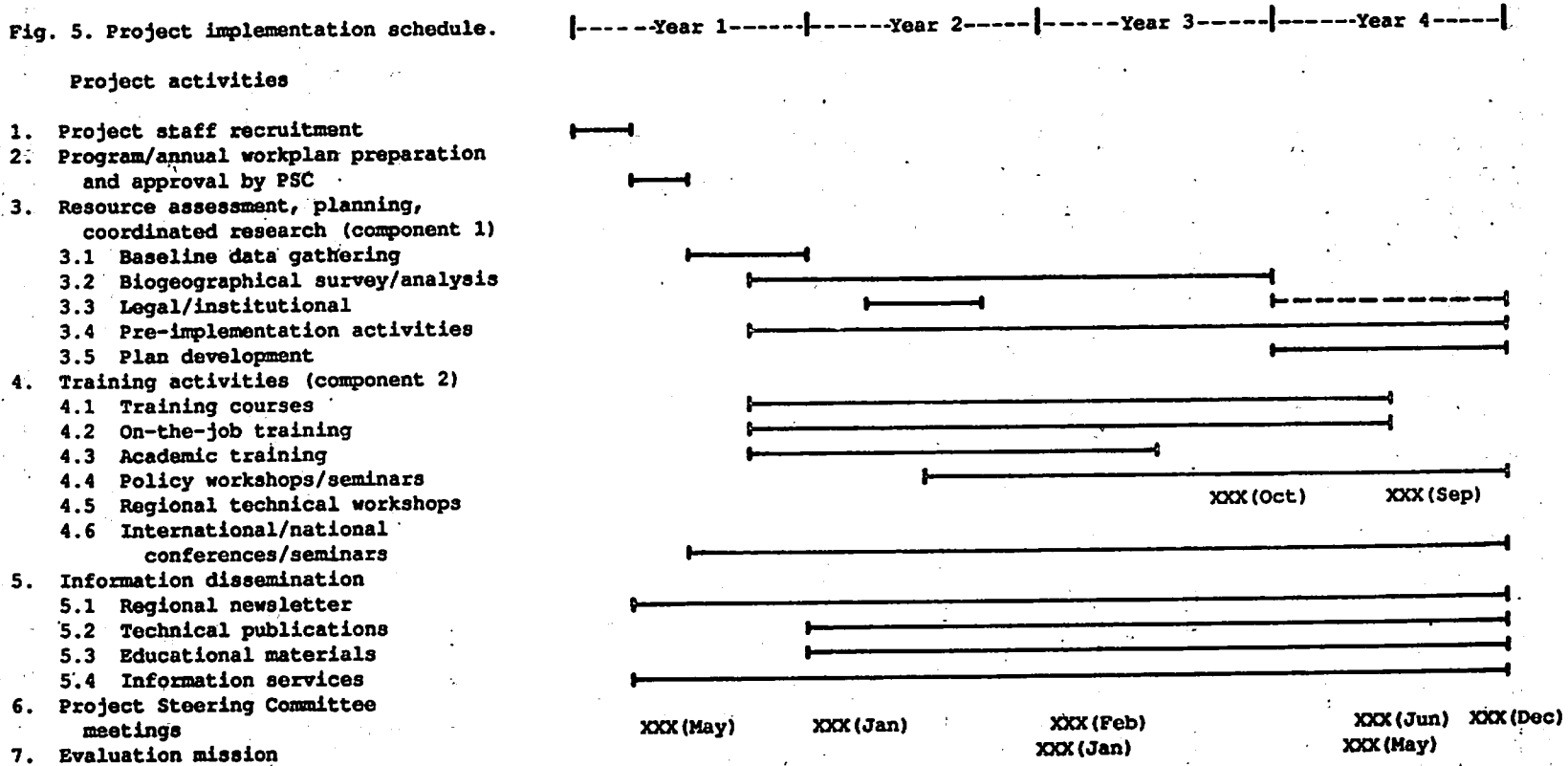
Implementation schedules

The timetable for the implementation of the project activities for four years (Fig. 5) will be followed as closely as possible once the program and annual workplans and the regional activities under component 2 are approved by the PSC. While it is expected that the pace of implementation of project activities under component 1 may vary from country to country, completion is aimed at the end of the third year or the end of the first quarter of the fourth year, at the most.

With the signing of the MOU between USAID and ASEAN in May 1986 and the meeting of the PSC in late May, project activities are expected to begin not later than July 1986, after considering the time needed for the release of funds from USAID and ICLARM.

The first year will see the development of a comprehensive program plan covering the site-specific CRMP and the regional training and information

Fig. 5. Project implementation schedule.



activities. A CRM profile for each country, based on existing information, will be prepared by ICLARM project staff in collaboration with national project staff after an exhaustive search from available literature/reports. Some resource assessment and cooperative research activities will have to be initiated towards the third quarter of the first year, while the first training courses on Information Research Management will have to be completed. On-the-job training will also be made. At least, two issues of the regional newsletter will be published in the first year--one in July and another in December. Then, three issues will be published a year, viz., January, May and September.

While steps will be initiated to prepare the educational and technical materials in the first year, meaningful output can only be visible in the second, third and fourth years. Training activities will be concentrated in the second and third years to develop technical capability in time to help in the implementation of project activities especially under component 1.

The end product of component 1 will be a set of management plans of the specific sites chosen. The plans which remain to be tested and implemented can possibly form another phase of project activities in which additional funding will be sought.

Project Operational Budget

Budget for pilot-site activities for ASEAN participating countries (details to be provided by the countries): US\$2,253,800

Budget for training program

1. Short-term training

(2 weeks; 17 participants: 12 from participating countries and 5 from host countries)

Participants

Airfare (\$500 x 12)	=	\$ 6,000
Per diem (\$50 x 14 x 17)	=	<u>\$11,900</u>
Subtotal	=	\$17,900

ASEAN Resource Personnel (RP) (1 from host country; 1 from ASEAN)

Airfare (\$1,000 x 1)	=	\$1,000
Per diem (\$50 x 14 x 2)	=	\$1,400
Honorarium (\$1,000 x 1)	=	<u>\$2,000</u>
Subtotal	=	\$4,400

Foreign/technical assistance

Airfare	=	\$2,500
Per diem (\$50 x 14)	=	\$ 700
Consulting fee	=	<u>\$3,500</u>
Subtotal	=	\$6,700

Materials and supplies	=	\$ 4,500
Preparatory, monitoring, misc.	=	<u>\$ 1,500</u>
Total	=	\$35,000/course

6 courses x \$35,000 = \$210,000

2. On-the-Job training

a. Within ASEAN region

	6 months	3 months
Airfare	\$ 700	\$ 700
Living expenses (\$500/month)	\$3,000	\$1,500
Training expenses (including internal travel)	<u>\$2,500</u>	<u>\$2,000</u>
Subtotal	\$6,200	\$4,200

b. In US locations (10 weeks)

Airfare	\$2,500
Living expenses (\$350/week)	\$3,500
Training expenses (\$250/week)	<u>\$2,500</u>
Total	\$8,500

Summary:

6-month training at \$6,200/person x 12 persons	= \$ 74,400
3-month training at \$4,200/person x 18 persons	= \$ 75,600
10-week training at \$8,500/person x 12 persons	= \$102,000
Preparatory, monitoring, communication, misc.	= <u>\$ 12,300</u>
Total	\$264,300

3. Medium-term academic training

a. Within ASEAN region

Airfare (two round trips)	\$ 1,000
Tuition fee	\$ 4,400
Stipend (\$350 x 24)	<u>\$ 8,400</u>
Total	\$13,800

b. US universities

Airfare (One round trip)	\$ 2,500
Tuition fee and supplies (2 years x \$6,650)	\$13,300
Stipend (24 months x \$600)	<u>\$14,400</u>
Total	\$30,200

c. Development of postgraduate curriculum for CRM (deferred)

Task Force	
Travel (7 persons x \$700)	\$ 4,900
Per diem (7 x 100 x 7 days)	\$ 4,900
Support	<u>\$ 4,000</u>
Total	\$13,800

Summary:

6 MS in ASEAN universities (\$82,800 deferred)	
6 MS in US universities	\$181,200
Curriculum development (\$13,800 deferred)	
Preparatory, monitoring, misc.	<u>\$ 2,400</u>
Total	\$183,600

4. Policy seminars/workshops/conferences
 a. Policy seminars/workshops (3 days); 20 participants (5 from host country, 15 from other countries)

Participants		
Airfare (15 x \$500)	\$ 7,500	
Per diem (20 x \$80 x 3)	<u>\$ 4,800</u>	
Subtotal		\$12,300
Technical assistance (foreign)		
Airfare	\$2,500	
Per diem (\$80 x 1 x 7 days)	\$ 560	
Consulting fee (\$250/day x 7 days)	<u>\$1,750</u>	
Subtotal		\$ 4,810
Project staff participation		
(\$1,250 x 2)	\$2,500	
Support	<u>\$2,400</u>	
Subtotal		<u>\$ 4,900</u>
Total		\$22,010

2 workshops x \$22,010 = \$ 44,020

b. Regional technical workshops

Participants		
Airfare (\$20 x \$500)	\$10,000	
Per diem (25 x \$50 x 4 days)	<u>\$ 5,000</u>	
Subtotal		\$15,000
Technical assistance		
Airfare	\$ 2,500	
Per diem (\$50 x 1 x 7)	\$ 350	
Consulting fee (\$250/day x 7 days)	<u>\$ 1,750</u>	
Subtotal		\$ 4,600
Material and supplies		
Support and misc.		\$ 5,000
		<u>\$ 3,000</u>
Total		\$27,600

