

# Coastal Resource Management Project

## Philippines

### **1999 ANNUAL REPORT**

**JANUARY 1, 1999 THROUGH DECEMBER 31, 1999**

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*In partnership with:*

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RESOURCES  
LOCAL GOVERNMENT UNITS  
NON-GOVERNMENT ORGANIZATIONS and other ASSISTING  
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## LIST OF ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AGILE	Accelerating Growth, Investment and Liberalization with Equity Project (USAID)
AT	Agricultural Technician
BEMO	Bohol Environment Management Office
BIDEF	Bohol Integrated Development Foundation
BFARMC	Barangay Fisheries and Aquatic Resources Management Council
BMT	Bohol Marine Triangle
CBFMA	Community-Based Forest Management Agreement
CBRMP	Community-Based Resource Management Project (World Bank)
CCESM	Caraga Center for Environmental Studies and Management
CENRO	Community Environment and Natural Resources Office/Officer
CEP	Coastal Environment Program (DENR)
CI	Conservation International
CO	Community Organizer
COE	Center of Excellence
CRM	Coastal Resource Management
CRMP	Coastal Resource Management Project (USAID)
CSWCD	College of Social Work and Community Development (University of the Philippines)
DA	Department of Agriculture
DA-ATI	Department of Agriculture-Agricultural Training Institute
DA-BFAR	Department of Agriculture-Bureau of Fisheries and Aquatic Resources
DCCCI	Davao City Chamber of Commerce and Industry
DECS	Department of Education, Culture and Sports
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DIMAVEMCI	Digos Market Vendors Multipurpose Cooperative Inc.
DND	Department of National Defense
DOT	Department of Tourism

DSF	Digos School of Fisheries
EBJF	Evelio B. Javier Foundation
ECAN	Ecological Critical Area Network
EDF	Economic Development Foundation
ELAC	Environmental Legal Assistance Center
ENRMD	Environment and Natural Resources Management Division (Province of Negros Oriental)
ENRO	Environment and Natural Resources Office/Officer
FASPO	Foreign Assisted and Special Projects Office
FARMC	Fisheries and Aquatic Resources Management Council
FCBFI	First Consolidated Bank Foundation, Inc.
FLA	Fishpond Lease Agreement
FPE	Foundation for Philippine Environment
FRMP	Fisheries Resource Management Project (ADB)
FSSI	Foundation for Sustainable Society Inc.
GEF	Global Environmental Facilities
GEM	Growth with Equity in Mindanao Project (USAID)
GIS	Geographic Information System
GOLD	Governance and Local Democracy Project (USAID)
GOP	Government of the Philippines
IATFCEP	Inter-Agency Task Force on Coastal Environmental Protection
ICLARM	International Center for Living Aquatic Resources Management
ICM	Integrated Coastal Management
IEC	Information, Education, and Communication
IISE	Industrial Initiative for Sustainable Environment Project (USAID)
IMA	International Marinelife Alliance
IMO	International Maritime Organization
IRA	Internal Revenue Allotment
ISFI	Institute for Small Farms and Industries
JEEP	Joint Energy and Environment Program
KKP	Kabang Kalikasan ng Pilipinas (World Wildlife Fund-Philippines)
LA	Learning Area

LAC	Learning Area Coordinator
LEAP	Legal Environmental Advocacy Program
LGC	Local Government Code
LGSP	Local Government Support Program
LGU	Local Government Unit
LOGODEF	Local Government Development Foundation
LMP	League of Municipalities of the Philippines
MAO	Municipal Agriculturist Office/Officer
MBA	Malalag Bay Alliance
MDC	Municipal Development Council
MFA	Mangrove Friendly Aquaculture
MFARMC	Municipal Fisheries and Aquatic Resources Management Council
MMC	Mangrove Management Component
MOA	Memorandum of Agreement
MPDO	Municipal Planning and Development Office/Officer
MPDC	Municipal Planning and Development Council
MSU	Mindanao State University
NAAEE	National Association of American Environment Educators
NALEC	National Law Enforcement Council
NALECC	National Law Enforcement Coordinating Committee
NAMRIA	National Mapping and Resource Information Agency
NEDA	National Economic and Development Authority
NGA	National Government Agency
NGO	Non Government Organization
NIPAS	National Integrated Protected Area System
NOAA	National Oceanic and Atmospheric Administration (USA)
NSC	National Steering Committee
OPA	Office of the Provincial Agriculturist
OPS	Office of the Press Secretary
OSEC	Office of the Secretary
PACAP	Philippines-Australia Cooperation Assistance Program
PAIC	Provincial Agriculture and Industrial Center

PAMB	Protected Area Management Board
PAWB	Protected Area and Wildlife Bureau
PBMP	Port Barton Marine Park (Palawan)
PBSP	Philippine Business for Social Progress
PCAMRD	Philippine Council for Aquatic and Marine Research and Development
PCG	Philippine Coast Guard
PCRA	Participatory Coastal Resource Assessment
PCRMC	Provincial Coastal Resource Management Council
PCSDS	Palawan Council for Sustainable Development Staff
PCSSD	Philippine Commission on Sports and Scuba Diving
PENRO	Provincial Environment and Natural Resources Office/Officer
PNP-Maritime	Philippine National Police Maritime Command
PO	People's Organization
PPAG	Policy and Planning Advocacy Group
PPDO	Provincial Planning and Development Office/Officer
PROCESS	Participatory Research, Organization of Communities and Education towards the Struggle for Self Reliance
PTA	Philippine Tourism Authority
RA	Republic Act
RFTC	Regional Fisheries Training Center
SB	Sangguniang Bayan (Municipal Council)
SCF	Seaweed Consultative Forum
SEAFDEC	Southeast Asian Fishery Development Center
SOCKSARGEN	South Cotabato, Sultan Kudarat, Sarangani, General Santos City
SP	Sangguniang Panglunsod (City Council)
SPAMAST	Southern Philippines Agribusiness, Marine and Aquatic School of Technology
SU	Silliman University
SUML	Silliman University Marine Laboratory
SUC	State Universities and Colleges
SV-SEP	San Vicente (Palawan)-Strategic Environmental Plan
TA	Technical Assistance

TC	Training Component
TMF	Rotarian Martin “Ting” Matiao Foundation
TWG	Technical Working Group
UNDP	United Nations Development Programme
UP-MSI	University of the Philippines-Marine Science Institute
UP-IJA	University of the Philippines-Institute of Judicial Administration
USAID	United States Agency for International Development
USC-MBS	University of San Carlos-Marine Biology Section
VICTO	Visayas Cooperative Central Fund Federation
WB	World Bank
WESAMAR	Western Samar Agricultural Resources Development Programme (European Union)
WWF	World Wildlife Fund

## **EXECUTIVE SUMMARY**

### **Background and Project Summary**

The Coastal Resource Management Project (CRMP) Philippines is a 7-year (1996-2002) technical assistance project of the Department of Environment and Natural Resources (DENR) funded by the United States Agency for International Development (USAID) and implemented in partnership with the Department of Agriculture's Bureau of Fisheries and Aquatic Resources (BFAR), local government units (LGUs), non-government organizations (NGOs), and other assisting organizations. CRMP was recently extended by USAID beyond the initial 5 years to the planned 7 year duration in consultation with DENR and following the recommendations of the mid-term evaluation conducted by USAID in December 1998.

CRMP provides technical assistance and training to national and local government, NGOs, and coastal communities in managing coastal resources. CRMP promotes multidisciplinary, multi-sectoral, multistage, and participatory processes of planning, implementation, and monitoring for sustainable coastal resource management (CRM) in six core "learning" areas composed of 29 municipalities and cities in 6 provinces (Figure ES-1). Expansion of the project's CRM initiatives is promoted to other LGUs throughout the country through collaborative efforts with national government agencies (NGAs), provincial governments, other projects, and organizations, such as the League of Municipalities of the Philippines (LMP).

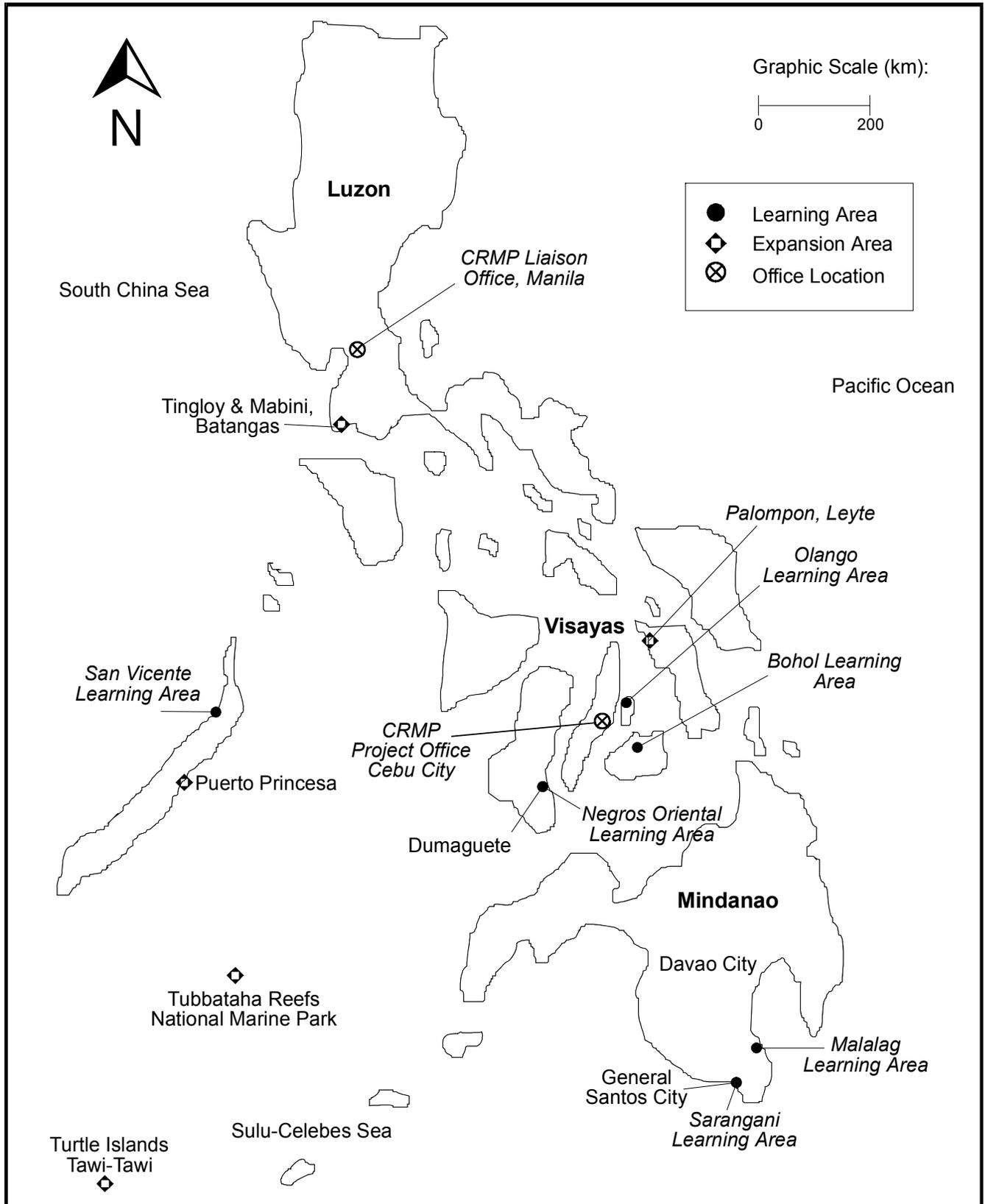
Tetra Tech EM Inc. is CRMP's prime contractor and is supported by a technical team that includes U.S.- and Philippine-based subcontractors, Philippine NGO and academic partners. Project implementation is also supported through cooperative partnerships with the US Peace Corps (with 4 volunteers currently assigned under the project), and related USAID funded projects and grantees, including the International Marineline Alliance (IMA), Silliman University and the US Coast Guard.

As detailed in this report, CRMP has progressed rapidly from community-based to collaborative coastal resource management (CRM) and multiple partnerships, to build momentum across a broad spectrum of society using proven methods.

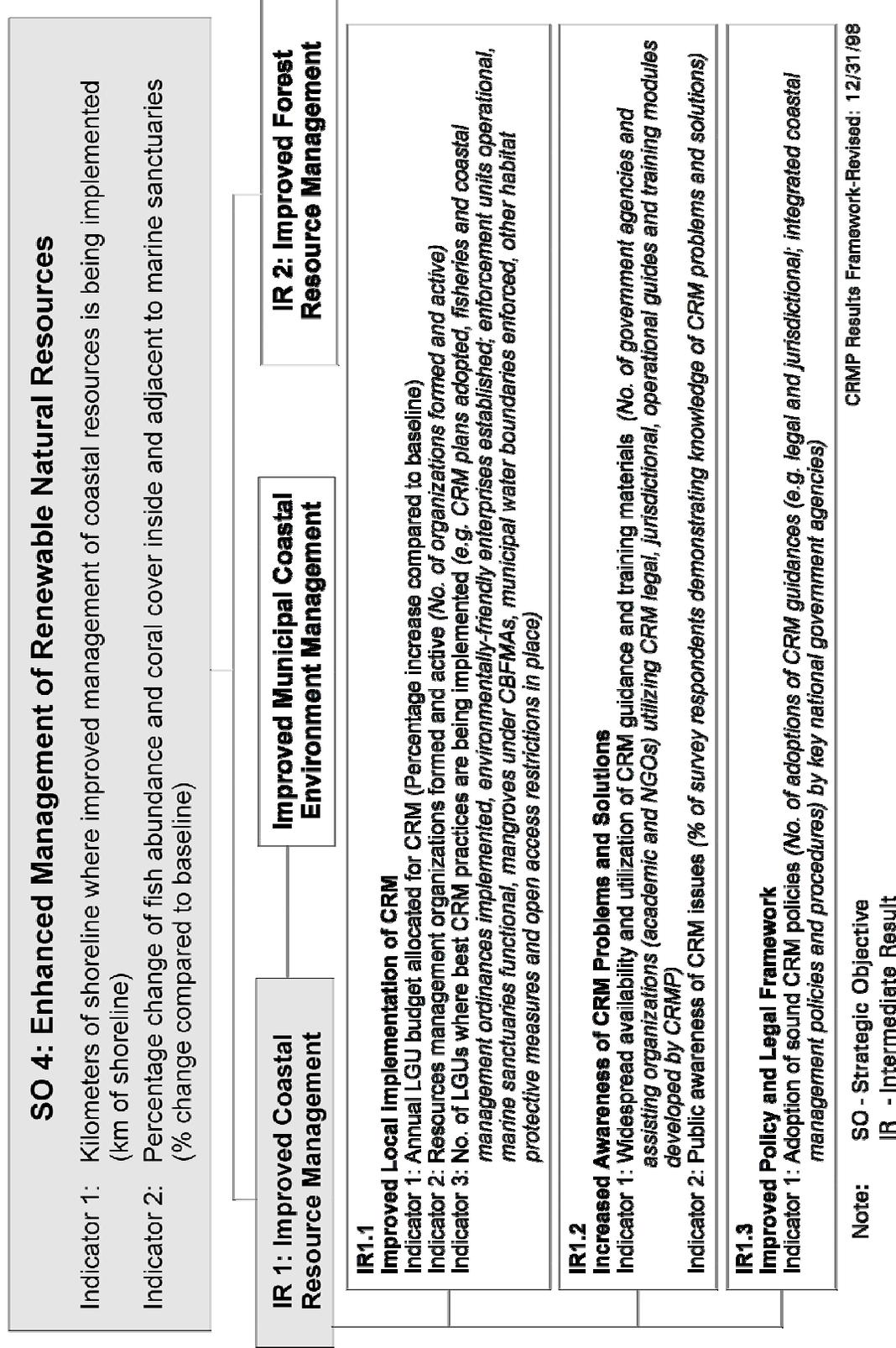
### **Progress Toward Strategic Objective**

USAID has identified six strategic objectives that contribute to the overall mission goal of the U.S. - Philippine partnership for democracy and development. CRMP contributes to coastal aspects of Strategic Objective No. 4: "Enhanced management of renewable natural resources." Based on USAID's Results Framework (Figure ES-2) revised December 1998, CRMP has two indicators addressing Strategic Objective 4 (SO4), SO4 1 and SO4 2. The indicators and performance monitoring system developed to measure progress and success of CRMP's interventions for SO4 indicators and three intermediate results (IR), IR 1.1, IR 1.2, and IR 1.3 are discussed below.

**Figure ES-1  
General Project Location Map**



**Figure 1-1**  
**Revised Results Framework for USAID/Philippines SO 4 Indicators:**  
**Coastal Resource Management Component**



The SO4 1 target is "3,000 kilometers of shoreline where improved management of coastal resources is being implemented by the end of the year 2002." Improved management of coastal resources is measured primarily under IR 1.1 by three indicators.

#### IR1.1 Improved Local Implementation of CRM

- (1) Annual LGU budget allocated for CRM (*Percentage increase compared to baseline*)
- (2) Resource management organizations formed and active (*Number of organizations formed and active*)
- (3) Number of LGUs where best CRM practices are being implemented

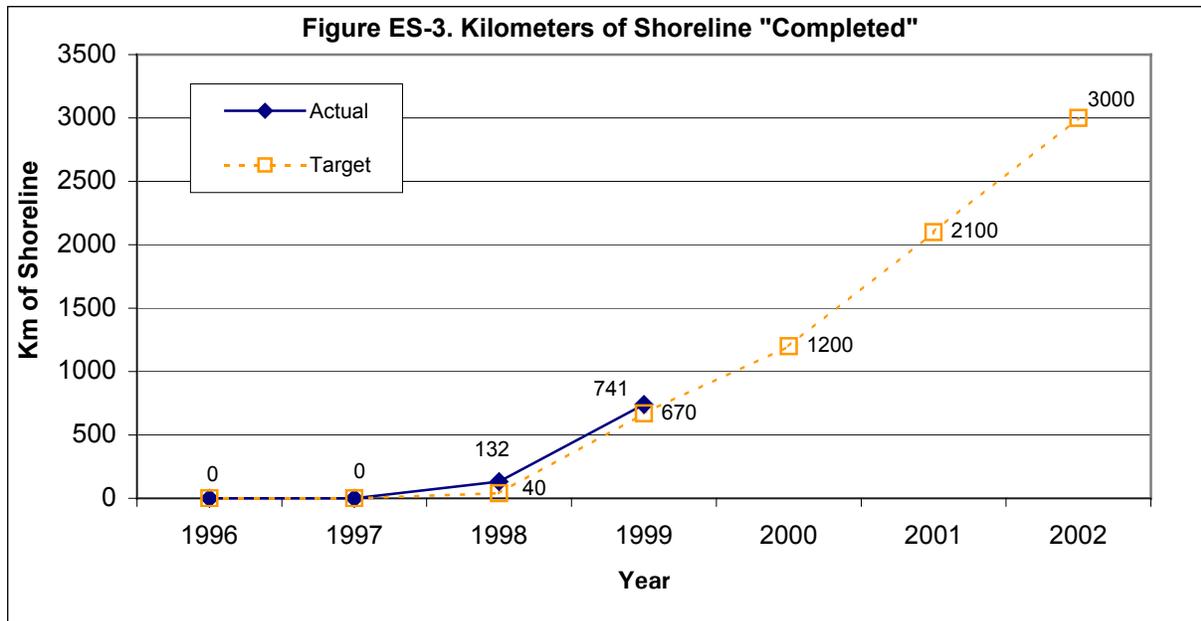
CRMP is working in learning areas and expansion areas to achieve the SO4 1 target. CRMP's operational targets for this strategic objective are:

- *Municipal management systems implementing improved management of coastal resources along 670 km of shoreline in 29 learning area municipalities by the end of year 2000*
- *Municipal management systems initiating (replicating) improved coastal resource management utilizing CRMP products and services along 2,330 km of shoreline in expansion areas by the end of the year 2002*

CRMP has developed a performance monitoring system called the Municipal Coastal Database (MCD) to track the progress and accomplishments of each LGU receiving technical assistance and training. The MCD was designed to serve the dual purpose of performance monitoring for both the project and LGU. A LGU must complete the specific set of requirements as prescribed in the IR1 indicators, to be counted under the SO4 indicator. Each LGU must: (1) be annually allocating budget for CRM, (2) have an active Municipal Fisheries and Aquatic Resource Management Council (MFARMC) that meets 6 or more times per year, and (3) be implementing one or more best CRM practices. A menu of best CRM practices is provided under IR 1.1 in Figure ES-2. The MCD is also being used as a self-assessment tool by LGUs to assess the current status of CRM and plan and prioritize future activities.

#### **SO4 1 Kilometers of shoreline where improved management of coastal resources is being implemented**

A total of 29 learning and expansion area LGUs covering 741 kilometers of shoreline have met all three indicators for improved management of coastal resources for the year ending 1999, exceeding the target of 640 kilometers of shoreline. Project progress in meeting the targets for kilometers of shoreline under improved management is summarized in Figure ES-3 and detailed in Appendix A using the MCD.



These accomplishments are presented graphically (Appendix A) using CRMP’s geographic information system (GIS). Municipalities having completed all 3 indicators are shown in black. Municipalities with 2 out of the 3 indicators (“2/3 completed”) or 1 out of the 3 indicators (“1/3 completed”) are shown by different degrees of hatching. Other municipalities where technical assistance has been initiated and targeted for project assistance during the year 2000 and beyond are shown with light shading. In addition, the Palawan Learning Area municipality of San Vicente and the expansion area LGUs of Mabini (Batangas), Palompon (Leyte) and Cagayancillo (Palawan) have completed all the requirements but are not shown on these maps.

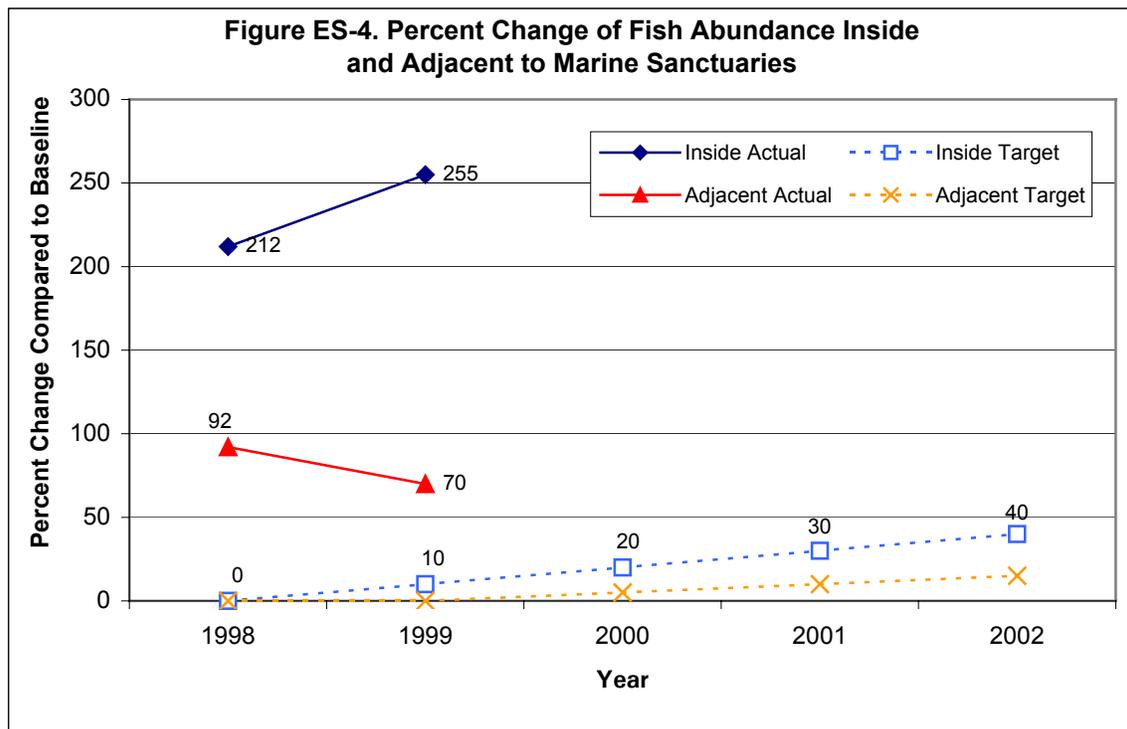
CRMP has initiated technical assistance to LGUs covering 2,228 km of shoreline including both core and expansion areas. CRMP is collaborating with a number of key partners to replicate the approach for improved management of coastal resources by municipalities. CRMP and the Fisheries Resource Management Project (FRMP) signed a Memorandum of Understanding (MOU) in 1999 linking the two largest coastal projects in the Philippines. FRMP, a project of the Bureau of Fisheries and Aquatic Resources (BFAR) funded by the Asian Development Bank (ADB), is adopting CRMP-developed products including: (1) training modules on Integrated Coastal Management (ICM), Participatory Coastal Resource Assessment (PCRA), and Mangrove Management; (2) information, education, and communication (IEC) materials such as posters and pamphlets; and (3) the Municipal Coastal Database (MCD) for use in 18 bays covering 100 municipalities in the Philippines.

A similar collaborative arrangement was made with the USAID-funded Governance and Local Democracy (GOLD) project. CRMP and GOLD have developed joint CRM activities for GOLD roll-out sites in Negros Oriental and Bohol. GOLD is also making use of the CRMP-developed training modules, IEC materials, and the MCD. The use of the MCD enables two collaborating USAID projects to contribute to and report accomplishments under a common set of indicators.

**SO4 2 Percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries**

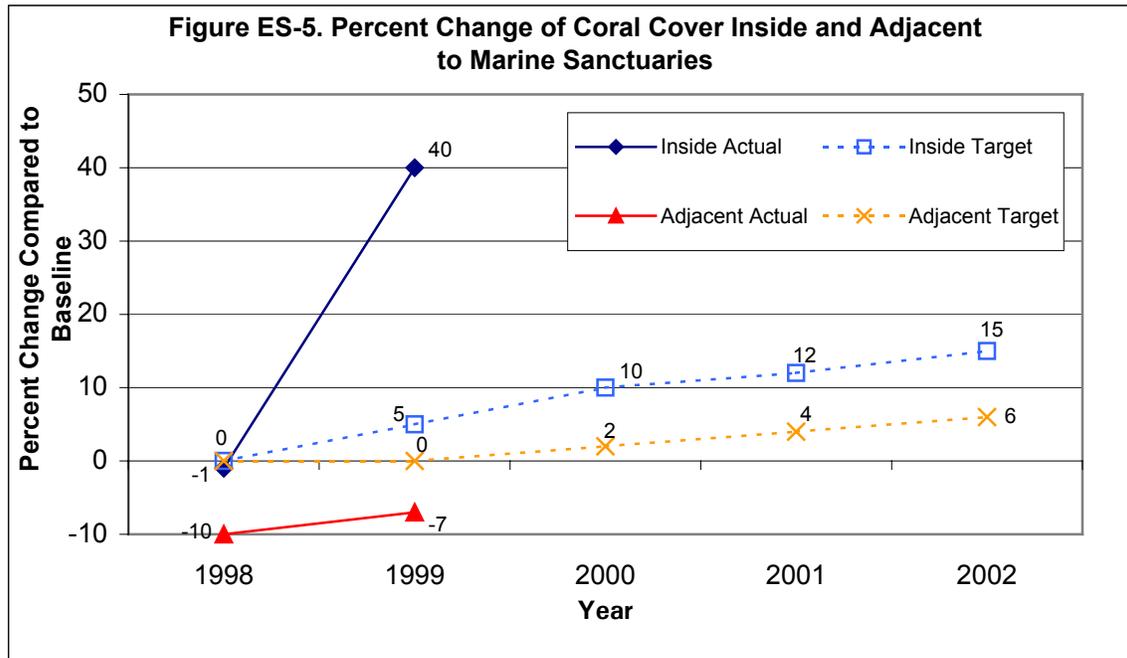
Biophysical impacts of improved local implementation of CRM are measured using standardized monitoring methods developed in partnership with the University of the Philippines Marine Science Institute (UP MSI). Annual assessments of fish abundance (focusing on key fish families that are commonly targeted for harvest) and live coral cover are conducted in 6 marine sanctuaries, one in each learning area.

The results of surveys conducted in 1999 (detailed in Appendix A) show fish abundance increased some 255 percent above the baseline inside marine sanctuaries (versus a 1999 target of 10 percent) and 70 percent above the baseline adjacent to marine sanctuaries (versus a target of 0 percent). These high percentage changes may be attributed to the extremely low baseline figures for fish populations due to the degraded and poorly managed condition of the these sanctuaries during the baseline year. (Figure ES-4)



Live hard coral cover increased 40 percent above the baseline inside marine sanctuaries (versus a 1999 target of 5 percent) and decreased -7 percent below the baseline adjacent to marine sanctuaries (versus a target of 0 percent; Figure ES-5). Record high tropical sea surface temperatures during the 1997 - 1998 El Niño event resulted in coral bleaching throughout coral reefs in the Philippines as well as the Indo-Pacific Region. In 1999, unusually heavy rains have persisted in many areas of the Philippines and localized outbreaks of the coral eating, crown-of-thorns seastar, *Acanthaster*, have been noted. Changes in living coral cover in sanctuaries monitored by CRMP have been influenced by these large-scale climatic events. Overall, the strength of management activities in marine

sanctuaries monitored in CRMP Learning Areas is increasing with active community involvement; however, inconsistencies in management, especially enforcement, still exist.

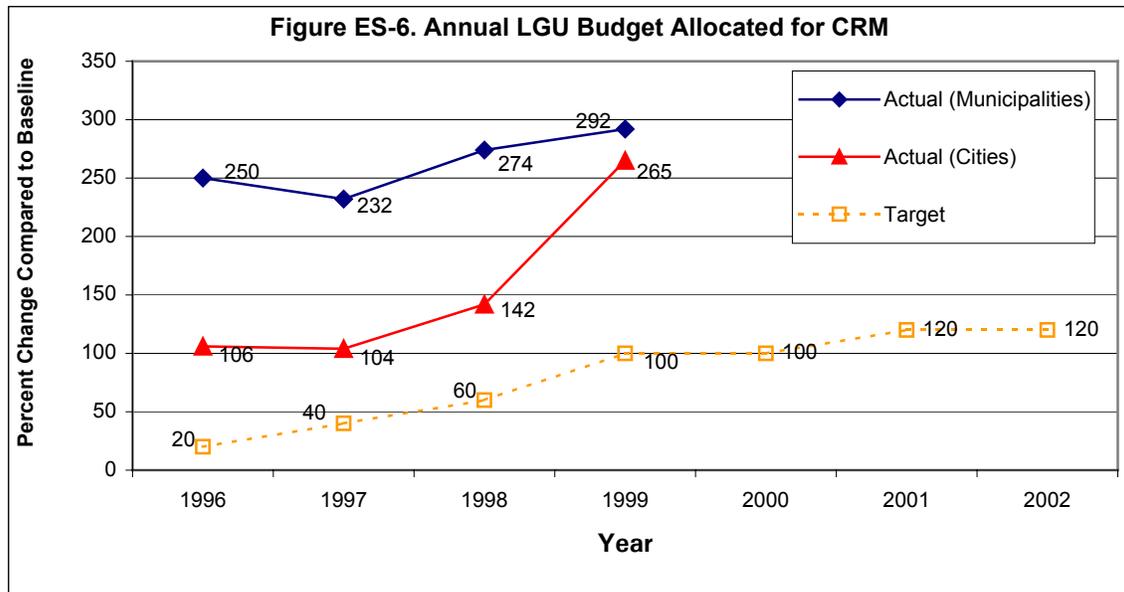


### Progress in Meeting Intermediate Result (IR) Indicators

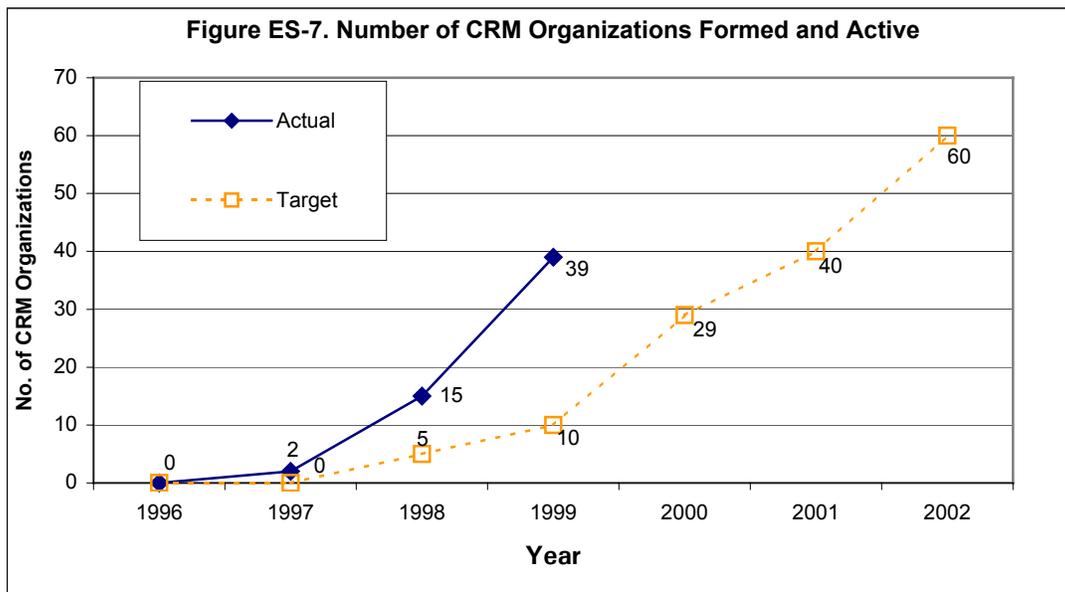
In support of the project's Strategic Objective, significant progress was realized during 1999 in meeting each of the project's IR indicators as documented in Appendix A and summarized in the following sections.

#### IR 1.1 Improved Local Implementation of CRM

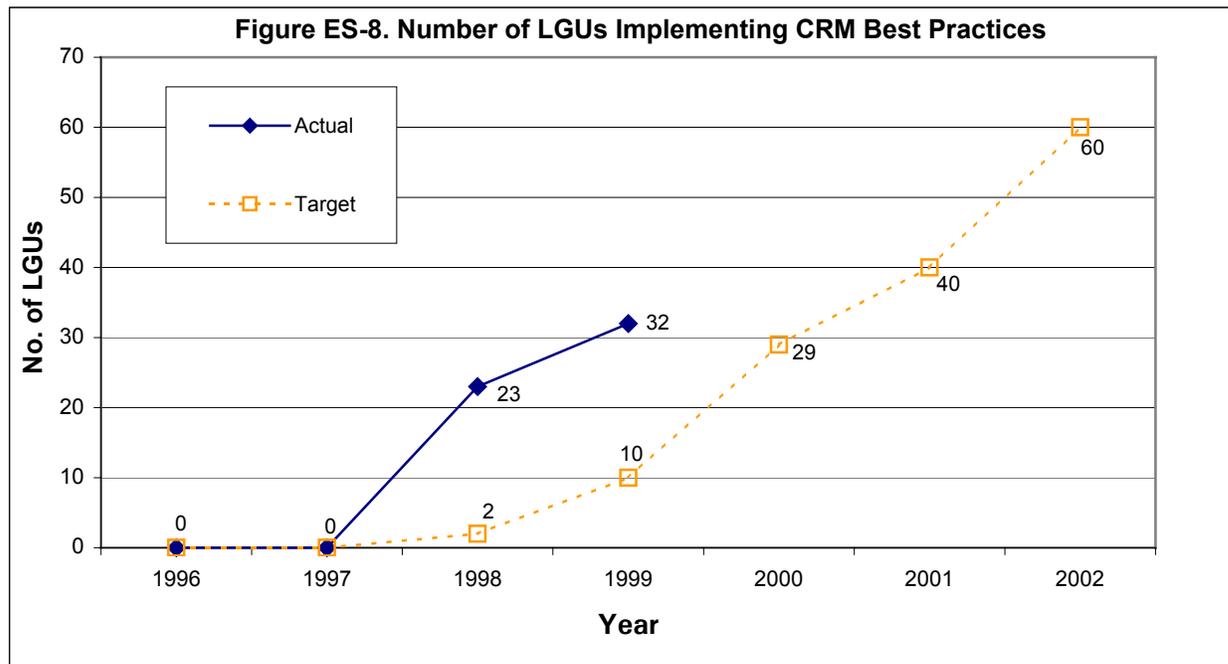
**Annual LGU budget allocated for CRM:** The number of LGUs allocating an annual budget for CRM and the amount of these allocations continued to increase during 1999 (Figure ES-6). For example, in 1995, 10 out of 29 LGUs in the CRMP Learning Areas reported that they allocated an annual CRM budget. At present, all 29 LGUs report allocating such a budget. From a reported baseline budgets, average annual CRM budgets have increased some 292 % for municipalities (to an average CRM budget of P107,981) and 265% for cities (to an average CRM budget of P2,456,400).



**Resource management organizations formed and active:** The project assisted in organizing or strengthening Municipal Fisheries and Aquatic Resource Management Councils (MFARMC) in all 29 learning area municipalities as well as in 10 expansion area LGUs. To be considered “active”, each MFARMC must formally meet at least 6 times a year (Figure ES-7). In addition, a total of 176 barangay FARMCs have also been formed or activated out of a total of 253 coastal barangays in the 6 CRMP learning areas. CRMP has also assisted in organizing and strengthening barangay-level FARMCs (BFARMC) and Bantay Dagat, or local coastal law enforcement groups.

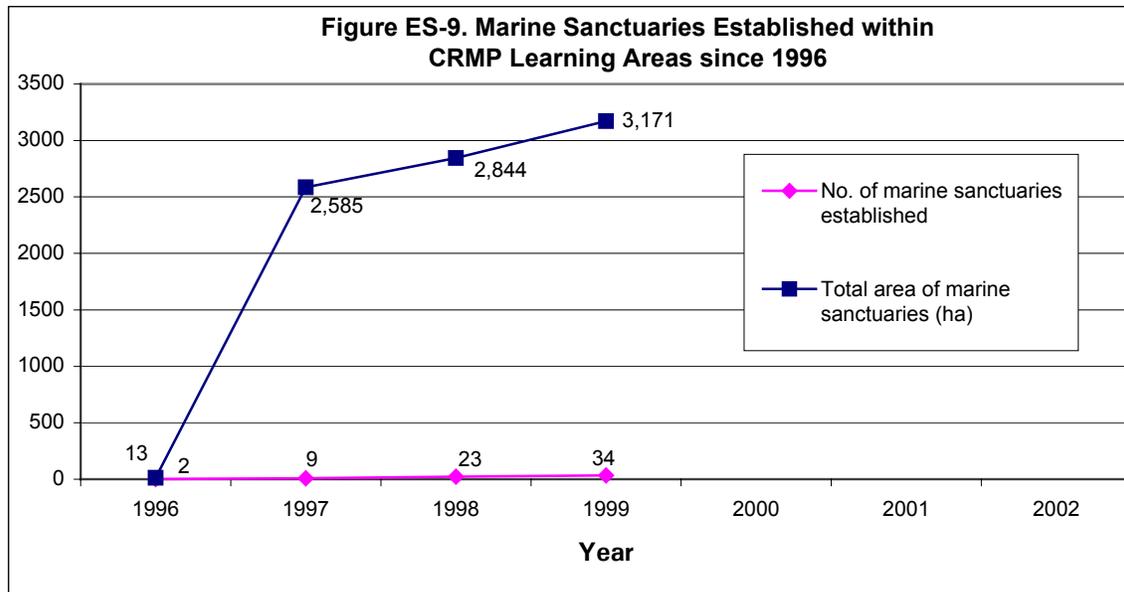


**Best CRM practices are being implemented:** A total of 32 LGUs were implementing two or more CRM best practices by the end of 1999 (Figure ES-8).