2 workshops x \$27,600 = \$55,200

c. Attendance of conferences and workshops (Project staff, ASEAN nationals, etc.) \$64,460

Summary of training budget:

a. Short-term training courses	=	\$210,000
b. On-the-job training	=	\$264,300
c. Medium-term academic training	=	\$183,600
d. Policy seminars/workshops/ conferences	=	<u>\$163,680</u>
Total		\$821,580

Budget for information activities

1. Newsletter		\$ 11,000
12 pages x 1,000 copies (\$600/ issue x 11 issues)	\$ 6,600	
Mailing cost (\$400/issue x 11 issues)	\$ 4,400	
2. Information service		\$ 27,900
Information search \$20 x 500	\$ 10,000	
Photocopy services \$5 x 500	\$ 2,500	
Mailing cost	\$ 1,400	
Books (200 volumes x \$50)	\$ 10,000	
Journals (20 titles x \$50 x 4 years)	\$ 4,000	
3. Video production (deferred)		(\$ 31,500)
\$14,000/title x 2 titles	\$ 28,000	
Conversion PAL/NTSC	\$ 3,000	
Tapes at \$25/pc	\$ 500	
4. Technical reports		\$ 85,000
200 pages x 1,000 copies (7 x 10 titles)	\$ 70,000	
Mailing cost \$1.50 x 1000 x 10	\$ 15,000	
5. Educational materials		\$ 45,000
15 pages x 1,000 copies (\$0.60/title x 20 titles)	\$ 12,000	
Honorarium \$1,000/title x 20 titles	\$ 20,000	
Mailing cost \$400 x 20	\$ 8,000	
Translation cost \$500/10 titles	\$ 5,000	
6. Proceedings/manuals/lecture series and review		\$105,000
10 titles x \$7,000/title	\$ 70,000	
Honorarium \$2,000/person x 10 titles	\$ 20,000	
Mailing cost \$1.50/copy x 1,000 copies x 10 titles	\$ 15,000	
7. Site-specific management plans		\$ 66,000
6 volumes x \$10,000 (500 copies)	\$ 60,000	
Mailing cost	\$ 6,000	
8. Publishing requirements		\$ 53,200
Editor \$6,500 x 4 years	\$ 26,000	
Draftsman/artist (4 years)	\$ 19,200	
Laser printer, software	\$ 8,000	
9. Misc. (services, travel, preparatory activities)		<u>\$ 25,400</u>
Grand total		<u>\$418,500</u>

Budget for operation, evaluation and contingency

ASEAN PSC (6 meetings)*

Transportation

Airfare = 13 participants x 2 meetings (1st and 6th) \$700/each	\$ 18,200
Airfare = 7 participants x 4 meetings (2nd to 5th) \$700/each	\$ 19,600

Per diem

15 participants x 2 meetings \$100/each x 4 days	\$ 12,000
9 participants x 4 meetings \$100/each x 4 days	\$ 14,400
Secretariat services \$2,500/meeting x 6 meetings	\$ 15,000
Materials and incidentals @ \$1,650/ meeting x 6 meetings	\$ 10,000 (rounded)

Other PSC activity support

Service (part-time) \$1,000 p.a. x 4	\$ 4,000
Communication \$2,000 p.a. x 4	\$ 8,000
Materials, travel incidentals \$2,500 p.a. x 4	<u>\$ 10,000</u>
Total	<u>\$111,200</u>

*Note: a. two from each country; b. one from each country including chairman of WGMS and two project staff.

Project evaluation (refers to the external evaluation of the project).

Travel and operation (mainly Component 1)

1. Annual workplan preparation	\$ 18,000
Airfare (1,000 x 1 trip/year x 2 persons) x 4 years	\$ 8,000
Per diem (\$100 x 25 days) x 4 years	\$ 10,000
2. NSC/national workshops/monitoring	\$ 26,000
Airfare (\$700 x 5 trips) for 4 years	\$ 14,000
Per diem (\$100 x 5 days x 6 countries) for 4 years	\$ 12,000
3. Technical assistance	\$ 80,000
Airfare (5 trips x \$1,000) for 4 years	\$ 20,000
Per diem (5 man-month, 3 persons) for 4 years	\$ 60,000
4. Ad hoc (contract, consultation, etc.)	\$ 11,200
Airfare (\$1,000 x 2 trips/year) for 4 years	\$ 8,000
Per diem (\$100 x 4 days x 2 trips/ year) for 4 years	<u>\$ 3,200</u>
Total	<u>\$135,200</u>

Summary:

PSC	\$111,200
Project evaluation	\$ 42,000
Travel and operation for Component 1	\$135,200
Contingency	<u>\$217,760</u>
Grand total	<u>\$506,160</u>

Gross summary:

1. In-country pilot-site projects		\$2,253,800
2. Training		\$ 821,580
a. Short-term	\$ 210,000	
b. On-the-job	\$ 264,300	
c. Academic	\$ 183,600	
d. Policy seminars/conferences	\$ 163,680	
3. Information		\$ 418,500
a. Newsletter	\$ 11,000	
b. Information service	\$ 27,900	
c. Technical reports	\$ 85,000	
d. Educational materials	\$ 45,000	
e. Proceedings/reviews/manuals	\$ 105,000	
f. Site-specific management plans	\$ 66,000	
g. Publishing requirements	\$ 53,200	
h. Miscellaneous	\$ 25,400	
4. Operation, evaluation and contingency		\$ 288,400
a. PSC	\$ 111,200	
b. Project evaluation	\$ 42,000	
c. Travel and operations for Component 1	\$ 135,200	
Grand total		<u>\$3,782,280</u>

Project administration

As implementing and executing agency, ICLARM's administrative objectives are to ensure that:

1. Project activities within approved workplans are funded in a timely manner and;
2. USAID Standard Provisions for the administration of the grant are adhered to.

Disbursement of funds

1. Funds will be disbursed directly to the coordinating agency in each country who will then be (a) responsible for coursing the funds to the various in-country activities and (b) accountable for the proper use of the funds within the framework of approved country workplans and the administrative procedures detailed in this document.

2. ICLARM will act only on disbursement requests and financial reports signed by the duly authorized representative of the coordinating agency. For this reason, coordinating agencies are requested to send to ICLARM a list of signatories together with specimen signatures on or before the submission of the first disbursement request.

3. To minimize transactional delays, ICLARM will be disbursing funds via bank transfers out of the project's restricted accounts with Chase Manhattan Bank, New York. Coordinating agencies are also, therefore, requested to establish restricted noninterest bearing local currency deposit accounts with Chase Manhattan branches or correspondent banks in their respective countries and provide ICLARM with the full details (bank name, bank/branch address, depositor's name, deposit account number) of these accounts.

4. Since the bulk of in-country project expenses will be made in their respective local currencies, disbursement requests, fund status reports and quarterly financial reports will be denominated in local currency. It is therefore, important for the coordinating agencies concerned to report the exchange rates at which ICLARM remittances were converted by their respective banks.

The Quarterly Financial Report format will allow the coordinating agencies to account for foreign exchange rates.

For special cases such as the procurement of equipment and the contracting of international consultants, direct US dollar disbursements may be made. These US dollar expenses will be reported separately in the Quarterly Financial Report.

5. The manner in which funds will be disbursed will depend on the nature of expense against which these funds will be applied. The general expense categories for disbursement purposes are as follows:

- a. Procurement: This is a one-time purchase of goods and/or services. Included are equipment, supplies, consultants, air tickets and other purchases/service contracts.
- b. Salaries and other recurring expenses: These are identified recurring expenses such as research assistants, salaries and rent/lease payments.
- c. Other operating expenses: These are the normal operating expenses incurred by the project, which included expenses for communications, xeroxing, utilities, transportation, per diems and maintenance.

6. Direct disbursements: This type is applicable in the case of procurement and salaries and other recurring expenses. The procedures in each case are as follows:

a. Procurement: Coordinating agencies are requested to accomplish and submit the "Direct Disbursement Request-Procurement" forms (Attachment 10a) and required attachments (see section on Procurement of Goods and Services). The request will be routed within ICLARM as follows:

- 1) Project Coordinator: who will check the request against approved workplans and will concur.
- 2) Manager, Administration and Finance: who will check the request for compliance with administrative guidelines and USAID Standard Provisions and will authorize the disbursement.

Receipts evidencing the purchase should be submitted together with the financial report of the quarter in which they were paid.

b. Salaries and other recurring: Upon hiring project staff or entering into a rent/lease contract, the coordinating agency is required to accomplish and submit to ICLARM a "Direct Disbursement Request-Recurring" form (Attachment 10b) for each staff member hired or contract entered into. Based on these requests, ICLARM will disburse prior to the end of each month, the required funds.

For salaries, the coordinating agencies are required to submit signed monthly Payroll Sheets (Attachment 11) together with the financial report of the calendar in which they were paid. For rent lease and other payments, evidence in the form of receipts should be included with the quarterly financial report.

7. Operating funds: Based on the annual workplans, ICLARM will provide coordinating agencies in each country an operating fund not to exceed US\$10,000 or its equivalent. These funds will be used for the operating expenses of the project and should be liquidated via the submission of Operating Fund Status reports (Attachment 12) with accompanying receipts in order for ICLARM to correspondingly replenish operating funds.

Status reports may be submitted as often as monthly, depending on the coordinating agency's funding requirements. However, the coordinating agencies are required at a minimum, to submit Operating Fund Status reports for each calendar quarter together with the Quarterly Financial reports.

8. Disbursements for procurement and recurring expenses as well as operating fund replenishments will be made once each month toward the last week of the month. For this reason, coordinating agencies should ensure that requests are received at ICLARM before the 10th of each month so that funds are disbursed before the end of the month.

9. Coordinating agencies are required to submit Quarterly Financial Reports (Attachment 13) within 30 days after the end of each calendar quarter. These financial reports detail all financial transactions executed during the quarter. As can be seen in Attachment 13, the financial report accounts for expenses incurred on a project task basis broken down per budget line item.

10. Quarterly Financial Reports should be accompanied by receipts or other evidences of payment (e.g., signed payroll sheets) for procurement and recurring expenses of the period. The accounting of operating funds, however, should tally with submitted or accompanying Fund Status Reports.

11. In addition, each financial report shall bear the certification of the authorized coordinating agency representative that:

a. Any interest accrued on the funds held by the coordinating agency shall be refunded to ICLARM and/or USAID;

b. An appropriate refund or credit to ICLARM will be made in the event of disallowance in accordance with the administrative procedures established for the project;

c. All expenses reported have been incurred in accomplishing the task specified and are in line with the workplans approved by the PSC;

d. All expenses reported have not been or will not be funded by any other funding/donor agency than USAID through ICLARM and;

e. All expenses reported as government counterpart contributions have not been or will not be funded by any funding/donor agency.

12. Failure to or significant delays by the coordinating agency in submitting financial reports shall be sufficient cause to deny subse-

quent disbursement requests until previous disbursements have been adequately liquidated.

Since liquidation, as presented in the Fund Status and Quarterly Financial Reports, is broken down into in-country tasks, the temporary disqualification from subsequent disbursements may apply to specific tasks as well as to whole country projects. Reporting and the other delinquencies on a task or country basis, however, will not prejudice the continued disbursement of funds to the other tasks or countries fulfilling the project's reporting and auditing requirements.

13. ICLARM, USAID, the Comptroller General of the United States or any of their duly authorized representatives shall have access to any books, documents, papers and records of the coordinating agency and other institutions involved in the project which are directly pertinent to the project for the purpose of making audits, examinations, excerpts and transcriptions.

Procurement of goods and services

1. In general, USAID Standard Provisions have to be adhered to. To prevent violations of these provisions, the following guidelines should be followed:

- a. Price and cost analyses (including competitive bidding) are encouraged for every procurement action. Evidence of these analyses should be submitted for any transaction in excess of US\$50.
- b. Any transaction in excess of US\$2,500 will require the prior approval of ICLARM's Manager for Administration and Finance.
- c. As much as possible, all purchases should be sourced and originate from any of the ASEAN countries or the United States.
- d. Under no circumstances will the following be procured with project funds:
 - 1) Military equipment;
 - 2) Surveillance equipment;
 - 3) Commodities and services for support of police or other law enforcement and services;
 - 4) Abortion equipment and services;
 - 5) Luxury goods and gambling equipment; or
 - 6) Weather modification equipment.
- e. The following goods and services may not be procured without prior written authorization of ICLARM's Manager for Administration and Finance:
 - 1) Agricultural commodities;
 - 2) Motor vehicles (except right-hand vehicles under 5,000 kg and motorcycles under 125 cc);
 - 3) Pharmaceuticals;
 - 4) Pesticides
 - 5) Rubber compounding chemicals or plasticizers;
 - 6) Used equipment;
 - 7) US Government-owned excess property; or
 - 8) Fertilizers.
- f. All expenses should be supported by receipts or sufficiently justified. In no case shall nonreceipted single expenses exceed US\$20.

- g. The contracting party may elect to purchase their requirements through ICLARM.
 - h. All goods purchased under the project and transported to the cooperating countries shall be shipped on privately owned US flag commercial ocean vessels to the extent that such vessels are available at fair and reasonable rates. Shipment of goods on non-US flag vessels will require the prior approval of ICLARM's Manager for Administration and Finance.
2. Title to equipment financed under the USAID grant shall rest in the participating countries, subject to the following conditions:
 - a. The country shall not charge for any depreciation, amortization or use of the property.
 - b. The country agrees to use and maintain the property for the purposes outlined in the approved workplans.
 - c. The coordinating agency is required to render an annual report before 31 January of each year showing a list of all nonexpendable properties acquired with project funds and their corresponding serial numbers and locations.
 3. As much as possible, ICLARM staff and/or US and ASEAN country nationals will be utilized for technical assistance. A special waiver, however, may be granted on a case-to-case basis subject to the submission of satisfactory justification.
 4. The training of any non-US individual outside of his home country should receive the prior written administrative authorization of ICLARM's Manager for Administration and Finance before project funds can be expended for this purpose.
 5. International travel will require the approval of ICLARM's Manager for Administration and Finance. In addition, the nonuse of US flag air carriers when available will require a waiver subject to appropriate justification.
 6. Air travel, when called for under the approved workplans, shall be done on a full fare economy basis. However, coordinating agencies are encouraged to avail of budget fares whenever possible.

Others

1. Identifiable taxes, including customs duties, cannot be paid for out of project funds.
2. Per diem rates used for in-country travel are subject to approval by ICLARM's Manager for Administration and Finance. As a matter of general policy, per diem rates used for the project should be those specified in the coordinating agency's internal policies subject to ICLARM's review. The use of a higher per diem rates than those specified in existing coordinating agency policies will require approval by ICLARM subject to the presentation of adequate justification.
3. Per diem expenses shall be valid and chargeable to the project only if accompanied by trip reports each showing locations/persons visited, dates, purpose of trips and summary of results.
4. The project will not pay honoraria to existing employees of the various agencies involved in the project for performing work which is part of their normal duties and responsibilities as employees of these various agencies. Such duties include, *inter alia*: project design, management, implementation, monitoring evaluation and participation in

meetings. Honoraria may be paid if it is clear that work undertaken is not part of his normal duties and that his participation is essential to the success of the project. Honoraria payments must be approved in advance by ICLARM's Manager for Administration and Finance.

5. In general, budget line items specified in the workplans may be exceeded up to a maximum of 15% of the original amount budgeted.

Project Implementation and Evaluation

After the annual workplan of the project has been approved by the PSC, USAID will then release the necessary funds for project implementation. Project activities for pilot studies are implemented by the various contractors under the coordination of National Coordinator (Country Project Manager) in each country. Training and information activities, on the other hand, will be implemented directly by ICLARM in close collaboration with the host institutions.

Project reporting

All project tasks/activities are expected to submit a quarterly program and financial report to ICLARM in accordance with the form in Attachment 14. The reporting format provides the necessary details needed for monitoring of progress of activities and ensuring timely completion of project tasks as scheduled. Team leaders of task or activity are expected to comply to reporting requirements to ensure timely release of funds. A copy of each of the reports should also be submitted to the various coordinating lead agencies and to the NSC chairman. The NSC will develop a procedure to ensure timely submission of required reports. In addition to quarterly reports, an annual report is to be submitted by 30 October of each year for discussion at PSC meetings. The approved format of the annual report appears in Attachments 15 and 16.

Monitoring of progress of project activities

ICLARM is responsible for regular monitoring of project activities during the course of project implementation. ICLARM project staff will work closely with national teams to provide technical support needed as well as to help resolve problems confronting project implementation even at the field level.

Evaluation of project performance

The PSC shall review the progress of project implementation and evaluate the project performance at least once a year. Project evaluation will essentially be based on the completion of project tasks/activities within the allocated time frame, attainment of objective or task product and the quality of output in terms of technical knowledge gained.

The quarterly progress and financial reports as well as ICLARM's semi-annual and annual reports shall be the bases for evaluation of project progress by the PSC.

Evaluation team

An external evaluation team will be formed by USAID to assess project performance and submit recommendations for improvement and future activities. The Mission Team will be made up of two members, one of whom preferably shall be an ASEAN national. One external evaluator will be adequate for midterm evaluation in view of the evaluating functions of both the NSC and the PSC. Subject to the state of the budget, two external evaluators will be desirable for the final evaluation of the total project performance which also includes ICLARM's role.

The team will conduct a midproject evaluation towards the end of the second year (December) or first part of the third year (January/February). The terms of reference shall be prepared jointly by USAID and the PSC.

Attachment 1

**A Proposed Conceptual Approach to the Development
of Country Program Plans for the ASEAN-US
Coastal Resources Management Project: An Example Using the
Lingayen Gulf, Philippines**

Prepared by

Dr. Chua Thia-Eng

Project Coordinator

ASEAN-US Coastal Resources Management Project

International Center for Living Aquatic Resources Management

3rd Floor, Bloomingdale Bldg., Salcedo St., Legaspi Village

Makati, Metro Manila, Philippines

and

Mr. Random Dubois

Technical Advisor

ASEAN-US Coastal Resources Management Project

International Center for Living Aquatic Resources Management

3rd Floor, Bloomingdale Bldg., Salcedo St., Legaspi Village

Makati, Metro Manila, Philippines

Introduction

A major component of the ASEAN-US Coastal Resources Management Project (CRMP) is the development of four (and possibly six, depending on funding availability) site-specific CRM plans in the ASEAN region. As an initial step to the development of these management plans, each participating lead agency institution has been requested to develop a country program plan covering the life of the project and the first annual workplan in anticipation of the next meeting of the Project Steering Committee (PSC). The approach described below, relating to the development of a program plan, has been proposed for consideration for three purposes: (1) to provide a focal point for the six ASEAN institutional representatives to consider and discuss as an initial step in a process leading to the development of a common approach agreed to by the PSC; (2) to provide a vehicle to facilitate the conceptualization process of the project purpose and characteristics; and (3) to demonstrate through illustrative examples the nature and extent of linkages which could exist among the participating countries' activities; the region's activities which are funded under the project; and the role and resources of ICLARM (as the project's executing agency) which could support project activities.