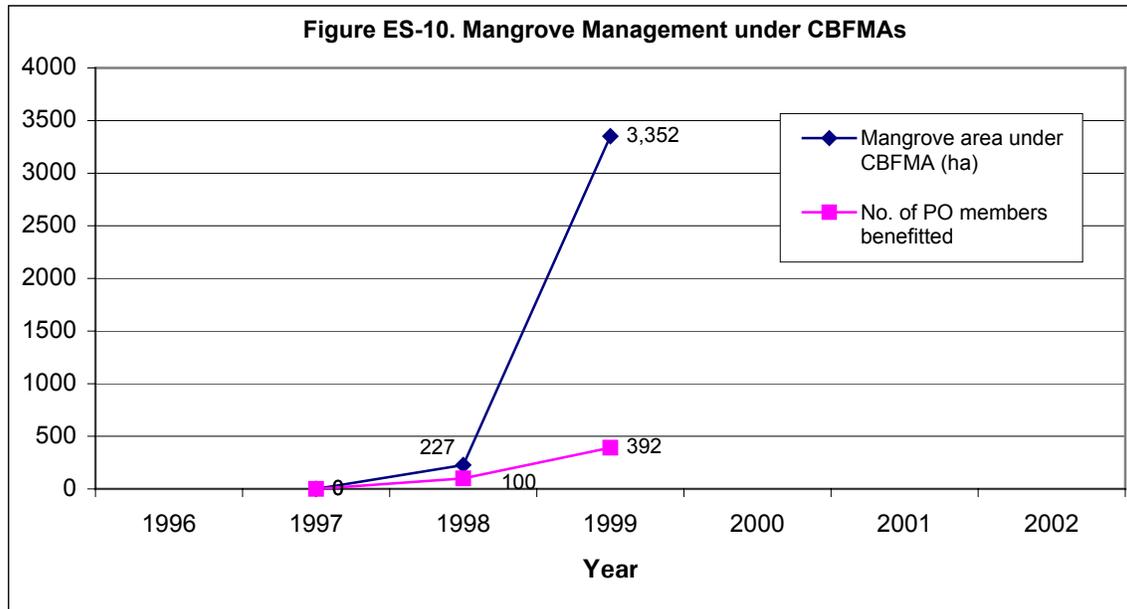
Examples of best practices being implemented in 1999 include:

- CRM plans were drafted by various LGUs, including several bay-wide plans, building upon completed training courses and technical workshops, participatory coastal resource assessments (PCRA), and coastal environment profiles
- Establishment of 11 new marine sanctuaries, bringing the total to 34 sanctuaries involving over 3,171 hectares of coral reef and sea grass habitat, within the CRMP Learning Areas since 1996 (Figure ES-9). In comparison, the pre-project baseline was 15 marine sanctuaries, involving 127 hectares, having been established in these same LGUs prior to 1996. The project assisted to strengthen the management of these protected areas, involving the development of supporting ordinances and management plans.



- Establishment of environment-friendly, community-based coastal enterprises in 12 LGUs, involving selected activities such as eco-tourism, seaweed farming, oyster culture, and other forms of mariculture, supported by ICM planning, management guidelines and market linkages, including the following examples:
  - Assisted in the development and commercial operation of the “Olango Island Wildlife and Seascape Tour”, an ecotourism enterprise owned and operated by 55 households residing adjacent to the Olango Island Wildlife Sanctuary (OIWS), the Philippine’s only designated RAMSAR site (a wetland area recognized for its international importance). Over P340,000 in gross revenues have been generated by the community-based venture from the conduct of 33 tours as well as financial contributions to the OIWS (some 45% of the tours were study tours, involving representatives from some 30 international institutions, 7 NGAs, 12 LGUs, 12 major media groups and numerous NGOs, academic and business organizations). Based on the experience gained, assisted the DENR to formulate and draft a new management plan and guidelines for the OIWS
  - Provided technical support and established market linkages for the Cambuhat (Bohol) oyster culture enterprise, the participants of which increased during 1999 from 17 to 42 households, excluding a still undetermined number of upstream adoptors. On the 2<sup>nd</sup> 8 month cycle of cropping, oyster production tripled in volume (increasing to 53,000 seeded spat collectors) with aggregate sales volume projected to reach P1.6 million by May 2000, which would provide an average household gross earning ranging from P30,000 to 60,000 per 8 month cycle. The oyster culture enterprise further proved to be a valuable tool in catalyzing community and LGU initiatives to better manage and protect water and environmental quality of the Cambuhat River which has developed into an attractive ecotour

- Technical assistance to several small enterprise projects in San Vicente, Palawan which includes the Port Barton Women’s Integrated Small Enterprise which set up a cooperative store, Capsalay Island seaweed farms and the Panindigan Women’s Association sardine processing plant
- Facilitated the processing and awarding of Community-based Forest Management Agreements (CBFMAs) to 6 people’s organizations (PO) benefiting 392 member households and covering over 3,352 ha of mangrove area in Bohol (Figure ES-10)



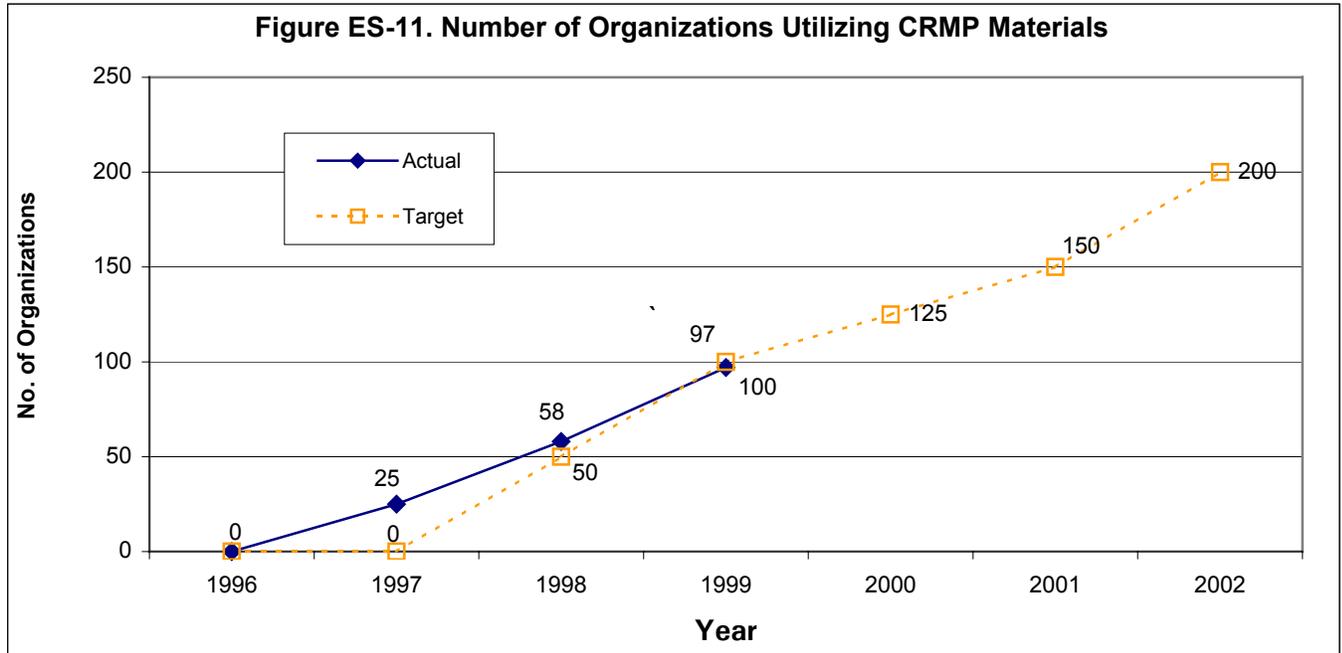
## IR 1.2 Increased Awareness of CRM Problems and Solutions

**Widespread utilization of legal, jurisdictional, operational guides and training modules:** As detailed in Appendix A, CRMP guides and training modules are actively being utilized by 97 organizations, including 10 national government agencies, 48 LGUs, 7 donor agencies and donor-assisted projects, 21 NGOs and 11 academic institutions (Figure ES-11).

Representative activities supporting the utilization of CRMP products include:

- Facilitated over 208 technical trainings, workshops and meetings, involving some 6,892 participants (composed of 4,822 male and 2,070 female participants)
- Organized and conducted three CRMP 10-day integrated coastal management (ICM) training courses, involving 139 graduates from Cebu, Davao, and Palawan in partnership with DENR and BFAR’s Regional Fisheries Training Centers (RFTC)
- Formal channels for national institutionalization of CRMP training materials were established with other donor-assisted projects, agencies and organizations, in particular the Asian Development Bank (ADB)-assisted Fisheries Resource Management Project (FRMP), which involves 18 bays and some 100 coastal LGUs.

- The project's reef survey and marine sanctuary monitoring methods were packaged in cooperation with the University of the Philippines–Marine Science Institute (UP-MSI) and were adopted for use by the DENR and BFAR in Regions 7 and 11.



**Public awareness of CRM issues:** Extensive qualitative surveys for this new indicator were conducted in 1999 and quantitative surveys will be completed in early 2000. Key activities completed during 1999 to support public awareness of CRM issues include:

- Comprehensive, local community to national information, education, communication (IEC) program, including the celebration of May as the national Month of the Ocean, in collaboration with national and local partners
- In partnership with the League of Municipalities of the Philippines (LMP) and NGAs, supported the design and conduct of the 1<sup>st</sup> Conference of Coastal Municipalities of the Philippines attended by President Estrada, the Chief Justice of the Supreme Court, 4 department secretaries, a Presidential Adviser and a Presidential Assistant and over 700 (90%) of coastal mayors. Launched the 2<sup>nd</sup> Search for Best CRM Programs in partnership with the LMP and all relevant national government agencies
- Partnerships with national and local mass media groups yielded over US\$400,000 in leveraged media values. Joint production efforts with both government and media companies, particularly the ABS-CBN Foundation (which is affiliated with the country's biggest network, ABS-CBN) and the government's Philippine Information Agency (PIA) resulted in the nationwide airing of broadcast features and radio and television plugs during the prime-time showing of the country's highest rating

programs. Total free airtime donated by the ABS-CBN network and the Philippine Information Agency amounted to approximately P15 million (US\$ 375,000). Print media values generated at national and local level totaled approximately P 3.5 million (US\$87,500)

- Development and production of award-winning IEC programs and materials including production and distribution of over 96,000 requested IEC publications and materials during the year. Industry awards received included the Philippine Web Awards for the DENR-CRMP website, *oneocean.org*, as Most Outstanding Website for the Environment Category; the Anvil Award of Excellence, also for the website by the Public Relations Society of the Philippines (PRSP).
- Preliminary results of the qualitative research undertaken in the project's learning areas by an independent research company, MBL Trends Inc., indicate the following:
  - Greater consciousness and awareness of environmental problems on the part of target groups when compared to three years ago (based on previous research undertaken by MBL Trends)
  - More willingness to promote and adopt CRM practices on the part of mayors and LGU officials (when compared to a similar qualitative research undertaken by GreenCOM/USAID in 1996)
  - Increased personal sense of responsibility on the part of target groups for their coastal resources (when compared to a similar qualitative research undertaken by GreenCOM/USAID in 1996)
  - CRMP's role strongly appreciated for its provision of technical assistance and training

### **IR 1.3 Improved Policy and Legal Framework**

***Harmonization of national policy for CRM:*** The project continued to contribute towards this indicator through the number of adoptions of CRM guidance materials and training modules by key government agencies. During 1999, the PCRA guidebook, training modules, and methodology were adopted by both DENR and BFAR through the FRMP. FRMP will implement PCRA in all 18 bays and will re-print the PCRA Handbook. In addition, a mangrove management handbook was completed and adopted by DENR. CRMP is training DENR and FRMP staff in PCRA and Mangrove Management in all Regions of the country.

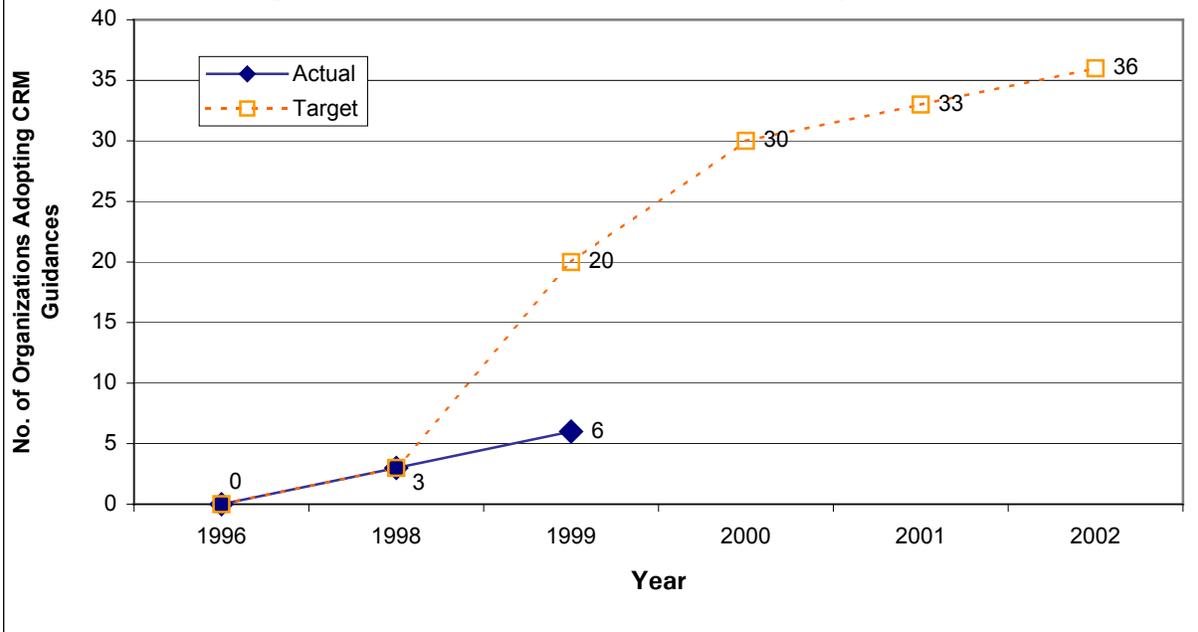
The significance of the adoption of various CRMP guidance documents by DENR and other relevant national government agencies is that it provides a mechanism for national government to harmonize and promote common policies, approaches, and methodologies for CRM. The total number of CRMP guidance documents adopted to date is 6 (Figure ES-12). While this is below the 1999 target, 12 additional guidebooks are now in the final

stages of being completed for adoption and publication.

Other key accomplishments during the year that will contribute to this intermediate result in the year 2000 include:

- Developed a policy study and standard procedures for delineating municipal water boundaries in partnership with NAMRIA and FRMP. These procedures will be issued by NAMRIA as an Administrative Order by the 1<sup>st</sup> Quarter 2000 to standardize and expedite the completion of municipal water delineation in 832 coastal municipalities in the country. Utilizing the CRMP GIS, computer-generated municipal water boundary maps were drafted for all Learning Areas except Palawan (Appendix A) and for the entire area of Region 7. (It is our understanding that these represent the first draft municipal water boundary maps in the country to date.)
- Developed a policy study comparing areas of conflict and divergence between the Fisheries Code and the Agriculture and Fisheries Modernization Act. This policy study could serve to improve the implementing rules and regulations of these two laws to reduce current conflicts in field level implementation
- Completed the policy study and Draft Joint Administrative Order (JOA) articulating the roles of DENR and BFAR in the implementation of the Fisheries Code for their review and approval. The JOA will serve to clarify the roles and responsibilities of DENR and BFAR as far as implementing the law is concerned
- Expanded the project's scope of work to respond to DENR's request for additional technical assistance to support the institutional and human resource development needs of its Coastal Environment Program (CEP). This support is aimed to integrate the approaches and technologies developed by CRMP within DENR's CEP.

Figure ES-12. Harmonization of National Policy for CRM



## Sustainability

Sustainability of the project's interventions will be achieved by a variety of factors including empowering coastal communities with CRM responsibility, developing an information base for sound CRM planning, building constituency groups to support CRM initiatives, and developing a critical mass of leaders in CRM. CRMP has made substantial progress in these areas over the last year as described below by a few selected examples.

***Empowering coastal communities with CRM responsibilities:*** A key element in sustaining CRM initiatives beyond the life of the project is the degree to which coastal communities have been empowered to address CRM issues on their own. A qualitative survey conducted by the USAID funded GreenCom project in 1996 revealed that at the community level, community members generally believed the CRM problems were the responsibility of the government. But few LGUs reported that they considered CRM as a priority issue, although the responsibility for managing coastal resources had largely been devolved to LGUs from the national government in 1991.

Focus-group discussions conducted in 1999 revealed a greater consciousness and awareness of coastal problems on the part of target groups when compared to the 1996 GreenCom survey. In addition, mayors and LGU officials were now more willing to promote and adopt CRM practices. Of significance is the increased personal sense of responsibility on the part of target groups for their coastal resources when compared to the 1996 survey results.

***Developing a CRM monitoring and information management system:*** The continuity of CRM initiatives can be greatly enhanced through the development of an appropriate and user-friendly information management system. In the absence of such a system, LGUs, national government agencies, and NGOs are constantly conducting new assessments and starting new initiatives without building on previous studies and work.

CRMP has completed the design and development of the Municipal Coastal Database (MCD) software as a planning, diagnostic, and monitoring tool for coastal LGUs, with external evaluation (beta testing) by key national partners and other donor-assisted projects. As of year-end 1999, the MCD is in the process of being adopted and applied by the CEP, FRMP, the province of Bohol and numerous other LGUs. At present, the project's MCD monitoring and evaluation system contains several levels of CRM-related information on over 250 LGUs throughout the country, or over 30 percent of the country's coastal LGUs (see Appendix D-8 to D-12). In the year 2000, CRMP will work with interested provinces in preparing provincial reports on the state of the coastal environment and CRM trends based on the MCD.

***Building constituency groups to support CRM initiatives:*** Different types of constituency groups from public and private sectors are required to support and sustain CRM initiatives beyond the life the project. CRMP is continuing to build these CRM support groups at national and local levels.

The *I Love the Ocean Movement* (ILTO), initiated by the project in 1998 as a vehicle for

CRM advocacy, has grown to over 13,000 ILTO members nationwide covering a wide range of sectors in society. In 1999, the ILTO chapters have begun to take on a life of their own without assistance from CRMP. For example, the Cebu Chapter was officially registered with the Securities and Exchange Commission to enable it to function independently as a corporate identity. A nationwide ILTO project was initiated called, "A Million Mangroves for the Millennium".

CRMP's partnership with the League of Municipalities of the Philippines (LMP) continues to generate nationwide support for CRM initiatives. The 1<sup>st</sup> Conference of Coastal Municipalities, conducted in partnership with the LMP and national government agencies, provided a high impact venue to build support for CRM initiatives among all coastal municipalities.

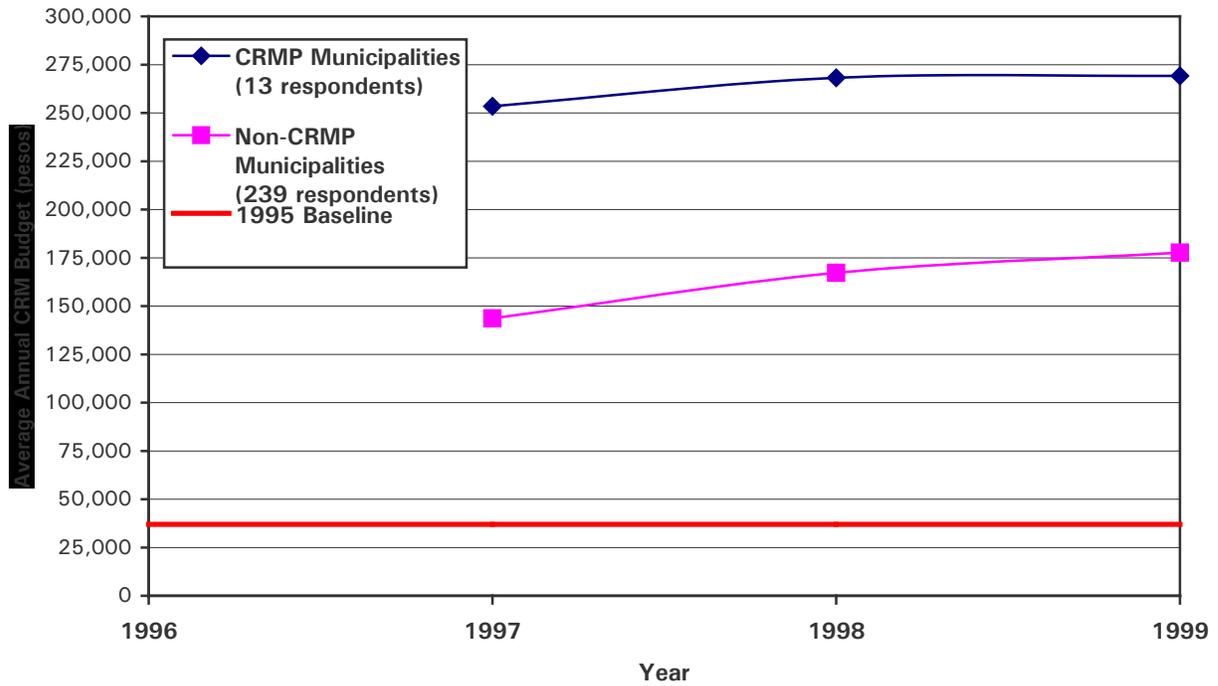
In 1999, CRMP concentrated its efforts on consolidating the expertise and experience of trained CRM practitioners in the 6 Learning Areas into provincial core groups for IEC and training. These provincial core groups, composed of local government, national government, and non-government staff, are now beginning to replicate training and IEC programs in CRM.

***Developing a critical mass of CRM leaders:*** The project has set an internal target of reaching 30% of strategic groups or networks that could further catalyze support and action programs in CRM. In theory, this percentage would establish a critical mass of leaders that would create self-reinforcing systems for CRM. While CRMP continues to work on building community leadership in CRM through training and IEC activities, in 1999, more attention was focused on promoting CRM leadership at the local government level. Some of the project's accomplishments along these lines in 1999 are discussed below.

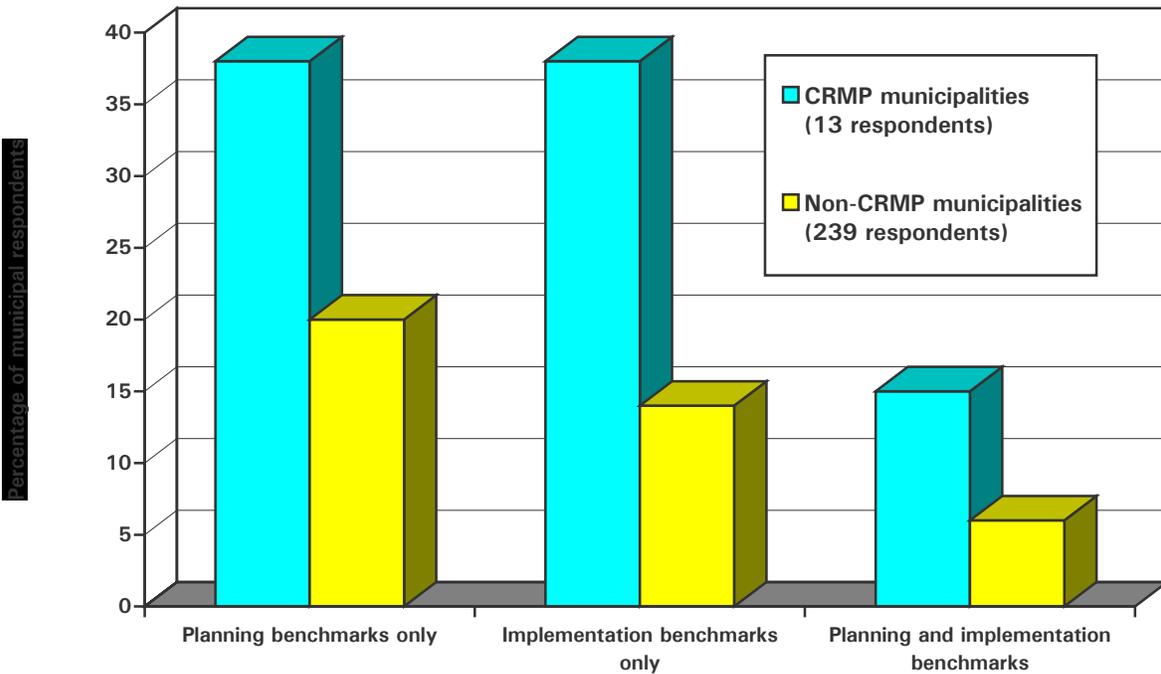
Developing a critical mass of LGU officials has progressed in partnership with the LMP since 1997. As an outcome of the 1<sup>st</sup> Conference of Coastal Municipalities, the 701 participating coastal mayors (90% of the 832 coastal mayors in the country) supported a resolution, addressed to the President, which articulated a 15-point agenda for empowering coastal LGUs for integrated coastal management.

As a result of the Conference, CRMP responded to requests for multi-media materials from 486 coastal municipalities, representing 58% of the national total. These requests were received from the coastal mayors themselves who wanted to implement CRM in their respective municipalities. The results of a survey of 252 or 30 % of all coastal municipalities conducted by CRMP at the Conference (Figure ES-13) revealed that annual budget allocations for CRM have significantly increased above the 1995 pre-project baseline level (note: survey data for CRMP municipalities will vary from those entered from the MCD because of the mode of data collection). Increased activities related to CRM can be inferred from increases in budget allocations as evidenced from the percentage of municipalities achieving planning and implementation benchmarks (Figure ES-14) used by CRMP. The percentage of municipalities completing the full CRM cycle of planning and implementation, however, still needs improvement.

**Figure ES-13. Trends in LGU Annual Budget Allocations for CRM Based on Respondent Survey of 252 Coastal Municipalities**



**Figure ES-14. Status of LGU CRM Programs in 1999 Based on Respondent Survey of 252 Coastal Municipalities**



Building from the CRM agenda set by the LMP Resolution and in collaboration with the LMP, Silliman University's LEAP, and two USAID-funded projects (GOLD and AGILE), CRMP assisted in the conduct of national-level consultations and policy studies to support proposed amendments to the national Local Government Code to strengthen the role of LGUs in CRM. Proposed amendments such as the inclusion of the area of municipal waters in the computation of Internal Revenue Allocation (IRA), if passed, will reinforce the new paradigm of CRM as a basic service of all coastal LGUs in the country.

Overall, 1999 marked a year of refining approaches, methodologies, and tools developed by the project for widespread use to other areas of the Philippines and through other initiatives such as FRMP, CEP, and GOLD.

## **1.0 INTRODUCTION AND OBJECTIVES**

### **1.1 INTRODUCTION**

Tetra Tech EM Inc. received United States Agency for International Development (USAID) Contract No. 492-0444-C-00-6028-00, Coastal Resource Management Project (CRMP) on March 21, 1996 to provide technical assistance to the Government of the Philippines (GOP) through the Department of Environment and Natural Resources (DENR) in coastal resource management (CRM). This 1999 Annual Report summarizes the major project activities accomplished from January 1, 1999 to December 31, 1999 and includes a summary of key activities conducted during the 4<sup>th</sup> Quarter 1999. All progress is reported based on targets identified in the 1999 Annual Work Plan.

This report is organized into five sections including this introduction. Section 2.0 provides an overview of project rationale and approach. Section 3.0 is a summary of progress of CRMP national and local implementation activities. Section 4.0 provides a summary of project management activities. Section 5.0 summarizes overall project performance and impact. Section 6.0 discusses sustainability of the project's initiatives. The report's appendices provide: Performance Monitoring System (Appendix A); History of Coordination and Collaboration (Appendix B); Technical Report Summaries (Appendix C); List of CRMP Publications (Appendix D); and Summary of Expenditures through December 31, 1999 (Appendix E, for USAID only).

### **1.2 OBJECTIVES**

USAID has identified six strategic objectives that will contribute to the overall mission goal of a new U.S. - Philippine partnership for democracy and development. Strategic Objective No. 4 (SO4): "Enhanced management of renewable natural resources" includes the following overall result for CRMP:

"Coastal resources along 1,200 km of shoreline under improved management by year 2000 (5 years) or 3,000 km by 2002 (7 years)."

As illustrated in Figure 1-1, the two overall indicators for this objective are:

1. Kilometers of shoreline where improved management of coastal resources is being implemented
2. Percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries



Corresponding to these indicators are two operational objectives:

- Municipal management systems implementing improved management of coastal resources along 670 km of shoreline in 29 municipalities by the end of the year 2000
- Municipal management systems initiating improved coastal resource management utilizing CRMP products and services along 530 km of shoreline by the end of year 2000

Three intermediate results support the results framework:

- Improved local implementation of CRM
- Increased awareness of CRM problems and solutions
- Improved policy and legal framework

## **2.0 PROJECT RATIONALE AND APPROACH**

### **2.1 PROJECT RATIONALE**

CRMP was developed to address a variety of basic issues that result in the overuse and degradation of Philippine coastal resources. These issues include:

- Local governments are not yet effective at managing their jurisdictional areas for coastal resources under the Local Government Code (LGC).
- CRM policies and the roles of various national and local agencies involved are not clear among all participants in CRM planning and implementation.
- Human resources needed for CRM planning and implementation are not sufficiently developed.
- Slow economic development in coastal areas increases pressure on fishery resources.
- Market failures in the coastal resource economy perpetuate poverty and promote inappropriate use of coastal habitats such as conversion of mangrove forest.
- De facto open access system causes over-exploitation of most resources.
- Low productivity resulting from habitat destruction, pollution, and over-exploitation decreases economic benefits of coastal resources.

- Loss of marine and coastal biodiversity, which is irreversible, continues.

## **2.2 PROJECT APPROACH**

CRMP's approach is to work at the national level to improve formulation and implementation of a national CRM policy through several project activities. These activities aim to clarify jurisdictions, formulate practical CRM policies and procedures, and highlight the significance of the "open access" problem.

Participatory assessment, planning, and implementation of CRM plans are facilitated through the six CRMP core or "learning" areas (Figure 2-1). Local government units (LGU) are being assisted to become fully supportive of CRM efforts in their areas of jurisdiction through training and technical support. To balance the need for economic development alongside of CRM, a limited number of micro and small-scale enterprise opportunities are being promoted in the six learning areas.

For LGU project partners, the key results targeted by CRMP's approach include:

1. Annual budget for CRM allocated by LGUs
2. Resource management organizations formed and active
3. Best CRM practices (interventions) are being implemented by LGUs such as:
  - a. CRM plans adopted
  - b. Fisheries and coastal management ordinances implemented
  - c. Enforcement units operational
  - d. Marine sanctuaries functional
  - e. Mangroves under Community-Based Forest Management Agreements
  - f. Environment-friendly enterprises established
  - g. Municipal water boundaries enforced
  - h. Other habitat protective measures and open access regimes restrictions in place

## **2.3 PROJECT EXPANSION**

CRMP is strategically expanding the sphere of CRM and sustainable coastal development through a series of activities and supported initiatives that focus on:

- Coordination among donors
- Improved communication and coordination with and among government and assisting organizations
- Encouraging successes to be replicated in new areas utilizing CRMP products and services



The expansion activities not only occur in adjacent or distant coastal areas but through sharing of training opportunities with other donors and assisting organizations; combining research outputs; and building linkages for information, education, and communication (IEC) activities in the country. The IEC and Training components of the project are the primary means for expansion beyond the six learning areas and to the country as a whole.

### **3.0 TECHNICAL ASSISTANCE**

#### **3.1 NATIONAL IMPLEMENTATION**

All project activities that will have potential impact on a national scale are included under the national implementation level. The main thrust of these activities is to promote improved national policies and laws on CRM and increased awareness of CRM problems and solutions.

##### **3.1.1 Policy Component**

USAID expanded CRMP's Policy Component during the 2<sup>nd</sup> Quarter 1999 in response to the request of the Department of Environment and Natural Resources (DENR) for additional technical assistance to enhance and institutionalize CRM at the national level.

The primary focus of the expanded component is the institutional adoption of the CRMP approach to sustainable management of coastal resources. Drawing from the rich experiences in implementing the CRMP strategy at the local level, the component translates these experiences and incorporates them in the formulation process for a coherent national policy, program, and institutional undertaking. The key elements for this component have been undertaken since the project started in 1996, particularly in the area of policy and local advocacy through the project's IEC Component. These achievements therefore, were used as a springboard for the expanded component.

This report reflects the transition of activities under the component. While carrying out the activities as programmed and planned in the 1999 Work Plan, these activities also reflect the expanded scope of the national component. In order to provide coherence to the expanded strategic interventions of the component, a component framework was collaboratively drafted and now serves as the anchor document for future activities.

The indicator for the Policy Component falls under Intermediate Result 1.3 "Improved Policy and Legal Framework" as measured by:

*Indicator 1: Adoption of Sound CRM policies (No. of adoptions of CRM guidances (e.g. legal and jurisdictional; integrated coastal management policies and procedures) by key national government agencies).*

Table 3-1 provides a summary of the Policy Component's 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) on a quarterly basis.

**TABLE 3-1  
POLICY COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>I.</b>	<b>Policy Component</b>				
<b>I.A</b>	<b>Legal and Jurisdictional Guidebook Revised, Distributed, and Utilized</b>				
1.	Complete editing and correction on Fisheries Code section	C			
2.	Convene full technical working group meeting at DENR	O	O	O	O
3.	External editing and review		O	O	O
4.	Endorsement from DENR, DA-BFAR, DILG		O	O	O
5.	Print and distribute book to all coastal municipalities			O	O
<b>I.B</b>	<b>Valuation of Coastal Resources Book and Information Distributed and Utilized</b>				
1.	Launch valuation book with media	O	C		
2.	Distribute book to all key policy organizations and individuals	O	O	O	C
<b>I.C</b>	<b>Complete Drafts of ICM Guidebooks (Operational Procedures) for CRM</b>				
1.	Review existing drafts of guidebooks and determine needs	O	C		
2.	Contract assistance to complete drafts	O	O	C	
3.	Final drafts of booklets 1 and 2 for review with GOP counterparts		O	O	O
4.	Final drafts of enforcement booklet and booklets 3,4, 5, 6, 7, 8, and 9			O	O
5.	Review of drafts by appropriate government counterparts				O
<b>I.D</b>	<b>Develop and Test Integrated Municipal Fisheries Management and CRM Ordinance that Includes Licensing of Fishers, Gear and Access Restrictions within Municipal Waters</b>				
1.	Study on options for ordinance	C			
2.	Draft model ordinance	C			
3.	Develop guidelines leading to ordinance formulation	O	O	O	O
4.	Draft and assist adoption of integrated fisheries ordinance in Calape, Bohol		O	O	O
5.	Review ordinance through critics meeting		O	O	O
6.	Test ordinance in Calape, Bohol; Negros Oriental; Olango Island; Davao del Sur			O	O
7.	Select several other municipalities for testing ordinances			O	O
<b>I.E</b>	<b>Finalize and Distribute Legal Environment Advocacy Program (LEAP) Manual for Coastal Law Enforcement</b>				
1.	Review LEAP manual and organize critics review meeting	C			
2.	Revise manual and test in selected learning areas		O	O	C
3.	Refine manual, edit and finalize for printing		O	O	C

**TABLE 3-1 (Continued)**  
**POLICY COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>I.F Establish/Reactivate National Interagency Monitoring Team for Fishery Enforcement</b>					
1.	Conduct planning meeting to develop action plan by lead agencies and initiate monitoring protocol	O	C		
2.	Draft legal mechanism or memorandum of agreement	O	O	C	
3.	Begin to implement action plan through agencies			O	O
<b>I.G Develop and Test Mapping Techniques for Demarcation of Municipal Waters</b>					
1.	Develop municipal boundary maps for learning area provinces as model	C			
2.	Coordinate with NAMRIA, FRMP, and DENR to address mapping activities	O	O	O	O
3.	Conduct training on positioning and use of boundaries			O	O
4.	Develop boundary map showing outer MW boundary for entire Philippines	O	O	O	C
<b>I.H Assist to Clarify Role of Protected Areas Management Board (PAMB) vis-à-vis LGU</b>					
1.	Coordinate with DENR on the role of PAMB	C			
2.	Re-endorse Tubbataha PAMB MOA by DENR	O	O	O	C
3.	Convene Tubbataha PAMB in Palawan jointly with KKP		O	C	
<b>I.I Assist Policy Needs of Learning Areas and Mangrove Implementation</b>					
1.	Assist Sarangani Bay LA in a workshop on RA 8550 and other issues	C			
2.	Assist Malalag Bay LA in a workshop on integrated fishery ordinance			O	O
3.	Convene TWG at DENR on Fishpond Lease Agreement (FLA) reversion process for mangrove areas		O	O	C
4.	Assist to review several mangrove laws			O	C
<b>I.J Finalize Search for Best CRM Practices</b>					
1.	Review project proposals for winning municipalities for 1998 search	O	O	O	C
2.	Convene National Steering Committee (NSC) for approval of project proposals of winning LGUs	O	O	O	C
3.	Finalize criteria for selection of best CRM practices in year 2000 with IEC			O	C
4.	Launch year 2000 awards via League of Municipalities of the Philippines (LMP)			O	C
<b>I.K Support CEP via Technical Assistance in Planning and Institutional Development</b>					
1.	Attend consultations to improve structure of CEP	O	O	O	O

**TABLE 3-1 (Continued)**  
**POLICY COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
2.	Integrate use of CRMP municipal coastal database system for CEP sites	0	0	0	0
3.	Develop institutional plan for CEP		0	0	0
4.	Assist DENR and DA-BFAR in the development of a joint MOA to clarify respective jurisdiction and authority and the management of fisheries resources as stipulated in Rule 3.2 of RA 8550	0	0	0	0
5.	Prepare a CRMP-CEP integration plan			0	0
6.	Provide technical assistance to CEP for planning and strengthening technical assistance support services to municipalities			0	0
7.	Establish DENR/provincial resource centers to increase capacity for service delivery to municipalities			0	0
8.	Assist in the development of a comprehensive human resource development plan			0	0
<b>I.L Assist to Draft National ICM Master Plan for Philippines</b>					
1.	Prepare a comprehensive coastal and marine management policy and institutional framework			0	0
2.	Develop collaborative strategy and agreement with participating institutions and donor organizations and establish steering committee for the national coastal framework development			0	0
3.	Assist in the preparation of a monitoring and evaluation system for coastal and marine programs and projects			0	0
4.	Identify and pursue policy and legislative reforms			0	0

### 3.1.1.1 Work Plan Accomplishments

Major accomplishments of the Policy Component during the 4th Quarter of 1999 include:

- Continued collaborative efforts in providing technical assistance in the drafting of amendments to the country's Local Government Code (LGC) to further empower LGUs for integrated coastal management (ICM). These collaborative efforts directly involved the following:
  - League of Municipalities of the Philippines (LMP)
  - Silliman University's Legal Environmental Advocacy Program (LEAP)
  - USAID-funded Governance and Local Democracy (GOLD) and Accelerating Growth, Investment and Liberalization with Equity (AGILE) projects

- Key representatives from the Philippine Congress
- Further developed the Joint Administrative Order (JAO) between the BFAR and DENR to further clarify and define their respective CRM roles
- Assisted in catalyzing DENR's position on various CRMP policy initiatives by establishing a policy assistance presence within the Central Office of DENR
- Continued work on needed revisions to CRMP's Legal and Jurisdictional Guidebook
- Maintained the project's close collaboration with the LMP and initiated similar activities for promoting CRM with the other local government leagues
- Continued policy discussions with a technical working group (TWG) on Republic Act (RA) 7161 and the fishpond reversion process
- Drafted technical guidelines for demarcation of municipal waters as part of a policy study for DENR's National Mapping and Resource Information Agency (NAMRIA)
- Furthered discussions with the Department of Finance (DOF) and the Local Government Academy (LGA) on opportunities for collaboration in implementing the World Bank-assisted Community-Based Resource Management Project (CBRMP)

A summary of the major work plan accomplishments of the Policy Component during 1999 is provided in the following sections.