The remaining portion of the document consists of a brief list and description of the general characteristics recommended for consideration in the development of a program plan. This portion is followed by an illustrative example of program development extending over the life of the project. The guidelines sent out earlier by ICLARM project staff to PSC representatives have been incorporated into the present approach to maintain continuity.

For ease of model construction, the Philippine proposal was selected as the basis to develop the approach described below. It should be noted that

this approach may not reflect the views of the Philippine ASEAN-US CRMP participants.

General Considerations in Program Preparation

1. **Defining the objective.** The primary objective of the ASEAN-US CRMP's planning, assessment and research components is the development of site-specific plans which ensure the sustained economic development of coastal resources and resource systems. This clearly defined objective satisfies one major criterion for the creation of an effective management plan (i.e., the establishment of clearly defined management objective(s)).

2. **Defining the management region.** Boundary definition is an intractable problem as "bounded-areas" inherently serve as subsets of larger areas *ad infinitum*. Nevertheless, a bounded area should be defined to support the stated management objectives. "Well-bounded" areas may be defined using bio-physical, political, economic and/or other criteria which serve the stated management objectives.

3. **"Implementability".** A management plan developed in isolation from the proposed site users and managers and the knowledge of natural resources affected will have little chance of success. The degree to which a plan will be "implementable" will be determined by the: plan relevance to the interests and concerns of the users and managers of the natural resources of the management area; responsiveness to the issues "at hand"; and degree to which the plan will fit into the existing legal and institutional framework governing the area activities.

4. **"Adaptability".** A management plan should be viewed as a "living document" with a built-in capability to adjust to changing circumstances. In the light of the project's time and budgetary constraints, site-specific plans should be viewed, in most cases, as first-generation plans serving to provide an overall management framework in which future planning recommendations stemming from additional research, new management issues, changes in government policy and others can be accommodated. One means to ensure a plan's dynamic nature is to integrate a periodic monitoring and review function into the plan design.

5. **Plan documentation and ease of use.** To be effective, a management plan should be both well-documented and easy to interpret. Thorough documentation provided a solid basis to support plan recommendations which may, at times, prove controversial. Ease of interpretation provides a means for a wide audience, ranging from local user groups to the decisionmakers, to understand the implications of the plan and the basis on which proposed recommendations are justified.

6. **Strategy for implementation.** A management plan should be developed in concert with a parallel strategy for plan implementation. Such a strategy should be planned out in the early design phases of the program leading to the development of the management plan and be implemented incrementally during the process of plan development.

An Illustrative Example

Referring to the guidelines for annual workplan preparation, Fig. 1 (in the text proper) outlines a classification hierarchy to program activities which facilitates the planning process. For purposes of the present model, the following convention was established: the development of a site-specific plan (assessment, planning and research components in the ASEAN-US CRMP description) is assigned to the project level (001 code). Once this convention has been established, each of the remaining sublevel designations can be easily identified.

In the case of the Philippine example, four main divisions are proposed (200-500 code). The first three are biogeographical, socioeconomic and legal/institutional. In addition to these three research and analysis divisions, a fourth "operational" division has been identified as implementation.

Under these four main divisions, a series of tasks have been identified. In the four cases, one for each division, specific tasks have been described and formatted using the guidelines as the standard. Task descriptions were developed by borrowing liberally from the Philippine proposal and the judicious application of imagination. Following task description, a discussion ensues employing the use of matrices to facilitate intertask and task-regional project activity coordination and the budgetary planning process.

1. **Biogeographical division.** This division encompasses studies focused on the natural resource systems and relevant intersystem linkages which characterize the proposed management site. It includes, but should not be limited, to resource assessment studies; species-specific management studies; pollution research; analysis of coastal processes; the development and use of computer-simulation models for use in plan development, etc.

Within the present model, the following tasks have been identified: critical habitat survey; coral reef survey; growth-parameter/management studies on two economically significant reef species; water quality baseline analysis; and fish stock assessment (Tasks 210-250).

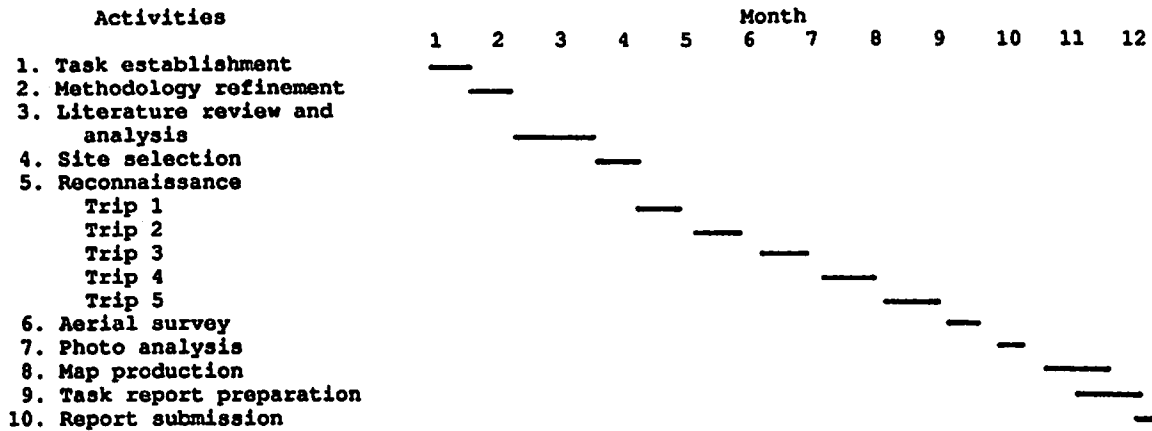
Task: Critical Habitat Survey

Task Code: 210 (Table 1)

Targets/Products: The object of the survey is to identify the nature and extent of critical habitats in the Lingayen Gulf study area. The products generated in the survey will include a descriptive account of each critical habitat "type" characteristic of the region; a new set of aerial photographs depicting the study area delineating areal cover by habitat "type"; and a base map generated from the aerial survey at a scale between 1:12,500 and 1:25,000.

Task Description: A major element of the site management plan will be the identification and development of specific management strategies for critical habitats characteristic of the region. An *a priori* requirement to the formulation of these strategies is a basic knowledge of the character and extent of these areas. To that end, the survey will entail a three-step approach to habitat identification and characterization. First, a thorough search of the literature, aerial photographic archives, topographic maps and charts will be conducted. This information will be analyzed and potential habitat sites and types will be initially identified. This preliminary data base will serve as a basis for a series of reconnaissance trips to each of the sites to determine the accuracy of the previously collected information. In some cases, this may entail little more than a "wind-shield" survey; in other cases, the nature and extent of the habitat may require more detailed system assessments such as transect surveys. Following this "ground-truthing" survey,

Table 1. Workplan for Biogeographical Task 210.



Institution: University of the Philippines, Diliman (UPD) - Marine Science Institute (MSI)

PI: Dr. X

	National input	Project input
Equipment budget		YUS\$
Boat and engine		
Scuba equipment	XUS\$	"
Air compressor		"
Photo interpretive equipment		
Subtotal	XUS\$	ZUS\$
Operational budget		
Personal services		
PI	XUS\$	YUS\$
Research staff		"
Per diem		"
Transportation	"	
Materials and supplies		"
Subtotal	XUS\$	ZUS\$
Contingency	YUS\$	XUS\$
Total	ZUS\$	XUS\$

if the results so warrant, an aerial survey will be contracted to photograph the study site. The resulting information will serve as a basis to analyze trends in habitat cover, quality of cover and, in some cases, sources of stress.

Duration: 12 months

2. Socioeconomic division. For the purposes of the present planning exercise, the term *socioeconomic* is broadly defined to include the range of human activities which are interlinked either directly or indirectly with the natural resource systems at the pilot site. Activities which should be considered under this division range from studies examining economic sectors directly supported by these systems to social assessments related to identifying the underlying causes for human-induced habitat degradation.

Key questions which may be considered here include studies which: identify and characterize the key "users" of coastal resources in the region; describe the present resource use patterns; and examine alternative, and where possible, less inferior solutions to present resource use patterns.

Within the present model, the following tasks have been identified: an "extended" economic analysis of the western Lingayen Gulf coral reefs; the local and regional economic importance of the Hundred Islands Marine Park; and

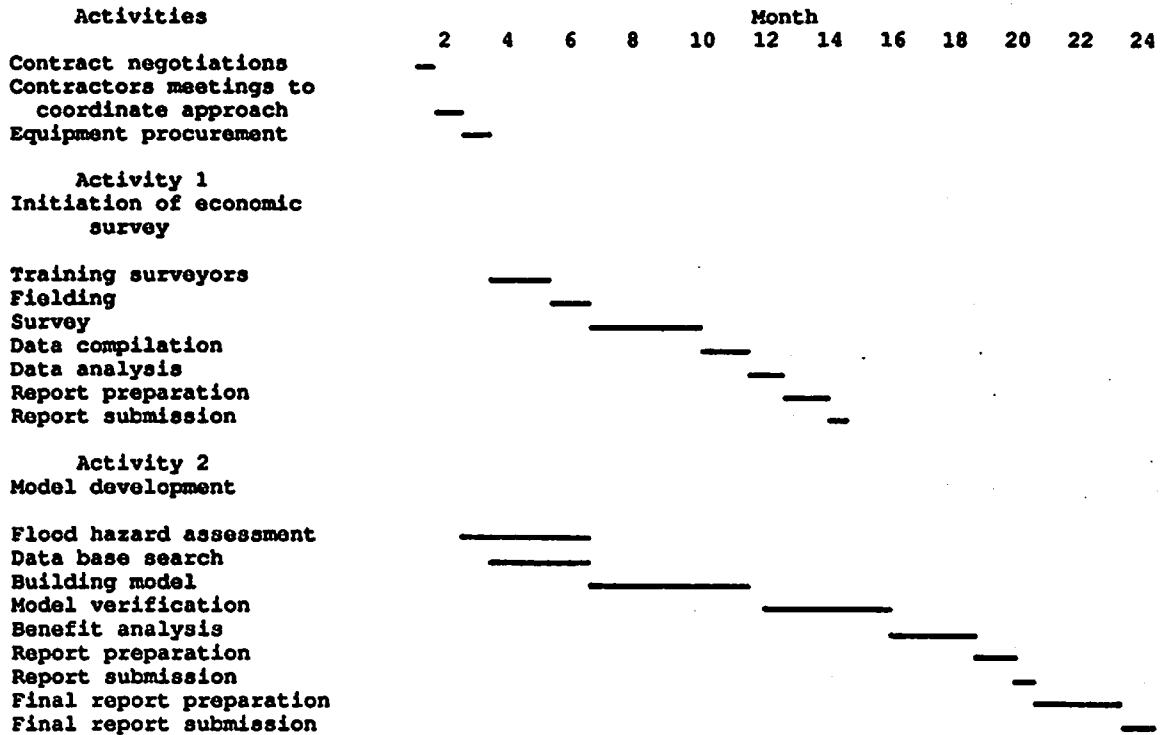
an analysis of the artisanal/commercial fishing conflict in the Gulf (Task Codes 310-330).

Task: Economic Analysis of the Coral Reef Resources of the Western Lingayen Gulf

Task Code: 310 (Table 2)

Targets/Products: The object of the analysis is to document to the extent possible the economic significance of the coral reef resources within

Table 2. Workplan for Socioeconomic Task 310.



Institutions: UPD - Department of Socioeconomics
 Don Mariano Marcos Memorial State University -
 Department of Computer Science (DMMSU/DCS)

PI(s): Dr. X (UPD); Dr. Y (DMMSU)

	National input	Project input
Equipment budget		
IBM AT		XUS\$
Calculator		YUS\$
Subtotal	OUS\$	ZUS\$
Operational budget		
Personal services		
PI #1		"
PI #2		"
Research staff (UPD)	XUS\$	
Research staff (DMMSU)	"	
Per diem	"	"
Transportation	"	"
Materials and supplies		"
Subtotal	ZUS\$	XUS\$
Technical assistance		
hazards specialist (1 mm)		YUS\$
Contingency	XUS\$	ZUS\$
Total	XUS\$	YUS\$

the pilot site. The product generated will be a report which will attempt to translate the goods and services provided by this natural ecosystem into economic units of measurement acceptable for use in economic analyses associated with possible future economic development projects.

Task Description: A major source of critical habitat degradation has been the failure by development planners to account for these systems in the economic analyses associated with the prefeasibility phases of project planning. In part, one solution to this problem rests with identifying and measuring the human goods and services provided by these systems in terms suitable for inclusion in economic analyses. To address this concern in the Lingayen Gulf site, the following task activities were identified: an economic survey of users immediately dependent on the reef (e.g., fishermen, the cottage shellcraft industry; dive shops, hotelier and other tourist-related enterprises; and the urchin export industry). Concurrent with the quantification of these direct sources of economic importance, efforts will be directed to develop and apply specific methodologies which will attempt to measure the indirect importance of the reef. One "service" which has been initially identified as of primary importance in the Lingayen area is the role of the reef as energy buffer to sources of seaborne flooding.

In the light of the difficulty in quantifying this "service," a predictive computer-simulation model will be developed based on empirically derived evidence generated from past floods in the Lingayen Gulf and other sites. This model will serve to "predict" and compare inundation zones in the presence and absence of the coral reef for the 15-, 25- and 50-year storm event. This information, in turn, will serve as the basis to calculate cost-saving figures associated with the reef from damage attributed to storm surge.

Duration: 24 months

3. Legal/institutional division. This division encompasses all those tasks concerned with the examination of the legal and institutional regime affecting the pilot site. Similar to the cases of the other divisions, task selection should be governed by a broad interpretation of legal and institutional regimes. Tasks, in all likelihood, will vary in scope from the local to the national, and in character from governmental institutions to the private and nonprofit sectors. Specific questions which should be examined include: definition of the jurisdictional boundaries of the various governmental entities relevant to the pilot site; key coordination points among the local, regional and national institutions; institutional explanations for resource degradation; and nature and extent of institutional data bases.

In the Philippine model, the tasks identified under the present division are: a survey of governmental arrangements affecting the Lingayen Gulf region; an analysis of private organizations/associations dependent on the Lingayen coastal/marine resource systems; and an analysis to determine the feasibility of coupling the Philippine CRM plan to the country's National Conservation Strategy (Tasks 410-430).

Task: Analysis of Governmental Arrangements

Task Code: 410 (Table 3)

Targets/Products: The object of the analysis is to identify and characterize the governmental entities and their respective roles and responsibilities at the local, regional and national levels which affect/manage the use of coastal resources in the Lingayen Gulf study area. The specific products will be: a summary compilation and analysis of the legal regime supported by copies of the relevant legal acts which affect the Lingayen coast; and a report characterizing all the governmental institutional "actors," their legal mandates and resources available to carry out these mandates. This second

Table 3. Workplan for Legal/Institutional Task 410.

Activities	Month									
	1	2	3	4	5	6	7	8	9	10
Activity 1										
Prepare TOR	—									
Negotiate contract	—									
Initiate archival review		—	—							
Interviews		—		—						
Prepare report				—	—					
Report submission					—					
Activity 2										
Prepare TOR	—									
Negotiate contract	—									
Review Activity 1 report					—					
Identify and make initial contacts						—				
Interviews						—	—			
Incorporate results from user survey*							—	—		
Data analysis								—	—	
Prepare report*									—	—
Report submission										—

Institution: UP-School of Law (UP/SOL); Haribon Foundation (HF).

PI: Mr. X (UP/SOL); Mr. Y (HF)

Equipment budget: none

Operational budget	National input	Project input
Personal services		
PI X		XUS\$
PI Y		YUS\$
Research staff		ZUS\$
Local transportation	XUS\$	"
Xeroxing	"	"
Materials and supplies	"	"
Subtotal	YUS\$	ZUS\$
Contingency	"	"
Total	ZUS\$	YUS\$

*Final report must await the completion of the user survey described in 310.

report will be supported by a schematic portraying all relevant entities at the three levels of responsibility (local, regional and national).

Task Description: The legal analysis will be a "straightforward" review of the legislative "acts" relevant to the subject. Xeroxes will be made of all appropriate acts and will be appended to the compilation report. Where they exist, a review of previous surveys pertaining to coastal resources will be consulted. Legal advisors at the Haribon Foundation and the National Environmental Protection Council will be consulted in the analysis to assist in identifying institutional impediments resulting in resource degradation.

Based on the aforementioned legal analysis, governmental institutions will be contacted and interviews arranged with the appropriate personnel. Basic information which will be gathered will include the number and range of professional skills of people employed in the office(s). These people's responsibilities affect the Lingayen coastal resource systems; trends in recent budgets; and institutional "perspectives" of coastal resources issues in the study area. An analysis based on these interviews, the previous legal review and a survey of "users" in the field incorporated from Task 310 (above) will provide the basis for final report preparation. Specific themes examined,

which will be included in the final report, will be opportunities for increased coordination at the local and regional levels; means to implement multisectoral mitigation measures attempting to arrest coastal resource degradation; and identification of institutional impediments at the national level manifesting themselves in coastal resources degradation at the local level.

Duration: 10 months

4. **Implementation division.** Unlike the previous three divisions, this division is not defined by thematic characteristics but is more operational in nature. It should be planned on a time frame extending the life of the project designed to interact to a high degree with the other components feeding into the development of a management plan. Whereas some activities may be desired to be focused at the national level by and large, they should emphasize the local level, recognizing plan genesis.

The important point here is that the tasks and activities developed under this division are not directly concerned with implementation, but should be focused on facilitating plan implementation once the plan has been developed.

In the light of the nature of this component, the individual elements will not be studies or assessments but should be focused on "consciousness-raising" and building local consensus for plan development and implementation. There exists a number of means available to achieve these objectives which include the: holding of local public forums to discuss the need for a management plan and solicit input into plan development; developing information linkages which keep local authorities and users informed of project progress; formation of local working groups which meet on a periodic basis to discuss/resolve specific coastal resources issues; and funding of educational materials to increase local awareness of the need for a process of developing a management plan.

For our conceptual model, five tasks have been identified: a series of one-day public forums sponsored in the first year of the project to be conducted at locales distributed throughout the region; the formation and funding for the periodic meetings of a local counterpart group representing the region's significant manager and user groups to serve as the focal point for information flow and the local "entry" point; the funding of 4 three-day public forums in the beginning of the project's fourth year to present project results, solicit local input and provide a means to discuss possible management options; sponsoring of workshops on an *ad hoc* basis during the life of the project which can address specific issues/resource use conflicts with interested local users/managers aimed at seeking means to their resolution; and contracting with a local conservation group to develop a locally focused public awareness campaign addressing the importance of coastal resources and the need for their management (Tasks 510-550).

Task: One-day Public Forums

Task Code: 520 (Table 4)

Targets/Products. The object of the forums is to "sensitize" the public on the objectives and approach of the project. About four forums will be held during the first year of the project, distributed geographically throughout the region to provide a ready access as possible to the region's inhabitants. A copy of the proceedings resulting from each forum will be prepared for distribution.