**Activity No. I.A** (*Legal and Jurisdictional Guidebook Revised, Distributed, and Utilized*):

The draft revision to incorporate changes introduced by the 1998 Fisheries Code (RA 8550) was completed and is now being circulated for internal review. A TWG involving the key agencies concerned will be convened once the internal review is completed to assist in the external review of the revised Guidebook.

**Activity No. I.B** (*Valuation of Coastal Resources Book and Information Distributed and Utilized*): The resource valuation book was formally launched in June and over 2,500 copies have been distributed to date. The book provides a semi-technical, popular approach to valuation methods, which has been very well received based on review comments. On account of this book, the Philippines has joined Australia and Indonesia in being the only countries that have assigned economic values to critical coastal habitats.

**Activity No. I.C** (*Complete Drafts of ICM Guidebooks (Operational Procedures) for CRM*):

Drafts were completed for the first 4 guidebooks (Coastal Management: Orientation and Overview ; Legal and Jurisdictional Framework for Coastal Management; Coastal Management Planning; Community Participation in CRM; and Managing Coastal Habitats) that are now being reviewed.

**Activity No. I.D** (*Develop and Test Integrated Municipal Fisheries Management and CRM Ordinance that includes Licensing of Fishers, Gear and Access Restrictions within Municipal Waters*): Following a participatory process, model CRM ordinances are in an advanced stage of being developed and drafted for Calape Bay (Bohol), Bais Bay (Negros Oriental), Malalag Bay (Davao del Sur), and Sarangani Bay.

These draft mode ordinances incorporate the results of inter-agency policy discussions held in the preparation of the above listed guidebooks. These included current developments on coastal management based on the implementing rules and regulations of the Fisheries Code and the Agriculture and Fisheries Modernization Act (AFMA).

**Activity No. I.E** (*Finalize and Distribute LEAP Manual for Coastal Law Enforcement*): In association with Silliman University's Legal Environmental Advocacy Program (LEAP), a Manual for Coastal Law Enforcement was drafted and is in the process of final reviews and field testing in the CRMP learning areas.

Based on these available drafts, the packaging of initial training modules is in progress. In coordination with the Asian Development Bank (ADB)-assisted Fisheries Resource Management Project (FRMP) and the University of the Philippines-Institute of Judicial Administration (UP-IJA), plans were made to conduct a training workshop for judges and prosecutors in Mindanao based on the drafted sections of the LEAP Manual. Unfortunately, this proposed training workshop did not push through due to the busy schedules of the prospective partners.

**Activity No. I.F** (*Establish/Reactivate National Interagency Monitoring Team for Fishery Enforcement*): Links with the National Law Enforcement Coordinating Council were made that resulted in a proposed Task Force to curb illegal fishing activities. To support such national-level activities, a Joint MOA between DENR and BFAR was drafted to better define implementation arrangements between the two agencies based on the Fisheries Code. Both DENR and BFAR have acted internally on the draft MOA and reportedly are consolidating their respective positions prior to holding a joint review meeting.

Following the 3<sup>rd</sup> Quarter visit of the U.S. Coast Guard needs assessment team, discussions continued to be held with the national government agencies directly concerned with fisheries enforcement on possible working relationships with the U.S. Coast Guard under a proposed Participating Agency Service Agreement (PASA) with USAID.

**Activity No. I.G** (*Develop and Test Mapping Techniques for Demarcation of Municipal Waters*): A policy paper on mapping techniques and principles in the demarcation of municipal waters in accordance with the Fisheries Code was completed and circulated to DENR-NAMRIA and DA-BFAR.

Draft guidelines on the procedures for delineation and demarcation of municipal waters were also prepared in collaboration with NAMRIA and FRMP, and these will be pilot tested in the Bohol Learning Area during the 1<sup>st</sup> Quarter 2000. The project facilitated an initial DENR-NAMRIA orientation on these procedures to planning staff of some 15 municipalities through the coordination of the Bohol Environment Management Office (BEMO).

**Activity No. I.H** (*Assist to Clarify Role of Protected Areas Management Board (PAMB) vis-à-vis LGU*): CRMP provided reviews on the merits of organizing a policy forum to clarify PAMB mandates in general, as well as the newly created Tañon Strait Commission (a PAMB that would overlap the municipal waters of much of the Negros Oriental Learning Area). Based on this review, recommendations on the proposed workshop design and targeted participants have been provided to DENR.

In association with the Kabang Kalikasan ng Pilipinas (KKP; World Wildlife Fund – Philippines), CRMP assisted in re-convening the PAMB for the Tubbataha National Marine Park, a UNESCO World Heritage Site.

**Activity No. I.I** (*Assist Policy Needs of Learning Areas and Mangrove Implementation*): As required throughout the year, clarification and guidance on key CRM policies was provided to the CRMP learning areas and components. These activities included assisting at a Bohol workshop for provincial offices of concerned national government agencies to clarify and strengthen their roles as CRM implementers.

The component assisted in convening a mangrove policy TWG within the DENR Central Office to review a proposed Department Administrative Order (DAO) articulating RA 7161's provision on the absolute ban on cutting of all mangroves. The TWG recommended that CRMP assist DENR in seeking a new opinion from the DOJ on this proposed DAO, which would tend to conflict with the concept of community-based forest management as currently defined by Executive Order 263. As a longer-term strategy, the TWG also requested CRMP to assist DENR in drafting needed amendments to RA 7161. Subsequent discussions were held with the TWG on the feasibility and needed steps for securing a new opinion from the DOJ.

**Activity No. I.J** (*Finalize Search for Best CRM Practices*): In coordination with the National Search Committee, the mechanics, guidelines, selection criteria and nomination forms for the Search for Best CRM Program Awards were revised and finalized. In the process, the revised forms were made consistent with CRMP's Municipal Coastal Database (MCD).

The Awards program was re-launched at the Conference of Coastal Municipalities of the Philippines (Conference), during which over 130 nomination forms were requested by the attending mayors indicating a high level of interest.

**Activity No. I.K** (*Support CEP via Technical Assistance in Planning and Institutional Development*): Collaboration with DENR's Coastal Environment Program (CEP) continued to be strengthened throughout the year and is a major focus of the expanded scope of work of the Policy Component.

Major activities included the organization and conduct of the first National CEP – CRMP Workshop, which was held in Cebu, and the continued development and use of the MCD, for which CEP served as a "Beta tester" in design evaluation and provided significant data inputs. The MCD currently contains initial data on nearly all municipalities nationwide where CEP sites are located (current MCD total includes 55 CEP municipalities). Copies of

all encoded MCD data have been provided to CEP for validation, and future use for project monitoring and evaluation.

As requested, assistance was provided on a range of policy, planning and technical topics, including development of a draft joint MOA between DENR and BFAR, guidance on the delineation of municipal waters and on continuing the ban on placement of artificial reefs.

**Activity No. I.L** (*Assist to Draft National ICM Master Plan for Philippines*): Direct participation in the planning and discussions of the Conference as well as the National Convention of the League of Municipalities of the Philippines (LMP) held last October in Cebu City provided excellent opportunities to validate needed policy changes at the national level. In the process, the project was able to effectively interact with virtually all coastal municipalities in the country and created, through the MCD and LMP questionnaire, an initial baseline of relevant data that can support the drafting of a national ICM master plan as well as future monitoring and evaluating activities. At present, the MCD contains some level of ICM information on some 377 coastal LGUs nationwide, representing some 45 percent of the country's total of about 830 coastal LGUs.

An important offshoot of the Conference was the verbal instruction of President Estrada for the DENR, BFAR and the Department of Interior and Local Government (DILG) to develop a plan of action for organizing a national Task Force on Coastal Zone Management. The Policy Component supported DENR by coordinating with the DILG in the issuance of a Presidential Directive for operationalizing the Task Force.

Significant unplanned activities and accomplishments during the year include:

**Participation in the Conference and LMP National Convention:** Active participation in all aspects of the Conference proved to be a unique project opportunity that significantly contributed to both national and local implementation results. Outputs of the Conference and subsequent LMP National Convention, included policy initiatives that could be addressed at the national level as well as action items doable at the local level.

**Proposed amendments to the Local Government Code (LGC):** As one result of the Conference, the LMP issued a resolution to the President and Congress to increase the national budget's Internal Revenue Allocation (IRA) for coastal municipalities in the light of their acceptance of CRM as a basic service to be provided by the LGUs.

The initiative to amend the LGC was actively pursued by enhancing the collaborative works with all parties involved, tapping the USAID-funded GOLD and AGILE projects as well as Silliman University's LEAP. Two meetings were convened by the TWG where the proposed amendments were discussed in detail and deliberated. LEAP continued work on the exact wordings of the amendments, while CRMP along with GOLD-AGILE pursued the supporting policy studies (particularly on the simulation of including the municipal waters for the computation of the IRA) that would substantiate the proposed amendments. CRMP also sustained linkages with the LMP and Congress.

### **3.1.1.2 Activities Not Accomplished and Why**

Some planned policy activities concerning coastal law enforcement were postponed. For example, the planned workshop for prosecutors and judges in Davao did not push through due to the busy schedules of prospective partners such as the FRMP. New policy initiatives, such as recent efforts to amend the LGC and organization of the Policy and Planning Advocacy Group (PPAG) also deferred some previously planned activities.

The planned effort to start the institutional integration of CEP and CRMP has proceeded slowly largely due to changes in DENR's staff. Over 3½ years of project implementation DENR has changed the National CEP Coordination 4 times. DENR has recently appointed a new CEP Director who is quite familiar with CRMP. It is anticipated that most work for integrating CEP and CRMP will culminate next year when the new director shall have fully assumed his new CEP post.

The MCD beta-testing process has also proceeded slowly owing to the sudden departure of the Manila-based coordinator. Although substantial work has been done in Cebu and Bohol, coordination with CEP and other national agencies was delayed.

Efforts to have the DENR Secretary endorse the "Tubbataha MOA" were suspended after repeated attempts to convince key officials of the urgency of this matter failed due to the resignation of key persons. CRMP is rather assisting the implementation of the PAMB for Tubbataha.

ICM Guidebook development was not complete as scheduled in 1999. This major task moved slowly due to limited resources assigned to the completion of each guidebook, primarily core advisors with many other duties. A new schedule has been incorporated with the Annual Work Plan for 2000.

### **3.1.1.3 Issues and Lessons Learned**

Increasing awareness and encouraging DENR's Central Office to have a sense of ownership of the project remains an important focus of the component. At the moment, the Policy and Institutional Component has made inroads in establishing its presence in DENR by meeting with the Undersecretary, directors, and units concerned. The interest expressed in the meetings with the concerned officials should be sustained through continued collaboration and support from the team and the project as a whole. At this juncture, the component needs to build the confidence of DENR, particularly its technical and CEP counterparts, on the valuable support the project can provide in advancing effective coastal resource management in the country.

The goodwill and excellent working relationship generated by the project with LMP, DA-BFAR, NAMRIA, and Congress should also be maintained given the critical support they can extend in pushing for the key management reforms the project has been advocating for a sustainable coastal resource management.

### 3.1.2 Information, Education, and Communication (IEC) Component

This component supports all aspects of CRMP through various IEC activities. Its primary objective is to increase knowledge about CRM problems and solutions in the Philippines at all levels but with a focus on the CRMP learning and expansion areas. Another objective of the IEC Component is to form a number of multi-sectoral collaborative agreements with donor agencies, private sector, media, and civic groups to promote education and awareness about CRM. The indicators for IEC fall under Intermediate Result 1.2 “Increased Awareness of CRM Problems and Solutions” as measured by:

*Indicator 1. Widespread availability and utilization of CRM guidance and training materials (number of government and assisting organizations [academic and NGOs] utilizing CRM legal, jurisdictional, operational guides, and training modules developed by CRMP)*

*Indicator 2. Public awareness of CRM issues as measured by the percent of survey respondents demonstrating knowledge of CRM problems and solutions*

Table 3-2 provides a summary of the IEC Component’s 1999 Work Plan activity schedule (shaded areas) and progress to date (C=completed activities; O=ongoing activities) by quarter.

**TABLE 3-2  
IEC COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>II.</b>	<b>Information, Education, and Communication (IEC) Component</b>				
<b>II.A</b>	<b>Plan and Implement Public Education and Media Campaign to Promote Three Critical CRM Results: Fishing Effort Reduced to Sustainable Levels; Illegal and Destructive Fishing Practices Reduced; Critical Coastal Habitats Protected and Managed</b>				
1.	Formulate and implement a public education and media campaign on CRM and food security vis-à-vis three CRM critical results areas	O	O	O	C
2.	Implement public education and media campaign in partnership with radio, print and television networks and other agencies		O	O	C
3.	Establish and activate local CRM media networks in learning provinces			O	C
4.	Develop and publish stories in national and local media regarding CRM results, best practices, policy concerns		O	O	C
5.	Maintain and update CRMP website, oneocean.org	O	O	O	C
6.	Formulate and implement a public education and social mobilization strategy on the observance of Philippine Ocean Month (May)	O	C		
<b>II.B</b>	<b>Develop and Implement LGU Advocacy Program to Promote Spread of CRM</b>				
1.	With the GOLD Project and CRMP’s technical components,	O	O	O	O

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>II. Information, Education, and Communication (IEC) Component</b>					
<b>II.A Plan and Implement Public Education and Media Campaign to Promote Three Critical CRM Results: Fishing Effort Reduced to Sustainable Levels; Illegal and Destructive Fishing Practices Reduced; Critical Coastal Habitats Protected and Managed</b>					
	assist in the development of LGU CRM toolkits				
2.	With Policy Component, promote CRM to national officials of League of Municipalities, League of Provinces and League of Leagues through briefings, orientations, and special presentations	O	O	O	O

**TABLE 3-2 (Continued)**  
**IEC COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
3.	With Policy Component and League of Municipalities, assist in conducting the Search for Best CRM Practices Award	O	O	O	O
4.	With Policy Component, implement a dissemination plan for Coastal Valuation Book among national agencies, such as DOT, DA-BFAR, and DILG	O	C		
<b>II.C Institutionalize IEC Activities in Appropriate Agencies and in the Private Sector at National Level</b>					
1.	Establish criteria/guiding principles on selection of national IEC partners	O	O	C	C
2.	Identify and engage other appropriate IEC partnerships	O	O	O	C
<b>II.D Conduct Public Education at Local Levels to Increase Knowledge of Laws, Operational Procedures, and Resource Valuation Governing Coastal Resources and Use</b>					
1.	With Policy Component, popularize information on laws, operational procedures, and coastal valuation governing coastal resources and use		O	O	C
2.	Produce popular versions of these technical information		O	O	C
3.	Implement a public education and media dissemination strategy to download at municipal and barangay levels			O	C
4.	Popularize information and messages on laws, CRM operational procedures and coastal valuation				C
<b>II.E Leverage Support from the Business Sector and Others to Support CRM</b>					
1.	Engage corporate partners to support IEC special events and social mobilization in LAs and the "I Love the Ocean" Movement (examples: Ocean Month, International Coastal Cleanup Day, World Fisheries Day, World Ocean Day, World Food Day)		O	C	C
2.	Assist Enterprise Component in leveraging private sector support in marketing		O	O	C

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
3.	Identify and engage corporate partners to support Search for Best CRM Practices Awards Program		O	O	C
<b>II.F Institutionalize IEC Activities in the Learning Areas and Provinces</b>					
1.	Establish criteria for selection of IEC partners and institutions	C			
2.	Identify and organize IEC core groups in learning areas	O	O	C	
3.	Formulate and implement a training program on IEC skills at the community level for IEC core groups, LGUs, NGOs, POs			O	O
4.	Translate existing materials and provide IEC core groups and key local partners with training manuals and reference materials on IEC strategies			O	O
5.	Establish criteria for the identification of CRM Resource Centers	O	O	C	

**TABLE 3-2 (Continued)**  
**IEC COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
6.	Engage partners in planning and operation of CRM Resource Centers			O	C
7.	Design and operate CRM Resource Centers			O	O
8.	Employ the "I Love the Ocean" Movement as the general public's social mobilization/advocacy group for the promotion of CRM	O	O	O	O
9.	Study tour of appropriate representatives to attend National Association of American Environment Educators (NAAEE) in August 1999 and visit relevant environmental education units	O	O	C	
<b>II.G Assist to Promote CRM in Expansion Areas and Provinces</b>					
1.	Assist Olango Island LA to set up a Cebu "Expansion Core Group"			O	C
2.	Assist in facilitating the participation of appropriate partners in providing technical assistance to expansion municipalities	O	O	O	O
3.	Develop and package CRM Best Practices from learning areas for dissemination to expansion areas	C			
4.	With the Training and Local Implementation Components, facilitate CRM Leadership workshops as IEC prelude to ICM Training		O	O	O
<b>II.H Support Development and Production of IEC Materials for Project Components</b>					
1.	Mangrove Management: Toolkits	O	O	O	O
2.	Policy: Legal and Jurisdictional Book, LEAP Manual, ICM Guidebooks	O	O	O	O
3.	Local implementation: Six environmental profiles	O	O	O	O
4.	Enterprise: Manuals on ecotourism and seaweed			O	O

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
	production				
5.	Training: Modules for ICM training (10-day and 3-day courses)			O	C
<b>II.I Design and Implement a Systematic Evaluation of the IEC Strategies and Activities</b>					
1.	Contract an independent research group or company to undertake systematic evaluation of IEC strategies and activities	C			
2.	Monitor and analyze results of evaluation group		O	O	C
3.	Internalize evaluation results into planning for IEC				O

### 3.1.2.1 Work Plan Accomplishments

Major accomplishments of the IEC Component during the 4th Quarter 1999 include:

- In collaboration with other CRMP components, continued to strengthen established partnerships with the DENR, LMP, PIA, mass media, and other private sector partners to support national understanding and promotion of CRM-related issues
- Supported production and continued airing of CRM-related plugs on various highly rated national and local radio and television shows, including "Magandang Gabi Bayan," "Assignment," "The Probe Team," "Correspondents," and "Brigada Siete"
- Assisted the PIA to produce, at their own expense, a 30-second television plug featuring the DENR Secretary and LMP President calling for protection of the seas
- Facilitated publication of various CRM-related articles in national and local newspapers (Estimated media values of publishing these CRM articles amounted to P180,000 for national print media and P108,800 for Cebu-based newspapers.)
- Supported CRMP expansion activities by preparing and distributing comprehensive CRM information packages to 486 municipal mayors who had requested these materials during the Conference and LMP National Convention; additional IEC assistance also provided to Moalboal, Malabuyuc, Consolacion and Talisay, which are proposed CRMP expansion LGUs in Cebu province
- Under full private sponsorship, a 21-day "Our Seas, Our Life" exhibit was held at the Ayala Alabang Mall in Metro Manila (Following this exhibit, the display panels were officially transferred to the Protected Areas and Wildlife Bureau (PAWB) of DENR for planned use in the PAWB exhibit hall in Quezon City.)

- Sustained business and private sector support for the “I Love the Ocean” Movement’s activities, which included “A Million Mangroves for the Millennium” project in Cebu and the celebrity dive in Samal Island, Davao
- Developed and provided IEC support to the project’s various components and learning area teams
- Maintained and updated the CRMP website, *oneocean.org* (In recognition of its high quality and comprehensive scope, *oneocean.org* was awarded the “Most Outstanding Website for Environment” during the annual Philippine Web Awards.)
- Conducted a systematic evaluation of various IEC activities, including the Knowledge, Attitudes, and Practices (KAP) Survey of learning and expansion areas
- Assisted to provide an executive briefing to Petron Corporation’s and Petron Foundation’s top level management with a project goal of helping to establish a business sector-driven CRM program in the province of Bataan
- Initiated a partnership with Sky Foundation, Inc., a sister company of ABS-CBN, that has offered to broadcast for free the project’s CRM video materials on its recently established cable learning channel (Target audience of the learning channel is their member elementary and secondary schools, which utilize these video materials for their media-assisted curriculum.)

A summary of the major Work Plan accomplishments of the IEC Component during 1999 is provided in the following sections.

**Activity II.A** (*Plan and Implement Public Education and Media Campaign to Promote Three Critical CRM Results: Fishing Effort Reduced to Sustainable Levels; Illegal and Destructive Fishing Practices Reduced; Critical Coastal Habitats Protected and Managed*): Building upon the project’s established partnerships and approaches, a wide range of national to local level IEC activities were planned and implemented including the component’s involvement in the following:

- Presidential Proclamation that May is the nation’s annual “Month of the Ocean” and a comprehensive series of national and local CRM-related celebration activities
- Conference of Coastal Municipalities of the Philippines, which was attended by the President, four department secretaries, and over 700 mayors or approximately 90 percent of the 832 coastal mayors in the country

Conference workshops focused on the following topics:

- Poverty eradication in coastal communities
- Redefining food security in the coastal setting

- Addressing jurisdictional issues in municipal waters
- Enforcing coastal laws, and
- Financing mechanisms for managing coastal resources
- National LMP Conference, which for the first time included CRM-related “clinics” and workshops, that led to a resolution addressed to the President calling for amendment of the LGC to further support coastal municipalities for integrated coastal management (ICM)
- “Our Seas, Our Life” exhibits held in Cebu City (as part of the multi-sectoral “Adto Padulong so Usa ka Lawod” displays held for 10 weeks), in Tagbilaran City (Bohol, with over 96,000 visitors), and with private sector funding in Alabang, Metro Manila (The exhibits’ display panels have now been transferred to DENR’s PAWB for future use in their exhibit area.)
- Development, production and distribution of a wide range of IEC materials, with over 96,000 items requested and distributed during the year (see Table 3-3)
- Maintenance and updating of the project’s award winning website *oneocean.org*, with monthly number of user sessions (visits) reaching 4,000 in December
- Media briefings and invitational tours to CRMP project sites to showcase CRM successes at the community level

Key IEC partners throughout the year included the DENR, PIA, LMP, the Office of the Presidential Assistant on Poverty Eradication, ABS-CBN Foundation, involved LGUs, numerous national and local NGOs and POs, and private sector partners.

**TABLE 3-3  
IEC MATERIALS REQUESTED AND DISTRIBUTED  
FROM JANUARY THROUGH DECEMBER, 1999**

Description/Title	Quantity
A Call for Leadership Poster	331
About CRMP (Cebuano)	5,392
Ang Dagat ay Buhay Audio Tape	50
And Dagat ay Buhay Poster	133
Best Coastal Management Programs Brochure	1,059
Call to Action Flyer	3,502
Coastal Alert1-One Ocean	247
Coastal Alert Brochure	3,045
Coastal Alert Coloring Book	9
Coastal Alert Poster (Cebuano)	349
Coastal Alert Poster (English)	325
CRMP Folder	797
CRM for Food Security Booklet	2,809

<b>Description/Title</b>	<b>Quantity</b>
CRM for Food Security Planner	246
CRM Video (CRMP-Agrisyyete, 1 & 2) VHS	36
Future's Sake Poster	277
Human Impacts Poster	5,128
"I Love the Ocean" Sticker	10,698
Imagine the Future without Mangroves Poster	44
It's Their Ocean Too Poster	198
Legal and Jurisdictional Guidebook	13
LMP Kit	781
Lost Reef Brochure (English)	8,790
Lost Reefs Brochure (Cebuano)	4,548
Lost Reefs Brochure (Tagalog)	4,921
Mangrove Brochure (Imagine...foldout)	2
Mangroves in Trouble Brochure (Cebuano)	4,463
Mangroves in Trouble Brochure (English)	11,133
Mangroves in Trouble Brochure (Tagalog)	3,665
Marine Sanctuaries Video	33
No Time to Lose Poster	421
One Ocean Postcard	7,070
Our Seas, Our Life Brochure	664

**TABLE 3-3 (Continued)**  
**IEC MATERIALS REQUESTED AND DISTRIBUTED**  
**FROM JANUARY THROUGH DECEMBER, 1999**

<b>Description/Title</b>	<b>Quantity</b>
Our Seas, Our Life Guidebook	5,143
Our Seas, Our Life Poster-Dumaguete	30
Para sa Maayong Kaugmaon Poster	377
PCRA Handbook	2,458
Presidential Speech brochure	716
Rhythm of the Sea Book	589
Sine'skwela-"Colors of the Sea" (VHS)	33
Tambuli 1-Nov 96 Newsletter	439
Tambuli 1-Nov 96 Newsletter (re-print)	592
Tambuli 2-May 97 Newsletter	484
Tambuli 2-May 97 Newsletter (re-print)	389
Tambuli 3-Nov 97 Newsletter	985
Tambuli 4-August 1998 Newsletter	2,146
Tambuli 5-May 99 Newsletter	2,026
The Life Cycle of a Coral Colony flyer	1,426
Tools & Methods in Community-based CRM	334
Usa ka panawagan sa pag Pangulo Poster	335
Values of Philippine Coastal Resources Book	2,633
Total	96,223

**Activity No. II.B** (*Develop and Implement LGU Advocacy Program to Promote Spread of CRM*): Initiated in late 1997, project partnership with the LMP has progressively strengthened their important role in CRM advocacy at national policy and decision-making levels. A key milestone in this partnership was the conduct of the Conference that served as a credible and effective forum for LGUs to formulate their own CRM advocacy agenda.

A major output of the Conference was LMP Resolution No. 1, Series of 1999, entitled "A Resolution Calling for the Enactment / Implementation of Measures Empowering Local Government Units for Integrated Coastal Management" which includes the following requested actions of President Estrada and the Philippine Congress to:

- Establish municipal water boundaries as soon as possible
- Amend the LGC to include municipal water areas for purposes of computing
- Allocate a portion from the Internal Revenue Allocation (IRA) to increase LGU resources for CRM-related activities and to enhance enforcement of existing fisheries laws
- Accord more CRM-related powers to LGUs and ensuring integration for national development

In coordination with the Policy Component, technical assistance was provided to the LMP to support the representation and processing of their Resolution No. 1 with the concerned agencies, including the Presidential Management Staff Office, members of the Philippine Congress, and concerned departments. As an initial result of these IEC efforts, the National Bureau of Investigation (NBI) issued Memorandum Order No. 44, Series of 1999 ordering its Field Offices to adopt "measures to strengthen the enforcement and prosecution mechanism relative to matters in (LMP) Resolution No. 1, Series of 1999."

On the local level, the LGU advocacy program was strengthened through the production and distribution of requested IEC materials and the active roles of CRM Collaborator Groups composed of key stakeholders within each CRMP learning area. Supporting IEC activities included CRM orientation sessions, staging of CRM exhibits in the municipal halls, and serving as resource speakers in multi-sectoral forums, particularly during observance of the Month of the Ocean in May, Environment Month in June, Fish Conservation Week in September, and World Food Day in October.

**Activity No. II.C** (*Institutionalize IEC Activities in Appropriate Agencies and in the Private Sector at National Level*): During 1999, IEC activities continued to be institutionalized at the national level through active partnerships with the following agencies, organizations, and key private sector partners: DENR, PIA, LMP, BFAR, ABS-CBN Foundation and recently, its sister company, Sky Foundation, Inc. These partnerships served both to integrate the project's IEC initiatives through collaborative development approaches and to leverage the project's resources with those of its partners.

The project's successful partnership with the ABS-CBN Foundation and PIA has resulted in the leveraging of the project's resources against the media industry's air time and broadcast capabilities, resulting in the free airing and broadcast of CRM "infomercials" that was unprecedented in terms of network coverage and frequency. For example, radio and television mass media coverage on the Conference has generated media values that nearly equalled the cost of the conference itself.

Through joint or external production agreements with leading media networks and PIA, CRMP not only cut production costs, but also turned mass media into a primary ally for promoting CRM, including its relationship to food security, in the national social agenda. It may be of interest to note that the movie *Muro-Ami* released in December 1999 (concerning a destructive type of coral reef fishing that reportedly exploits minors as divers) was recently awarded 13 out of 17 awards for the country's Best Picture of the Year.

**Activity No. II.D** (*Conduct Public Education at Local Levels to Increase Knowledge of Laws, Operational Procedures, and Resource Valuation Governing Coastal Resources and Use*): The IEC Component plays a supportive role to the CRMP learning area teams and various components in conducting public education at the local level. During 1999, these activities included the development and production of various IEC materials, organizational support, CRM presentations, and exhibits.

A series of popular pamphlets that captures the primary messages of the Coastal Resource Valuation Book were drafted and pre-tested with municipal mayors during the LMP National Convention. These pamphlets are in the process of being finalized, based on the mayors recommended changes in the design and specificity of the information presented.

**Activity No. II.E** (*Leverage Support from the Business Sector and Others to Support CRM*): In addition to the commitments of time and energy of countless individuals, significant financial counterpart support was generated over the course of the year from both the private and public sectors. Specific examples include:

- Staging of the "Our Seas, Our Life" Exhibit in Cebu (SM City provided free space for the setup of the exhibit for a 2-month period); in Tagbilaran City, Bohol (in partnership with Bohol province and the City of Tagbilaran as well as various public and private sectors); and in Alabang, Metro Manila (entirely private funded, including transportation of the exhibit from Cebu to Manila)
- Public education and media campaigns to promote CRM for food security were largely undertaken by way of partnership with the national and local media. The CRMP publication on "CRM for Food Security" was reprinted by Bookmark and is now publicly sold through National Bookstores nationwide.
- Cumulative national print media values generated by CRMP-initiated stories as well as media-initiated stories and articles on CRM-related topics amounted to over P3.5 million for 1999.

- In partnership with the Training Component, initiatives have been undertaken to share existing IEC materials with the ADB-funded Fisheries Resource Management Project (FRMP) of the BFAR. Initial publications and posters have been identified by FRMP for their use with reprinting costs to be assumed by FRMP.

**Activity No. II.F** (*Institutionalize IEC Activities in the Learning Areas and Provinces*): CRM advocacy groups have been identified and organized for all six CRMP learning areas. Comprising a mix of government information and private media practitioners, as well as concerned NGOs, these CRM advocacy groups now serve a critical role in promoting CRM causes in their respective spheres of influence.

It was envisioned that the institutionalization of IEC activities at the local level would be via the proposed CRM Resource Centers. However, there were various delays in establishing resource centers in most learning areas. As a result, a re-alignment of the IEC institutionalization strategy was developed that would maximize the central role of the province in undertaking CRM-related IEC functions.

**Activity No. II.G** (*Assist to Promote CRM in Expansion Areas and Provinces*): IEC support was extended to possible CRM expansion areas through such activities as 1-day orientation sessions on CRM and CRM planning, the staging of exhibits at various municipal halls, conduct of information caravans and information dissemination activities, "I Love the Ocean" Movement orientation sessions, and 2-day Ecology Training for Teachers and curriculum integration of CRM.

With the management decision to further refine the project's expansion areas and expansion strategy, efforts to service the needs of expansion areas were not aggressively pursued this year. However, all requests for IEC materials were attended and responded to. During 1999, a total of 486 CRM information packages were sent to requesting mayors from coastal municipalities throughout the country.

**Activity No. II H** (*Support Development and Production of Information and Education Materials for Project Components*): Continuous support was provided to the development and production of IEC materials for the project's other components (major print outputs for 1999 are listed in Table 3-3). In addition, the IEC Component supported:

- Preparation of the illustrations, design, and lay-out of the 11-part CRM Guidebook Series and the Mangrove Management Toolkits
- Workshop facilitation and documentation assistance to various. CRM planning workshops conducted in the Bohol, Negros, and Olango learning areas
- Preparation of a Special Mid-term report that chronicles the evolution of CRMP's activities, providing highlights of key challenges, successes and lessons learned over the first 3 ½ years of implementation as well as forecast future directions for the remaining life of the project

**Activity No. II.I** (*Design and Implement a Systematic Evaluation of the IEC Strategies and Activities*): An independent research firm, MBL Trends, Inc., was contracted to conduct a benchmark survey to assess knowledge levels, attitudes, and practices of target groups in the learning areas. This survey is now on its second phase of the research: the conduct of a quantitative survey of fisherfolk communities. The qualitative part of the study has been completed, which consisted of in-depth interviews of municipal mayors as well as focus group discussions of key informants, barangay captains, and women. It is anticipated that the quantitative part of the study will be completed by first week of March 2000.

Systematic impact assessments and evaluation studies have also been conducted for major IEC activities such as the 1998 "Our Seas, Our Life" Exhibit and the 1999 Conference of Coastal Municipalities. Initial research findings indicate that such activities have made a major impact in terms of knowledge levels and involvement of target audiences.

An additional research activity undertaken for the 4<sup>th</sup> Quarter involved the evaluation of selected IEC materials on the part of municipal mayors, to assess their acceptability, use, and how these materials could be improved. Initial findings show that respondent municipal mayors found the materials appealing (93 percent); provided them with enough information on the subject (96 percent) and; would recommend these for reading to their peers (100 percent). All of the respondents also recommended the reprinting of the "CRM for Food Security" booklet. In terms of usage, 76 percent claimed that they have read the materials, with the "CRM for Food Security" booklet as the most used material. The mayors also recommended the translation of these materials into the vernacular.

### **3.1.2.2 Activities Not Accomplished and Why**

The set up of CRM Resource Centers was postponed pending a review of how this could be accomplished bearing in mind the sustainability and maintenance of these centers.

Planned assistance to most proposed expansion areas was also postponed, pending further rationalization of where these expansion sites would be and the criteria for selecting them.

The partnership with the GOLD Project to jointly develop and produce LGU CRM toolkits did not fully materialize given personnel and budget constraints on the part of the GOLD Project. Instead, CRMP took the initiative of developing a CRM Primer that has been distributed and pre-tested to municipal mayors. As currently planned, the 11-part CRM Guidebook Series and the Mangrove Toolkits will serve as the CRM toolkits for LGUs.

There have been some delays in the finalization of technical publications from the various project components. As such, production, design, and lay-out were subsequently set back. These include the 11-part CRM Guidebook Series, which is still being finalized by the CRMP technical team. A public education program woven around these guidebooks will be developed and implemented as soon as these guidebooks are ready for production and dissemination.

### **3.1.2.2 Issues and Lessons Learned**

By design, CRMP champions the ascendancy of local government as frontline stewards of CRM. As the recent success of the Conference illustrates and the volume of information requests received from municipal LGUs show, such demand for technical assistance and IEC support for CRM-related activities may continue to increase. However, there is a need to repeatedly affirm this mandate both at national and local levels so that the convergence of national policies and local initiatives (as what happened in the Conference) are sustained.

Initial research findings from the qualitative survey indicate that even with limited resources, an active LGU can implement CRM as a basic service, while an indifferent LGU can not. As such, the project's focus to build local LGU capabilities for CRM should be strengthened.

Initiation of counterpart schemes and strategic partnerships has worked to the advantage of CRMP, particularly where the business sector, private media networks, and government information agencies were concerned. For example, the partnership with ABS-CBN yielded a media exposure in prime time hours of ABS-CBN shows, with Month of the Ocean messages incorporated in the station's hourly identification messages. The partnership with the PIA proved to be a win-win situation for everyone concerned, as broadcast companies, through a broadcast order mandated by PIA, were able to claim tax deductions in the amount equivalent to their CRM broadcast airtime.

As recognized early on in the project, private sector support for CRM was initially acquired via the corporate marketing door. As such, the IEC Component undertook public education activities that would also result in high public visibility for sponsoring companies and business entities. In 1999, private sector support was solicited in such community mobilization activities as the "Crown of Thorns" Collection Dive, "Celebrity Dives," Quiz Bowls, Essay Writing and Poster Making contests, exhibits for Ocean Month and Environment Month, and the conduct of sea camps and coastal treks by the "I Love the Ocean" Movement.

Response to demand-driven requests contributed immensely to help promote the spread of CRM outside the learning areas. We have noted that where CRM is demand-driven, the project's level of effort in putting CRM in the local government's priorities is much less than in cases where such a demand was not in place.

## **3.2 LOCAL IMPLEMENTATION IN LEARNING AREAS AND EXPANSION AREAS**

### **3.2.1 Overview of Local Accomplishments**

CRMP's six learning areas include 29 municipalities and cover 670 km shoreline. Expansion areas include municipalities within learning area provinces as well as

municipalities in other provinces. The indicators for Local Implementation fall under Intermediate Result 1.1. "Improved Local Implementation of CRM" as measured by:

*Indicator 1. Annual LGU budget allocated for CRM*

*Indicator 2. Resource management organizations (FARMCs, Bantay Dagat or their equivalent) formed and active*

*Indicator 3. Number of LGUs where best CRM practices are being implemented (such as CRM plans adopted, fishery and coastal management ordinances implemented, environmentally friendly enterprises established, enforcement units operational, marine sanctuaries functional, mangroves under CBFMAs, municipal water boundaries enforced or other appropriate interventions in place)*

During 1999, original estimates of shoreline length were updated through use of digitized maps included in the project's Geographic Information System (GIS). A comparison of original estimate and revised shoreline lengths is provided by LGU in Summary Table 1, Appendix A. As agreed under the project, reported shoreline lengths do not include offshore islands and inland extensions of rivers and estuaries.

Municipalities in learning and expansion areas continued to make substantial progress in meeting the criteria for improved local implementation of CRM. A current status summary of local implementation in the CRMP learning and expansion areas is provided in Appendix A. In addition to the following activities, each Learning Area Coordinator (LAC) also participated in and supported several significant, nationwide events, including the Conference, the CEP – CRMP National Workshop, the celebration of May as the national "Month of the Ocean" and activities related to the 13<sup>th</sup> International Coastal Clean-up conducted in association with the International Marinelifelife Alliance (IMA) – Philippines and numerous other project partners.

### **3.2.2 Bohol**

The Bohol Learning Area is composed of the following LGUs: Buenavista, Calape, Clarin, Inabanga, and Tubigon (75 coastal barangays; 57 km of shoreline). Currently proposed expansion areas include Candijay, Getafe, Loon, Mabini, Maribojoc, and Panglao (115 km of shoreline).

Table 3-4 provides a summary of 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) in the Bohol Learning Area by quarter.

**TABLE 3-4**  
**BOHOL**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Bohol Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Monitor, review, and refine Haribon project as required	C	O	C	
	• Recruit learning area-wide technical assistant and one CO	O	O	O	C
	• Prepare technical pool contract with BIDEF	O			
	• Operationalize BEMO desk and technical assistance functions		O	O	O
<b>III.B</b>	<b>Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning</b>				
	• Validate PCRA by barangay	O	O	O	O
	• Finalize, publish, and present PCRA results to key stakeholders	O	O	O	O
	• Edit, finalize, and print coastal profile for learning area	O	O	O	O
<b>III.C</b>	<b>Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM</b>				
	• Finalize provincial MOA to establish CRM council based in BEMO	O	O	C	
	• Re-evaluate municipal MOAs as required	C			
	• Assist PAMB functions as required	O	O	O	O
	• Organize 2 cross visits within learning area			C	
	• Establish FARMCs in learning area municipalities		O	O	C
<b>III.D</b>	<b>Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate</b>				
	• Integrate PCRA results into municipal and barangay levels			O	O
	• CRM planning trainers and facilitators pool developed			C	

**TABLE 3-4 (Continued)**  
**BOHOL**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
	• Barangay level planning in selected barangays			O	C
<b>III.E</b>	<b>Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances</b>				
	• Collection of all municipal ordinances in LA	O	C		
	• Calape Bay plan refined	O	O	O	O
	• Calape Bay plan institutionalized into an ordinance			O	O
	• Facilitate adoption of standardized CRM ordinances for LA			O	O
<b>III.F</b>	<b>Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries</b>				
	• Support existing marine sanctuaries	O	O	O	O
	• Encourage new marine sanctuaries in Inabanga and Buenavista			O	O
	• Supervise reef monitoring in existing sanctuaries		O	C	
	• Support management of NIPAS areas		O	O	O

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.G</b>	<b>Assist LGUs and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				
	• Develop monitoring form for law enforcement system	<b>C</b>			
	• Conduct refresher course on fisheries laws for Bantay Dagat			<b>O</b>	<b>O</b>
<b>III.H</b>	<b>Strengthen Institutions through Training and Information Dissemination</b>				
	• Press officer institutionalized through DENR and Governor's office	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>
	• Develop mechanism for Information flow in province		<b>O</b>	<b>O</b>	<b>C</b>
	• Write stories on CRM in Bohol		<b>O</b>	<b>O</b>	<b>C</b>
	• Provide mini ICM training as required	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
	• CRM board and information center developed at CEP station		<b>C</b>		
	• Improve CRM resource center based in BEMO	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>
<b>III.I</b>	<b>Update Performance Monitoring Database on a Regular Basis</b>				
	• Update field application of performance database	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>

### 3.2.2.1 Work Plan Accomplishments

Major accomplishments of the Bohol Learning Area during the 4th Quarter 1999 include:

- An IEC Specialist was hired to support activities within the Bohol learning and expansion areas. Full-time counterpart staff is being provided by the Bohol Environment Management Office (BEMO), which is under the Provincial Planning and Development Office (PPDO).
- The participatory coastal resource assessment (PCRA) for Calape was validated, with copies provided to the LGU to support their CBRMP loan application. The draft Calape Bay ICM plans was also integrated into the CBRMP loan application format.
- A workshop involving 15 coastal municipalities was conducted through the BEMO to strengthen use of the Municipal Coastal Database as a provincial planning and monitoring tool. A key official of NAMRIA was invited and provided an orientation on delineation of municipal water boundaries.
- The team participated in various CRM-related provincial activities, including the GOLD "roll-out" conference, the provincial ecotourism conference, and presentation of May 1999 Earthwatch Expedition reef survey results to the Provincial Tourism Council.

A summary of the major Work Plan accomplishments of the Bohol Learning Area during 1999 is provided in the following sections.

**Activity No. III.A** (*Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required*): Following a participatory approach, the provincial MOA establishing a CRM Task Force and the formal arrangements for CRMP partnership at the provincial level was

drafted, reviewed by all parties concerned, and approved by both the Governor and the Provincial Council.

Based on the approved MOA, counterpart staff, resources, and CRM leadership are now being provided by the province through the BEMO, particularly to proposed expansion areas and to related projects, such as CBRMP, GOLD, and the Global Environment Facility (GEF)-funded Bohol Island Marine Triangle (BMT) Project.

To support these efforts, several additional CRMP staff were recruited over the course of the year, including a municipal CRM technical assistant, an IEC Specialist, and a new community relations officer under the area's assisting organization, Haribon Foundation.

**Activity No. III.B** *(Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile for Planning)*: Municipal level PCRAs and related maps were completed and validated for the entire learning area and expansion LGUs of Getafe and Loon. These baseline data and maps have been provided to each LGU for their utilization in CRM planning, particularly to support CBRMP loan applications. The PCRA process is on going in selected Haribon-CRMP model barangays.

Copies of these data were provided to DENR and BFAR to support their respective CBRMP roles in coastal resource assessment as well as to the BEMO to assist their provincial planning and monitoring role. The PCRA data has been incorporated into the Coastal Area Profile, which is now in the final editing and layout stage of publication.

**Activity No. III.C** *(Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM)*: The project assisted in organizing and activating a total of five municipal Fisheries and Aquatic Resources Management Councils (FARMC) and four fish warden associations within the learning area through the direct involvement of key stakeholders. Following approval of the provincial MOA, further assistance was provided to organize and activate the Provincial CRM Task Force to serve as the province's central CRM coordinating body.

To support these efforts, project staff attended regular meetings and assisted to provide technical assistance, resource materials and training as needed in close coordination with DENR's Provincial Environment and Natural Resources Office (PENRO) and the provincial BFAR office.

**Activity No. III.D** *(Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal and Learning Area Levels as Appropriate)*: Technical assistance was provided to utilize completed PCRAs, the draft profile, training activities, and lessons learned to date to support CRM planning at all levels. For this purpose, a workshop focusing on CRM as a basic LGU service was organized and conducted in collaboration with the CBRMP and Local Government Academy (LGA) for nine coastal LGUs, which have indicated their intent to apply for CBRMP loans, a significant portion of which are expected to be applied for CRM-related activities.

The consultation process for CRM planning and zoning for the municipalities of Calape and Tubigon are on going, while barangay-level planning was conducted in Batasan (Tubigon), the results of which have been adopted by the Barangay Development Council. ICM planning was also conducted in Barangay Cambuhat (Buenavista), spearheaded by CRMP's Enterprise Component.

As further described under the Training Component section of this report, a pool of CRM planning trainers and facilitators has now been developed within the province following a series of trainer's training.

**Activity No. III.E** (*Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances*): The team assisted to compile and facilitate the sharing of fisheries and CRM ordinances between the learning and expansion area LGUs. A draft model fisheries ordinance was prepared for the Calape Bay, which would serve to integrate the respective jurisdiction of the two LGUs concerned, Calape and Loon.

To support these integration efforts, a draft map delineating the municipal waters of all LGUs in the province was generated using CRMP's geographic information system (GIS).

Based on existing criteria provided the 1998 Fisheries Code, this draft municipal water boundary map has undergone a number of LGU and provincial-level reviews and revisions to highlight areas of existing boundary disputes to be further addressed during a provincial workshop scheduled for the 1<sup>st</sup> Quarter 2000. This provincial-level municipal water boundary map represents perhaps the first such map drafted in the country today.

**Activity No. III.F** (*Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries*): The planning and establishment of four new marine sanctuaries was facilitated in Pantudlan (Loon, 10.2 ha in area); and Batasan, Bilangbilangan, and Macaas (Tubigon, over 22 ha in area) in collaboration Haribon-CRMP and Project Seahorse. Based on completed underwater resource assessments and community consultations, the process of establishing marine sanctuaries is on going in Madangog (Calape), Cuaming (Inabanga), and Asinan (Buenavista).

Community-based participatory sanctuary monitoring training was conducted for five barangays of learning area. Regular community-based monitoring of sanctuaries continued within the learning area, with support from the Bohol Integrated Development Foundation (BIDEF) for bi-annual monitoring of the Cabaongan (Loon) marine sanctuary.

Balicasag Island marine sanctuary was assisted through a monitoring expedition supported by Earthwatch Institute.

**Activity No. III.G** (*Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans*): The team participated in technical discussions and presented a position paper to the province to establish a framework for improving coastal law enforcement within the province. Technical assistance was also provided in conducting fish warden training in all but one LGU within the learning area and also on the on-going registration of all fish warden organizations within the learning area.

The team provided technical assistance to the Philippine National Police Maritime Command (PNP Maritime) to prepare a proposal to acquire new patrol boats for coastal law enforcement.

**Activity No. III.H** (*Strengthen Institutions through Training and Information Dissemination*): The team assisted in facilitating numerous CRM-related training activities completed during the year as listed under the respective report sections for CRMP's Training, Enterprise and Mangrove Management components. These included ICM training activities to all FARMCs in the learning area as well as various expansion areas.

Based on the provincial MOA, activities were initiated to establish the CRM Resource Center within the BEMO, including the provision of a computer, IEC, and other CRM reference materials.

Numerous CRM-articles and stories specific to the province were published in local newspapers and the provincial capitol magazine in coordination with the Provincial Information Office and PIA. CRMP supported the bi-annual preparation and distribution of the vernacular publication "Ang Subiran" by Haribon-CRMP and Project Seahorse to community beneficiaries within whole learning area.

**Activity No. III.I** (*Update Performance Monitoring Database on a Regular Basis*): The MCD was regularly updated and currently includes data on 19 LGUs within the province. The PPDO, through the BEMO, provided valuable inputs to MCD design as part of the Beta-testing process and have taken the lead in adopting and managing the existing MCD software to meet their specific needs for provincial-level planning and monitoring. On their own initiative, the province is now adopting and integrating the MCD into their existing database systems, to include other types of information such as upland and watershed concerns.

#### **3.2.2.2 Activities Not Accomplished and Why**

The planned technical assistant for the learning area has not been hired yet due to lack of available personnel. This resulted in delays in completing the Coastal Area Profile. While previously proposed as a CRMP expansion area, the Panglao Island area involving the municipalities of Dauis and Panglao, is considered to have sufficient, CRM actors at present. These include the Bohol Marine Triangle (BMT) Project and two local NGOs working in the area. For this reason, proposed CRMP expansion activities in the area will be through the province, the BEMO and the BMT project when it begins.

Proposed CBRMP-CRMP collaboration in organizing and conducting "next step" write shops was postponed until agreement is reached with the LGA, which is responsible for conducting such training activities under CBRMP.

#### **3.2.2.3 Issues and Lessons Learned**

A provincial-level forum focused on building awareness on illegal fishing should be held, and involve not only implementers but all key stakeholders to best address these issues.

Some 17 LGUs within the province have indicated their intent to apply for CBRMP loans, and this has affected implementation of some CRMP activities.

Through its association with the 1999 Earthwatch Expedition reef surveys, CRMP became involved in Balicasag Island management and the drafting of a MOA among the PCG, LGU and the province. This island highlights the growing sensitivities of the integration of tourism, local communities, and coral reef conservation.

As previously noted, regular meetings are needed with CRMP Components working in Bohol to improve implementation and minimize potential scheduling and resource conflicts.

Due to prioritization and staffing problems within Haribon, the completion of activities specified in their Terms of Reference has fallen behind schedule.

Better integration of work plans and activities is needed with the provincial offices of BFAR and DENR to enhance project implementation, particularly in expansion areas.

### 3.2.3 Malalag Bay

The Malalag Bay Learning Area is composed of the following LGUs: Hagonoy, Malalag Bay, Padada, Santa Maria, and Sulop (20 coastal barangays; 69 km of shoreline). The current expansion area LGUs include Balut and Sarangani Islands, Digos, Don Marcelino, Jose Abad Santos, Malita, and Santa Cruz (estimated 137 km of shoreline).

Table 3-5 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) in the Malalag Bay Learning Area by quarter.

**TABLE 3-5  
MALALAG BAY  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III. Local Implementation in the Malalag Bay Learning Area</b>					
<b>III.A Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>					
	• Monitor, review, and refine ISFI project activities as required	<b>C</b>			
	• Conduct regular conference with local counterparts and CRMP Team	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Malalag Bay Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Recruit Provincial Coordinator for area	O	C		
	• Coordinate with Sarangani Bay Learning Area Coordinator	O	O	O	O
	• Review and refine structure and activities of enterprise in Malalag Bay	C			
<b>III.B</b>	<b>Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning</b>				
	• Edit and correct PCRA maps for digitizing	C			
	• Finalize and publish coastal profile		O	O	O
<b>III.C</b>	<b>Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM</b>				
	• Consultation and agreement of MOA for provincial level	O	C		
	• Organize Provincial CRM Council		O	O	C
	• Conduct ICM planning workshops for barangay and municipal levels	O	O	O	C
	• Strengthen existing FARMCs	O	O	O	O
	• Organize bay-wide integrated FARMC		C		
	• Assist with formation of Environmental Inter-Agency Task Force			O	O
<b>III.D</b>	<b>Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate</b>				
	• Assist MPDOs in drafting and integration of CRM plans to LGU plans	O	O	O	C
	• Assist MPDOs in lobbying for SB approval of CRM plans	O	O	O	O
<b>III.E</b>	<b>Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances</b>				
	• Finalize the unified fishery ordinance for Malalag Bay		O	O	O
	• Conduct orientations on model ordinance to TWG			O	O
<b>III.F</b>	<b>Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries</b>				
	• Assist Hagonoy, Digos, Sta. Maria, and Padada with marine sanctuaries	O	O	O	O
	• Assist in reef baseline assessment and monitoring		O	O	O
	• Assist with drafting of ordinances for sanctuaries				C

**TABLE 3-5 (Continued)**  
**MALALAG BAY**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.G</b>	<b>Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.G</b>	<b>Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				
	• Encourage funding for Bantay Dagat and law enforcement in each LGU	<b>C</b>			
	• Conduct fish warden training for coastal barangays of Sta. Maria		<b>C</b>		
	• Conduct training for Bantay Dagat personnel		<b>O</b>	<b>O</b>	<b>O</b>
<b>III.H</b>	<b>Strengthen Institutions through Training and Information Dissemination</b>				
	• Conduct 1-day seminars on marine ecology for teachers		<b>O</b>	<b>O</b>	<b>C</b>
	• Train key members of new FARMCs through cross-visits		<b>O</b>	<b>C</b>	
	• Identify and train core group on IEC at provincial level	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
	• Set-up CRM Resource Center for area			<b>O</b>	<b>O</b>
	• Train CRM trainers to serve in learning and expansion areas		<b>O</b>	<b>O</b>	<b>C</b>
	• Tap local radio station to promote CRM messages		<b>O</b>	<b>O</b>	<b>O</b>
	• Conduct film showings as appropriate	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
	• Implement program for Month of the Ocean		<b>C</b>		
<b>III.I</b>	<b>Update Performance Monitoring Database on a Regular Basis</b>				
	• Update municipal database and use as educational tool	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>

### 3.2.3.1 Work Plan Accomplishments

Major accomplishments of the Malalag Bay Learning Area during the 4<sup>th</sup> Quarter 1999 include:

- Conducted of first organizational meeting with members of the Provincial CRM Council (PCRMC) to discuss organization functions, accomplishments, directions, issues, and next steps
- Following their participation in a study tour to the Bohol and Olango learning areas, release by the Provincial Government of Davao del Sur of P400,000 as supplemental budget for CRM-related activities, such as IEC, training, mangrove planting, marine sanctuary, and enterprise development
- Facilitated the conduct of the First Provincial Fishery Congress which focused on strengthening enforcement of fisheries laws (During the Congress, 387 recent graduates of the Deputy Fish Warden Training were deputized.)
- Supported integration of barangay CRM plans into the proposed P226.5 Million budget for the Fishery Development Component funding activities under the Davao Integrated Development Program (DIDP), funded by the Overseas Economic Cooperation Fund (OECF)
- Facilitated the conduct of PCRA in the expansion LGU of Don Marcelino

- Participated in various CRM-related activities, including regular coordination meetings with ADB-assisted FRMP activities in Santa Cruz, Davao del Sur, and participation in the multi-sectoral Davao Gulf Summit Meeting

A summary of the major Work Plan accomplishments of the Malalg Bay learning area during 1999 is provided in the following sections.

**Activity No. III.A** (*Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required*): Similar to the Bohol Learning Area, a major accomplishment of the year was the participatory development, review, and finalization of the provincial MOA, which was approved by the Governor and Provincial Council. The MOA establishes the formal framework and commitments for provincial-level CRM leadership and collaboration, including the establishment of the PCRMC, and its roles and responsibilities. The MOA also addresses the planned establishment of the CRM Resource Center, for which an office area at the new Provincial Capitol building has now been committed.

To better meet the increasing demands for CRM technical assistance in the learning area, two additional project staff was recruited (a provincial coordinator to facilitate provincial level-activities and a CRM technical assistant to assist field level activities). The contract and scope of work of CRMP's assisting organization (the Institute for Small Farms and Industries [ISFI]) was reviewed and modified to expand their enterprise development activities and overall level of effort. Coordination activities were strengthened with the nearby Sarangani learning area team to enhance the sharing of resources and experiences between the two respective teams.

In addition to the newly formed PCRMC, project expansion activities were enhanced by establishing close collaboration with the ADB-assisted FRMP, the OECF-assisted DIDP, and DENR CEP sites, through the active support of DENR Region 11.

**Activity No. III.B** (*Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile for Planning*): All PCRA results and resource maps for the learning area were reviewed and finalized with the project partners, including the PPDO and respective Municipal Planning and Development Officers (MPDO). Additional activities included the following:

- Recent conduct of PCRA in the expansion LGU of Don Marcelino
- Various underwater resource assessments
- Generation of a draft municipal water boundary map for the area

Copies of the digitized PCRA maps, underwater resource assessment and related data were distributed to all learning area LGUs and provincial offices to be used as a planning tool. These data have been incorporated into the profile, which is now in the final editing and layout stage of publication.

**Activity No. III.C** (*Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM*): The participatory process of designing and establishing the PCRMC through the provincial MOA played an important role in strengthening the involvement of key stakeholders at the provincial level. In turn, the province and the PCRMC are taking an increasingly active role in continuing these efforts at the municipal level.

Major activities conducted during the year to strengthen stakeholder involvement include:

- Organization of an Integrated Fisheries and Aquatic Resources Management Council (IFARMC) to address inter-LGU issues and CRM concerns for the Malalag Bay area
- Facilitation in the passage of an Executive Order for the creation of a municipal TWG, which has now been adopted by the LGUs of Hagonoy, Sulop, and Santa Maria
- Facilitation of a bay-wide CRM planning workshop involving 60 key participants from all LGUs along Malalag Bay and concerned national and provincial agencies (During this workshop, the summary results of the CRMP-funded impact modelling study [conducted by UP Visayas] on the environmental conditions and carrying capacity for fish pens and cages within Malalag Bay were presented.)

**Activity No. III.D** (*Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal and Learning Area Levels as Appropriate*): A series of barangay-level ICM planning workshops were conducted resulting in the drafting of action plans for 24 coastal barangays, followed by public hearings to facilitate adoption of these plans within each barangay.

In cooperation with DENR Region 11, these barangay ICM plans were subsequently forwarded to the OECF-assisted DIDP for possible funding support. Assistance was concurrently provided to the Barangay FARMCs, Fisheries Technicians, and municipal TWG in consolidating these barangay plans into their Municipal Comprehensive Development Plans for budgetary purposes and as part of a municipal CRM management plan.

**Activity No. III.E** (*Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances*): The draft framework for a unified fisheries ordinance for Malalag Bay was developed as an outcome of the bay-wide workshop and follow-up activities with the Malalag Bay Alliance (MBA). Discussions were also held with the Provincial Council's Committee Chair on Agriculture on the formulation of a unified provincial fishery ordinance by 1<sup>st</sup> Quarter 2000.

**Activity No. III.F** (*Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries*): Technical assistance was provided to the following:

- Padada LGU in delineating their municipal fish sanctuary

- Santa Maria LGU in establishing a 20 ha marine sanctuary and drafting of the approved supporting ordinance (Municipal Ordinance No. 5, Series of 1999)
- Sarangani learning area team in conducting underwater assessments in the municipality of Kiamba, Sarangani Province
- LGU and PO member's participation in training courses on SCUBA diving and marine sanctuary monitoring and evaluation
- Launching of the Hagonoy Municipal Fish Sanctuary, including the installation of marker buoys
- Presentation of the underwater assessment results conducted in Barangay New Argao to the Malita municipal council

**Activity No. III.G** (*Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans*): In partnership with BFAR Region 11, the Regional Fisheries Training Center (RFTC) and the province, assisted in facilitating and conducting various Deputy Fish Warden Training courses. As a result, a total of 667 graduates were deputized as Deputy Fish Wardens within the learning area during 1999.

**Activity No. III.H** (*Strengthen Institutions through Training and Information Dissemination*): In coordination with the Sarangani learning area coordinator, a concept paper on establishing a provincial CRM Resource Center was developed and circulated to various offices at the provincial and regional levels for review comments. The Governor of Davao del Sur has already designated a physical site for the Center within the new Provincial Capitol building, which is in the final stages of construction. Initial discussions were held with the Committee Representative for the Philippines-Australia Cooperation Assistance Program (PACAP) regarding possible cooperation in the setting up the center.

In addition to training and IEC activities reported under the respective component sections, the following major activities were conducted to strengthen local institutions in CRM:

- In coordination with the DENR and the Provincial ENRO, a province wide trainor's training on mangrove plantation, nursery and management was conducted, involving 36 DENR, provincial, LGU, and PO participants. A major output of the training was the participants' identification the Provincial Core Group of Trainors.
- The team organized a 2-day marine ecology seminar for 35 elementary school science teachers from Santa Maria, Malalag, and Sulop. Action plans to include basic marine ecology concepts in their lesson plans were formulated by the participants.
- A 6-day study tour involving the mayor of Hagonoy, municipal council members; fisheries technicians from Padada and Malalag; and representatives from the Offices of PPDO, ENRO, DENR and Provincial Council was conducted at the CRMP Cebu Office, Bohol and Olango Learning Aras.

**Activity No. III.I** (*Update Performance Monitoring Database on a Regular Basis*): The MCD currently includes updated data for all learning area and potential expansion area LGUs within the province of Davao del Sur.

### **3.2.3.2 Activities Not Accomplished and Why**

The finalization of the unified fishery ordinance for Malalag Bay has been delayed. PCRMC has been given the provincial lead in facilitating development and adoption of such inter-LGU ordinances. Hence a new but critical role of the PCRMC had led to some delays in the finalization of certain ordinances.

Setting up the CRM Resource Center for the area has also been delayed. The area designated by the Governor for the Center is within the new Provincial Capitol building, which is in the final stages of construction

### **3.2.3.3 Issues and Lessons Learned**

The study tour to the Bohol and Olango learning areas proved to be an effective tool for enhancing the understanding and appreciation on CRM by key stakeholders. Although it hampered some activities, the experience and commitments expressed by the key players were worthy and inspiring.

IEC activities should be deliberate, purposive and regular to best generate local support for CRM activities within and beyond the project. In the process, identify and mobilize as many CRM partners and advocates as possible. Although there is no fixed way of enjoining activity support and involvement, such efforts have to be well orchestrated and timed.

The private sector is an important stakeholder and a potentially key partner to mobilize. For example, in establishing the Hagonoy Pilot Community-based Mangrove Management Project, concerned banana plantation operators and fishpond operators showed a committed interest in pursuing the project.

### **3.2.4 Negros Oriental**

The Negros Oriental Learning Area is composed of the following nine LGUs: Amlan, Bacong, Bais City, Dauin, Dumaguete City, Manjuyod, San Jose, Sibulan, and Tanjay (72 coastal barangays; 111 km of shoreline). The currently proposed expansion LGUs include Ayungon, Bayawan, Bindoy, Guihulngan, La Libertad, Santa Catalina, Siaton and Zamboanguita (estimated 195 km of shoreline).

Table 3-6 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (**C** = completed activities; **O** = ongoing activities) in the Negros Oriental Learning Area by quarter.

**TABLE 3-6**  
**NEGROS ORIENTAL**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Negros Oriental Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Strategic review and planning workshop	C			
	• Monitor, review, and refine Ting Matiao project as required	C	C	O	C
	• Regular quarterly advisory council meeting	C	C	C	C
<b>III.B</b>	<b>Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning</b>				
	• Digitize municipal resource base maps	C			
	• Integrate all PCRA results into coastal profile	C			
	• Finalize and publish coastal profile		O	O	C
	• Update municipal database and complete profile for San Jose	O	O	O	C
	• Facilitate water quality sampling in bay areas		O	O	C
<b>III.C</b>	<b>Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM</b>				
	• Approval of MOA for provincial coordination	O	O	O	O
	• Fisheries code orientation for all existing organizations			O	C
	• Regular quarterly meeting of PCRMC	O	O	O	O
	• Facilitate coastal clean-up			C	
	• Follow up PAMB policy regarding Apo Island management	O	C		
	• Support selected FARMC formation in learning area	O	O	O	C
<b>III.D</b>	<b>Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate</b>				
	• Adoption of 18 barangay ICM plans by barangay councils	C			
	• Endorsement and adoption of barangay ICM plans by MDCs		O	O	O
	• Assist with municipal CRM plans and ordinances	O	O	O	O
<b>III.E</b>	<b>Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances</b>				
	• Conduct consultative workshop on model fishery ordinance	C			
	• Test model ordinance in selected LGUs		O	O	O
	• Draft ICM ordinance for adoption in province			O	O
<b>III.F</b>	<b>Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries</b>				
	• Conduct regular monitoring on selected marine reserves	O	O	O	O
	• Support existing marine sanctuaries in selected municipalities	O	O	O	O

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Negros Oriental Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Assist in facilitating participatory reef monitoring	O	O	O	C
	• Draft management plans for marine sanctuaries		O	O	O

**TABLE 3-6 (Continued)**  
**NEGROS ORIENTAL**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.G</b>	<b>Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				
	• Fisheries orientation to local officials and law enforcement agencies	O	C		
	• Assist in the conduct of deputation for Bantay Dagat			O	C
	• Test LEAP enforcement manual7	O	O	O	C
<b>III.H</b>	<b>Strengthen Institutions through Training and Information Dissemination</b>				
	• Involve CVRC School of Fisheries in the ICM training course		C		
	• Facilitate radio program series on CRM during month of the ocean		C		
	• Organize, train, and mobilize IEC core group in province	O	C		
	• Establish provincial CRM resource center		O	O	O
	• Train trainors for mangrove management and CBFMAs		O	O	C
	• Complete article for Tambuli publication	C			
<b>III.I</b>	<b>Update Performance Monitoring Database on a Regular Basis</b>				
	• Update municipal database and present to PCRMC	O	O	O	O

#### 3.2.4.1 Work Plan Accomplishments

Major Work Plan accomplishments of the Negros Oriental learning area during the 4th Quarter 1999 include:

- Provided technical guidance to the organized TWGs of Amlan, Bacong, Manjuyod, and Tanjay in preparing their respective municipal CRM plans, with 2-day CRM planning workshops also conducted in Amlan and San Jose
- Supported bi-monthly meetings of the TWG on pollution of the Dumaguete coastal waters to develop their 2-year work plan and research design on data gathering, analysis, and interpretation
- In association with the project advisory council, presented a concept paper on establishing the provincial CRM Resource Center to the Governor (The Governor

approved the council's proposal to place the center at the 2<sup>nd</sup> floor of the Provincial Agriculturist's Office and to assign staff from the province, with BFAR and CRMP to initially run the center.)

- In a related activity, facilitated the site visit of a senior PACAP representative regarding possible cooperation in setting up the center.
- Conducted the First FARMC Provincial Congress involving 100 participants from 21 coastal LGUs of the province. Major output of the congress was a finalized 2000 Work Plan for each city or municipal FARMC.
- Provided a technical presentation to the Manjuyod municipal council on the potential issues and opportunities regarding the construction and operation of fish cages in Barangay Campuyo (Silliman University Marine Laboratory [SUMML] also presented an initial result of the carrying capacity study conducted in Siit Bay [Siaton]. As a result of the meeting, a resolution was passed to defer a previously approved resolution allowing the construction and operation of fish cages in the area.)
- Facilitated the conduct of trainor's training on mangrove rehabilitation and management for 32 participants
- Conducted participatory monitoring and evaluation of the Tandayag (Amlan) marine reserve (Some 25 fisherfolk participants were trained on CRMP's participatory reef monitoring methods, and a management plan for the marine reserve was formulated during the skills training.)
- Together with SUMML, conducted two Bantay Dagat orientation and deputation seminars, resulting in the deputization of 112 participants

A summary of the major Work Plan accomplishments of the Negros Oriental learning area during 1999 is provided in the following sections.

**Activity No. III.A** (*Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required*): The proposed MOA for provincial coordination was given to the Provincial Council; however, the council did not give the Governor authority to sign the MOA for a number of possibly political reasons. In the absence of this MOA, strong partnerships continued to be maintained with the Environment and Natural Resources Management Division (ENRMD) under the Office of the Governor and the multi-sectoral Project Advisory Council.

Regular meetings, planning sessions, and other forms of coordinating activities were held with all project partners and key stakeholders throughout the year to fully mobilize the project and maximize available resources.

**Activity No. III.B** (*Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile information for Planning*): All PCRA baseline assessments have been completed, resource maps digitized and validated, with copies provided to partner LGUs

and agencies. These data have been incorporated into the profile, which is now in the final editing and lay-out stage of publication.

In addition to PCRA, a mangrove profile was completed for the coastal areas of Amlan, Manjuyod, and Tanjay, water quality studies have been supported in Bais and Siit Bays, and underwater assessments and community-based monitoring have been conducted for various reef areas and marine sanctuaries in the learning area.

**Activity No. III.C** (*Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM*): The team provided technical support and guidance to municipal FARMCs, which have been organized and are active in all learning area LGUs. Major concerns addressed during FARMCs meetings include institutional strengthening of the councils, registration of municipal fisherfolks, formulation of municipal fishery ordinances, coastal law enforcement, and the deputation of Bantay Dagat members. Assistance was provided to initiate a provincial association or congress of municipal FARMCs to further strengthen these organizations on a provincial level.

**Activity No. III.D** (*Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate*): Supported by a number of project-sponsored training activities and workshops, municipal CRM plans are now in an advanced stage of preparation by multi-sectoral TWGs that have been organized in Amlan, Bacong, Manjuyod and Tanjay, while similar CRM plans have been drafted for Bais and San Jose.

**Activity No. III.F** (*Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries*): The team contributed to the resolution of the jurisdictional conflict between the Dauin LGU and the Protected Area Management Board (PAMB) established for the Apo Island Marine Sanctuary, which is included under the National Integrated Protected Area System (NIPAS). As approved by the PAMB, Resolution No. 1, Series of 1999 serves to regulate and prescribe fees for access to and use of resources in Apo Island.

A poster board was prepared for Apo Island showing pictures and description of the activities during the participatory monitoring training of its marine sanctuary conducted in conjunction with the underwater assessment performed by volunteer divers for the 3<sup>rd</sup> global ReefCheck program.

The team supported approval of Sibulan Municipal Ordinance No. 10 creating a 6 ha marine sanctuary in Barangay Agan-an, the second sanctuary established in Sibulan with CRMP assistance to date. For the third year, community-based monitoring of the Cangmating (Sibulan) marine sanctuary continued in partnership with DENR, ENRMD, Ting Matiao Foundation (TMF), and the University of the Philippines-Marine Science Institute (UP-MSI).

Community-based monitoring and evaluation was also conducted for the Tandayag (Amlan) marine reserve, involving some 25 fisherfolk participants who were trained on participatory

reef monitoring methods developed by CRMP. A draft management plan for the marine reserve was formulated during the skills training.

**Activity No. III.G** (*Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans*): The team continued to use local mass media, such as popular weekly radio programs, and conduct technical workshops, and trainings to strengthen current understanding and enforcement of coastal laws. In association with SUML and other project partners, a series of Bantay Dagat orientation and deputation seminars were held throughout the year, leading to the deputization of over 162 new Bantay Dagat members throughout the learning area.

**Activity No. III.H** (*Strengthen Institutions Through Training and Information Dissemination*): Major activities conducted during the year include co-sponsoring a CRM radio series as part of the popular “Bantay Kinaiyahan” program. Topics discussed during the radio program focused on coastal concerns and activities undertaken by CRMP and project partners (LGUs, DENR, and LEAP). In association with PIA and SUML, a region-wide seminar workshop on “Information Officers as Environment Advocates with emphasis on CRM” was also conducted for over 70 participants from the Regional Association of Development Information Officers, Region 7 (RADIO-7).

A proposed location for the provincial CRM Resource Center has been identified by the Governor, but this activity is awaiting approval of the proposed provincial MOA.

**Activity No. III.I** (*Update Performance Monitoring Database on a Regular Basis*): The MCD was regularly updated and utilized for planning activities within the learning area. At present, the MCD contains current data on all learning area LGUs and 3 expansion LGUs within the province.

#### **3.2.4.2 Activities Not Accomplished and Why**

The proposed MOA for provincial coordination was apparently not signed because the Provincial Council of Negros Oriental in its Resolution No. 577 did not give authority to the Governor to sign the MOA. The reason given was that the council, in its letter dated August 12, 1999, asked the Governor to streamline the personnel of the Environment and Natural Resources Division (ENRMD) of the Office of the Governor, and pending the action of the Governor on this matter, the council could not allow him to sign the MOA. “Streamline” could possibly mean two things: changing the leadership and personnel of the ENRMD who can be controlled by the council; and changing the name, structure, and direction of the ENRMD to fit the personal motivation of the council whose majority members belong to the opposition party.

#### **3.2.4.3 Issues and Lessons Learned**

While there is clearly an increase in the awareness on fishery laws among coastal communities, especially among Bantay Dagat members, recent incidents tend to show the lack of knowledge on the procedural aspects of apprehension and the gathering and preservation of pieces of evidence in fishery law violations among law enforcers.

There has been an increase in CRM-related activities in the LGUs that were initiated by their respective FARMCs. Conducting a province-wide FARMC Congress is recommended to maximize the sharing of initiatives as well as lessons learned from these experiences.

The participatory CRM planning process has received strong social acceptance from the LGUs and the coastal communities. The process provides an avenue for the community to participate in the management and development of their resources.

The conduct of participatory monitoring and evaluation of marine sanctuaries proved very encouraging and rewarding for the local fishers as they discover the increasing biodiversity and improving coastal habitats of their protected area. As a result, the experience significantly renewed community's commitment to manage and protect the area.

There is a growing misconception of the significance of the Environmental Impact Assessment (EIA) System. More often than not, it is seen as a mere requirement for development projects and not as a management tool that can assist both government and project proponent in the implementation as well as monitoring and evaluation of the project in a manner that is least detrimental to the environment.

### 3.2.5 Olango Island

The Olango Island learning area is composed of the following LGUs: Cordova and Lapulapu City (11 coastal barangays of Olango Island; 61 km of shoreline). Proposed expansion activities may include the nearby barangays along the eastern coastline of Mactan Island, located within both Lapu-lapu City and the Cordova municipality. In addition, the following LGUs in Cebu province are proposed as potential expansion areas: Alcantara, Alcoy, Alegria, Argao, Badian, Bogu, Consolacion, Liloan, Malabuyoc, Moalboal, Ronda, Sibonga, Tabuelan, and Talisay (estimated 201 km of shoreline).

Table 3-7 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (**C** = completed activities; **O** = ongoing activities) in the Olango Island learning area by quarter.

**TABLE 3-7  
OLANGO ISLAND  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Olango Island Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Present and validate 1999 work plan with LGU and partners	<b>C</b>			
	• Review and refine MOA with Lapu-lapu and Cordova	<b>O</b>	<b>O</b>	<b>C</b>	
	• Recruit staff (community organizer, enterprise project officer)	<b>O</b>	<b>O</b>	<b>C</b>	
	• Review roles and responsibilities of all partners	<b>C</b>			

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Olango Island Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
<b>III.B</b>	<b>Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning</b>				
	• Review PCRA inputs to coastal profile with USC	C			
	• Complete edits on coastal profile with USC	C			
	• Publish and distribute coastal profile for learning area		O	O	O
<b>III.C</b>	<b>Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM</b>				
	• Form island-wide management board through a MOA		O	O	C

**TABLE 3-7 (Continued)**  
**OLANGO ISLAND**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
	• Facilitate meeting and education of island-wide management council			O	C
	• Strengthen PAMB for Olango Island Wildlife Sanctuary	O	O	O	
	• Support inter-agency task force on environment	O		O	O
<b>III.D</b>	<b>Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate</b>				
	• Follow PCRA with barangay level CRM planning meetings	O		O	C
	• Develop barangay plan for Gilutongan	O	O	O	C
	• Draft island-wide CRM plan with inputs from profile and maps			O	C
<b>III.E</b>	<b>Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances</b>				
	• Draft an integrated CRM ordinance for the island and test			O	O
<b>III.F</b>	<b>Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries</b>				
	• Improve management of Gilutongan marine sanctuary through participation	O	O	O	O
	• Plan and validate sanctuaries in Gilutongan, Nalusuan and Caw-oy	O	O	O	O
	• Assist in reef monitoring and feedback information to community	O	O	O	C
<b>III.G</b>	<b>Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				
	• Assess law enforcement needs in island-wide council		O	O	O
	• Train fish wardens (4th batch)		C		
	• Make operational island-wide patrolling under Lapu-lapu and Cordova			O	O
<b>III.H</b>	<b>Strengthen Institutions through Training and Information Dissemination</b>				
	• Establish and make active a CRM resource center for the area	O		O	O

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
	• Conduct various IEC programs in conjunction with IEC	0	0	0	0
<b>III.I</b>	<b>Update Performance Monitoring Database on a Regular Basis</b>				
	• Update database and use as educational tool for island-wide council	0	0	0	0

### 3.2.5.1 Work Plan Accomplishments

Major accomplishments of the Olango learning area during the 4th Quarter 1999 include:

- Completed 2-day ICM planning workshops in all 11 Olango barangays with active participation from DENR, LGUs, and barangays and supported adoption of proposed action plans by the respective barangay councils
- Presented and facilitated the entry of a new partner, Feed the Children (FTC), to the Cordova Municipal Council. (Focusing on health and sanitation in Gilutongan Island, FTC will be implementing a P500,000 grant provided by Friends of Internal Refugees [FIRE]. CRMP will serve as the technical advisor and PO representative.)
- Provided technical inputs to Cordova to assist them to finalize and approve Municipal Ordinance No. 008, Series of 1999, establishing user fees, revenue sharing arrangement between the municipality and barangay, and management structure for the Gilutongan marine sanctuary
- Assisted in conducting the 3<sup>rd</sup> reef monitoring surveys of the sanctuary in partnership with community members, DENR, BFAR, IMA, LGU and UP-MSI, with feedbacking of results to the Cordova mayor and members of the municipal council
- Assisted Lapu-lapu LGU in conducting the second Fish Warden Deputation Training in Olango, resulting in the deputation of 61 new fish wardens on the island
- Assisted DENR and Wetlands International-Australia in conducting a 2-day training for academe and local community members on Shorebird Identification and Counting at the Olango Island Wildlife Sanctuary (OIWS) to improve monitoring of wetlands in the country
- Facilitated various study tours to the learning area, including the visit of the BFAR Director, FRMP Director, and Cordova mayor to Gilutongan Island (Following a community presentation on sanctuary establishment, community-based reef monitoring, seaweed farming, and the eco-tour projects established by the community through the technical assistance of CRMP, BFAR Director Sarmiento committed to provide one patrol boat to support the LGU's commitment to reduce illegal fishing; a warehouse; and possible mechanical drier for seaweed growers.)