Task Description: The one-day public forums will be preceded by timely announcements using local news media, radio and posters announcing the activity. Local organizations and user groups with interests in CRM will be contacted directly. The forum panel will be formed from members of the local

Table 4. Workplan for Implementation Task S20.

Activities	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
Forum 1													
Make local contacts	—												
Panel formation		—											
Agenda preparation			—										
Prepare facility				—									
Media arrangements					—								
Conduct forum						—							
Prepare proceedings							—						
Submit proceedings								—					
Forum 2													
Forum 3													
Forum 4													

Institution: Don Mariano Marcos Memorial State University (DMMSU)

PI: Dr. X

Equipment budget: none

Operational budget	National input	Project input
Personal services		
PI		XUS\$
Forum panel participants	YUS\$	
Per Diem		ZUS\$
Transportation	ZUS\$	
Communication costs		"
Xeroxing		"
Materials and supplies		"
Proceedings preparation		"
Subtotal	XUS\$	YUS\$
Contingency	"	"
Total	YUS\$	ZUS\$

counterpart group, representative(s) of the national PSC; and selected others who can bring a "broad" perspective to the subject at hand.

While the forum's full agenda has not been finalized to date, the principal components will include: the history of the project; a characterization of the area; the major issues (if known) which a management plan would purport to address, the approach currently under study leading to plan development and projected follow-up activities under the implementation division and the other three divisions.

Duration: 12 months

Program Preparation: Some Considerations

It is safe to say that no single system exists which provides a full-proof approach linking all tasks in an optimal sequence under the umbrella of a program. Nor is this warranted as flexibility in program design is a desirable characteristic especially in this project's outer years. Nevertheless, a programmatic framework should be established to provide coherence to project tasks and activities leading to plan development and to facilitate the budgetary planning process. To that end, the following points should be considered in program development.

1. **Flexibility.** Generally, task descriptions and commitment to task implementation should be inversely correlated with time (i.e., the tasks identified in the outer years of the project should be described in less detail and should be given a tentative status within the program plan in contrast to those activities identified in the earlier project years). In part, this is justified by lack of a planner's ability to predict the future. It also has the advantage of taking into account the results generated in the earlier and middle portions of the program which may influence task identification in the outer years. The annual workplans should, guided by the overall work program framework, be the vehicle to provide day-to-day project detail.

2. **Program objective.** The major exception to the consideration above concerns those activities directly related to the preparation of the plan. This program element should be planned for sometime in the ASEAN-US CRMP's fourth year. Time and money should be reserved for this activity in the program plan though the actual detail and format of the plan can be deferred into the second and third years of the project.

3. **Task interdependence.** There will exist obvious points within the project life where one task will depend either directly or indirectly on the successful completion of an earlier task. This could occur because of: a need for existing data in the second task generated from an earlier task; equipment purchased for one task would be required in a second; or a single contractor has been requested to conduct more than one task-related activity. These considerations should be thought out as far in advance as possible to avoid time-consuming delays and inefficient use of project funds. In some cases, activities planned under one task can be combined with others to obtain a better return on investment of project funds.

4. **Interproject coordination.** In some cases, there will be other ongoing project funding activities with results which could be incorporated into the development of a management plan. Where possible, the respective activities under each project should be shaped to increase project complementarity in the light of the scarce resources available for the ASEAN-US CRMP component 1.

5. **Program task prioritization.** There will be few cases under the ASEAN-US project component 1 where funding is substantial enough for all activities desired or even required to develop a satisfactory management plan. Given the funding constraint, there will be a need to "prioritize" proposed program tasks leading to plan development. To assist in that process, a group bringing a diversified perspective of the coastal site, resources and issues should be consulted by each country's respective National Steering Committees (NSC). Criteria which should be considered in task selection generally fall under questions relating to management need. These criteria include: issue severity; issue immediacy; economic importance of the resource systems to be incorporated under the plan; and task interdependence (i.e., the degree to which information generated by one task can serve as a basis for the implementation of future tasks once additional funding becomes available; and balance recognizing that the project's purpose is to assist in the development of multisectoral management plans.

A bar chart typical of the one recommended for use in the earlier guidelines is presented in Table 5. In preparing such a chart, a matrix such as the one in Table 6 may be of some use in identifying major intersections between program tasks. Where intersections occur, the need arises to examine intertask coordination in greater detail prior to scheduling task implementation on the bar chart. In the example, Task 410 has been scheduled to accommodate the economic survey of coral reef resources proposed in Task 310 due to the complementarity of certain elements in the two tasks as described above.

Table 5. Bar chart to plan out program activities.

Project tasks	Code	Project month													
		3	6	9	12	15	18	21	24	27	30	33	36	39	42
Habitat survey	210	_____													
Reef survey	220														
Growth studies	230														
Water quality	240														
Fisheries survey	250														
Economic analysis	310														
Marine park study	320	_____													
Fisheries conflict	330														
Institutional analysis	410	_____													
Private sector	420														
NCS linkages	430														
Local group	510														
One-day forums	520	_____													
Three-day forums	530														
Ad hoc Workshops	540														
Public awareness	550														

Table 6. Proposed matrix to assist in program preparation.

	Division 200 Task	Division 300 Task	Division 400 Task	Division 500 Task
	2 2 2 2 2	3 3 3	4 4 4	5 5 5 5
	1 2 3 4 5	1 2 3	1 2 3	1 2 3 4 5
	0 0 0 0 0	0 0 0	0 0 0	0 0 0 0 0
Division 200				
Task 210	X			X X
Task 220				
Task 230				
Task 240				
Task 250				
Division 300				
Task 310		X	X X	X X
Task 320				
Task 330				
Division 400				
Task 410		X		X X
Task 420		X		
Task 430				
Division 500				
Task 510				
Task 520				X
Task 530				
Task 540				
Task 550				

An alternative vehicle to the use of a matrix for programming planning is a conceptual schematic, a simplified example of which is presented in Table 7. In this example, using the Philippine model, one component which has been incorporated into the plan development process is the establishment of a general data base which can serve the various divisions. This schematic establishes a broader framework than plan development by including a second phase designated plan implementation.

Table 7. Conceptual schematic to assist in program preparation.

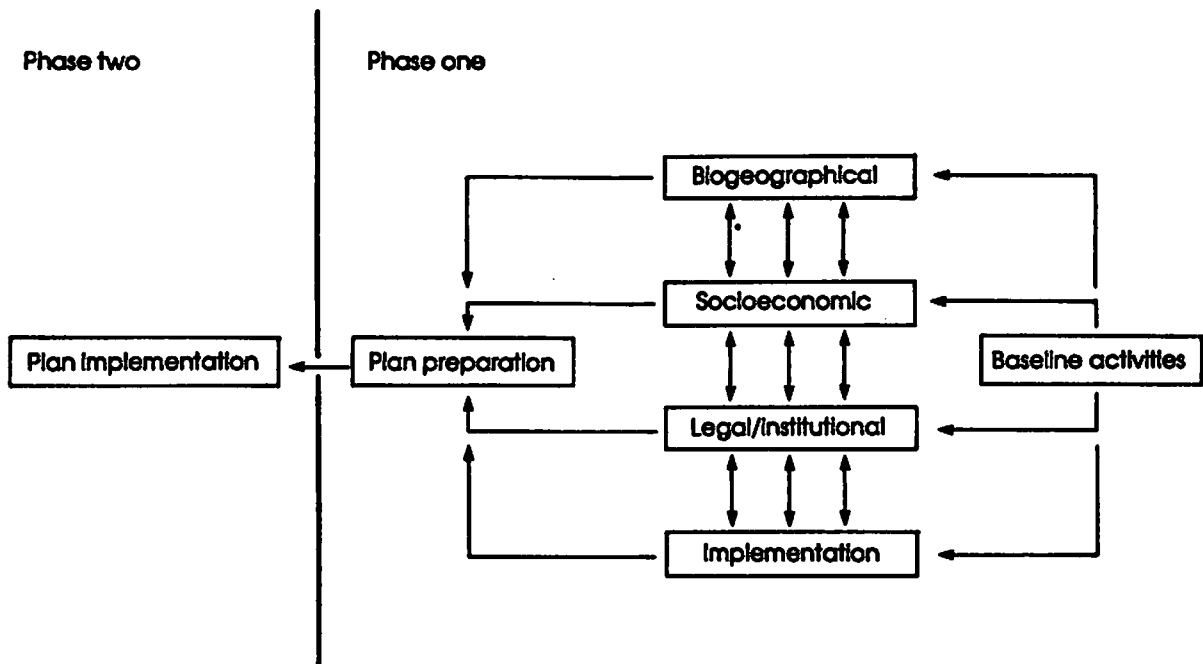


Table 8. The possible role of the ASEAN-USAID CRMP regional activities in program development.

	Component 1					Component 2	
	Resource assessment	Planning	Cooperative research	Regional courses	Policy WS	Academic training	Information dissemination
Division 200							
Task 210	X		X				X
Task 220							
Task 230							
Task 240							
Task 250							
Division 300							
Task 310	X		X	X	X		X
Task 320							
Task 330							
Division 400							
Task 410		X			X		X
Task 420							
Task 430							
Division 500							
Task 510							
Task 520		X					X
Task 530							
Task 540							
Task 550							

Table 9. Possible roles for ICLARM in progress activities.

	Task					Task			Task			Task				
	2	2	2	2	2	3	3	3	4	4	4	5	5	5	5	5
	1	2	3	4	5	1	2	2	1	2	3	1	2	3	4	5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administration																
Assist in work	X					X			X							X
Plan preparation																
Providing technical assistance																
In-house																
Consultants						X										
Data searches						X			X							
Data base development	X					X			X							X
Research networking																
Information exchange	X					X			X							
Regional workshop coordination						X										
Facilitate training and manpower development	X															
Newsletter	X					X			X							X
Curricula development assistance																
Public awareness promotion																X

In addition to these matrices, two other tables have been included (Tables 8 and 9). These are presented as examples for use by the program planner to facilitate the conceptualization of the linkages between specific tasks and the ASEAN-US CRMP's regional components and possible supportive roles of ICLARM as the project's executing agency in task implementation, respectively. As work program components, these analyses are recommended as a means to achieve a higher degree of coordination between country and regional project activities; promote a regional supportive network which can complement in-country data and information collection activities; and assist ICLARM in determining the nature and extent of services desired by ASEAN participating institutions.

In conclusion, it is hoped this proposed conceptual approach will provide a basis for discussion and an initial entry point into the process of program preparation which can be finalized in the next PSC meeting.

Attachment 2**Establishment of a Network on Coastal
Resources Research and Management****Title: ASEAN coastal resources and management
research network**

Objectives. The goal of the network is to strengthen research and management capabilities within the ASEAN region to develop and implement coastal resources management (CRM) strategies for rational utilization of renewable coastal resources on a sustained basis. This goal can be achieved by combining the formation of the network with the project's other elements, namely: (1) cooperative and collaborative research on coastal resources and their management; (2) upgrading technical capabilities through training courses; and (3) exchange of research information and experience through workshops and publications.

Components. The network will be made up of research institutions and individuals which are actively involved in coastal resources research and management and are committed to the network concept and objectives stated above. A list of potential institutional members of the network is attached.

Network Activities

1. Research. Scientific research on coastal resources and their management will be conducted; and, wherever possible, collaborative research of regional interest will be participated in. Project resources may be used to foster closer cooperation and collaboration by making it possible for senior researchers to undertake research within the region or facilitate the participation of junior scientists (on attachment basis) as members of ongoing research teams in other collaborating institutions or countries. This will promote the exchange of scientific personnel among ASEAN countries and enable free exchange of scientific expertise which are in full conformity with the spirit of ASEAN.

The activities of the network will be included under components 1 and 2 of the project document where relevant.

2. Training. Participating/cooperating institutions and individuals will help conduct or participate in training courses/workshops/seminars at the national or regional level designed to upgrade technical capabilities of research scientists involved in coastal resources research. Such activities may include training courses/workshops in the use of microcomputers for data management needed for simulating trends in coastal resources exploitation; standardization of methodologies for living resources assessment; or approaches for socioeconomic surveys of coastal areas, among others.

3. Information exchange and dissemination. Exchange of information on coastal resources and their management among ASEAN scientists can be facilitated through the network. The project newsletter will play an important role in updating information in addition to reporting the progress of project implementation. Members of the network can play an active role by contributing to the newsletter; preparing technical and training manuals; and developing audiovisual materials on coastal resources utilization and management and

educational materials that would lead to public awareness and cooperation on the sustainable exploitation of the living coastal resources of the region.

**List of potential members of the network
on coastal resources research and management**

Brunei Department of Fisheries
Darussalam: Department of Forestry

Indonesia: National Institute of Oceanology (LON)
Marine Fisheries Research Institute (BPPL) of Agency for
Agricultural Research and Development (AARD)
Ministry for Population Affairs and Environment (KLH)
Department of Forestry Estate Management, Ministry of
Forestry
Bogor Agricultural University
Diponegoro University
National Development Planning Agency (BAPPENAS)

Malaysia: Ministry of Science, Technology and Environment
University of Agriculture
University of Science, Malaysia
University of Malaya
Fisheries Research Institute
Marine Science Society

Philippines: Marine Science Institute - University of the Philippines,
Diliman
College of Fisheries, University of the Philippines in the
Visayas
Bureau of Fisheries and Aquatic Resources
Philippine Council for Agriculture and Resources Research
and Development
Philippine Fisheries Research Society
College of Fisheries, Don Mariano Marcos Memorial
State University

Singapore: National University of Singapore
Primary Production Department
Science Council of Singapore

Thailand: Phuket Marine Biological Center
Office of the National Environment Board
Kasetsart University
Chulalongkorn University
Department of Fisheries
National Institute of Coastal Aquaculture
National Economic and Social Development Board
Tourism Authority of Thailand

Attachment 3

**Training Course 1: Principles in Coastal
Resources Management**

Course targets and approach. The course is designed to introduce researchers, resource managers and policymakers to the principles of integrated CRM. Such a course would create a common analytical and philosophical base for CRM in the participating ASEAN countries.

The course focuses on synthesis and integration of information on renewable coastal resource use conflicts and formulation of management strategies and planning.

Course content. Rationale and principles of CRM (interdisciplinary, multiple use management, management information needs, intersectoral coordination, integration of policy, management and research); management tools (set-backs, EISs, zoning, atlases, etc.); conflicts associated with traditional sectoral approaches in the coastal zone; conflict resolution; major resource systems and processes (mangroves, beaches, seagrasses, coral reefs, fish, etc.); the role of marine reserves and protected areas; economic systems (fisheries, agriculture, aquaculture, transport and communication, tourism, urbanization, industrialization, mining, forestry); sociocultural characteristics of coastal inhabitants; natural hazards; institutional relationships (traditional resource management, government and quasi-governmental institutions, policies, legal frameworks, regulations and enforcement); economic analysis and CRM (existing economic interactions, modelling, benefit-cost analysis); technology demonstration for research and information management; case studies.

No. of Participants
15-20

Course schedule
March 1987
August 1987
March 1988
February 1989

Duration
Two weeks

Venue
Rotational venue

Attachment 4**Training Course 2: Information Research and Management**

Course targets and approach. The course is designed to provide project technical staff with sound knowledge of current approaches and modern tools' applications in information procurement, storage and retrieval. This can be advanced by formalization of existing information management systems (DIALOG, AUSTINET, CSIRONET, INFOTERRA, etc.), data processing, and using and disseminating information.

Course content. Introduction to information systems (libraries; use of abstracts, contents, journals, bibliographies, reviews, directories; use of data bases; formulating queries; on-line searching; information services (AGRIASIA, LARIS, MINISIS, INFOTERRA, DIALOG, AUSTINET, IDRC-sponsored services, etc.); storing information (reprints libraries, computers); using information (in research, training, extensions, avoidance of duplication, assessment of topicality, etc.); scientific reporting (papers/articles, pitfalls, referencing, project report preparation, newsletter, etc.); disseminating information (preparation and uses of newsletters, press releases, articles, reprints, manuals, posters, audiovisual); microcomputing for word processing, statistics, experimental data storage, communication, etc.

Duration: Two weeks

No. of participants: 20

Course schedule: September 1986

Venue: ICLARM, Philippines

Attachment 5

**Training Course 3: Remote Sensing Application
in Coastal Resources Management**

Course targets and approach. The course is aimed at training project technical staff in the application of remote sensing to coastal resources management (CRM) including the interpretation of satellite imagery and aerial photographs.

Course contents. Basic principles of remote sensing; application of available technology to natural resource assessment (mangroves, coral reefs, seagrass beds, etc.); processes (sand transport, current patterns, bathymetry modifications); human settlement surveys (land use, patterns of occupancy); pollution monitoring; hazards assessments; management applications (zoning, atlas/graphics preparation; existing data centers; and means available to access the data).

Duration: 2 weeks

No. of participants: 20

Course schedule: July 1988

Venue: Asian Institute of Technology, Thailand

Attachment 6**Training Course 4: Methods of Socioeconomic Analysis
in Coastal Resources Management**

Course targets and approach. The course is designed for project personnel involved in socioeconomic studies or other potential ASEAN personnel interested in the socioeconomic aspects of coastal zone management, approaches and methods used in social and economic analysis for the management of the coastal systems. The participants will be exposed to a broader perspective covering not only the economic assessment of the coastal resources but also their indirect contribution to the coastal systems and their social implication to the coastal zone population.

Course contents. Traditional approaches to economic assessment and their respective strengths and weaknesses; alternative approaches (energy analysis; extended cost/benefit analysis); characteristics of human livelihood systems dependent on coastal resources in the ASEAN region; comparative case studies employing traditional versus alternative economic analysis in project design.

Duration: 2 weeks

No. of participants: 20

Course schedule: November 1987

Venue: Singapore

Attachment 7

Training Course 5: Integrative Methods

Course target and approach. The purpose of this course is twofold: (1) to introduce trainees to the various available techniques which assist them in interdisciplinary multisectoral natural resources planning; and (2) to provide the means, both training and software, to planners to build site-specific computer simulation models which can be used to predict the future status of coastal resources and resource systems, given present rates and levels of exploitation within each resource sector and known existing empirical relationships between systems and processes characteristics of the site.

The usefulness of this information to the planner will be demonstrated in a management scenario reflecting the situation at one of the CRMP sites. Site selection will depend on the participating countries' level of interest and site applicability to other ASEAN-USAID CRMP nations. Direct participatory involvement by workshop participants in the building of a site-specific model, together with the supply of appropriate software, will ensure each country's representative(s) of leaving the workshop with the capabilities to build similar models appropriate to their respective CRMP (or other) sites.