A summary of the major Work Plan accomplishments of the Olango Learning Area during 1999 is provided in the following sections.

**Activity No. III.A** (*Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required*): The team supported the organization and activities of key stakeholder groups to further mobilize CRM activities on the different islands, including the following:

- Olango island-wide and Cordova FARMCs
- Multi-sectoral TWG for improving the Gilutongan marine sanctuary
- TWGs for developing ecological destinations (eco-tours) in Barangay Sabang and San Vicente
- Seaweed growers and vendors cooperatives in Gilutongan Island
- Seaweed Consultative Forum
- Women associations in Barangays Gilutongan and Sabang
- Olango youth ecology groups

Partnerships were strengthened with public, private sector, and NGOs through the following activities:

- Close cooperation with the DENR Region 7 Protected Area and Wildlife Bureau (PAWB) and PAMB in support of the 920 ha OIWS, the Philippine's only RAMSAR site (wetlands of international importance)
- Strengthening the role of the private sector, particularly Mactan-based resorts and dive operators, in actively supporting and funding CRM activities such as improvements to the Gilutongan marine sanctuary
- Establishing effective networks and leveraging resources of local NGOs (As further described in the report section on Enterprise Development, an estimated P3.5 million has now been committed by NGOs to assist CRM-related activities on Gilutongan Island.)

**Activity No. III.B** (*Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile for Planning*): Validation of PCRA results and production of digitized resource maps was completed for all barangays within the learning area. These results served as a basis for the recently completed, barangay-level ICM planning workshops, and draft action plans. The PCRA results have now been incorporated into the profile, which is in the final editing and lay-out stage of publication in cooperation with the University of San Carlos-Marine Biology Section (USC-MBS).

In addition, a draft municipal water boundary map was generated for both Lapu-lapu City and the Cordova municipality to assist their CRM planning efforts and coastal law enforcement activities.

**Activity No. III.C** (*Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM*): The involvement of key stakeholders was strengthened through the participatory approaches developed and followed in establishing and activating the various TWGs and CRM organizations in the learning area. These groups played key roles in:

- Developing the management framework for the Gilutongan marine sanctuary (Municipal Ordinances No. 003 and 008, Series of 1999)
- Organizing and conducting barangay-level ICM planning in preparation for island-wide planning in 1<sup>st</sup> Quarter 2000
- IEC collaboration activities ranging from the 13<sup>th</sup> International Coastal Clean-up and Lapu-lapu Clean Coasts Contest to educational “Sea Camps” conducted for island youth
- Assisting the management planning and operations of the OIWS, including development and marketing of the community-based ecological destination (eco-tour) initiative in Sitio Suba, Barangay Sabang

**Activity No. III.D** (*Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate*): Following validation and distribution of the PCRA results, ICM planning workshops were organized and conducted for all 11 Olango barangays.

The active participation of over 85 community members, DENR and LGU officials in these workshops resulted in the preparation of draft ICM plans, which have been submitted to their respective barangay councils for review and adoption. Preparations have now been made for integrating these barangay ICM plans in the form of an island-wide plan, with an island-wide workshop scheduled for 1<sup>st</sup> Quarter 2000.

**Activity No. III.E** (*Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances*): In addition to technical support provided in preparing two municipal ordinances on management of the Gilutongan marine sanctuary, assistance was also provided to:

- Lapu-lapu LGU in planning the formation of City FARMC and the formulation of the basic fishery ordinance
- Barangay Maribago (Lapu-lapu) council in planning a marine sanctuary building upon CRMP’s work at Gilutongan Island
- Cordova municipal FARMC and LGU in preparing and adopting municipal ordinances on closed fishing season (for spawning rabbitfish) and the use of fish aggregating devices (FAD), or “payaos” for traditional hook-and-line community fishing activities

**Activity No. III.F** (*Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries*): Supported by a multi-sectoral TWG, assisted the Cordova LGU to develop and adopt two municipal ordinances for the Gilutongan marine sanctuary that served to:

- Officially establish the sanctuary by municipal ordinance (it had been originally proclaimed by a barangay resolution in 1991)
- Increased its size from the original 10 ha to 15 ha, providing a physical, geographic description of its boundaries
- Include all coastal waters and land areas within 20 meters of the sanctuary as special management, buffer zone (making it one of the few, if not the only, municipal sanctuaries in the Philippines that includes consideration of managing shoreline development)
- Establish user and accreditation fee schedules and municipal or barangay revenue sharing formula
- Identify management structure and organization of the sanctuary

The team provided technical assistance in establishing boat mooring buoys, marker bouys and signboards. Bi-annual, community-based monitoring surveys of the sanctuary continued and indicated general improvement in fish abundance and coral cover over the last year providing valuable feedback and support to community-based management, LGU, and TWG partners.

**Activity No. III.G** (*Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans*): The team assisted the Lapu-lapu LGU to organize and conduct the second Fish Warden Deputation Training in Olango, resulting in the deputation of 61 new fish wardens.

The team further assisted both learning area LGUs by providing needed training and technical support to barangay FARMCs and Bantay Dagat organizations and supporting several seaborne patrols in cooperation with the Cebu City Bantay Dagat Commission, PNP Maritime Command, and Lapu-lapu LGU, and the Philippine Navy in their Adopt-a-Bay Project in Cordova, increasing their level of involvement in coastal law enforcement.

**Activity No. III.H** (*Strengthen Institutions through Training and Information Dissemination*): Various project partners completed the 10-day ICM training course, including regional representatives from DENR, BFAR, DOT, FARMC members, and a leading NGO (Philippine Business for Social Progress, [PBSP]). Additional training courses supported during 1999 focused on coastal law enforcement (Fish Warden and Bantay Dagat training), ICM planning, mangrove management, cooperative organization, business (seaweed and eco-tour) management, marine sanctuary monitoring, solid waste management.

Due to the range of on-going activities and close proximity to Cebu, the Olango Learning Area is increasingly serving as a popular study tour and training site for both national and

international visitors. An estimated 69 participants visited the site in 7 project-assisted study tours during 1999.

### **3.2.5.2 Activities Not Accomplished and Why**

The drafting of an island-wide CRM plan has been postponed to 1<sup>st</sup> Quarter 2000 to allow validation of barangay-level CRM plans, which were only drafted in 4<sup>th</sup> Quarter 1999.

Various alternatives are still being evaluated for locating and organizing a CRM Resource Center to best serve the needs of the learning area, its two LGUs, and potential expansion areas within the province. Discussions were initiated with the Lapu-lapu City Council and planning staff to use an area within the Mini City Hall located in Barangay Talima as a CRM Information Center on Olango Island. In addition, a smaller IEC center is currently proposed to be located on Gilutongan Island to better support the needs of this satellite islet.

### **3.2.5.3 Issues and Lessons Learned**

The involvement of LGUs, DENR, and other stakeholders in the various TWGs and barangay-level CRM planning became the venue of a more collaborative project effort.

Study tours for LGU and other partners to successful CRM sites (such as Cabilao Island, Bohol marine sanctuaries) proved very effective and provided first hand experience and information that could then be applied in planning and implementing CRM best practices. The participatory planning process, such as used for formally establishing the Gilutongan marine sanctuary, also proved effective in that it increased support and commitment from the community, public and private sector over the course of these activities. As a result, it appears that the project has helped to “bridge the gap” between public service providers, the private sector, and others to the island learning area of Olango.

However due to the proximity of the Olango learning area to Cebu and the number of on-going CRM activities there, it is an increasingly common destination for study tours and cross-visits. Unfortunately, too many visitors may also disrupt the learning area’s work program.

### **3.2.6 San Vicente, Palawan**

The Palawan learning area is composed of the municipality of San Vicente (10 coastal barangays; 120 km of shoreline). Current expansion area LGUs include the municipality of Cagayancillo (Tubbataha Reefs), Aborlan, Narra, and Puerto Princesa City (estimated 400 km of shoreline).

Table 3-8 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) in the learning area by quarter.

**TABLE 3-8  
PALAWAN  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Palawan Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Review 1999 work plan with DENR and partners	C			
	• Set up office and use as support base and resource center	C			
	• Orient, train, and set up work program for new TA	O	C		
	• Setup reporting system for CO and TA in San Vicente	C			
	• Secure commitments from LGUs and partners	C			
	• Implement capability building course for LGU (San Vicente)	O	O	O	C
	• Ensure LGU counterpart for marine sanctuary management	O	O	C	

**TABLE 3-8 (Continued)  
PALAWAN  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.B</b>	<b>Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning</b>				
	• Use coastal profile to update municipal CRM and barangay plans	O	O	O	C
	• Complete habitat and fish stock assessment of Port Barton Marine Park	O	C		
	• Update barangay profiles for planning	O	O	O	C
<b>III.C</b>	<b>Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM</b>				
	• Establish and train municipal FARMC in San Vicente	O	O	O	
	• Strengthen Port Barton Marine Park Management Board	O	O	O	O
	• Strengthen relations with PCSDS, RFTC, OPA, and NGOs	C			
<b>III.D</b>	<b>Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate</b>				
	• Develop CRM plan process for barangay CRM plans	O	C	C	
	• Revise and update San Vicente CRM plan through collaboration with the Municipal Council (SB)		O	O	O
	• Refine Port Barton CRM plan	O	O	O	C
	• Work with PCSDS to complete ECAN zonation of San Vicente Bay		O	O	O

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.E Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances</b>					
	• Review existing ordinances on CRM		O	C	
	• Provide orientation on the Fisheries Code			O	C
	• Draft integrated CRM ordinance for San Vicente				O
<b>III.F Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries</b>					
	• Finalize ordinance for Port Barton Marine Park (3 sanctuaries)	O	O	O	O
	• Prepare information on sanctuary status, assessments for planning	C			
	• Finalize management plan for marine park with zones and rules		O	O	C
	• Begin implementation of marine park management		O	O	O
<b>III.G Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>					
	• Encourage San Vicente to maintain bay patrolling	O	O	O	O
	• Identify training and logistical needs for improved law enforcement		O	C	
	• Leverage support for law enforcement needs		O	O	O
<b>III.H Strengthen Institutions through Training and Information Dissemination</b>					
	• Conduct training on marine park management in SB	O	O	C	

**TABLE 3-8 (Continued)  
PALAWAN  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
	• Conduct specialized training for CRM planning and implementation	O	O	O	C
<b>III.I Update Performance Monitoring Database on a Regular Basis</b>					
	• Organize Palawan CRM database and collection system	O	O	O	O
	• Update database and present to San Vicente Municipal Council	C	O	O	C

### 3.2.6.1 Work Plan Accomplishments

Major accomplishments of the Palawan Learning Area during the 4th Quarter 1999 include:

- CRMP, the ADB-assisted FRMP, and the Provincial Government agreed to jointly conduct the Palawan ICM Forum (for mayors). As a parallel activity, each forum will be supported by small ICM planning workshops assisted by the RFTC for the various LGUs of the Forum.
- Brokered the formation of a four-party CRM program for Cagayancillo with Kabang Kalikasan ng Pilipinas (KKP), the Provincial Government, and the Cagayancillo LGU as partners and co-implementers. A 1-day seminar on CRM was conducted for the Cagayancillo Task Force in Puerto Princesa.

- A CRM camp was conducted in Port Barton for 60 youth in cooperation with the Office of the Governor, DECS, Palawan Council Sustainable Development Staff (PCSDS), Haribon, Environmental Legal Assistance Center (ELAC), and the Palawan Conservation Corps (PCC).
- A MOA with Puerto Princesa City providing for cooperation and collaboration between CRMP, FRMP, and UNESCO's CRM initiatives in Ulugan Bay was endorsed for signature by the Mayor.

A summary of the major Work Plan accomplishments of the Palawan Learning Area during 1999 is provided in the following sections.

**Activity No. III.A** (*Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required*): The San Vicente LGU designated three counterpart CRM staff and increased their CRM budget to P350,000. Expansion activities were initiated with the province, Puerto Princesa City, and municipalities of Aborlan, Cagayancillo, and Narra. Collaboration was established or strengthened with the following projects and organizations:

- FRMP: Participated in ICM training and officially adopted the CRMP processes for PCRA, CRM planning, and reef monitoring for their Honda Bay project site (To strengthen project collaboration, both projects have established a common office in Puerto Princesa City. As a major expansion activity in year 2000, FRMP has agreed to jointly sponsor a ICM Forum for all mayors in the province.)
- PCSDS: Province-wide partnership, including marine surveys, planning and reef monitoring of the 6,500 ha Port Barton Marine Park (PBMP)
- KKP: Co-member of the Cagayancillo Task Force involved in planning and management assistance to the Tubbataha National Marine Park, a UNESCO World Heritage Site, and Sulu-Celebes Sea Project activities
- UNESCO: Cooperator in their Ulugan Bay CRM initiatives, including their adoption of the Municipal Coastal Database
- RFTC (Palawan): CRM training partnership

**Activity No. III.B** (*Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile for Planning*): Completed PCRA resource maps were prepared for all coastal barangays and distributed for use in CRM planning activities. Barangay profiles were updated to support preparation of CRM plans, which have been completed.

To date, more than 250 copies of the Coastal Environment Profile for San Vicente, entitled the *Rhythm of the Sea* have been distributed to concerned agencies, organizations, LGUs, and academic institutions, including the State Polytechnic College of Palawan (SPCP) and the Palawan State University.

Extensive resource assessments and monitoring surveys were completed in the PBMP to support preparation of its management plan, which is in the process of being finalized and approved. These reef surveys were conducted in collaboration with University of the Philippines-Marine Science Institute (UP-MSI), PCSDS, U.S. Peace Corps and Volunteer Service Overseas (VSO).

**Activity No. III.C** (*Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM*): In coordination with PCSDS, key LGU, municipal agriculturist office (MAO), and FARMC staff were trained on CRM planning and ecological critical area network (ECAN) zoning guidelines.

Key staff from FRMP, CRMP, RFTC, PCSDS, and Office of the Provincial Agriculturist (OPA) attended the first of a series of CRM re-tooling and capacity strengthening exercises being sponsored by FRMP but involving the use of CRMP materials such as the PCRA Handbook. The same batch of 15 CRM and fisheries personnel attended CRMP's 10-day ICM course.

**Activity No. III.D** (*Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate*): With technical assistance of CRMP staff, the ECAN staff of San Vicente's Municipal Planning and Development Office (MPDO) formulated a draft zonation plan for the coastal waters of the entire learning area (120 km of shoreline). Following technical review by CRMP, the draft plan was forwarded to PCSDs for accreditation.

A total of 12 core zones (sanctuaries) and various other-use zones were delineated in the draft plan. CRMP is now coordinating with the LGU and PCSDS for the preparation of corresponding zone management plans.

**Activity No. III.E** (*Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances*): Existing LGU ordinances on CRM and fisheries management issues were compiled and reviewed in the process of preparing the draft PBMP management plan. As drafted, this plan serves to integrate fishery and CRM concerns within the park boundaries and should serve as an important guide for improved management of the LGU's remaining municipal waters.

Discussions were initiated with FRMP and UNESCO concerning their related activities to develop integrated fishery and CRM ordinances, including registration and regulation of fishermen and fishing boats.

**Activity No. III.F** (*Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries*): The PBMP Council was strengthened through training activities and planning sessions, and through the involvement of the resort and boat owner associations, which CRMP assisted to re-activate and re-organize.

CRMP conducted a series of 9 training sessions for LGU officials of Port Barton and the PBMP Council to hone their management skills for marine park management. The training

activities focused on MPA management, reef surveys, seaweed enterprise, resource rents, fisheries management, buoy placement, and zoning. Through collective community effort, buoy anchor fabrication and placement was done.

In cooperation with PCSDS, DENR, Peace Corps and VSO, underwater resource assessments were completed for the 6,500 ha PBMP with the following areas initially identified: three core sanctuaries (about 150 ha); seaweed farming zone (about 25 ha); pearl farms (about 1,500 ha); four SCUBA diving sites; and one mangrove river park.

Community proposals for establishing nine more marine protected areas were received during the barangay CRM planning workshops; preparatory plans have been mapped out for rapid resource assessment.

**Activity No. III.G** (*Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans*): CRMP facilitated the conduct of refresher courses on fisheries law enforcement for Bantay Dagat members by the RFTC. Coastal law enforcement activities were sustained by the LGU throughout the year, particularly within the marine park area. The project assisted in securing a new patrol boat from the PCSDS.

**Activity No. III.H** (*Strengthen Institutions through Training and information Dissemination*): CRMP's second 10-day ICM course in Palawan was conducted, involving six FRMP staff and representatives from five Palawan LGUs. Following their training, FRMP staff applied their new skills in the conduct of CRM planning sessions in Honda Bay. Over the course of the year, CRMP provided training support and technical assistance to eight ICM-related training courses conducted in the learning area as well as in Narra and Puerto Princesa City. CRMP also conducted an environmental education workshop for teachers. In cooperation with assigned Peace Corps volunteers and the LGU, CRM information sheds and community bulletin boards were established in key coastal locations along the PBMP.

**Activity No. III.I** (*Update Performance Monitoring Database on a Regular Basis*): MCD information was regularly updated, and the exchange of data with other institutions was strengthened. Copies of the original MCD CD-ROM were provided to the FRMP and UNESCO teams as part of the beta-testing process, and revised copies have been provided for their project use.

### **3.2.6.2 Activities Not Accomplished and Why**

The following planned activities were not accomplished:

- The planned cross visit activity was again postponed due to heavy workload.
- The team was unable to implement IEC activities for CRM in St. Paul's Park pending signing of the MOA between Puerto Princesa City and DENR.
- Conduct of the Palawan ICM Forum was postponed to the 1<sup>st</sup> Quarter of 2000 to give more time for planning and design.

- Technical assistance to strengthen the San Vicente Bantay Dagat will be undertaken next year.
- Formulation of an Integrated Fisheries Ordinance was postponed to year 2000 when ECAN zoning is approved by the PCSDS.

### 3.2.6.3 Issues and Lessons Learned

CRMP's CRM program in Port Barton and San Vicente is gradually being recognized as the "model" for similar CRM efforts elsewhere in Palawan. The same tools and approaches will be used in Honda Bay and Puerto Princesa Bay. NGOs and schools are also utilizing CRMP's tools. Because of the increasing confidence placed on the successful lessons generated in San Vicente (especially in Port Barton), there are high expectations about the impacts of CRM in the learning area.

### 3.2.7 Sarangani Bay

The Sarangani Bay Learning Area is composed of the following LGUs: Alabel, General Santos City, Glan, Kiamba, Maasim, Maitum and Malapatan (67 coastal barangays; 231 km of shoreline). Potential expansion areas may include the municipalities of Lebak, Kalamansig, and Palimbang within the province of Sultan Kudarat.

Table 3-9 provide a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) in the Sarangani Bay learning area by quarter.

**TABLE 3-9  
SARANGANI BAY  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Sarangani Bay Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
•	Recruit one new community organizer to assist	C			
•	Validate 1999 work plan with DENR and other partners	C			
•	Develop MOA with MSU to provide services to CRM efforts	O	O	O	O
<b>III.B</b>	<b>Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning</b>				
•	Finalize and publish coastal profile	O	O	O	C
•	Assist LGUs to write municipal profiles with PCRA maps		O	O	O
<b>III.C</b>	<b>Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM</b>				
•	Support Sarangani Bay PAMB and assist to activate	O	O	O	C

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.</b>	<b>Local Implementation in the Sarangani Bay Learning Area</b>				
<b>III.A</b>	<b>Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required</b>				
	• Form and strengthen municipal FARMCs in learning area	O	C		
<b>III.D</b>	<b>Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate</b>				
	• Follow PCRA with barangay and municipal CRM planning workshops	O	O	O	C
	• Assist MPDOs, fishery technicians, and technical working groups		O	O	O
	• Consolidate barangay CRM plans into municipal CRM plan			O	C
	• Develop CRM plan for bay through PAMB	O	O	O	O
	• Assist General Santos City FARMC with PCRA and CRM planning in 9 barangays	O	O	O	C
<b>III.E</b>	<b>Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances</b>				
	• Hold seminar-workshop on fisheries code	O	C		
	• Hold workshop to develop unified fishery ordinance for Bay		O	O	O
	• Adopt a unified management ordinance based on PAMB plan for bay			O	O
<b>III.F</b>	<b>Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries</b>				
	• Improve sanctuary management in Glan and Alabel	O	O	O	O
	• Establish sanctuaries in General Santos City, Kiamba, Maitum, Maasim, and Malapatan	O	O	O	O
	• Develop MOA with MSU on monitoring and use of scuba gear	O			
	• Assist in reef monitoring	O	O	O	O

**TABLE 3-9 (Continued)**  
**SARANGANI BAY**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>III.G</b>	<b>Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				
	• Organize municipal Bantay Dagat organizations	O	C		
	• Develop bay-wide Bantay Dagat plan	O	O	O	O
<b>III.H</b>	<b>Strengthen Institutions through Training and Information Dissemination</b>				
	• Conduct leadership training for FARMC and provincial personnel			O	O
	• Develop IEC core group to initiate activities in local areas		C		
	• Make CRM resource center functional in General Santos (MSU)	O	O	O	O
	• Conduct training on mangrove management	O	O	C	
	• Train barangay-based fishers in fish monitoring for sanctuaries		O	O	O
<b>III.I</b>	<b>Update Performance Monitoring Database on a Regular Basis</b>				

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
III.G	<b>Assist Municipalities, Barangays, and POs to Improve Law Enforcement to Support Ordinances and CRM Plans</b>				
	• Update database and use as baseline for bay plan	C		C	

### 3.2.7.1 Work Plan Accomplishments

Major accomplishments of the Sarangani learning area during the 4<sup>th</sup> Quarter 1999 include:

- In coordination with the Provincial CRMP Director, reviewed the draft unified fishery ordinance sent by BFAR Central Office and scheduled a 2-day workshop with fisheries technicians and other partners for the unification of all existing fishery ordinances of Sarangani Province and General Santos City on a bay-wide level
- Validated PCRA resource maps, draft municipal water boundaries, report on habitat areas generated and incorporated into the profile
- Assisted BFAR, RFTC Panabo, LGUs, and DENR to train 351 fisherfolk-FARMC members and LGU representatives on deputation of fish wardens and fishery law enforcement system
- Strengthened linkages with the Business Resource Center (BRC) of the local University of Notre Dame's community extension service, by endorsing to them CRMP beneficiaries needing capability building to manage livelihood projects
- Participated in a project coordination meeting held between IMA and CRMP in Davao City
- Facilitated dialogue between a USAID team from Washington D.C. and fisherfolk community of Sitio Kapatan, Kabug, Glan; facilitated study visit of USAID personnel to evaluate level of synergy among CRMP, GOLD, and GEM projects, all USAID funded

A summary of the major Work Plan accomplishments of the Sarangani Learning Area during 1999 is provided in the following sections.

**Activity No. III.A** (*Mobilize Project, Identify Partners and Roles, and Recruit Assistance as Required*): In collaboration with project partners, a provincial MOA was drafted and circulated to concerned parties for review. Review comments from DENR, the province, and other LGUs have been incorporated into the final draft of the MOA, which is now being discussed. During the transition period in key staff, the team provided support to the CRMP Malalag Bay Learning Area as required to ensure sustainable collaboration of the various stakeholders, LGU partners, and other key players in the province.

**Activity No. III.B** (*Complete Baseline Assessment, Maps, Coastal Area Profiles and Utilize PCRA and Profile Information for Planning*): All PCRA maps, LGU partners' comments on

the Sarangani Bay Profile, and other essential documents of the seven learning area LGUs were completed and submitted for finalization, printing and publication.

**Activity No. III.C** (*Strengthen the Involvement of LGUs, DENR, BFAR, Local Organizations (Bantay Dagat, FARMCs, PAMBs, and Provincial Councils) and Other Key Stakeholders in CRM*): In addition to the bay-wide Inter-Agency Task Force on Coastal Environmental Protection (IATFCEP), a total of seven LGU FARMCs, including General Santos City, were organized and fully activated during the year. Concurrently, 59 out of the 66 coastal barangays of Sarangani Bay were likewise organized into barangay FARMCs.

**Activity No. III.D** (*Assist Community and LGU Participation in CRM Planning and Completion of Plans for Barangay, Municipal, and Learning Area Levels as Appropriate*): In collaboration with the PPDO, ENRAP, OPAG, City Development Planning Office, and the PMU-ADPO, the team assisted in formulating an integrative workshop framework for the management of Sarangani Bay and SOCSKSARGEN's coastal resources. The team also supported the incorporation of 66 barangay plans into respective municipal CRM plans via the concerned FARMCs. This effort was made possible by the strong counterpart support of LGUs, DENR, and NGOs (Tambuyog and Bgkis Lakas). All seven LGU-drafted CRM action plans were finalized and submitted to their respective LGU councils for approval and funding.

**Activity No. III.E** (*Assist LGUs to Prepare and Implement Integrated Fishery and CRM Ordinances*): In coordination with the Provincial CRMP Director, the team reviewed the draft unified fishery ordinance sent by BFAR Manila office and conducted a 2-day workshop with fisheries technicians and other partners for the unification of all existing fishery ordinances of Sarangani Province and General Santos City on a bay-wide level.

In coordination with DENR, BFAR, and LGUs, some 676 participants were trained on the new Fisheries Code (RA 8550), sustainable fisheries, and CRM during 1999.

**Activity No. III.F** (*Assist LGUs to Plan, Establish, and Implement Effective Marine Sanctuaries*): Underwater resource assessments were jointly undertaken by CRMP, Tambuyog, and LGUs in the following barangays: Manguling (Maitum); Tinoto (Maasim); Siguel (General Santos City); Poblacion (Malapatan); Taluya, Katubao, Kiamba and Gumasa (Glan). Annual monitoring surveys were also established for the Tuka Reef (Kiamba) marine sanctuary.

**Activity No. III.H** (*Strengthen Institutions through Training and Information Dissemination*): The proposed design and location of the CRM Resource Center was forwarded to the provincial CRM office. The project assisted the City Agriculture and City ENRO Offices conduct IEC through lectures and public fora, film showings, and distribution of project publications.

**Activity No. III.I** (*Update Performance Monitoring Database on a Regular Basis*): The MCD was completed, updated, and fed back to the seven coastal LGUs of Sarangani Bay.

### **3.2.7.2 Activities Not Accomplished and Why**

The planned formulation and adoption of bay-wide management plan continued to be postponed because of lack of preparation, including that of the PAMB. As a result, the completion of various other bay-wide plans, such as the bay-wide Bantay Dagat plan, were also postponed.

The proposed MOA with the Mindanao State University (MSU) on reef monitoring and use of the project's SCUBA equipment was deferred to the DENR as the implementing agency. The proposed location and organization of the CRM Resource Center is still undergoing further review to best meet the IEC needs of the area.

### **3.2.7.3 Issues and Lessons Learned**

The security of tenure for fisherfolk residing along the coastal stretch of Sarangani Bay remains a critical CRM issue. To help resolve such issues, LGUs together with DENR have to zonify their respective coastal zones.

Discarding of fish fry other than bangus (milkfish) along the beach, which is a common activity, accelerates depletion of fishery resources. To address this, a community-based IEC must be in place

Legal and jurisdictional issues include overlapping of functions of different agencies and no clear municipal water boundaries between coastal LGUs also remains an issue. As one result, law enforcement remains too weak, and a low CRM priority of LGUs.

In the process of updating the Municipal Coastal Database, it was learned that the BFAR Central Office is likewise developing a database on fisheries, and has sent these out to LGUs with the request to complete the needed data forms. Such related but independent fisheries data collection activities may create confusion in the respective LGUs and there is a need for CRMP to coordinate with such efforts.

### **3.2.8 Enterprise Component**

The Enterprise Component is working in all six learning areas to develop economic alternatives for coastal community residents who are primarily dependent on coastal resources for their means of subsistence. The Enterprise Component seeks to establish environment-friendly economic alternatives that are fully integrated within a CRM process.

The Enterprise Component is focused on developing limited environment-friendly enterprises involving seaweed farming, other forms of mariculture, and ecotourism as best CRM practices. This component is promoting sustainability by leveraging support for enterprise and assisting CRMP counterparts to guide enterprise development. The Enterprise Component's activities are conducted through and in close coordination with each learning area.

Table 3-10 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) of the Enterprise Component by quarter.

**TABLE 3-10  
ENTERPRISE COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>IV. Enterprise Component</b>					
<b>IV.A Leverage Resources to Support Development and Implementation of CRM Enterprises in Learning Areas</b>					
1.	Identify partnerships with private and public institutions and projects	O	O	C	
2.	Promote CRMP enterprise program and models to various stakeholders for support and adoption through networking and site visits	O	O	O	C
3.	Package proposals and form MOAs with implementing partners	O	O	O	C
4.	Facilitate entry and integration of partner projects in learning areas		O	O	C
<b>Activity by learning areas:</b>					
	BOHOL: Develop MOA with (provincial and municipal) LGUs to support projects		O	O	C
	NEGROS ORIENTAL: Develop MOA with Siaton to formalize LGU pledge to allocate funds		O	O	C
<b>OLANGO ISLAND</b>					
	• Promote tourism linkages between Olango Island and Bohol	O	O	O	C
	• Identify support mechanisms for tourism through DOT and private sector	O	O	O	C
	PALAWAN: Ensure BFAR support to Port Barton broodstock cage project		O	O	O

**TABLE 3-10 (Continued)  
ENTERPRISE COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>IV.B Assist Local CRM Partners to Implement and Sustain CRM Enterprise Projects</b>					
1.	Identify and work jointly with persons and offices (LGU, NGA) to implement joint projects with CRMP and take over support and guidance	O	O	O	C
2.	Develop, package, and disseminate resource materials and information on enterprise projects	O	O	O	C
3.	Develop and package a CRM enterprise training module for		O	O	C

ICM				
4. Arrange cross-site visits and experiential learning opportunities	O	O	O	C
5. Introduce enterprise projects to key stakeholders, identify roles, and provide timely information	O	O	O	C
6. Assist stakeholders to secure permits, licenses, tenurial rights and to integrate CRM enterprises into local resource use and zoning plans	O	O	O	C
<b>IV.C Assist the Implementation of Seaweed Farms Through Technical Guidance, Training, Marketing, Financing, Linkages and Stakeholder Management</b>				
<b>BOHOL</b>				
• Establish 30 household-based seaweed farms at Panggangan Island	O	O	O	O
• Monitor and provide technical assistance to partners at Mantatao and Batasan Islands as required	O	O	O	C
<b>NEGROS ORIENTAL</b>				
• Support seaweed farming of <i>E. cottonii</i> in Bais Bay for 56 families	O	O	O	O
• Establish seaweed farming operation at Siit Bay, Siaton with 50 farmers	O	O	O	O
<b>OLANGO ISLAND</b>				
• Plan and support another 20 farmers at San Vicente and Pangan-an	O	O	O	O
• Assist 30 installed farms to achieve sustainability with SCF	O	O	O	O
• Facilitate loans, permits, and technical training for new farmers	O	O	O	O
<b>PALAWAN</b>				
• Establish seaweed farming in Port Barton with 50 farmers	O	O	O	O
• Leverage funds for commercial scale production and marketing		O	O	O

**TABLE 3-10 (Continued)**  
**ENTERPRISE COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>IV.D Assist Implementation of Other Mariculture and Fish Processing Ventures Through Technical Guidance, Training, Marketing, Financing, Linkages, and Stakeholder Management</b>					
<b>BOHOL</b>					
	• Establish 20 household-based production of oyster and mudcrab at Buenavista and Inabanga	O	O	C	
	• Extend production assistance to NGO and LGU CRM				

partners engaged in mariculture projects at Calape and Clarin	O	O	C	
<b>NEGROS ORIENTAL</b>				
• Complete trials for mud crab culture, grouper fish farming, abalone culture and rabbitfish farming	O	O	O	C
• Based on LA team's outcome of trials establish mariculture demo-enterprises		O	O	O
• Assist women's group in Bais with village-level fish processing			O	O
<b>OLANGO ISLAND: Continue with seaweed farming activities</b>	O	O	O	C
<b>PALAWAN</b>				
• Complete trials for selected species	O	O	O	C
• Based on result of completed trials, establish enterprises by a core group of farmers		O	O	C
• Establish fish cage facilities for grouper and rabbitfish	O	O	O	C
• Initiate establishment of credit windows for 3 women's organizations	C			
• Assist Panindigan Women's Association to develop fish processing	O	O	O	C
<b>IV.E Assist in the Implementation of Ecotourism Projects Through Planning, Product Development, Training, Marketing, Financial Linkages, and Stakeholder Management</b>				
<b>BOHOL</b>				
• Support ecotourism ventures in Banacon, Handayan Island, Cambuhat river and village, and Cabilao-Sandingan Marine Reserve	O	O	O	O
• Develop fee structures for visitation with LGU		O	O	O
<b>NEGROS ORIENTAL</b>				
• Assist to set-up a souvenir shop in Bais Bay for all local products			O	O
• Conduct training on community level ecotourism for key personnel		O	C	
• Work to regularize fee ordinance tourist management on Apo Island	O	O	O	C

**TABLE 3-10 (Continued)  
ENTERPRISE COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
•	Increase number of beneficiaries for women's clothing venture in Bais		O	O	O
•	Support ecotourism for dolphin watching and others in Bais Bay			O	O
•	Work with Negros Oriental resorts to support scuba diving conservation			O	O
<b>OLANGO ISLAND</b>					

<ul style="list-style-type: none"> <li>Assist Olango Island tour to become sustainable and develop ancillary services such as crafts, bed and breakfast, and recreation</li> </ul>	O	O	O	C
<ul style="list-style-type: none"> <li>Establish the Gilutongan community-based tourism enterprise and fee collection system</li> </ul>	O	O	O	C
<ul style="list-style-type: none"> <li>Facilitate collaborative planning and conduct skills training in ecotourism for key stakeholders</li> </ul>	O	O	O	O
<b>PALAWAN</b>				
<ul style="list-style-type: none"> <li>Promote visitation to marine sanctuary in Port Barton with user fees</li> </ul>	O	O	O	O
<ul style="list-style-type: none"> <li>Develop attractions in Port Barton area as a package for tourists</li> </ul>	O	O	O	O
<ul style="list-style-type: none"> <li>Initiate eco-tour guide training program for Port Barton youth</li> </ul>			O	O
<b>SARANGANI BAY</b>				
<ul style="list-style-type: none"> <li>Encourage diving tourism to new sanctuaries</li> </ul>	O	O	O	O
<ul style="list-style-type: none"> <li>Use underwater photos and video to attract divers</li> </ul>	O	O	O	O
<ul style="list-style-type: none"> <li>Develop a plan for ecotourism at Glan, Malapatan, and Kiamba</li> </ul>	O	O	O	O
<ul style="list-style-type: none"> <li>Develop marine park plans and user fee arrangements</li> </ul>			O	O
<ul style="list-style-type: none"> <li>Conduct one cross-visit to a well managed marine reserve</li> </ul>			O	O
<b>IV.F Implement Strategies for Integrating Enterprise to Achieve Best CRM Practices through Financial Incentives, Fees and Permits, Zoning, and Other Mechanisms</b>				
1. Analyze potential for enterprise incentives for CRM in learning areas	C			
2. Build consensus and plan for integration of enterprise in each area		C		
3. Fine tune enterprise strategies in each learning area			C	
4. Formulate a business plan for each enterprise project			O	O
5. Develop materials for publication on CRM enterprise strategies	O	O	O	C

### 3.2.8.1 Work Plan Accomplishments

Major accomplishments of the Enterprise Component during the 4<sup>th</sup> Quarter 1999 include:

#### Bohol

- Leverage support from the municipality of Buenavista and DENR to improve visitor facilities for the Cambuhat community ecotourism project; assisted the LGU to identify potential enterprise projects for their CBRMP funding proposal, and to organize and register the Cambuhat Enterprise Development and Fishery Association (CEDFA)

- Organized promotion of the Cambuhat ecotour product at national and provincial travel marts, and co-financed the marketing planning workshops in cooperation with tBohol’s Provincial Tourism Council, the Bohol Investment Promotions Cener, and the Bohol Federation of Travel and Tour Operators (BFTTO)

### Negros Oriental

- Reviewed a draft assessment study of Siit Bay and potential impacts and CRM concerns of fish cage operations completed by SUML
- Organized and conducted extension training on seaweed farming to 20 Amlan fisherfolk

### Olango Island

- Assisted to secure a P500,000 grant for health and sanitation improvement on Gilutongan Island to complement on-going project activities. Grant funding is being provided by the Foundation for Internal Refuges (FIRE) and implemented in cooperation with Feed the Children (FTC) Philippines.
- With co-funding from the Cordova LGU, completed a rapid environmental review of coastal tourism development plans and conducted a conceptual planning workshop for the islands of Gilutonga, Lava, Shell and Day-as
- Assisted DENR Region 7 to formulate strategic and action plans for management of the Olango Island Wildlife Sanctuary (OIWS) and the Olango ecotour product
- Assisted to organize and register the Suba, Olango Ecotourism Cooperative (SOEC)
- Facilitated various site visits to the Olango ecotour, including a representative of the New Zealand foreign assistance program as part of a project design mission and the president of the International Ecotourism Society who described the Olango ecotour project as a “center for excellence in community ecotourism”

### Palawan

- Facilitated a MOA between the provincial and municipal LGUs, DENR, DTI, the Palawan Chamber of Commerce and Industry, and the PO to support development of the San Vicente fish processing enterprise
- Assisted to organize and legally establish a community-based management council for the Port Barton Marine Park (PBMP) and initiated training activities to support preparation of a management plan that will include a fee collection mechanism

A summary of the major Work Plan accomplishments of the Enterprise Component during 1999 is provided in the following sections.