Duration: 2 weeks

No. of participants: 20

Course schedule: February 1988

Venue: To be determined

Attachment 8

ASEAN/US Cooperative Program on Marine Sciences:
Coastal Resources Management Project

FELLOWSHIP NOMINATION

Name of Nominating Agency: _____

Country: _____

Training Courses/Workshops/Seminars (Title): _____

Duration (State period): _____

Name of Candidate (Block letters): _____

Designation of Candidate: _____

1. The Nominating Agency will provide any insurance considered necessary beyond the cover afforded by the Project, it being understood that ICLARM is not responsible for claims arising from any accident or illness of a participant during his attendance at, and in travel incidental to, seminars/workshops/training courses. However, the Project will cover participants for service-incurred death or permanent disablement due to an accident occurring during the program and related travel.

2. During the period of attendance, the position of the nominee in the country of origin will be reserved and he will continue to receive, during his fellowship, a salary and relative allowances to meet home commitments.

3. On conclusion of the fellowship, the Agency/Institution intends to use the services of the nominee in its _____ program and will be employed to the following post upon return (if applicable): _____

4. Upon request by ICLARM, the Agency/Institution will submit an assessment of the performance of the nominee taking into account his subsequent duties and capabilities.

Certified: _____
Name and Signature of Official Title

Date: _____

ACADEMIC AND OTHER EDUCATION (Start with the last institution attended and work backwards.)

INSTITUTION/ADDRESS	MAJOR/DEGREE	YEAR INCLUSIVE
_____	_____	_____
_____	_____	_____
_____	_____	_____

PREVIOUS FELLOWSHIP OR SCHOLARSHIP

AWARDING AGENCY/PLACE OF STUDY	SUBJECT STUDIED/DURATION
_____	_____
_____	_____
_____	_____
_____	_____

KNOWLEDGE OF LANGUAGES

LANGUAGE	READING				SPEAKING				WRITING				
	E	G	F	P	E	G	F	P	E	G	F	P	

E – excellent G – good F – fair P – poor

EMPLOYMENT RECORD (Start with the present and work backwards.)

EMPLOYER/ADDRESS: _____

DURATION (from/to): _____

POST TITLE: _____

BRIEF DESCRIPTION OF WORK: _____

EMPLOYER/ADDRESS: _____

DURATION (from/to): _____

POST TITLE: _____

BRIEF DESCRIPTION OF WORK: _____

CERTIFICATION

I certify that to the best of my knowledge and belief the statements made by me in answering the foregoing questions are true and complete. If selected for the fellowship, I shall undertake to:

1. Devote my full time and attention to the training program.
2. Refrain from engaging in political, commercial or other activity incompatible with my work program.
3. Conduct myself at all times in a manner compatible with my status as holder of the fellowship.
4. Cooperate in the evaluation of the effectivity of the training and complete and return evaluation questionnaires whenever required.
5. Return to my home country at the end of the fellowship.

I understand that if my conduct is deemed unsatisfactory by the authorities in charge, I am liable to be repatriated before the end of the training.

DATE _____

SIGNATURE _____

Attachment 10a

DIRECT DISBURSEMENT REQUEST – PROCUREMENT

Country: _____ Date: _____

PLEASE REFER TO INSTRUCTIONS AT THE BACK OF THIS FORM.

ITEM DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL	SUPPLIER	TASK/ ACTIVITY CODE
TOTAL DISBURSEMENT REQUESTED					

The undersigned hereby certifies: (1) that price and cost analyses have been done and the above represents the best overall procurement option (documentation required for transactions above US\$50 is attached); (2) that the above proposed purchases are within approved workplans; (3) that these purchases will not be funded by any other agency; (4) that the appropriate refund or credit to the grant will be made in the event the funds are not expended or if expenses/purchases are disallowed in accordance with approved workplans or the policies established by ICLARM and the PSC; (5) that any interest accrued on the funds made available herein will be refunded to ICLARM/USAID; and (6) that to the best of my information and belief, none of the above commodities contain components produced in and imported from other than free world countries.

By: _____ Date: _____

For ICLARM's Use:

Concurred by: _____

Disbursement Approved: _____

(Back of Form)

INSTRUCTIONS

1. This form should be filled out monthly as purchases are required and submitted prior to the 10th of each month to ensure that funds are disbursed prior to the end of the same month.
2. All equipment and other purchases requiring the prior approval of ICLARM (as detailed in the *Guidelines for Project Implementation and Evaluation*) should be reflected on this form. The inclusion of other operational purchases (i.e., supplies and materials) shall be at the option of the coordinating agency.
3. Please make sure that task/activity codes are indicated.
4. Attachments to this form shall be those required by the *Guidelines* such as:
 - a. Price and cost analysis
 - b. Justification for waivers sought

Attachment 13

QUARTERLY FINANCIAL REPORT

Country: _____

For the Period _____ to _____ 19 _____

PLEASE REFER TO INSTRUCTIONS AT THE BACK OF THIS FORM.

LOCAL CURRENCY RECEIPTS			
DATE	US\$ EQUIVALENT	EXCHANGE RATE	LOCAL CURRENCY AMOUNT
A. TOTAL LOCAL CURRENCY RECEIPTS			

US\$ RECEIPTS	
DATE	US\$ AMOUNT
B. TOTAL US\$ AMOUNT	

	US\$	LOCAL CURRENCY	COUNTRY COUNTERPART
C. TOTAL RECEIPTS (A + B)			
D. ADD: BEGINNING BALANCES			
E. TOTAL FUNDS AVAILABLE FOR THE PERIOD (C + D)			
F. LESS: EXPENSES FOR THE PERIOD (See Attached Task Expense Reports)			
G. ENDING BALANCE (E - F)			

The undersigned hereby certifies: (1) that the information provided above and in the attached reports are proper and due under the terms of USAID Standard Provisions, the approved workplans and the established administrative guidelines; (2) that expenses as reported are not funded or will not be reimbursed by any other agency; (3) interest accrued on funds will be refunded to ICLARM/USAID; (4) that a refund will be made to ICLARM/USAID should any of the expenses be disallowed.

By: _____ Date: _____

(Back of Form)

INSTRUCTIONS

1. Local currency and US\$ receipts refer to *all* funds disbursed by ICLARM and received by the Coordinating Agency during the specified period. These amounts include procurement and recurring expense disbursements as well as operating fund disbursements or replenishments.
2. Beginning balances should correspond to ending balances reported in the previous Quarterly Financial Report.
3. Required attachments are:
 - a. Task/activity expense reports
 - b. Receipts for purchases made out of direct disbursements
 - c. Payroll sheets
 - d. Receipts for rental/lease or other recurring expense payments
4. This report should be submitted to ICLARM within 30 days after the end of each calendar quarter.

TASK/ACTIVITY EXPENSE REPORT
Attachment to the Quarterly Financial Report

Country _____
For the Period of _____ to _____ 19 _____

TASK/ACTIVITY _____
CODE _____

EXPENSE ITEMS	US\$	LOCAL CURRENCY	COUNTRY COUNTERPART
a. Equipment b. Consultants c. Salaries d. Honoraria e. Per diem f. Supplies/materials g. Transportation h. Others			
SUB-TOTAL			

TASK/ACTIVITY _____
CODE _____

EXPENSE ITEMS	US\$	LOCAL CURRENCY	COUNTRY COUNTERPART
a. Equipment b. Consultants c. Salaries d. Honoraria e. Per diem f. Supplies/materials g. Transportation h. Others			
SUB-TOTAL			

QUARTERLY PROGRESS REPORT

1. Project Task/Subtask (Title) _____

2. Code _____

3. Project Leader _____

4. Co-Investigators _____

5. Starting Date _____
 Expected Date of Completion _____

6. Allocated Budget _____ Amount Used _____

7. Progress of Activities _____
 Reporting Period _____

ACTIVITIES	ACCOMPLISHMENT					
	100%	80%	50%	25%	10%	0%
a.						
b.						
c.						
d.						
e.						
f.						
g.						
h.						
i.						
j.						
k.						
l.						
m.						
n.						
o.						
p.						
q.						
r.						

(Specify each activity as outlined in project task.)

8. Expenditures

BUDGET CODE	ITEM	EXPENDED TO DATE	BALANCE
a	Equipment	_____	_____
b	Consultants	_____	_____
c	Salaries	_____	_____
d	Honoraria	_____	_____
e	Per diem	_____	_____
f	Supplies/materials	_____	_____
g	Transportation	_____	_____
h	Other operating expenses*	_____	_____

*Include photocopying and purchase of books and journals.

9. MAIN ACCOMPLISHMENTS _____

10. MAIN PROBLEMS _____

11. REMARKS _____

12. SIGNATURE OF PROJECT TEAM LEADER _____

Date _____

Attachment 15

**ASEAN/US Cooperative Program on Marine Sciences:
Coastal Resources Management Project**

ANNUAL REPORT

SUMMARY

COUNTRY _____

TITLE _____

Country Project Manager _____

**Number of Country
Project Staff** _____

I. ANNUAL COUNTRY PROJECT REPORT **PERIOD** _____

- Introduction
- Results/Achievements
- Conclusion/Comments and Suggestions/Problems
- Expenditures

II. NEXT ANNUAL WORKPLAN **PERIOD** _____

Attachment 16

**ASEAN/US Cooperative Program on Marine Sciences:
Coastal Resources Management Project**

ANNUAL REPORT

INDIVIDUAL PROJECT TASK REPORT

COUNTRY _____ DIVISION CODE _____

TITLE _____

Project Leader _____ Agency _____

Project Staff _____

I. ANNUAL PROJECT REPORT PERIOD _____

- Introduction (Rationale/Objectives)
- Materials and Methods
- Results/Achievements
- Conclusion/Comments and Suggestions/Problems
- Expenditures

II. NEXT ANNUAL TASK WORKPLAN PERIOD _____