**Activity No. IV.A** (*Leverage Resources to Support Development and Implementation of CRM Enterprises in Learning Areas*): Leveraging activities focused on getting capable local institutions and NGOs to learn and adopt the Component's work so that support to existing projects could continue, as needed, and expand to other coastal areas. Collaboration efforts were further strengthened throughout the year with other USAID-funded projects, particularly GOLD, and related donor-funded projects, including: CBRMP; FRMP; Global Environment Facilities (GEF)-funded Bohol Islands Marine Triangle (BMT) Project; and the European Union (EU)-funded Western Samar Agricultural Resources Development Programme (WESAMAR).

Public and private institutions were mobilized to provide material, financial, and human resources support for startup and management of these project –initiated enterprise activities. Resource support was also offered by visiting national and international development agencies.

Further accomplishments under this Activity include:

- Counterpart funding support for project-initiated enterprise activities was provided by 6 LGUs (Buenavista, Clarin, Cordova, San Vicente, Santa Maria, and Siaton) with commitments for similar support pledged by 4 other LGUs (Bais City, Calape, Inabanga and Loon). Counterpart financial, technical and material support for enterprise activities was also provided or pledged by 6 NGAs (DENR, BFAR, DTI, DOT, DOLE, and TESDA) and 3 provinces (Bohol, Negros Oriental, and Palawan).
- Collaborative partnerships, co-financing and implementation arrangements have been established with over 12 NGOs, including:
  - Bohol: FTC, First Consolidated Bank Foundation, Inc. (FCBFI); and Local Government Development Foundation (LOGODEF)
  - Olango: Foundation for a Sustainable Society, Inc. (FSSI); Visayas Cooperative Central Fund Federation (VICTO); ACES; FTC, and FIRE
  - Palawan: KKP, Conservation International (CI)
  - Sarangani: Business Resource Center (BRC) of the University of Norte Dame

Direct NGO funding support for enterprise activities initiated by the project was over P3.5 million in 1999.

- Formal discussions for project collaboration on enterprise development were initiated with official development assistance (ODA) agencies and organizations from Canada, Japan, New Zealand, U.S., and Switzerland.

**Activity No. IV.B** (*Assist Local CRM Partners to Implement and Sustain CRM Enterprise Projects*): The focus of technical assistance to LGUs and NGAs continued to shift from establishing “pilot” demonstration projects to providing advisory, training assistance, and guidelines in sustainable enterprise project conceptualization, planning, and management at the municipal level. A summary of major accomplishments under this Activity include:

- The team completed drafts or formulated resource materials and manuals to guide coastal enterprise development planning, implementation and management, including:
  - Manual on seaweed production and management
  - Grower-to-grower training manual on seaweed production and management
  - Technical advisories on adverse effects of El Niño and La Niña to seaweed farming, and mitigation measures
  - Market study on the Olango Birds and Seascape Tour (OBST), including a study of Cebu-based inbound tour operators
  - Manual on ecotourism product development
  - Guidebook and training manual for sustainable coastal tourism
  - Feature articles on CRMP’s ecotourism development process and products, and enterprise initiatives for CRM contributed to the project’s *oneocean.org* website, Tambuli magazine, and VSO ecotourism conference book
- Presentations on community-based coastal ecotourism were delivered in various conferences, forums, and workshops, including:
  - Ecotourism Planning Workshop (by The Ecotourism Society-worldwide)
  - Conference on Ecotourism Conservation, Community Development (by the Volunteer Service Overseas)
  - 6<sup>th</sup> Regional Tourism Council Assembly (DOT and Region 7 Tourism Council)
  - Strategies for Coastal Resource Management (Center for Environmental Studies, U.P. Cebu)
  - Forum on community-based ecotourism development (University of San Jose de Recoletos, Cebu)
- Assistance was provided to 11 LGUs to assess their potentials for seafarming, mariculture, ecotourism, and other enterprise options and prepare supportive ICM plans (Bais City, Buenavista, Calape, Candijay, Cordova, Inabanga, Lapu-lapu City,

Loon, Manjuyod, San Vicente, and Tanjay) and establish provincial-level collaboration with the provinces of Bohol, Negros Oriental and Palawan.

- The team assisted in packaging and implementing the ICM short course and basic CRM module for local executives of nine Bohol LGUs applying for CBRMP loans in cooperation with the Bohol Province.

**Activity No. IV.C** (*Assist the Implementation of Seaweed Farms through Technical Guidance, Training, Marketing, Financing, Linkages and Stakeholder Management*): In selected areas, the feasibility of seaweed farming was further developed as an environment-friendly source of alternative or supplemental livelihood for coastal communities. While seaweed farming has been practiced for many years in the Philippines (which is one the world's largest producers of *Eucheuma*, the primary source of the emulsifier carrageenan), innovations by the Enterprise Component include introduction of:

- Higher value, stress resistant "sakol" varieties of *E. cottonii*, which in addition to its high carrageenan value as a dried seaweed, is also a highly desired edible seaweed
- Improved farming technologies, such as "net-bag" and line-method techniques
- Integrated pilot testing, training, community organizing, and ICM planning support
- Market linkages and assistance to improve economic returns to seaweed farmers

In addition to providing a potentially important source of income, the project's support for family-based seaweed farming has also served to strengthen CRM awareness in LGUs of 4 learning areas.

The team also conducted study tours on the seaweed project and coastal management for various local, national and international groups, including representatives from the national government of Sri Lanka, Ambassador and Consuls of Switzerland, U.S. National Oceanographic and Atmospheric Administration (NOAA), Japanese Embassy, The Nature Conservancy, New Zealand foreign assistance office, and the International Union for Conservation of Nature (IUCN).

**Activity No. IV.D** (*Assist in the Implementation of Other Mariculture and Fish Processing Ventures through Technical Guidance, Training, Marketing, Financing, Linkages, and Stakeholder Management*): Based on feasibility studies and pilot testing conducted by the project to date, technical support was focused on the following activities during 1999:

- Assessed the feasibility of mariculture in four municipalities of Bohol (Calape, Candijay, Inabanga, and Loon) to support CRM planning and CBRMP loan proposals
- Assisted to establish, provide technical training and support, and monitor demonstration mariculture projects in 4 different learning areas (Bohol, Davao del Sur, Negros Oriental and Palawan) in cooperation with organized community groups and project partners

- Completed and presented the results of scientific assessment studies on carrying capacity, potential environmental impacts and management measures for existing fish cage operations in Malalag Bay (in cooperation with U.P. Visayas) and for Siit Bay (in cooperation with SUML)
- Established marketing support, improved processing, and linkages for project-initiated enterprise products. For example, the number of oyster culture enterprise participants in Barangay Cambuhat (Bohol) increased during 1999 from 17 to 42 households, excluding a still undetermined number of upstraem adoptors. On the 2<sup>nd</sup> 8 month cycle of cropping, oyster production tripled in volume and increased to 53,000 seeded spat collectors. Aggregate sales volume is projected to reach P1.6 million by May 2000, providing an average household gross earning ranging from P30,000 to 60,000 per 8 month cycle

**Activity No. IV.E** (*Assist in the Implementation of Ecotourism Projects Through Planning, Product Development, Training, Marketing, Financial Linkages, and Stakeholder Management*): The attraction and potential CRM linkages and economic benefits of community based ecotourism were increasingly realized during the year, as summarized by the following major accomplishments:

- Assisted to establish demonstration, community-based ecotourism “products,” including the Cambuhat River and Village Tour (Buenavista, Bohol, which directly involves 52 members of the Cambuhat Women’s Group, supported by the services and products of 37 oyster grower and the Olango Bird and Seascape Tour, which involves 55 households composing the Suba, Olango Ecotourism Cooperative.) In cooperation with key stakeholders and project partners, a total of 43 tours, involving 565 tourists, were facilitated to both ecotour destinations during the year. Assisted both communities to implement basic financial management, purchasing, community interpretation, tour operation and conflict management systems

A summary profile of the Olango ecotour business for 1999 is provided below:

Total No. of Tours: 33	Total No. of tourists: 357	Gross Revenue: P340,796
Study tours: 45%	Foreign: 31%	Community benefit: 54%
Familization tours: 30%	Domestic: 69%	Expenses: 41%
Recreation tours: 21%		OIWS contribution: 5%
Media tours: 3%		

- Study tours conducted for the Olango ecotour during the year involved 30 international institutions, 7 NGAs, 12 LGUs, 12 media establishments, numerous NGOs, and academic and business organizations. Marketing linkages were established with resorts on Mactan Island, tour companies and schools. Media exposure was generated in all leading national and local daily newspapers, magazines, and TV stations
- Provided assistance in planning and marketing potential community-based ecotourism activities:

- Assisted to consolidate the 3-year Ecotourism Development Plan of the three LGUs in Bais Bay (Manjuyod, Bais, Tanjay)
- Facilitated collaboration with the resort owners of Port Barton to focus promotion efforts on the marine park to support CRM activities

**Activity No. IV.F** (*Implement Strategies for Integrating Enterprise to Achieve Best CRM Practices, through Financial Incentives, Fees and Permits, Zoning and Other Mechanism*):

In each learning area, strategies to integrate enterprise development to CRM activities were further defined and implemented in cooperation with local communities and project partners. These strategies, including the framework for enterprise development, were packaged as a component module to the project's ICM trainings.

Provided any needed assistance in developing ordinances integrating user fees and revenue sharing arrangements for several marine protected areas (Gilutongan Marine Sanctuary, Olango; Port Barton Marine Park, Palawan) as well as developing proposed management guidelines and fee arrangements for community-based OIWS ecotours. In addition, the experiences, technologies applied, and lessons learned in enterprise and ecotourism development were documented and shared through various conferences, training activities, and publications.

### **3.2.8.2 Activities Not Accomplished and Why**

In general, all planned activities were accomplished and in many cases, targets were exceeded. To enhance sustainability, a number of enterprise activities are on-going. Limited enterprise development initiatives in Malalag Learning Area (integrated *Gracilera* and rabbitfish culture) did not prove feasible for a number of reasons and was discontinued.

### **3.2.8.3. Issues and Lessons Learned**

The Enterprise Component experienced a number of difficulties during the year, including the following:

- Natural calamities (El Niño and La Niña climate conditions) damaged seaweed production and set back marketing and loan repayment targets. Regular monitoring of biophysical conditions and seaweed growth in seaweed farm sites was initiated necessary to anticipate occurrence of potential crop problems and minimize losses.
- PAMB temporally suspended operation of Olango ecotour operation inside the OIWS in late December to allow several issues to be resolved. CRMP formulated proposed guidelines for OIWS visitors to allay apprehensions on potential negative impacts and to formalize accreditation of the community ecotourism venture.
- Private land owners constructed visitor facilities near the bank of the Cambuhat River, which distracts from the natural beauty of this ecotour area.

- DENR - PAMB's construction plans for visitor facilities inside and outside the OIWS needed redesigning to conform to environmental standards (Timely discussion of enforcement issues between community residents and legal stakeholders led to greater awareness of management responsibilities, environmental laws, and appropriate designs.)

The enterprise development initiatives helped to integrate the environmental, social, and economic components of CRM in a given community. They also facilitated the collaboration and vertical integration of various levels of stakeholder support to CRM and community development, from the municipality up to the regional and national levels.

Resources to implement technical assistance and start up production for enterprises were readily offered and mobilized by stakeholders as success and credibility of the projects was established. Effective strategies for building the capability of CRM partners to sustain and replicate the enterprise projects involved providing experiential learning opportunities, assisting partners to address management issues as they occurred, timely training on relevant skills, and strong project ownership by key stakeholders.

### 3.2.9 Mangrove Management Component (MMC)

The focus of CRMP's Mangrove Management Component is the restoration, reversion, enhancement, and management of mangrove habitats. The main strategy is to encourage local community organizations to apply for Community-Based Forest Management Agreements (CBFMA), effectively making them stewards of this resource. Other approaches will be also used. Success of the Mangrove Management Component is measured by mangrove areas under CBFMA as one of the best CRM practices.

Table 3-11 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (C = completed activities; O = ongoing activities) by quarter.

**TABLE 3-11  
MANGROVE MANAGEMENT COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
V.	Mangrove Management Component (MMC)				

<b>V.A Identify and Train Staff and Government Counterparts for Project Work in Bohol, Selected Learning Areas and Mindanao</b>				
1. Develop 10-day training program / course on mangrove management	<b>C</b>			
2. Conduct training for new staff and all counterpart personnel in Bohol	<b>C</b>			
3. Plan second training for learning area counterparts and conduct in Bohol			<b>O</b>	
<b>V.B Identify at Least 7 Areas for Mangrove Intervention in Bohol and Mindanao</b>				
1. Final identification of areas for CBFMA interventions	<b>C</b>			
2. Field staff survey work areas and complete maps		<b>C</b>		
3. Detailed work plans for each site completed		<b>O</b>	<b>O</b>	
4. Support for local POs as local CBFMA implementing institutions		<b>O</b>	<b>O</b>	<b>C</b>
5. CBFMAs drafted and accompanying management plans				<b>C</b>
<b>V.C Assist in the Issuance of 11 CBFMAs in Bohol and Mindanao</b>				
1. Continue to strengthen POs to support CBFMAs	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
2. Mangrove management plans refined for each CBFMA			<b>C</b>	<b>C</b>
3. Assist POs to apply for formal CBFMA	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
4. CBFMAs issued on a site-specific basis			<b>O</b>	<b>C</b>
<b>V.D Complete and Distribute at least 100 copies of the "MMC Toolkit"</b>				
1. Complete writing and edit all toolkit sections	<b>O</b>	<b>C</b>		
2. Review and obtain endorsement by DENR and other agencies		<b>C</b>		
3. Print and distribute		<b>O</b>	<b>O</b>	<b>O</b>
<b>V.E Launch MMC Toolkit and Conduct Workshop on Methods for 30 Staff from Appropriate Organizations and DENR</b>				
1. Refine training methodology and content based on experience	<b>C</b>			
2. Conduct training/workshop on management for LGUs and DENR		<b>C</b>		
3. Conduct community level training as required to pursue objectives			<b>O</b>	<b>C</b>
<b>V.F Translate and Reproduce All Management Guidelines into Cebuano and Filipino</b>				
1. Translate appropriate materials			<b>O</b>	
2. Produce translated materials				<b>C</b>
<b>V.G Assist Mangrove Management in Learning and Expansion Areas of CRMP</b>				
1. Start activities in Bohol learning area (Buenavista and Inabanga)	<b>C</b>			

**TABLE 3-11 (Continued)**  
**MANGROVE MANAGEMENT COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
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2. Assist in Negros Oriental, Sarangani Bay, and Davao del Sur		O	C	
3. Assist DENR in 11 CBFMA areas		O	O	C
4. Assist in Palompon expansion area		C		
<b>V.H Contribute to Policy and IEC Components</b>				
1. Contribute experience to discussion and workshops on FLA reversion		O	O	C
2. Collaborate with Policy Component on refining several mangrove laws		C		
3. Contribute article to Tambuli on CBFMA process			C	
<b>V.I Monitor and Evaluate all MMC Activities</b>				
1. Update CRMP database, performance and monitoring system		O	O	O
2. Monitor progress on all CBFMA in process and refine process		O	O	O

### 3.2.9.1 Work Plan Accomplishments

Major accomplishments of the Mangrove Component during the 4<sup>th</sup> Quarter 1999 include:

- Assisted to identify potential CBFMA intervention sites in Clarin, Buenavista, and Getafe (Bohol); and in Bayawan, Siaton, and Tanjay (Negros Oriental) to improve integration of MMC activities within these CRMP learning and expansion areas
- Continued to support the preparation and processing of CBFMA applications and supporting requirements of awarded CBFMAs, including preparation and processing of the various supporting plans, documents, and resource-based maps
- Conducted CBFMA briefing and orientation for the LGU officials of Getafe and the Banacon people's organization (PO) to facilitate the awarding of the first CBFMA in the mangrove protected areas of Region 7; and conducted paralegal and advocacy training to selected PO members for deputation purposes the Banacon CBFMA involves a total of 1,775 ha and benefits 75 PO members.
- Assisted to operationalize a TWG for fishpond reversion in Bohol including training to validate and assess fishponds in Inabanga and Candijay
- Facilitated a community consultation in Candijay, Bohol initiated by two POs
- Assisted the "I Love the Ocean" Movement in preparing the Consolacion (Cebu) Mangrovetum Plan for the launching of the "Mangroves for the Millennium" Project

A summary of the major Work Plan accomplishments of the MMC during 1999 is provided in the following sections.

**Activity No. V.A** (*Identify and Train Staff and Government Counterparts for Project Work in Bohol, Selected Learning Areas and Mindanao*): To support project work, a total of 184 PO members, LGU and NGA staff completed the 3-day training on mangrove rehabilitation and management. These training courses were conducted in Bohol, Negros Oriental, Leyte, Sarangani, Davao del Norte, and Davao del Sur. To support future requirements of the Malalag learning area, a provincial training corps was formed in Davao del Sur.

In addition, 24 members from Bohol POs applying for CBFMA completed a 5-day planning workshop that was jointly conducted with DENR, and which focused on the process for completing required CBFMA plans and approval procedures.

During the training activities conducted in Palompon, Leyte, the team assisted the POs and LGU to establish nine mangrove nurseries. A similar training was also conducted for selected students in the area by the core of trainers who graduated from the 3-day training.

In addition, the team conducted an orientation training to U.S. Peace Corps Volunteers in Iloilo City and provided technical advice to the Vice Governor of Eastern Samar on a dying stand of mangrove trees in their province.

**Activity No. V.B** (*Identify at least 7 Areas for Mangrove Intervention in Bohol and Mindanao*): Eight areas for mangrove intervention were identified in Bohol, located within the LGUs of Buenavista, Candijay, Clarin, Getafe, Inabanga, and Mabini. An additional area was identified in the municipality of Calape, but this site was endorsed to BIDEF for CBFMA assistance because the foundation has been previously assisting the concerned PO.

As agreed during the 1<sup>st</sup> Quarter, no new activities were undertaken in potential expansion areas of Mindanao and Leyte to focus MMC activities within current project areas. Only limited technical assistance based on LGU requests and counterpart support is being encouraged in these areas.

In addition to training support provided to Palompon (Leyte), discussions were initiated with the Governor and LGU officials of Masbate for their requested training on mangrove rehabilitation and management. An orientation briefing was conducted, with proposed follow-up collaboration during the early part of 2000.

**Activity No. V.C** (*Assist in the issuance of 11 CBFMAs in Bohol and Mindanao*): The project assisted the identification, processing and approval of six CBFMAs during 1999, all within the Bohol Province. These activities were conducted in close cooperation with DENR Region 7, the Provincial and Community Environment and Natural Resource Offices (PENRO/CENRO) of Bohol, Talibon and Tubigon, and concerned LGUs. As summarized in the following table, these CBFMAs involve 292 PO (household) members and 3,125 ha of mangrove areas along some 20 km of shoreline. The issuance of two additional CBFMAs had previously been assisted in 1998 and involved 122 PO members and 227 ha of mangrove.

The team also assisted the ratification and completion of community-based resource management framework plans, resource use plans, and annual work plans for all POs that were issued CBFMA in the four Bohol LGUs of Candijay, Getafe, Inabanga, and Mabini.

**TABLE 3-12  
PROFILE OF PEOPLE’S ORGANIZATIONS WITH CBFMA**

<b>Name of People’s Organization (PO)</b>	<b>Estimated Area (ha)</b>	<b>No. of Members</b>	<b>km of Shoreline</b>
1. Panadtaran Mangrove Association (Candijay, Bohol)	590	49	5.0 (Riverbank)
2. Buyoan Mangrove Association (Candijay, Bohol)	163	53	0.5
3. San Isidro Mangrove Association (Mabini, Bohol)	17	31	0.7
4. Nasingin Mangrove Association (Getafe, Bohol)	420	51	1.2
5. Cagawasan Mangrove Association (Inabanga, Bohol)	160	33	1.4
6. Banacon Fisherfolk and Mangrove Planters Association (Banacon, Getafe, Bohol)	1,775	75	11.0
<b>Total</b>	<b>3,125</b>	<b>292</b>	<b>19.8</b>

**Activity No. V.D (Complete and Distribute at Least 100 Copies of the “MMC Toolkit”):** A Composite Evaluation Team was formed with DENR and BFAR to complete final reviews and revisions of the MMC Toolkit, which will consist of the following seven guidebooks:

- Community-Based Forest Management Agreement: An Appropriate Land Tenure Instrument for Mangroves
- The Importance of Mangrove Forests to Our Fishery Resources
- Resource Mapping Guide on Mangroves in Support of CBFM Projects
- Guide to Developing LGU Support and Local Ordinances for CBFMAs
- Guide to Mangrove Nursery Establishment and Management
- Guide to Mangrove Plantation Establishment and Management
- Fishpond Restoration Guide on CBFMA

**Activity No. V.E (Launch MMC Toolkit and Conduct Workshop on Methods of 30 Staff from Appropriate Organizations and DENR):** The training methodologies and MMC Toolkit underwent further review and refinement to incorporate the project experience gained to

date. These review activities, including a 2-day workshop, directly involved the Composite Evaluation Team described above.

Due to various delays, the launching of the MMC Toolkit has been rescheduled for early 2000 at which time publication of the documents is estimated to be completed.

**Activity No. V.F** (*Translate Management guidelines into Cebuano/Pilipino*): IEC materials on the "Economics of Protecting Mangroves" were translated to Cebuano and printed.

**Activity No. V.G** (*Assist Mangrove Management in Learning and Expansion Areas of CRMP*): Over the course of the year, technical assistance and support was provided to all CRMP learning areas, various expansion areas, and several components, which included:

- Conducting training programs on community organizing and mangrove management (Bohol)
- Assisting the Enterprise Component in conducting a mangrove management training in Barangay Cambuhat, Buenavista (Bohol) and in validating two proposed livelihood projects (mud-crab fattening and oyster culture)
- Conducting training programs on mangrove rehabilitation and management for the Sarangani, Malalag, and Negros Oriental learning areas, which led to the formation of provincial corps of mangrove management trainers

**Activity No. V.H** (*Contribute to Policy and IEC Components*): The team contributed to the development, clarification, and review process of the proposed joint General Memorandum Order No. 3 between DENR and BFAR. Support was provided in the formation and operation of the TWG for fishpond reversion activities in Bohol. The team also provided assistance on producing one poster on mangrove management and one poster on "Questions and Answers of Mangrove Management."

**Activity No. V.I** (*Monitor and Evaluate all MMC Activities*): All planned as well as unplanned activities were appropriately monitored and evaluated using field reports from the CO Coordinator and the COs.

### **3.2.9.2 Activities Not Accomplished and Why**

Printing and distribution of the "Mangrove Management Toolkit" was not accomplished as these documents are still in the final preparation stage.

The conduct of the 10-day training on mangrove rehabilitation and management intended for new staff and the Bohol learning area counterparts was also not accomplished because the learning area counterparts were not yet prepared. The component awaits the assignment of LGU-based COs and the formation of POs such that its key officers may be considered as participants. This activity may be conducted in January 2000.

### **3.2.9.3 Issues and Lessons Learned**

Two COs in the Bohol CBFMA areas were hired by the LGUs of Inabanga and Mabini, indicating that CBFMA sustainability is already in place in these LGUs. Current budget limitations may have constrained other participating LGUs from hiring their COs.

Effective field coordination and collaboration makes the conduct of mangrove management activities more efficient and economical. However, to achieve this, an effective coordination system and the commitment of the partners are vital.

LGU hiring of COs, ideally as a permanent position, is considered necessary in achieving continuity and sustainability in the implementation of community-based projects.

### 3.2.10 Local Implementation in Expansion Areas

Local implementation in CRMP expansion areas is facilitated through the dissemination of CRMP products and services. Expansion areas are evaluated by the same indicators as learning areas except that CRM interventions should be initiated using CRMP products and services. Expansion areas often draw on leveraged support systems through political will and financial allocations of municipal and provincial governments as well as other donor projects, which are aligned with CRMP.

Table 3-13 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress in Expansion Areas (C = completed activities; O = ongoing activities) by quarter.

**TABLE 3-13  
LOCAL IMPLEMENTATION IN EXPANSION AREAS  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>VI. Local implementation in expansion areas (530 km)</b>					
<b>VI.A Identify Coastal Areas for Expansion and Establish Baseline Information</b>					
1.	Assess CRM situation needs and establish linkages	O	O	O	
2.	Finalize agreements with donors to collaborate on management areas and accomplish database	O	O	O	O
3.	Finalize MOAs with LGUs (provincial and municipal) as expansion areas	O	O	O	O
<b>VI.B Plan and Implement Provincial Level Activities to Support CRMP Learning and Expansion Areas</b>					
1.	Finalize MOA with provincial body (Bohol, Davao del Sur, Negros Oriental, Cebu, Palawan, and Sarangani Bay) and define roles of each agency	O	O	O	O
2.	Set-up CRM learning center in provincial or other office		O	O	O

**TABLE 3-13 (Continued)  
LOCAL IMPLEMENTATION IN EXPANSION AREAS**

**1999 Work Plan Activity Schedule and Progress to Date**

<b>Ref. No.</b>	<b>Work Task / Activity Description</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
3.	Develop useful cross-visits for provincial officials			O	O
4.	Develop core of ICM trainers for ICM in each province			O	C
5.	Support integration of provincial body for CRM policy development			O	O
6.	Find support for "Our Sea Our Life" Exhibit as appropriate (Bohol)	O	C		
<b>VI.C Facilitate Expansion Municipalities Through Exchange of Lessons, Cross-visits, Communication and Education Materials, and Other Means of Technical Assistance</b>					
<b>BOHOL</b>					
	• Clarify municipalities with MOA and their status	C			
	• Make presentation on CRMP to each expansion area	O	O	O	C
	• Facilitate cross-visits between learning area and expansion areas			C	
	• Facilitate PCRA as required to form profiles			C	
	• Expand to Panglao Municipality and plan activities	C			
	• Facilitate Earthwatch Expedition in Panglao		C		
<b>MALALAG BAY</b>					
	• Facilitate activities in Digos, Malita, and Don Marcelino		O	O	C
<b>NEGROS ORIENTAL</b>					
	• Facilitate activities (PCRA, CRM planning, law enforcement) in Siaton		O	O	C
	• Initiate PCRA planning in other barangays within LA	O	O	O	C
<b>OLANGO ISLAND</b>					
	• Promote exchanges between Olango Island and facing Mactan barangays		O	O	O
	• Involve Mactan barangays facing Olango Island in ICM training		O	O	O
	• Conduct PCRA in Mactan barangays facing Olango Island			O	O
	• Assist with MFARMC of Cordova		O	O	C
	• Facilitate cross-visits with Bohol sites			O	O
<b>PALAWAN</b>					
	• Conduct ICM training course for Palawan partners			O	C
	• Share CRMP materials with Puerto Princesa City ENRO, Planning Office, St. Paul's Park, and other projects in city	O	C		
	• Develop IEC program for Cagayancillo and Tubbataha	O	O	C	
	• Develop education materials for St. Paul's Park marine area	O	O	O	C
	• Arrange at least one cross-visit between expansion and Learning Area			O	O
	• Contribute to PCRA for city through GIS support for maps		O	O	O
	• Support Tubbataha Management Plan endorsement	O	O	O	C

**TABLE 3-13 (Continued)**

**LOCAL IMPLEMENTATION IN EXPANSION AREAS**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
	• Initiate projects (assist seaweed farming) in Cagayancillo Islands		O	O	O
	• Plan for monitoring Tubbataha Reefs in May 2000			O	O
<b>SARANGANI BAY</b>					
	• Hold consultative meeting with province, PPDO, and expansion LGUs		C		
	• Assist with GEF-supported program for Sultan Kudarat	O	O	C	
	• Gather baseline information and hold planning workshop		O	C	
	• Explore MOA with Sultan Kudarat, Balut, and Sarangani Bay LGUs	O	O	C	
<b>MABINI/TINGLOY</b>					
	• Coordinate w/ KKP, Sulu Fund, Haribon Foundation, and LGU	O	O	O	O
	• Support sanctuary management in two barangays	O	O	O	O
	• Support drafting coastal profile and integrated plan			O	O
	• Support cross-visit to CRMP learning area		C		
<b>CEBU</b>					
	• Conduct ICM training for Cebu Province		O	C	
	• Initiate activities with selected LGUs			O	O
<b>VI.D Monitor Activities in Expansion Areas Jointly with LGUs, NGAs, and Other Donors to Determine Extent of CRM and Future Needs</b>					
	• Municipal and CRMP database updated every 6 months for each LGU	O	O	O	O

Major Work Plan accomplishments during 1999 include:

**Activity No. VI.A** (*Identify coastal areas for expansion and establish baseline information*): Each learning area is engaged in strengthening contacts with expansion LGUs and preparing or implementing (as in the cases of Bohol and Davao del Sur) provincial MOAs to facilitate expansion activities.

Agreements with other donor-funded projects that are pending or being developed include:

- Agreement with the ADB-supported FRMP to collaborate on training, education materials, CRM planning process, and other aspects of CRM implementation solidified with many planned activities for year 2000 in sharing materials and implementing trainings (PCRA, ICM, mangrove, and marine sanctuaries)
- On-going collaboration with the World Bank-assisted and DOF-implemented CBRMP, focusing primary on activities within Region 7 (Assistance was provided to nine LGUs participating in the CBRMP through a workshop training on CRM to help them develop their CBRMP loan proposals.)

- Collaboration with the WWF-Philippines on the Sulu-Celebes Sea database profiling culminating in a workshop in December and with plans for taking some CRM materials to LGUs in 2000

**Activity No. VI.B** (*Plan and Implement Provincial Level Activities to Support CRMP Learning and Expansion Areas*): MOAs with the provinces of Davao del Sur and Bohol were finalized and signed in the 2<sup>nd</sup> and 3<sup>rd</sup> Quarters, respectfully. Similar provincial-level MOAs have been drafted for the provinces of Sarangani and Palawan. These MOAs are in varying stages of review and are expected to be signed within the 1<sup>st</sup> Quarter 2000.

**Activity No. VI.C** (*Facilitate Expansion Municipalities through Exchange of Lessons, Cross-visits, Communication and Education Materials, and other means of TA*):

#### Bohol

- Seven expansion area LGUs have been identified (Candijay, Getafe, Loon, Mabini, Dimiao, Maribojoc and Panglao). Additional Bohol LGUs will be assisted through the framework of the provincial MOA.
- The results of the comprehensive survey of selected reef areas within marine sanctuaries of expansion LGUs Panglao and Loon by a CRMP-facilitated Earthwatch Expedition conducted in May were fed back to the Provincial Tourism Council, local community members and key stakeholders, including the Philippine Tourism Authority (PTA) in September. This information was utilized to help design the proposal to Global Environmental Facilities (GEF) for the Bohol Marine Triangle (BMT).
- Ongoing assistance was provided to the Foundation for Philippine Environment (FPE) in preparing their proposal for a medium-sized GEF project grant for the “Bohol Island Marine Triangle” management area. The project was launched in October in Panglao and culminated in December with further discussions with UNDP scheduled in January 2000.

#### Malalag Bay

- Two expansion area municipalities, Digos and Malita, were active in CRM activities and will be further supported in year 2000.
- The first provincial expansion MOA for Davao del Sur, DENR, and BFAR includes:
  - Prepare the Executive Order (EO) for the Provincial CRM Council
  - Develop the municipal coastal database
  - Provide technical information on CRM
  - Plan the provincial CRM resource and information center

These points are part of the year 2000 work plan.

### Negros Oriental

- In cooperation with CRMP, the expansion municipality of Siaton is implementing all regular activities of a learning area municipality with support from the LGU.
- A water quality study for Siit Bay was completed by SUML as part of the baseline for planning and will be presented to the LGU in January 2000.
- The learning area continues to provide a popular and highly educational venue for cross-visits and study tours from existing or potential expansion areas.

### Olango Island

- Similar to Negros Oriental, the Olango Island learning area continued to receive requests for cross-visits and educational tours, particularly focusing on enterprise development and marine sanctuary development at Gilutongan Island.
- CRMP was asked to assist with the OIWS management plan in response to increased attention in the area for tourism.

### Palawan

- The marine interpretation guide for St. Paul's Park drafted by a CRMP intern from the U.S. was refined and arrangements for its publication will be arranged in year 2000
- A workshop to evaluate the management status of the Tubbataha National Marine Park was conducted in April in conjunction with the Marine Parks Center of Japan, local NGOs, DENR, and PCSDS. The outcome decision to rebuild the ranger station with funds from Japan commenced in the 3<sup>rd</sup> Quarter with completion targeted for February 2000.
- Assistance was provided in the development of an IEC program for Tubbataha Park management with support from the Sulu Fund and the Coral Reef Alliance. The program accomplished the following:
  - Developed a flip-chart poster show for all dive boat operators and their dive guests going to Tubbataha that is shown before the dive boat departs Puerto Princesa City for Tubbataha Reefs
  - Implemented an education program for coastal fishing communities (2,000 persons) that have historically depended on Tubbataha for a fishing ground
  - Assisted with management planning and coordination for Tubbataha

- Work scoping and field assessment for CRM, IEC, and planning for the Cagayancillo municipality (which includes Tubbataha within its jurisdiction) was completed in the 2<sup>nd</sup> Quarter in partnership with a local NGO (SAGUDA), and plans were made to follow-up with work plan development. On-site CRM planning will occur in February 2000.
- Two project activities for provincial-level collaboration were presented by CRMP and approved in principle by the Governor of Palawan. These proposed collaboration activities are a Mayor's CRM Forum based on CRM best practices to be implemented early in year 2000, with counterpart funding to be provided by FRMP.
- Collaborative agreements were forged with the ADB-assisted FRMP and UNESCO/UNDP to guide related project activities in the Puerto Princesa and Honda Bay areas. The agreements are working as FRMP and CRMP share offices and approaches. A MOA will be signed with the city to this effect in early 2000.

#### Sarangani Bay

- CRMP participated in SOCSARGEN-wide ICM planning meeting to develop the terms of reference for a bay-wide management plan with first drafts set for April 2000.

#### Mabini/Tingloy, Batangas

- Continuing technical assistance is being coordinated through the Sulu Fund, by Mr. Danny Ocampo who attends all meetings of KKP, the LGUs, Haribon Foundation, tourism operators, and De La Salle University.
- The cross-visit by the Tingloy municipal mayor and councilors conducted in April to Negros Oriental and Olango Island learning areas resulted in the Mayor becoming an active supporter of CRM through improved law enforcement (20 arrests), starting a CRM committee, and considering planning for marine sanctuaries.
- Barangay Sto. Tomas in Tingloy has launched a program to protect their immediate coral reef area
- An CRM exhibit was held in early December at the Municipal Hall of Tingloy jointly sponsored by Sulu Fund and KKP.

#### Cebu

- The Moalboal LGU started a CRM planning process and expressed its desire to become an expansion area. Five other Cebu LGUs have been identified as potential expansion areas for 2000

**Activity No. VI.D (*Monitor Activities in Expansion Areas*):**

Selected expansion area databases were updated, as information became available from the areas discussed above. At present, the project's municipal coastal database contains several levels of CRM-related information on over 250 coastal LGUs nationwide.

**3.2.10.2 Activities Not Accomplished and Why**

Most planned activities for expansion were accomplished during 1999. Those still in process include the completion of the provincial level MOAs. The discussion of the MOAs is lengthy because various stakeholders are involved. Also, the draft MOA proposes several large tasks that not all parties are confident can be accomplished without more planning and agreement on responsibilities. Negros Oriental decided not to sign the provincial MOA because the Provincial Council wants to "streamline" its role in environmental projects through the Fisheries Division-Provincial Agriculturist Office.

**3.2.10.3 Issues and Lessons Learned**

The expansion activities are progressing with vigor in those municipalities and provinces where the demand is high and where there is sufficient understanding about the crucial need for CRM in the area. Some lessons generated are:

- The more substantial linkages that CRMP can make with other donors, other projects, local and national government groups working on CRM, the more opportunities are generated for synergistic action and support in a large and complicated field.
- Donor collaboration requires building trust and working together before any results become evident.
- The opportunities for collateral support in expansion areas exist as long as CRMP is flexible enough to work together with projects, donors, interns, and others such as these ongoing activities assisted by or cooperating with CRMP:
  - Related USAID-funded projects (GOLD, IISE, ENRAP, GEM, AGILE)
  - ADB-supported FRMP for 18 bays in the Philippines
  - World Bank-supported CBRMP, focusing primarily on Bohol learning area and later Negros Oriental and Cebu
  - FPE proposal to GEF for Bohol Island Marine Triangle management
  - Marine Parks Center of Japan support for Tubbataha
  - Earthwatch Institute support for surveying coral reefs in southern Bohol

- WWF/KKP projects in the Sulu Sea for Tubbataha and the Sulu-Celebes Sea supported by GEF and WWF-US
- Sulu Fund for Marine Conservation activities in Mabini/Tingloy, Batangas and Tubbataha, Palawan, and educational materials on coral reefs
- School for Marine Affairs of University of Washington collaboration with CRMP and Silliman University for using the internet to share information on ICM among coastal planners and students and to develop an intern exchange program
- The involvement of interns: Sandra Zicus to assist with St. Paul's education materials; Jennifer Murphy's assistance with the Negros Oriental Profile and other writing projects of CRMP; Nelia Forest's upcoming contribution to the role of the NIPAS Act in CB-CRM sites; and several other pending contributions through U.S. based researchers

### 3.2.11 Training Component

The Training Component supplies the means to build institutional capacity for integrated coastal management (ICM) at the municipal and provincial level. By the end of 1999, it will have completed the 10-day ICM Training Course for all learning and key expansion areas of CRMP.

Table 3-14 provides a summary of the 1999 Work Plan activity schedule (shaded areas) and progress to date (**C** = completed activities; **O** = ongoing activities) by quarter.

**TABLE 3-14**  
**TRAINING COMPONENT**  
**1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
<b>VII. Training Component</b>					
<b>VII.A Conduct ICM Training Jointly with Government Partners in Cebu, Davao, and Palawan</b>					
1.	ICM training conducted in Cebu for Cebu expansion area	<b>C</b>			
2.	ICM training conducted in Cebu for Olango Island		<b>C</b>		
3.	ICM training conducted in Davao for Malalag Bay and Sarangani Bay expansion areas			<b>C</b>	
4.	ICM training conducted in Palawan for expansion areas			<b>O</b>	<b>C</b>
<b>VII.B Institutionalize ICM Training Through Training of Trainors and Dissemination of Training Materials and Develop Guidelines for Study Tours</b>					
1.	Package training materials into a kit for dissemination for both 10-day and 3-day courses	<b>O</b>	<b>C</b>		

2. Conduct ICM Training of Trainors for selected 10-day ICM graduates				<b>O</b>
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**TABLE 3-14 (Continued)  
TRAINING COMPONENT  
1999 Work Plan Activity Schedule and Progress to Date**

Ref. No.	Work Task / Activity Description	Q1	Q2	Q3	Q4
3.	Conduct ICM conference for graduates of ICM training courses				<b>O</b>
4.	Train ATI, BFAR, DENR, and SUC trainors (UP-Visayas, MSU and Camiguin State Polytechnic) as required to build their ICM capacity	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
5.	Develop and apply guidelines for study tours	<b>O</b>	<b>O</b>	<b>O</b>	<b>C</b>
<b>VII.C Develop and Implement Short Course on ICM for Two or Three Selected Learning and Expansion Areas</b>					
1.	5 short courses conducted in key expansion areas (Panglao, Loon and Calape, Bohol; Palompon, Leyte; Mabini, Batangas)		<b>O</b>	<b>O</b>	<b>C</b>
<b>VII.D Assist in the Development and Packaging of ICM Training for Mangrove Component</b>					
1.	Assist in development of 10-day mangrove management training	<b>C</b>			
2.	Package mangrove management course in a training kit for dissemination				<b>C</b>

### 3.2.11.1 Work Plan Accomplishments

Major accomplishments of the Training Component during the 4<sup>th</sup> Quarter 1999 include:

- Completed the 10-day ICM Training Course (ICM-TC) for 44 Palawan expansion area participants
- 3-day ICM Short Course implemented for the 48 staff and FARMCs of the municipalities of Clarin, Inabanga, Loon and Panglao (Bohol)
- Conducted a 2-day ICM planning workshop was held in San Jose, Negros Oriental for 30 FARMC members
- Participated in various and collaboration meetings with other donor-assisted projects, including:
  - GOLD "roll-out" conferences
  - FRMP planning meetings

A summary of the major accomplishments of the Training Component during 1999 is provided in the following sections.

**Activity No. VII.A** (*Conduct ICM Training Jointly with Government Partners in Cebu, Davao, Palawan*): A total of 139 participants graduated from the 10-day ICM-TC during 1999, with courses organized and conducted in Cebu, Davao, and Palawan. This brings the overall project-to-date total number of ICM-TC graduates to 294.

**Activity No. VII.B** (*Institutionalize ICM Training Through Training of Trainers and Dissemination of Training Materials and Develop Guidelines for Study Tours*): Formal channels were established for national dissemination of training materials through other donor-assisted projects, agencies and institutions, including GOLD, FRMP, JICA, and the Southeast Asian Fisheries Development Center (SEAFDEC).

A summary of CRMP training packages prepared to date and recommended duration of each training is listed below:

**TABLE 3-15  
CRMP TRAINING PACKAGES**

<b>Title of Course</b>	<b>Number of Days</b>
1. Integrated Coastal Management Training Course (ICM-TC) implemented in collaboration with BFAR-RFTC	10
2. Short Course on Integrated Coastal Management (ICM-SC) implemented in collaboration with BFAR-RFTC and LGUs of Bohol and Negros Oriental	3
3. Local Chief Executives' Course on ICM (ICM-LCE) implemented in collaboration with CBRMP	3
4. Mangrove Management Training Course (MM-TC)	10
5. Short Course on Mangrove Management (MM-SC)	3
6. Participatory Coastal Resource Assessment Training (PCRA)	3
7. Local Coastal Law Enforcement Training Course (packaging on-going) in collaboration with LEAP / Silliman University	-
8. Coral Reef Monitoring and Assessment (packaging on-going) in collaboration with UP-MSI	-
9. Community-based Seaweed Growers' Training	2-3
10. Ecotourism Planning Training Course (packaging on-going)	10

**Activity No. VII.C** (*Develop and Implement Short Course for Two or Three Selected Learning and Expansion Areas*): During 1999, a total of 118 municipal-level participants graduated from the ICM Short Course. In addition, a total of 65 LGU participants were trained in Negros Oriental and collaborated in the training of 34 new Peace Corps volunteer. The team supported CBRMP/CRMP joint training for nine Bohol coastal LGUs applying for CBRMP loans and coordinated participation of six participants from CRMP partner institutions to the Coastal Zone '99; NAAEE Conference; Coral Reef Symposium

**Activity No. VII.D** (*Assist in Development and Packaging of ICM Training for Mangrove Component*): The training team assisted in the development of the 3-day Mangrove Management Component training course for the Palompon (Leyte) expansion area. Packaging of the 10-day mangrove management training course was also completed.

### **3.2.11.2 Activities Not Accomplished and Why**

The “Training of Trainers” that was originally scheduled for implementation by the International Institute of Rural Reconstruction (IIRR) was postponed due to delays in finalizing the training materials and course schedule of activities.

### **3.2.11.3 Issues and Lessons Learned**

A Training of Trainers is still required for the development of a national pool of ICM trainers within the Philippines. However, the ICM concept is difficult to incorporate within a skills development training without direct supervision from the CRMP training staff. Instead of depending upon a training organization to design and deliver a training course, the CRMP training staff should design and implement the course itself, with relevant partners.

To facilitate the information management of training participants, each learning area should have a separate database system which will regularly update the central database in Cebu. The Trainet database is still not effectively functioning. The inputting of data requires some more quality control to assure that the database output is useful.

Opportunities for future training collaboration exist with CBRMP, FRMP and GOLD. This collaboration should be established and scheduled at the earliest possible moment. Future collaboration in institutionalizing training modules through SEAFDEC and the Japanese government exist and must be pursued at the earliest opportunity.

The expansion activities undertaken with the LGUs should be coordinated closely with the training staff since the most effective manner of expansion is through the technical assistance provided by training activities.

### **3.2.12 Biophysical Monitoring of Marine Sanctuaries**

As agreed under Indicator 2 of project’s Strategic Objective, biophysical monitoring of fish abundance and coral cover was conducted for six project-assisted marine sanctuaries, using standardized survey methods. The results to date of monitoring surveys conducted in the following areas are summarized in Section 5.2.1 and Appendix A:

- Cabacongan, Loon and Lomboy, Calape (Bohol)
- Gilutongan, Cordova (Cebu)
- Cangmating, Sibulan (Negros Oriental)

- Port Barton, San Vicente (Palawan)
- Tuka (Poblacion), Kiamba, (Sarangani)

Simplified, reef survey methods were developed based on methods that have been widely used in the Philippines (for example, by UP-MSI and Earthwatch Expeditions in the Philippines) and compatible with global reef monitoring protocols, such as the “ReefCheck” program and the Global Coral Reef Monitoring Network (GCRMN).

Supported by a core team of UP-MSI marine scientists, the monitoring activities were facilitated through a community-based and participatory approach that directly involves trained teams of local fisherfolk and project partners to conduct and evaluate each survey. In addition to UP-MSI, local POs and fisherfolk, the biophysical surveys involved the following partners:

- BIDEF, Haribon (Bohol)
- ENRMD (Negros Oriental)
- DENR, IMA, USC-MBS (Olango)
- PCSDS, VSO, LGU MAO (Palawan)
- U.P. Mindanao (Sarangani)
- BFAR (Bohol, Olango)
- U.S. Peace Corps (Bohol, Olango, Palawan)

To further strengthen the skills of local monitoring teams and to share experiences, a national competition was organized and conducted by UP-MSI in Cagayan de Oro, which involved a number of teams from outside the CRMP learning areas.

In addition to the six required biophysical monitoring sites, the project assisted in conducting numerous underwater resource assessments and reef monitoring surveys in all learning areas throughout the year. These include cooperation with the Earthwatch Institute in conducting reef monitoring surveys of nine marine sanctuaries in Bohol, Cebu, and Negros Oriental. Based on completed training and monitoring activities, the methods were adopted by BFAR Region 7 in conducting six underwater resource assessments in Bohol, Cebu, and Negros Oriental during 1999.

A field manual as well as a trainor’s manual of the project’s reef monitoring methods were drafted and reviewed, and are now in the final stage of publication. Orientation briefings and copies of draft manuals and survey forms were provided to the CEP coordinators during the CEP-CRMP national workshop held in Cebu, as well as to several groups of Peace Corps and VSO volunteers directly involved in CRM activities throughout the country.

## 4.0 PROJECT MANAGEMENT

### 4.1 WORK PLAN ACCOMPLISHMENTS

In November 1999, Tetra Tech EM Inc. (Tetra Tech) advised USAID that the 75 percent of the \$14,266,282 obligated funds might be utilized by December 31, 1999 and requested that about \$1.7 million in incremental funding be provided as programmed in Amendment No. 5 to carry out project implementation through September 30, 2000. However, USAID verbally advised Tetra Tech to re-evaluate the budget in Modification No. 5 to determine the period when the existing obligated funds will last.

Due to budget constraints, the planned procurement of project vehicles was abandoned.

#### 4.1.1 Cost Control

Total project expenditures through December 31, 1999 represents 56 percent of the total budget. The estimated percent of expenditures by implementation and activity as of December 31, 1999 is as follows:

**TABLE 4-1  
SUMMARY PERCENT OF TOTAL EXPENDITURES IMPLEMENTATION  
BY LEVEL AND ACTIVITY**

Implementation Level/Activity	Percent of Expenditures To Date
CRM Core Activities/Administration	52.0
Policy	6.0
Mangrove Management	5.0
Performance Monitoring	1.0
San Vicente, Palawan	3.0
Negros Oriental	3.0
Olango Island, Cebu	2.0
Bohol	3.0
Malalag Bay, Davao del Sur	2.0
Sarangani Bay	2.0
Multisectoral Coordination	0.7
Silliman University Marine Laboratory	8.0
Expansion Activities	12.3
Total	100.0

*Notes:*

1. *Percent of expenditures are estimated and should not be used for contractual or accounting purposes.*

2. *Expenditures include labor, other direct costs, subcontractors, and associated overhead and fee.*

#### **4.1.2 Recruitment of Staff as Required**

The following staff started work with the project in 1999 (either on a full-time basis or intermittently):

- Alum, Edna (Independent), Mariculture Specialist for the Negros Oriental learning area
- Batongbacal, Jay (Independent), Institutional/Legal Analysis Consultant
- Besa, Dexter Allen (Independent), Computer Graphics Artist
- Cruz, Raymundo dela (Independent), CRM Technical Assistant for the Palawan Learning Area
- Cuadrasal, Zosimo (Independent), Calape LGU Coordinator (Bohol)
- Dumon, Ma. Pepa (Independent), Marketing Specialist (Enterprise Development)
- Esquerra, Ferdinand (GLOVIS), Research and Institutional Support Specialist
- Faburada, Arturo, Project officer for the Palawan learning area (CRM planning and implementation, training, implementation of Best CRM Practices in barangay clusters)
- Fuentes, Rodrigo (Tetra Tech), Policy and Institutional Development Team Leader
- Gasalatan, Mario (GLOVIS), IEC Outreach Specialist
- Gendrano, Jose Federico (Tetra Tech), CRM Specialist
- Guidato, Marlito (Tetra Tech), Local Government Coordinator
- Gulayan, Anecita (Independent), Community Organizer Coordinator for Mangrove
- Huettche, Carsten (Independent), Coastal ecotourism consultant
- Iturralde, Gemma (EDF), Provincial Coordinator for the Malalag Bay Learning Area
- Jatulan, William (Independent), Training Officer

- Mancao, Roquelito (Independent), CRM Technical Assistant for the Malalag Bay Learning Area
- Martinez, Francis (Independent), Technical Assistant for CRM Planning for the Saranganin Bay Learning Area
- Mercado, Elmer (GLOVIS), IEC Policy Advocacy Specialist
- Monreal, Reynaldo (Independent), Bohol Provincial IEC and CRM Specialist
- San Juan, Lizette (Independent), CO/CD Consultant for Sarangani Bay Learning Area

#### 4.1.3 Subcontractor and Individual Consultant Agreements

A summary of subcontractor firms and individual consultants who have provided support to various CRMP activities during the year is listed in Table 4-2

**TABLE 4-2  
SUMMARY OF CRMP TEAM FIRMS AND INDIVIDUAL CONSULTANTS  
(JANUARY 1, 1999 TO DECEMBER 31, 1999)**

Organization / Individual	Services
<b>Organization</b>	
Economic Development Foundation	Technical staff for community development and community-based coastal management including community development core advisor and learning area coordinators for Malalag Bay, Negros Oriental, and Sarangani Bay
First Consolidated Bank of Bohol, Inc.	Technical assistance in enterprise development for the Bohol learning area
Geoplan Cebu Foundation, Inc.	GIS mapping services
Global Vision, Inc.	Transformational communication
Heuristics Technology and Management Consultants, Inc.	Architectural and engineering design of Silliman University Marine Laboratory
Institute for Small Farms and Industries	Technical staff for community development and community organizing in Malalag Bay learning area
J.H. Liong Construction	Construction of Silliman University Marine Laboratory
Haribon Foundation for the Conservation of Natural Resources, Inc.	Community-based coastal management in Bohol
Pacific Management Resources, Inc.	Technical assistance in the area of enterprise development
Pacific Rim Innovation and Management Exponents	Technical staff in support of policy component including: policy core advisor, policy researcher, and support staff
PlanPacific	Technical assistance in the development of ICM Guidebook

<b>Organization / Individual</b>	<b>Services</b>
Rotarian Martin "Ting" Matiao Foundation, Inc.	Community-based coastal management support in Negros Oriental
Trends-MBL	
Woodward Clyde-Philippines	Technical staff for community-based coastal management including learning area coordinators for Olango Island and Bohol
University of San Carlos	Technical assistance in completion of coastal area profile

**TABLE 4-2 (Continued)**  
**SUMMARY OF CRMP TEAM FIRMS AND INDIVIDUAL CONSULTANTS**  
**(JANUARY 1, 1999 TO DECEMBER 31, 1999)**

<b>Organization / Individual</b>	<b>Services</b>
<b>Individual</b>	
Abregana, Betty	Technical assistance in social science research and audience survey for the "Our Seas, Our Life" Exhibits
Alum. Edna	Mariculture Specialist for the Negros Oriental Learning area
Amejan, Andres	Technical assistance on mariculture enterprise projects for the learning areas in Negros Oriental, Bohol, and Olango Island
Baleña, Rex	Technical assistance in framework development for sound development of fish cages or pens in Malalag Bay
Balisacan, Caridad	Assistance in graphic arts for Various. CRMP publications
Barraca, Ruben	Technical assistance on seaweed enterprises for all CRMP learning areas
Batongbacal, Jay	Institutional/Legal Analysis Consultant
Bayer, Thomas	Technical assistance as Training Coordinator for CRMP's ICM training courses
Besa, Dexter Allen	Assistance in graphic arts for Various. CRMP publications
Blanco, Reggie	Technical assistance in community organizing (CO) activities in Olango Island
Borres, Jovita	Technical assistance in community organizing in San Vicente, Palawan
Collantes, Ysolde	Assistance in graphic arts for Various. CRMP publications
Cuadrasal, Zosimo	Technical assistance in coordinating with Calape LGU in Bohol
Cruz, Raymund dela	Technical assistance in Palawan learning area
Delegero, Johnette	Technical assistance in Malalag Bay learning area as Learning Area Coordinator (position reclassified under Tetra Tech)
Dumon, Ma. Pepa	Marketing assistance for enterprise development products in the Cebu and Bohol learning areas
Escabosa, Edgar	Community organizing under the MMC

<b>Organization / Individual</b>	<b>Services</b>
Faburada, Arturo	Project Officer of the Palawan Learning Area (CRM planning and implementation, training, implementation of Best CRM Practices in barangay clusters)
Frazier, Jack Gordon	Technical assistance in satellite telemetry for sea turtle tracking project and CRMP website
Garcia, Roberto	Technical assistance on mariculture enteroruse projects for the learning areas in Malalag Bay and Sarangani
Gerona, Arnold	Community organizing under the MMC
Gonzaga, Glenn	Project oversight for enterprise development products in Cebu and Bohol learning areas
Gonzales, Olive	Technical assistance in Sarangani Bay learning area

**TABLE 4-2 (Continued)**  
**SUMMARY OF CRMP TEAM FIRMS AND INDIVIDUAL CONSULTANTS**  
**(JANUARY 1, 1999 TO DECEMBER 31, 1999)**

<b>Organization / Individual</b>	<b>Services</b>
Green, Stuart	Technical assistance in Bohol learning area as Provincial Coordinator
Gulayan, Anecita	Technical assistance in the Bohol learning area
Huettche, Carsten	Coastal ecotourism consultant
Jatulan, William	Technical assistance in CRMP's training course as Training Officer
Jennings, Todd	Assistance in editing Mangrove Toolkit
Leocadio, Flora	Technical assistance as Enterprise Development Specialist for the learning areas in Negros Oriental and Palawan
Libosada, Carlos Jr.	Assistance in ecotourism seminar-workshop
Mancao, Roquelito	CRM Technical Assistant for the Malalag Bay learning area
Martinez, Francis	Technical Assistant for CRM Planning for the Sarangani Bay learning area
Miclat, Evangeline	Assistance in editing the "Rhythm of the Seas: Coastal Environment Profile of San Vicente, Palawan"
Monreal, Reynaldo	Bohol Provincial IEC and CRM Specialist
Paredes, Rosalinda	Technical assistance in research to measure impact of IEC activities
San Juan, Lizette	Technical assistance in the Sarangani Bay learning area
Stuewe, Michael	Technical assistance in satellite telemetry for see turtle tracking project and CRMP website
Toyogon, Estela	Community organizing under the MMC
Yambao, Alexis	Technical assistance in coastal policy and training

In addition to team firms and independent consultants, several individuals continued to participate in the project's efforts either as student interns or volunteers in different components of the project.

#### **4.2 ACTIVITIES NOT ACCOMPLISHED AND WHY**

Project management undertook all planned activities involving personnel except in several cases where planned new employment was no longer necessary.

## **5.0 PROJECT PERFORMANCE AND IMPACT**

In this section, the overall performance and impact of CRMP is summarized according to the 1999 Annual Work Plan accomplishments; progress in meeting project targets; and impact on key participating agencies and organizations. In addition, key implementation problems and issues, proposed courses of action, and adjustments to the work plan targets are described.

### **5.1 OVERALL STATUS OF WORK PLAN'S ACTIVITIES**

CRMP's 1999 Annual Work Plan describes major activities of the project over the period January 1 to December 31, 1999. Overall, major activities of the project were implemented as planned.

The overall status of key activities planned under the national Policy Component include:

- Policy study and Draft Joint Administrative Order defining the roles of DENR and DA-BFAR in implementing the RA 8550 (Fisheries Code) was completed and distributed for review by DENR and DA-BFAR ahead of schedule.
- Policy study on the Agricultural and Fisheries Modernization Act was drafted.
- CRM Legal and Operational Guidebooks are in a second round of internal review and editing; however, national government agency review is slightly behind schedule.
- CEP sites have been integrated into the Municipal Coastal Database and used for all CRMP sites as scheduled, supported a CEP-CRMP national coordination workshop.

The overall status of key activities planned under the IEC Component include:

- Provincial IEC core groups are being identified and strengthened as scheduled.
- Social marketing and mobilization efforts in observance with Month of the Ocean (May) were conducted successfully as scheduled.
- Conference of Coastal Municipalities conducted in partnership with the League of Municipalities was a major unplanned event that promoted not only LGU advocacy for and spread of CRM but a national policy direction for CRM articulated by President Estrada.

- Our Seas, Our Life exhibit, featured in Bohol at the request of Governor Relampagos was unplanned; requests for showings throughout the Philippines continue.
- Publications such as Tambuli “The Values of Philippine Coastal Resources” were published as planned and have provided a foundation of information to support CRM in the country.
- Qualitative and quantitative research studies on project interventions are being conducted as scheduled.

The overall status of key activities planned for Learning and Expansion Areas include:

- Coastal area profiles, coastal resource maps, and municipal coastal database for all learning areas have been updated, systematized, and are being used for CRM planning.
- Learning area municipalities are actively involved in developing municipal CRM plans as well as in some cases, bay-wide plans as scheduled.
- CRM best practices are being implemented by municipalities throughout all learning areas as scheduled and in selected areas, ahead of schedule.
- Enterprise development models involving ecotourism, seaweed farming and oyster culture are proceeding as planned; most climatic effects of 1998/9 have passed and all mariculture activities are healthy again.
- Mangrove Management Toolkit development, completed and ready for layout after a needed in-depth technical review by DENR. This will come out by April 2000.
- CBFMAs have been awarded as scheduled to 5 peoples organizations with 217 members covering over 1,000 ha of mangrove area.
- Provincial MOAs, a primary mechanism for CRM expansion in learning areas provinces is progressing, but is behind schedule as the review process involving all partners has taken more time than expected.

The overall status of key activities planned under the Training component include:

- ICM Training Courses conducted in partnership with DENR and DA-BFARs RFTCs completed in Cebu, Davao, and Palawan
- PCRA training module is packaged for widespread dissemination and adoption
- Collaboration with FRMP began to utilize a number of CRMP training modules

## 5.2 PROGRESS IN MEETING PROJECT TARGETS

As discussed in the 1998 Annual Report, USAID finalized and approved a revised Results Framework and indicators for CRMP in December 1998. CRMP began reporting results under the Revised Results Framework in the 1998 Annual Report.

### 5.2.1 Strategic Objective Indicators

CRMP has two Strategic Objective (SO) level indicators: kilometers of shoreline where improved management of coastal resources is being implemented; and percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries. Appendix A provides a 1999 year-end status in meeting project targets.

#### SO Indicator 1:

A cumulative total of 741 kilometers of shoreline, composed of 29 municipalities and cities, have been "completed" to date according to the indicators for local implementation. This includes 513 kilometers of shoreline within the 6 CRMP learning areas and 228 kilometers in expansion areas. This exceeds the project's target of 670 kilometers by the end of 1999. A total of 132 kilometers of shoreline (composed of 7 LGUs) reached a similar threshold in 1998.

#### SO Indicator 2:

Marine sanctuary monitoring for the second SO indicator (*percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries*) is also provided in Appendix A. Based on monitoring results for 6 selected marine sanctuaries, fish abundance increased some 255 percent above the baseline inside marine sanctuaries (versus a 1999 target of 10 percent) and 70 percent above the baseline adjacent to marine sanctuaries (versus a target of 0 percent). These high percentage changes may be attributed to the extremely low baseline figures for fish populations due to the degraded, poorly managed condition of these sanctuaries during the baseline year.

Coral cover increased 40 percent inside (versus a 1999 target of 5 percent) and decreased 7 percent adjacent (versus a target of 0 percent) in 1999 compared to baseline levels. Record high tropical sea surface temperatures resulted in coral bleaching throughout coral reefs in the Philippines as well as the Indo-Pacific Region in 1997 and 1998. In 1999, unusually heavy rains have persisted in many areas of the Philippines. CRMP has also noted localized outbreaks of the coral eating, crown-of-thorns seastar, *Acanthaster*. Overall, the strength of management activities in marine sanctuaries monitored in CRMP learning areas is increasing with active community involvement, however, inconsistencies in management, especially enforcement, still exist.

### 5.2.2 Municipal Coastal Database

The Municipal Coastal Database (MCD) was designed to help simplify and standardize monitoring and evaluation of CRM activities at the LGU level. It was further designed to support widespread adoption and use by LGUs and CRM-related agencies and projects.

The MCD can be used by the LGU as a guide to implementing CRM programs as well as to report on progress made in managing municipal waters. The MCD can also be used by assisting organizations and projects to plan, monitor, and evaluate technical assistance and training in CRM provided to an LGU.

During the MCD development stages, the following processes were completed:

- Developed the database structure, forms, reports and other tools
- Developed an extensive Help-file facility
- Undergone a through Beta1-test within the CRMP Team and outside contractors
- Presented to the DENR's CEP and the League of Municipalities Conference
- Prepared an MCD Manual which contains instructions and guidelines in operating the MCD software
- Prepared a Computer Based Tutorial (CBT) on how to operate the MCD software
- Generated at least 50 CD-ROMS for Beta2 distribution, involving key project partners (DENR, BFAR, LGUs) and other donor-assisted projects (GOLD, FRMP, CBRMP, ENRAP)

The completed version of the MCD (MCD 2000) is now in the process of being released and utilized as an innovative CRM software tool to the coastal municipalities and provinces. As of year-end 1999, the project's MCD monitoring system contains several levels of CRM-related information on over 250 LGUs throughout the country, or over 30 percent of the country's coastal LGUs.

### **5.3 IMPACT OF ACTIVITIES ON PARTICIPATING ORGANIZATIONS AND AGENCIES**

Partnerships and multisectoral collaboration serve as the primary mode of operation for most CRMP activities. During 1999, two key events that catalyzed active partnerships and corresponding positive impacts were the Month of the Ocean and the Conference of Coastal Municipalities.

- Month of the Ocean was observed at both national and local levels through a wide range of activities spearheaded by CRMP partners in national government, local government, and private sector. Leadership and commitment on the part of partner organizations to spearhead Month of the Ocean activities was immediate and largely the result of solid working relationships established during the 1998 International Year of the Ocean

- Conference of Coastal Municipalities hosted by the League of Municipalities of the Philippines (LMP) in partnership with DENR, DA-BFAR, OPAPE, and CRMP provided a first ever opportunity for key national government agencies to interface with coastal municipalities about the problems facing Philippines seas. As the 3<sup>rd</sup> key activity conducted by CRMP in partnership with the LMP over the last 3 years, the LMP is looking to institutionalize CRM as a regular activity of the LMP.

#### **5.4 KEY ISSUES AND IMPLEMENTATION PROBLEMS**

With the proliferation of donor-assisted coastal management programs, CRMP continues to experience a shortage of CRM Specialists despite the increasing numbers of trained ICM graduates.

The ongoing changes in national government agency staff is resulting in some delays in implementing CRMP's national policy component. Stabilization of DENR and DA-BFAR staff was previously anticipated by the end of the 3<sup>rd</sup> Quarter 1999, but a state of flux seems to continue.

The DA's implementation approach for the Agriculture and Fisheries Modernization Act (AFMA) Program continues to serve as a source of conflict between CRMP's CRM initiatives that promote reducing fishing effort to enable the recovery of municipal fisheries and DA's initiative to intensify capture fisheries to increase production in all coastal LGUs. Municipal Strategic Agricultural and Fisheries Development Plans are being prepared with little or no participation or public consultation, hence bear little resemblance to participatory CRM plans facilitated by CRMP. CRMP completed a policy study on conflicts between the Fisheries Code and AFMA to analyze conflicts between the two laws.

#### **5.5 PROPOSED REVISIONS TO WORK PLAN SCHEDULE OR COSTS**

USAID Contract Amendment No. 5 was approved in June 1999 amending the period of performance and budget of Tetra Tech's contract.

Tetra Tech's current funding was programmed through March 31, 2000. Tetra Tech has been able to stretch this funding beyond this date, however, incremental funding as programmed in Amendment No. 5 is required to continue operating the projects..

### **6.0 SUSTAINABILITY**

Sustainability of the project's interventions will be achieved by a variety of factors including empowering coastal communities with CRM responsibility, developing an information base for sound CRM planning, building constituency groups to support CRM initiatives, and developing a critical mass of leaders in CRM. CRMP has made substantial progress in these areas over the last year as described below by a few selected examples.

## **6.1 EMPOWERING COASTAL COMMUNITIES WITH COASTAL RESOURCE MANAGEMENT RESPONSIBILITY**

A key element in sustaining CRM initiatives beyond the life of the project is the degree to which coastal communities have been empowered to address CRM issues on their own. A qualitative survey conducted by the USAID funded GreenCom project in 1996 revealed that at the community level, community members generally believed the CRM problems were the responsibility of the government. But few LGUs reported that they considered CRM as a priority issue, although the responsibility for managing coastal resources had largely been devolved to LGUs from the national government in 1991.

Focus-group discussions conducted in 1999 revealed a greater consciousness and awareness of coastal problems on the part of target groups when compared to the 1996 GreenCom survey. In addition, mayors and LGU officials were now more willing to promote and adopt CRM practices. Of significance is the increased personal sense of responsibility on the part of target groups for their coastal resources when compared to the 1996 survey results.

## **6.2 DEVELOPING A COASTAL RESOURCE MONITORING AND INFORMATION MANAGEMENT SYSTEM**

The continuity of CRM initiatives can be greatly enhanced through the development of an appropriate and user-friendly information management system. In the absence of such a system, LGUs, national government agencies, and NGOs are constantly conducting new assessments and starting new initiatives without building on previous studies and work.

CRMP has completed the design and development of the Municipal Coastal Database (MCD) software as a planning, diagnostic, and monitoring tool for coastal LGUs, with external evaluation (beta testing) by key national partners and other donor-assisted projects. As of year-end 1999, the MCD is in the process of being adopted and applied by the CEP, FRMP, the province of Bohol and numerous other LGUs. At present, the project's MCD monitoring and evaluation system contains several levels of CRM-related information on over 250 LGUs throughout the country, or over 30 percent of the country's coastal LGUs (see Appendix D-8 to D-12). In the year 2000, CRMP will work with interested provinces in preparing provincial reports on the state of the coastal environment and CRM trends based on the MCD.

## **6.3 BUILDING CONSTITUENCY GROUPS TO SUPPORT CRM INITIATIVES**

Different types of constituency groups from public and private sectors are required to support and sustain CRM initiatives beyond the life the project. CRMP is continuing to build these CRM support groups at national and local levels.

The *I Love the Ocean Movement* (ILTO), initiated by the project in 1998 as a vehicle for CRM advocacy, has grown to over 13,000 ILTO members nationwide covering a wide range of sectors in society. In 1999, the ILTO chapters have begun to take on a life of their own without assistance from CRMP. For example, the Cebu Chapter was officially registered with the Securities and Exchange Commission to enable it to function independently as a corporate identity. A nationwide ILTO project was initiated called, "A Million Mangroves for the Millennium".

CRMP's partnership with the League of Municipalities of the Philippines (LMP) continues to generate nationwide support for CRM initiatives. The 1<sup>st</sup> Conference of Coastal Municipalities, conducted in partnership with the LMP and national government agencies, provided a high impact venue to build support for CRM initiatives among all coastal municipalities.

In 1999, CRMP concentrated its efforts on consolidating the expertise and experience of trained CRM practitioners in the 6 Learning Areas into provincial core groups for IEC and training. These provincial core groups, composed of local government, national government, and non-government staff, are now beginning to replicate training and IEC programs in CRM.

#### **6.4 DEVELOPING A CRITICAL MASS OF LEADERS IN CRM**

The project has set an internal target of reaching 30% of strategic groups or networks that could further catalyze support and action programs in CRM. In theory, this percentage would establish a critical mass of leaders that would create self-reinforcing systems for CRM. While CRMP continues to work on building community leadership in CRM through training and IEC activities, in 1999, more attention was focused on promoting CRM leadership at the local government level. Some of the project's accomplishments along these lines in 1999 are discussed below.

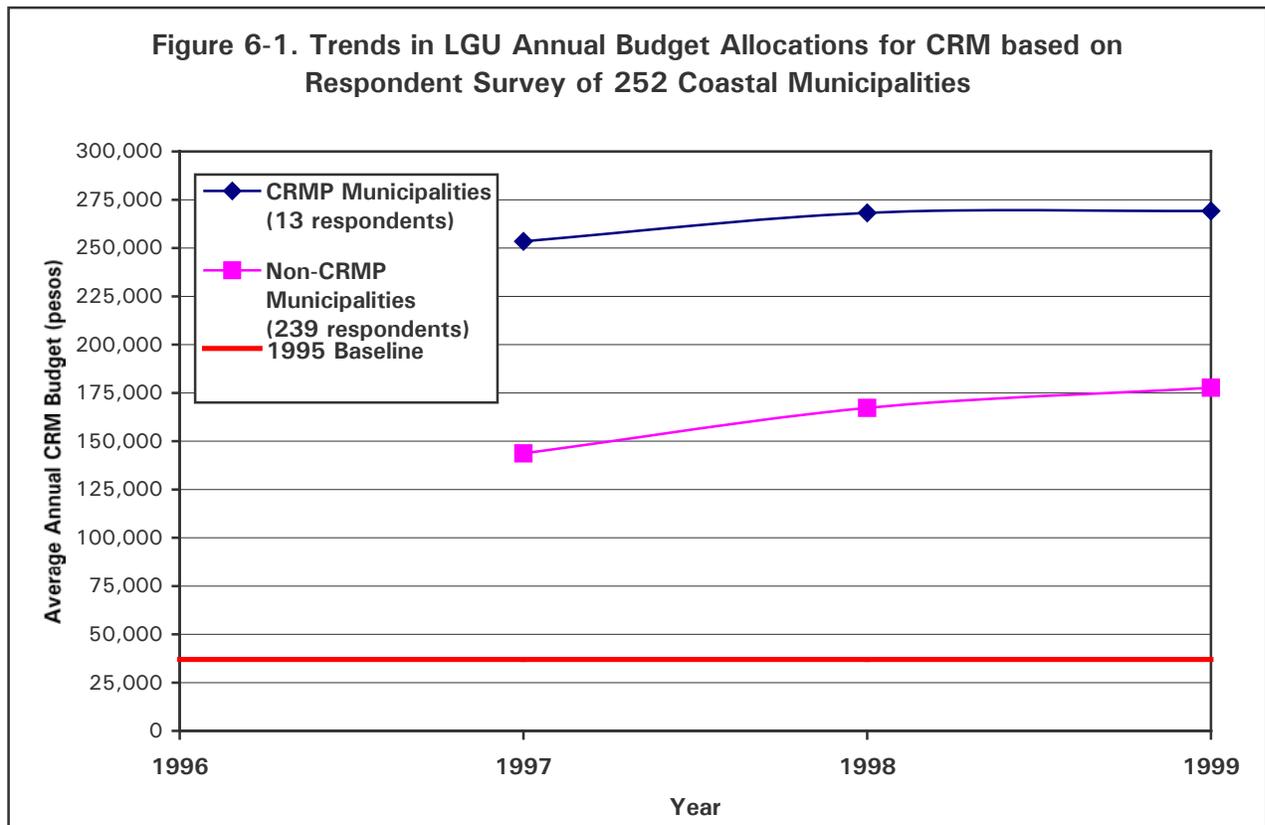
Developing a critical mass of LGU officials has progressed in partnership with the LMP since 1997. As an outcome of the 1<sup>st</sup> Conference of Coastal Municipalities, the 701 participating coastal mayors (90% of the 832 coastal mayors in the country) supported a resolution, addressed to the President, which articulated a 15-point agenda for empowering coastal LGUs for integrated coastal management.

As a result of the Conference, CRMP responded to requests for multi-media materials from 486 coastal municipalities, representing 58% of the national total. These requests were received from the coastal mayors themselves who wanted to implement CRM in their respective municipalities. The results of a survey of 252 or 30 % of all coastal municipalities conducted by CRMP at the Conference (Figures 6-1) revealed that annual budget allocations for CRM have significantly increased above the 1995 pre-project baseline level (note: survey data for CRMP municipalities will vary from those entered from the MCD because of the mode of data collection). Increased activities related to CRM can be inferred from increases in budget allocations as evidenced from the percentage of

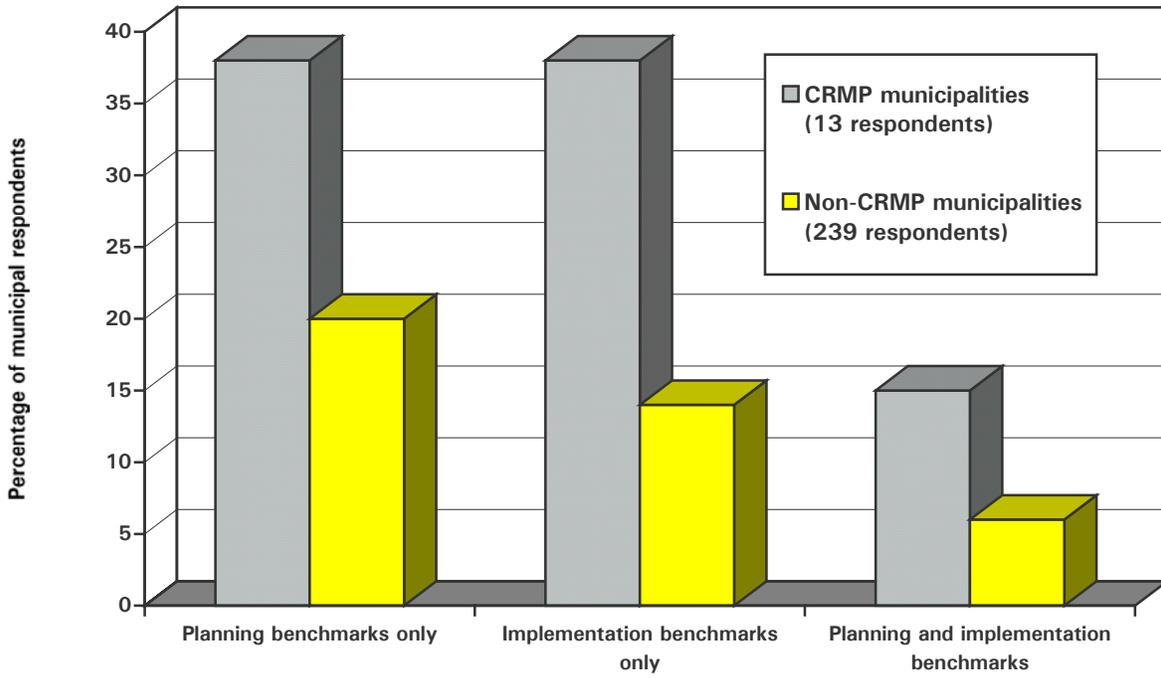
municipalities achieving planning and implementation benchmarks (Figure 6-2) used by CRMP. The percentage of municipalities completing the full CRM cycle of planning and implementation, however, still needs improvement.

Building from the CRM agenda set by the LMP Resolution and in collaboration with the LMP, Silliman University’s LEAP, and two USAID-funded projects (GOLD and AGILE), CRMP assisted in the conduct of national-level consultations and policy studies to support proposed amendments to the national Local Government Code to strengthen the role of LGUs in CRM. Proposed amendments such as the inclusion of the area of municipal waters in the computation of Internal Revenue Allocation (IRA), if passed, will reinforce the new paradigm of CRM as a basic service of all coastal LGUs in the country.

Overall, 1999 marked a year of refining approaches, methodologies, and tools developed by the project for widespread use to other areas of the Philippines and through other initiatives such as FRMP, CEP, and GOLD.



**Figure 6-2. Status of LGU CRM Programs in 1999  
based on Respondent Survey of 252 Coastal Municipalities**



**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**APPROVED:** December 31, 1998 (Revised)

<b>SO INDICATOR:</b>	Kilometers of shoreline where improved management of coastal resources is being implemented
<b>UNIT OF MEASURE:</b>	Kilometers of shoreline in core areas and expansion areas
<b>SOURCE DOCUMENT:</b>	Local government unit records, contractor's activity report, independent surveys
<b>SOURCE ORGANIZATION:</b>	Local government units; TetraTech (contractor); USAID staff
<b>INDICATOR DESCRIPTION:</b>	Kilometers of shorelines from municipalities are counted when the following criteria in local implementation are reached: 1) Annual LGU budget allocated for CRM 2) Resources management organizations are formed and active 3) Best CRM practices are being implemented Data is collected annually.

YEAR	PLANNED	ACTUAL
1996	0	0
1997	0	0
1998	40	132
1999	670	741
2000	1,200	
2001	2,100	
2002	3,000	

**COMMENTS:**

1996 is activity start-up year; however, the results framework for the CRM activity was revised in the 4<sup>th</sup> Quarter 1998, mid-term during the project. A total of 1,200 km of shoreline (670 km from core areas plus 530 km from expansion areas) is targeted for completion by the end of the year 2000. Additional time and financial resources will be required to complete expansion areas in accordance with the revised results framework.

Kilometers of shoreline where improved management of coastal resources is being implemented is counted from core areas and expansion areas. Core areas (CRMP Learning Areas) are where CRM interventions are directly assisted by CRMP. Core areas contribute 670 km of shoreline to the overall strategic objective of 3,000 km of shoreline where improved management of coastal resources is being implemented by the end of the year 2002.

Local implementation in expansion areas is where CRM interventions are catalyzed through collaboration and use of CRMP products and services. Expansion areas contribute 2,330 km of shoreline to overall strategic objective of 3,000 km of shoreline where improved management of coastal resources is being implemented by the end of the year 2002.

1999-Municipal Coastal Database Summary Table provides supporting data by municipality for Strategic Objective and Intermediate Result 1 indicators.

Original estimates of shoreline length were updated through use of digitized map included in the project's Geographic Information System.



Municipal Coastal Database Summary Table 1  
**CRMP Learning Areas (Local CRM Implementation)**  
 Updated Status - Dec. 1999

Province / Municipality (No. of Coastal Barangays)	Original Estimate of Shoreline Length (km)	Revised Shoreline Length (km)	Local CRM Implementation Indicators *				1998 Status "CRMP Completed" LGUs** Level I (km)	1999 Status "CRMP Completed" LGUs** Level I (km)
			1	2		3		
				Mun.	Brgy.			
<b>Bohol</b>								
Buenavista (10)	8	8	✓		1	c		
Calape (21)	28	15	✓	✓		(a),c,d,e,f		15
Clarin (8)	5	7						
Inabanga (19)	18	14	✓	✓	1	d, f		14
Tubigon (17)	18	13	✓		2	(a), b, d, e		13
<b>Subtotal (75)</b>	<b>77</b>	<b>57</b>	<b>4</b>	<b>2</b>	<b>4</b>			<b>42</b>
<b>Davao del Sur</b>								
Hagonoy (4)	6	8	✓	✓	4	(a), b, d, e, f		8
Malalag (3)	8	8	✓	✓	3	(a), b, d, e	8	
Padada (4)	5	4	✓	✓	4	b, d		
Sta. Maria (8)	38	46	✓	✓	8	(a), b, c, d		46
Sulop (1)	5	3	✓	✓	1	(a), b, d, e		3
<b>Subtotal (20)</b>	<b>62</b>	<b>69</b>	<b>5</b>	<b>5</b>	<b>20</b>		<b>8</b>	<b>57</b>
<b>Negros Oriental</b>								
Amlan (4)	8	7	✓	✓	5	(a), b, d, e		7
Bacong (7)	5	7	✓	✓	6	(a), b, d		7
Bais City (12)	24	30	✓	✓	12	(a),b,c,d,e,f	30	
Dauin (9)	11	10	✓	✓	9	(a), b, d, e	10	
Dumaguete City (7)	10	7	✓	✓	9	(a), b, d		7
Manjuyod (10)	15	16	✓	✓	10	(a),b,c,d,e,f		16
San Jose (5)	8	6	✓	✓	5	(a), b, c, d		6
Sibulan (6)	8	9	✓	✓	6	(a), b, d, e	9	
Tanjay (9)	13	19	✓	✓	9	(a), b, d, e		19
<b>Subtotal (69)</b>	<b>102</b>	<b>111</b>	<b>9</b>	<b>9</b>	<b>71</b>		<b>49</b>	<b>62</b>
<b>Cebu</b>								
Cordova (1)	18	13	✓	✓	2	a, b, c, d, (e)		13
Lapu-Lapu City (11)	55	48	✓	✓	15	c, (e)		
<b>Subtotal (12)</b>	<b>73</b>	<b>61</b>	<b>2</b>	<b>2</b>	<b>17</b>			<b>13</b>
<b>Palawan</b>								
San Vicente (10)	120		✓	✓	6	a,b,c,d,e,f,g,h	20	100
<b>Subtotal (10)</b>	<b>120</b>	<b>120</b>	<b>1</b>	<b>1</b>	<b>6</b>		<b>20</b>	<b>100</b>
<b>Sarangani</b>								
Alabel (3)	16	11	✓	✓	4	(a), b, c, d, e		11
General Santos City (9)	12	30	✓	✓	9	(a), b, d, e		30
Glan (16)	27	66	✓	✓	13	(a), b, c, d, e		66
Kiamba (15)	74	37	✓	✓	13	(a),b,c,d,e	37	
Maasim (11)	43	45	✓	✓	8	(a), b, d,		
Maitum (7)	43	24	✓	✓	6	(a), d		
Malapatan (6)	25	18	✓	✓	5	(a), c, d	18	
<b>Subtotal (67)</b>	<b>240</b>	<b>231</b>	<b>7</b>	<b>7</b>	<b>58</b>		<b>55</b>	<b>107</b>
<b>Total</b>	<b>253</b>	<b>674</b>	<b>28</b>	<b>26</b>	<b>176</b>		<b>132</b>	<b>381</b>

Notes :

\* Local CRM Implementation Indicators:

Indicator 1: Resources for CRM allocated by local government units

Indicator 2: Resource management organizations formed and active

Indicator 3: Best CRM practices (interventions) are being implemented by the LGU such as:

- (a) CRM plans adopted (b) Fisheries and coastal management ordinances implemented
- (c) Environmentally-friendly enterprises established (d) Enforcement units operational
- (e) Marine sanctuaries functional (f) Mangroves under Community-based Forest Management Agreements
- (g) Municipal water boundaries enforced (h) Other habitat protective measures and open access restrictions in place

✓

Yes

- ( ) Indicates that significant progress has been made in achieving CRM "best practices" (e.g. CRM plans drafted but not yet adopted or FARMC formed but not yet active)

\*\* Under the CRMP proposed system of LGU certification in CRM, "Level I" is defined as the "Basic" level of accomplishment where CRM is accepted as basic LGU service with planning and field interventions initiated. These documented LGU interventions include routinely allocating budget and resources for CRM, have active MFARMCs, and are implementing one or more CRM best practices



Municipal Coastal Database Summary Table 1  
**CRMP Learning Areas (Local CRM Implementation)**  
 Updated Status - Dec. 1999

Province / Municipality (No. of Coastal Barangays)	Original Estimate of Shoreline Length (km)	Revised Shoreline Length (km)	Local CRM Implementation Indicators *				1998 Status "CRMP Completed" LGUs** Level I (km)	1999 Status "CRMP Completed" LGUs** Level I (km)	2000 Target "CRMP Completed" LGUs** Level I (km)
			1	2		3			
				Mun.	Brgy.				
<b>Bohol</b>									
Buenavista (10)	8	8	✓		1	c			8
Calape (21)	28	15	✓	✓		(a),c,d,e,f	15		
Clarín (8)	5	7							7
Inabanga (19)	18	14	✓	✓	1	d, f	14		
Tubigon (17)	18	13	✓		2	(a), b, d, e	13		
<b>Subtotal (75)</b>	<b>77</b>	<b>57</b>	<b>4</b>	<b>2</b>	<b>4</b>		<b>42</b>		<b>15</b>
<b>Davao del Sur</b>									
Hagonoy (4)	6	8	✓	✓	4	(a), b, d, e, f	8		
Malalag (3)	8	8	✓	✓	3	(a), b, d, e	8		
Padada (4)	5	4	✓	✓	4	b, d			4
Sta. Maria (8)	38	46	✓	✓	8	(a), b, c, d	46		
Sulop (1)	5	3	✓	✓	1	(a), b, d, e	3		
<b>Subtotal (20)</b>	<b>62</b>	<b>69</b>	<b>5</b>	<b>5</b>	<b>20</b>		<b>8</b>	<b>57</b>	<b>4</b>
<b>Negros Oriental</b>									
Amlán (4)	8	7	✓	✓	5	(a), b, d, e	7		
Bacong (7)	5	7	✓	✓	6	(a), b, d	7		
Bais City (12)	24	30	✓	✓	12	(a),b,c,d,e,f	30		
Dauin (9)	11	10	✓	✓	9	(a), b, d, e	10		
Dumaguete City (7)	10	7	✓	✓	9	(a), b, d	7		
Manjuyod (10)	15	16	✓	✓	10	(a),b,c,d,e,f	16		
San Jose (5)	8	6	✓	✓	5	(a), b, c, d	6		
Sibulan (6)	8	9	✓	✓	6	(a), b, d, e	9		
Tanjay (9)	13	19	✓	✓	9	(a), b, d, e	19		
<b>Subtotal (69)</b>	<b>102</b>	<b>111</b>	<b>9</b>	<b>9</b>	<b>71</b>		<b>49</b>	<b>62</b>	
<b>Cebu</b>									
Cordova (1)	18	13	✓	✓	2	a, b, c, d, (e)	13		
Lapu-Lapu City (11)	55	48	✓	✓	15	c, (e)			48
<b>Subtotal (12)</b>	<b>73</b>	<b>61</b>	<b>2</b>	<b>2</b>	<b>17</b>		<b>13</b>		<b>48</b>
<b>Palawan</b>									
San Vicente (10)	120		✓	✓	6	a,b,c,d,e,f,g,h	20	100	
<b>Subtotal (10)</b>	<b>120</b>	<b>120</b>	<b>1</b>	<b>1</b>	<b>6</b>		<b>20</b>	<b>100</b>	
<b>Sarangani</b>									
Alabel (3)	16	11	✓	✓	4	(a), b, c, d, e	11		
General Santos City (9)	12	30	✓	✓	9	(a), b, d, e	30		
Glan (16)	27	66	✓	✓	13	(a), b, c, d, e	66		
Kiamba (15)	74	37	✓	✓	13	(a),b,c,d,e	37		
Maasim (11)	43	45	✓	✓	8	(a), b, d,			45
Maitum (7)	43	24	✓	✓	6	(a), d			24
Malapatan (6)	25	18	✓	✓	5	(a), c, d	18		
<b>Subtotal (67)</b>	<b>240</b>	<b>231</b>	<b>7</b>	<b>7</b>	<b>58</b>		<b>55</b>	<b>107</b>	<b>69</b>
<b>Total</b>	<b>253</b>	<b>674</b>	<b>28</b>	<b>26</b>	<b>176</b>		<b>132</b>	<b>381</b>	<b>136</b>

Notes :

\* Local CRM Implementation Indicators:

Indicator 1: Resources for CRM allocated by local government units

Indicator 2: Resource management organizations formed and active

Indicator 3: Best CRM practices (interventions) are being implemented by the LGU such as:

- (a) CRM plans adopted (b) Fisheries and coastal management ordinances implemented
- (c) Environmentally-friendly enterprises established (d) Enforcement units operational
- (e) Marine sanctuaries functional (f) Mangroves under Community-based Forest Management Agreements
- (g) Municipal water boundaries enforced (h) Other habitat protective measures and open access restrictions in place

✓ Yes

( ) Indicates that significant progress has been made in achieving CRM "best practices" (e.g. CRM plans drafted but not yet adopted or FARMC formed but not yet active)

\*\* Under the CRMP proposed system of LGU certification in CRM, "Level I" is defined as the "Basic" level of accomplishment where CRM is accepted as basic LGU service with planning and field interventions initiated. These documented LGU interventions include routinely allocating budget and resources for CRM, have active MFARMCs, and are implementing one or more CRM best practices

**BOHOL LEARNING AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	Learning Area Municipalities				
	Buenavista	Calape	Clarin	Inabanga	Tubigon
<i>MOA Signed</i>	✓	✓	✓	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓		✓	✓
<b>2. CRM organizations formed and active</b>					
<i>No. formed</i>	1 (M) 2 (B)	2 (M) 2 (B)	2 (M)	1 (M) 1 (B)	2 (M) 2 (B)
<i>No. active</i>	1 (B)	1 (M)		1 (M) 1 (B)	2 (B)
<b>3. CRM "Best Practices" Implemented</b>		1 (B)			
a. CRM plans adopted					
<i>PCRA Completed</i>	1	18	2	2	10
<i>Coastal area profile completed</i>	Final editing/ready for publication				
<i>CRM plans drafted</i>		1 (M)			1 (M) 1 (B)
<i>CRM plans adopted</i>					
b. Fisheries & coastal management ordinances actively implemented					✓
c. Environment-friendly enterprise established	1 (B)	1 (B)			
d. Coastal law enforcement units operational		✓		✓	✓
e. Marine / fish sanctuaries functional		✓			
<i>No. declared</i>		4			4
<i>No. functional</i>		1			2
f. Mangrove areas under CBFMA				✓	
g. Municipal water boundaries enforced					
h. Other habitat protective measures and open access restrictions in place					

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**BOHOL EXPANSION AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	Expansion Area Municipalities					
	Candijay	Dimiao	Getafe	Loon	Panglao	Mabini
<i>MOA Signed</i>	✓	✓	✓	✓		
<b>1. Annual LGU Budget (1999) allocated for CRM</b>			✓	✓	✓	
<b>2. CRM organizations formed and active</b>						
<i>No. formed</i>	2 (M) 2 (B)	1 (M) 1 (B)	2 (M) 3 (B)	2 (M) 2 (B)	1 (M) 3 (B)	
<i>No. active</i>	1 (M) 2 (B)	1 (B)	2 (B)	1 (M) 2 (B)		
<b>3. CRM "Best Practices" Implemented</b>						
a. CRM plans adopted						
<i>PCRA Completed</i>			3 (B)	2 (B)		
<i>Coastal area profile completed</i>						
<i>CRM plans drafted</i>				1		
<i>CRM plans adopted</i>						
b. Fisheries & coastal management ordinances actively implemented				✓		
c. Environment-friendly enterprise established						
d. Coastal law enforcement units operational				✓		
e. Marine / fish sanctuaries functional				✓		
<i>No. declared</i>	1	1	3	4	7	1
<i>No. functional</i>			1	3	1	
f. Mangrove areas under CBFMA	✓		✓			✓
g. Municipal water boundaries enforced						
h. Other habitat protective measures and open access restrictions in place						

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**SARANGANI LEARNING AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	Learning Area Municipalities						
	Alabel	General Santos City	Glan	Kiamba	Maasim	Maitum	Malapatan
<i>MOA Signed</i>	✓	✓	✓	✓	✓	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓	✓	✓	✓	✓	✓
<b>2. CRM organizations formed and active</b>							
<i>No. formed</i>	4 (M) 4 (B)	2 (M) 9 (B)	3 (M) 13 (B)	2 (M) 13 (B)	4 (M) 8 (B)	3 (M) 6 (B)	3 (M) 5 (B)
<i>No. active</i>	4 (M) 4 (B)	2 (M) 9 (B)	3 (M) 13 (B)	2 (M) 13 (B)	4 (M) 8 (B)	3 (M) 6 (B)	3 (M) 5 (B)
<b>3. CRM "Best Practices" Implemented</b>							
a. CRM plans adopted							
<i>PCRA Completed</i>	3 (B)	9 (B)	16 (B)	13 (B)	12 (B)	7 (B)	6 (B)
<i>Coastal area profile completed</i>	✓	✓	✓	✓	✓	✓	✓
<i>CRM plans drafted</i>	✓	✓	✓	✓	✓	✓	✓
<i>CRM plans adopted</i>	✓	✓	✓	✓	✓	✓	✓
b. Fisheries & coastal management ordinances actively implemented	✓	✓	✓	✓	✓		
c. Environment-friendly enterprise established	✓	✓	✓	✓			✓
d. Coastal law enforcement units operational	✓	✓	✓	✓	✓	✓	✓
e. Marine / fish sanctuaries functional							
<i>No. declared</i>	1		4				
<i>No. functional</i>	1		4				
f. Mangrove areas under CBFMA	NA	NA	NA	NA	NA	NA	NA
g. Municipal water boundaries enforced							
h. Other habitat protective measures and open access restrictions in place							

**Notes:** ✓ - yes; (M) - municipal; (B) – barangay; NA – not applicable / not present

**DAVAO DEL SUR LEARNING AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	Learning Area Municipalities				
	Hagonoy	Malalag	Padada	Sta. Maria	Sulop
<i>MOA Signed</i>	✓	✓	✓	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓	✓	✓	✓
<b>2. CRM organizations formed and active</b>	Provincial CRM Council (PCRMC) Provincial IEC Core Group Provincial Mangrove Management Group				
<i>No. formed</i>	2 (M) 4 (B)	2 (M) 3 (B)	2 (M) 4 (B)	2 (M) 8 (B)	2 (M) 1 (B)
<i>No. active</i>	2 (M) 4 (B)	2 (M) 3 (B)	2 (M) 4 (B)	2 (M) 8 (B)	2 (M) 1 (B)
<b>3. CRM "Best Practices" Implemented</b>					
a. CRM plans adopted					
<i>PCRA Completed</i>	✓	✓	✓	✓	✓
<i>Coastal area profile completed</i>	Final editing/ready for publication				
<i>CRM plans drafted</i>	✓	✓		✓	✓
<i>CRM plans adopted</i>					
b. Fisheries & coastal management ordinances actively implemented	✓	✓	✓	✓	✓
c. Environment-friendly enterprise established				✓	
d. Coastal law enforcement units operational	✓ Deputized Fish Wardens				
e. Marine / fish sanctuaries functional					
<i>No. declared</i>	1	1	1	1	1
<i>No. functional</i>	1	1			1
f. Mangrove areas under CBFMA/protected	Pilot area for the province				
g. Municipal water boundaries enforced					
h. Other habitat protective measures and open access restrictions in place					

**Notes:** ✓ - yes; (M) - municipal; (B) – barangay

**DAVAO DEL SUR EXPANSION AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	Expansion Area Municipalities		
	Digos	Malita	Don Marcelino
<i>MOA Signed</i>	✓	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓	✓
<b>2. CRM organizations formed and active</b>			
<i>No. formed</i>	1 (M) 4 (B)	1 (M) 10 (B)	1 (M) 10 (B)
<i>No. active</i>	1 (M) 4 (B)		
<b>3. CRM "Best Practices" Implemented</b>			
a. CRM plans adopted			
<i>PCRA completed</i>	✓		✓
<i>Coastal area profile completed</i>			
<i>CRM plans drafted</i>			
<i>CRM plans adopted</i>			
b. Fisheries & coastal management ordinances actively implemented	✓		
c. Environment-friendly enterprise established			
d. Coastal law enforcement units operational	✓		✓
e. Marine / fish sanctuaries functional			
<i>No. declared</i>			
<i>No. functional</i>			
f. Mangrove areas under CBFMA			
g. Municipal water boundaries enforced			
h. Other habitat protective measures and open access restrictions in place			

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**NEGROS ORIENTAL LEARNING AREA**

**Status of Results Indicators**

(as of December 31, 1999)

Sheet 1 of 2

	Learning Area Municipalities			
	Amlan	Bacong	Bais City	Dauin
<i>MOA Signed</i>	✓	✓	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓	✓	✓
<b>2. CRM organizations formed and active</b>				
<i>No. formed</i>	2 (M) 5 (B)	2 (M) 6 (B)	2 (M) 12 (B)	2 (M) 9 (B)
<i>No. active</i>	2 (M) 5 (B)	2 (M) 6 (B)	2 (M) 12 (B)	2 (M) 9 (B)
<b>3. CRM "Best Practices" Implemented</b>				
a. CRM plans adopted				
<i>PCRA Completed</i>	✓	✓	✓	✓
<i>Coastal area profile completed</i>	Final editing/ready for publication			
<i>CRM plans drafted</i>	✓	✓	✓	✓
<i>CRM plans adopted</i>				
b. Fisheries & coastal management ordinances actively implemented	✓	✓	✓	✓
c. Environment-friendly enterprise established			✓	
d. Coastal law enforcement units operational	✓	✓	✓	✓
e. Marine / fish sanctuaries functional				
<i>No. declared</i>	2		1	2
<i>No. functional</i>	2		1	2
f. Mangrove areas under CBFMA/MSA			✓	
g. Municipal water boundaries enforced				
h. Other habitat protective measures and open access restrictions in place				

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**NEGROS ORIENTAL LEARNING AREA**

**Status of Results Indicators**

(as of December 31, 1999)

Sheet 2 of 2

	Learning Area Municipalities				
	Dumaguete City	Manjuyod	San Jose	Sibulan	Tanjay
<i>MOA Signed</i>	✓	✓	✓	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓	✓	✓	✓
<b>2. CRM organizations formed and active</b>					
<i>No. formed</i>	2 (M) 9 (B)	2 (M) 10 (B)	2 (M) 5 (B)	2 (M) 6 (B)	2 (M) 9 (B)
<i>No. active</i>	2 (M) 9 (B)	2 (M) 10 (B)	2 (M) 5 (B)	2 (M) 6 (B)	2 (M) 9 (B)
<b>3. CRM "Best Practices" Implemented</b>					
a. CRM plans adopted					
<i>PCRA Completed</i>	✓	✓	✓	✓	✓
<i>Coastal area profile completed</i>	Final draft/ready for publication				
<i>CRM plans drafted</i>	✓	✓	✓	✓	✓
<i>CRM plans adopted</i>					
b. Fisheries & coastal management ordinances actively implemented	✓	✓	✓	✓	✓
c. Environment-friendly enterprise established		✓	✓		
d. Coastal law enforcement units operational	✓	✓	✓	✓	✓
e. Marine / fish sanctuaries functional					
<i>No. declared</i>		2	1	2	1
<i>No. functional</i>		2		2	1
f. Mangrove areas under CBFMA/MSA		✓			
g. Municipal water boundaries enforced					
h. Other habitat protective measures and open access restrictions in place					

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**NEGROS ORIENTAL EXPANSION AREA**

**Status of Results Indicators**

(as of December 31, 1999)

	<b>Expansion Area Municipality</b>
	<b>Siaton</b>
<i>MOA Signed</i>	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓
<b>2. CRM organizations formed and active</b>	
<i>No. formed</i>	2 (M) 14 (B)
<i>No. active</i>	2 (M) 14 (B)
<b>3. CRM "Best Practices" Implemented</b>	
a. CRM plans adopted	
<i>PCRA completed</i>	✓
<i>Coastal area profile completed</i>	Final draft
<i>CRM plans drafted</i>	✓
<i>CRM plans adopted</i>	
b. Fisheries & coastal management ordinances actively implemented	✓
c. Environment-friendly enterprise established	✓
d. Coastal law enforcement units operational	✓
e. Marine / fish sanctuaries functional	
<i>No. declared</i>	2
<i>No. functional</i>	2
f. Mangrove areas under CBFMA/MSA	✓
g. Municipal water boundaries enforced	
h. Other habitat protective measures and open access restrictions in place	

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**OLANGO ISLAND LEARNING AREA**

**Status of Results Indicators**

(as of December 31, 1999)

	Learning Area Municipalities	
	Cordova	Lapu-Lapu City
<i>MOA Signed</i>	✓	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓
<b>2. CRM organizations formed and active</b>		
<i>No. formed</i>	3 (M) 5 (B)	5 (island-wide) 20 (B)
<i>No. active</i>	3 (M) 4 (B)	4 (island-wide) 16 (B)
<b>3. CRM "Best Practices" Implemented</b>		
a. CRM plans adopted		
<i>PCRA completed</i>	✓	✓
<i>Coastal area profile completed</i>	Final editing/ready for publication	
<i>CRM plans drafted</i>	✓	
<i>CRM plans adopted</i>	✓	
b. Fisheries & coastal management ordinances actively implemented	✓	
c. Environment-friendly enterprise established	✓	✓
d. Coastal law enforcement units operational	✓	
e. Marine / fish sanctuaries functional		
<i>No. declared</i>	1	2
<i>No. functional</i>		
f. Mangrove areas under CBFMA		
g. Municipal water boundaries enforced		
h. Other habitat protective measures and open access restrictions in place		

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**PALAWAN LEARNING AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	<b>Learning Area Municipality</b>
	<b>San Vicente</b>
<i>MOA Signed</i>	
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓
<b>2. CRM organizations formed and active</b>	
<i>No. formed</i>	17
<i>No. active</i>	17
<b>3. CRM "Best Practices" Implemented</b>	
a. CRM plans adopted	4 plans covering 120 km of coastline
<i>PCRA completed</i>	✓
<i>Coastal area profile completed</i>	✓
<i>CRM plans drafted</i>	4
<i>CRM plans adopted</i>	2
b. Fisheries & coastal management ordinances actively implemented	5
c. Environment-friendly enterprise established	6
d. Coastal law enforcement units operational	2 organizations (Bantay Dagat & Boatmen)
e. Marine / fish sanctuaries functional	
<i>No. declared</i>	6 sanctuaries / 1 marine park
<i>No. functional</i>	3
f. Mangrove areas under CBFMA	PCSD – 5,000 ha; DENR – 1 ha
g. Municipal water boundaries enforced	ECAN zoning in 10 barangays
h. Other habitat protective measures and open access restrictions in place	<ul style="list-style-type: none"> <li>• CRM shed project</li> <li>• 1 CRM youth camp</li> <li>• 1 Marine Park Management Plan</li> <li>• watershed project</li> </ul>

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**PALAWAN EXPANSION AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	<b>Expansion Area Municipality</b>
	<b>Cagayancillo</b>
<i>MOA Signed</i>	✓
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓
<b>2. CRM organizations formed and active</b>	✓
<i>No. formed</i>	1 (MFARMC)
<i>No. active</i>	1 (MFARMC)
<b>3. CRM "Best Practices" Implemented</b>	
a. CRM plans adopted	
<i>PCRA completed</i>	
<i>Coastal area profile completed</i>	
<i>CRM plans drafted</i>	
<i>CRM plans adopted</i>	
b. Fisheries & coastal management ordinances actively implemented	✓
c. Environment-friendly enterprise established	✓
d. Coastal law enforcement units operational	✓
e. Marine / fish sanctuaries functional	
<i>No. declared</i>	1
<i>No. functional</i>	
f. Mangrove areas under CBFMA	
g. Municipal water boundaries enforced	✓
h. Other habitat protective measures and open access restrictions in place	✓

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**BATANGAS EXPANSION AREA**  
**Status of Results Indicators**  
(as of December 31, 1999)

	Expansion Area Municipalities	
	Mabini	Tingloy
<i>MOA Signed</i>	✓	
<b>1. Annual LGU Budget (1999) allocated for CRM</b>	✓	✓
<b>2. CRM organizations formed and active</b>		
<i>No. formed</i>	2 (B)	1 (M)
<i>No. active</i>	2 (B)	
<b>3. CRM "Best Practices" Implemented</b>		
a. CRM plans adopted		
<i>PCRA completed</i>	✓	✓
<i>Coastal area profile completed</i>		
<i>CRM plans drafted</i>		
<i>CRM plans adopted</i>		
b. Fisheries & coastal management ordinances actively implemented	✓	
c. Environment-friendly enterprise established	✓	
d. Coastal law enforcement units operational	✓	
e. Marine / fish sanctuaries functional		
<i>No. declared</i>	3	
<i>No. functional</i>	3	
f. Mangrove areas under CBFMA		
g. Municipal water boundaries enforced		
h. Other habitat protective measures and open access restrictions in place		

**Notes:** ✓ - yes; (M) - municipal; (B) - barangay

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**APPROVED:** December 31, 1998 (Revised)

**SO INDICATOR:** Percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries

**UNIT OF MEASURE:** Average percent change compared to baseline

**SOURCE DOCUMENT:** Biophysical survey data, contractor's activity report  
**SOURCE ORGANIZATION:** University of the Philippines Marine Science Institute; TetraTech (contractor)

**INDICATOR DESCRIPTION:** *Fish abundance inside and adjacent to marine sanctuaries:* Average percent change (in comparison to base years) in fish abundance inside and adjacent to six marine sanctuaries, using standard survey methods. Fish abundance will be estimated three times over the life of the project.  
*Coral cover inside and adjacent to marine sanctuaries:* Percent living coral cover inside and adjacent to six marine sanctuaries, using standard transect methods. Coral cover will be estimated three times over the life of the project.

YEAR	PLANNED	ACTUAL	PLANNED	ACTUAL
	(Fish abundance) (Inside/Adjacent)	(Inside/Adj)	(Coral cover) (Inside/Adjacent)	(Inside/Adj)
1996				
1997				
1998	0/0	212/92	0/0	-1/-10
1999	10/0	255/70	5/0	40/-7
2000	20/5		10/2	
2001	30/10		12/4	
2002	40/15		15/6	

**COMMENTS:**

Changes in fish abundance and coral cover inside and adjacent to marine sanctuaries may be influenced by a wide range of biophysical factors independent of human activities, for example, large-scale climatic-induced changes in sea surface temperature that results in coral bleaching.

1998- Baseline data collection completed for 3 learning areas, data analysis ongoing. Monitoring data collection for some marine sanctuaries complete, data analysis ongoing. El Niño oceanographic conditions marked the year and resulted in fairly widespread occurrence of coral bleaching; Observations of localized infestations of the Crown-of-Thorns seastar (coral-eating seastars). CRMP has assisted 16 LGUs establish or strengthen marine sanctuaries.

1999-Baseline data collection complete for 2 additional learning areas, for a total of 6 marine sanctuaries (with 2 sanctuaries being monitored within Bohol LA and no sanctuaries identified as appropriate with Malagal LA). Annual monitoring complete for all 6 sanctuaries and the completed analysis are summarized in the following pages and are the basis for the above listed results.

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**INTERMEDIATE RESULT:** Improved Coastal Resource Management  
**APPROVED:** December 31, 1998 (Revised)

**IR INDICATOR:** Annual LGU budget allocated for CRM

**UNIT OF MEASURE:** Percentage increase compared to baseline

**SOURCE DOCUMENT:** Local government unit records, contractor's activity report.  
**SOURCE ORGANIZATION:** Local government units, TetraTech (contractor); USAID staff

**INDICATOR DESCRIPTION:** Indicator targets increasing and sustaining regular budget allocations for CRM by LGUs. Information will be collected on an annual basis.

YEAR	PLANNED	ACTUAL	
		(Municipalities)	(Cities)
1996	20	250	106
1997	40	232	104
1998	60	274	142
1999	100	292	265
2000	100		
2001	120		
2002	120		

**COMMENTS:**

Average annual LGU CRM budget for municipalities within 6 CRMP Learning Areas:

1995	P 37,023 (baseline)	( 8 municipalities with validated CRM budget)
1996	P 92,485	(12 municipalities with validated CRM budget)
1997	P 85,775	(16 municipalities with validated CRM budget)
1998	P101,395	(16 municipalities with validated CRM budget)
1999	P107,981	(19 municipalities with validated CRM budget)

Average annual LGU CRM budget for cities within 6 CRMP Learning Areas:

1995	P 928,360 (baseline)	(2 cities with validated CRM budget)
1996	P 987,923	(4 cities with validated CRM budget)
1997	P 962,059	(4 cities with validated CRM budget)
1998	P1,320,518	(3 cities with validated CRM budget)
1999	P2,456,400	(2 cities with validated CRM budget)

Previously reported average annual LGU budgets included provincial, city, as well as municipal budgets. Under the revised results framework, only municipal budgets are being reported for consistency.

Local government unit budget allocations for CRM come from internal revenue allotments provided by the national government. Current economic conditions may alter targets. For example, 1998 LGU internal revenue allotments were reduced under the new national government.

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**INTERMEDIATE RESULT:** Improved Coastal Resources Management  
**APPROVED:** December 31, 1998 (Revised)

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**IR INDICATOR:** Resource management organizations formed and active

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**UNIT OF MEASURE:** Number of resource management organizations formed and active

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**SOURCE DOCUMENT:** Contractor's activity report.  
**SOURCE ORGANIZATION:** TetraTech (contractor); USAID staff

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**INDICATOR DESCRIPTION:** To be counted as formed and active, organizations must meet regularly and discuss CRM-related issues. Information will be collected on an annual basis.

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<b>YEAR</b>	<b>PLANNED</b>	<b>ACTUAL</b>
1996	0	0
1997	0	2
1998	5	15
1999	10	39
2000	29	
2001	40	
2002	60	

**COMMENTS:**

1999 - Resource management organizations counted are Municipal Fisheries and Aquatic Resource Management Councils (MFARMC) or equivalent municipal level organizations with representation from each barangay (the smallest unit of government). Such organizations are considered "active" if they meet at least 6 times per year. Supporting municipal level resource management organizations are Barangay FARMCs (BFARMC). A total of 176 BFARMCs have been formed out of a total of 253 coastal barangays in the 6 CRMP learning areas.

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**INTERMEDIATE RESULT:** Improved Coastal Resources Management  
**APPROVED:** December 31, 1998 (Revised)

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**IR INDICATOR:** Best CRM practices are being implemented

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**UNIT OF MEASURE:** No. of local government units where more than one CRM best practice is being implemented

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**SOURCE DOCUMENT:** Local government units records, contractor's activity report.

**SOURCE ORGANIZATION:** Local government units; TetraTech (contractor); USAID staff

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**INDICATOR DESCRIPTION:** CRM best practices: CRM plans adopted, fisheries and coastal management ordinances implemented, environment-friendly enterprises established, enforcement units operational, marine sanctuaries functional, mangroves under CBFMAs, municipal water boundaries enforced. Other habitat protective measures and open access restrictions in place.

Information will be collected on an annual basis.

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YEAR	PLANNED	ACTUAL
1996	0	0
1997	0	0
1998	2	23
1999	10	32
2000	29	
2001	40	
2002	60	

**COMMENTS:**

1999-Local government units implementing best practices are from all 6 learning areas as well as 3 expansion areas (Mabini, Batangas; Palompon, Leyte; Cagayancillo, Palawan) as listed in Municipal Coastal Database Summary Table 1. Best practices being implemented include: CRM plans drafted/adopted fisheries and coastal management ordinances implemented, marine sanctuaries functional, enforcement units operational, mangroves under CBFMAs, environment-friendly enterprise established and municipal water boundaries enforced.

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**INTERMEDIATE RESULT:** Improved Coastal Resources Management  
**APPROVED:** December 31, 1998 (Revised)

**IR INDICATOR:** Widespread utilization of legal, jurisdictional, operational guides, and training modules

**UNIT OF MEASURE:** Number of government and assisting organizations utilizing legal, jurisdictional, operational guides and training modules for CRM developed by CRMP

**SOURCE DOCUMENT:** Contractor's activity report.  
**SOURCE ORGANIZATION:** TetraTech (contractor); USAID staff

**INDICATOR DESCRIPTION:** Assisting organizations include academic and NGOs. Information will be collected on an annual basis.

YEAR	PLANNED	ACTUAL
1996	0	0
1997	0	25
1998	50	58
1999	100	97
2000	125	
2001	150	
2002	200	
2002		

**COMMENTS:**

1999-The universe of government and assisting organizations utilizing CRM guidance include: national, regional, and provincial offices of national government agencies; Supreme Court and regional and local courts; local government unit offices (provinces and municipalities); state colleges and universities; private colleges and universities; and non-government organizations. A summary listing of 97 agencies organizations and projects are provided on the following page. Several of the listed donor-assisted projects are national in scope and inturn encompass numerous additional local government units, as well as involved agencies and organizations.

## **Summary Documentation**

### **IR Indicator: Widespread utilization of legal, jurisdictional, operational guides, and training modules**

#### **National Government Agencies (10)**

BFAR-Regional Fishermen's Training Centers (RFTCs)  
Bureau of Fisheries and Aquatic Resources (BFAR)  
Department of Environment and Natural Resources (DENR)  
Department of Justice (DOJ)  
Department of Tourism (DOT)  
Local Government Support Program (LGSP)  
National Bureau of Investigation (NBI)  
Palawan Council for Sustainable Development Staff (PCSDS)  
Philippine Coast Guard  
Philippine Information Agency (PIA)

#### **Local Government Units (48)**

29 Learning Area LGUs

12 Expansion Area LGUs (Mabini and Tingloy, Batangas; Getafe and Loon, Bohol; Consolacion, Liloan, Moalboal and Talisay, Cebu; Digos, Davao del Sur; Palompon, Leyte; Siaton, Negros Oriental; Cagayancillo, Palawan)

5 Provinces (Bohol, Davao del Sur, Negros Oriental, Palawan, Sarangani)

League of Municipalities of the Philippines (LMP)

#### **Donor Agencies and Donor-Assisted Projects (7)**

Community-Based Resource Management Project (CBRMP) – World Bank  
Fisheries Resource Management Project (FRMP) - ADB  
Governance and Local Democracy (GOLD) Project – USAID  
Industrial Initiative for Sustainable Environment (IISE) Project – USAID  
Southeast Asian Fisheries Development Center (SEAFDEC)  
US Peace Corps  
Volunteer Service Overseas (VSO) – United Kingdom

#### **Non-Government Organizations (21)**

ABS-CBN Foundation  
Bandillo ng Palawan  
Conservation International (CI)

Environmental Legal Assistance Council (ELAC)  
Feed the Children  
Foundation for a Sustainable Society, Inc. (FSSI)  
Foundation of the Philippine Environment (FPE)  
Girl Scouts of the Philippines  
Haribon Foundation  
Institute of Small Farms and Industries (ISFI)  
International Marinelifelife Alliance (IMA)  
Palawan Conservation Corps  
Palawan NGO Network, Inc. (PNNI)  
Participatory Research, Organization of Communities and Education towards the Struggle  
for Self Reliance (PROCESS), Bohol  
Phildhrra  
SAGUDA  
St. Catherine's NGO  
Sulu Fund for Marine Conservation Foundation  
Tanggol Kalikasan  
Ting Matiao Foundation, Inc. (TMF)  
World Wildlife Fund-Philippines (WWF-Philippines; Kabang Kalikasan ng Pilipinas, KKP)

#### **Academic Institutions (11)**

Camiguin Polytechnic State College  
Cebu State College of Science and Technology - School of Fisheries  
Divine Word College, Tagbilaran, Bohol  
Iloilo State College of Fisheries  
Mindanao State University (MSU), General Santos City  
Silliman University, Center of Excellence – Coastal Resource Management (COE-CRM)  
Siquijor State College  
Southwestern University, Cebu  
University of San Carlos – Marine Biology Section (USC-CRM)  
University of the Philippines - Marine Science Institute (UP-MSI)  
University of the Philippines in the Visayas (UPV)

**PERFORMANCE DATA TABLE**

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**INTERMEDIATE RESULT:** Improved Coastal Resources Management  
**APPROVED:** December 31, 1998 (Revised)

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**IR INDICATOR:** Public awareness of CRM issues

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**UNIT OF MEASURE:** Percent of survey respondents demonstrating knowledge of CRM problems and solutions

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**SOURCE DOCUMENT:** Random survey by target groups  
**SOURCE ORGANIZATION:** Independent survey; Tetra Tech (contractor); USAID staff

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**INDICATOR DESCRIPTION:** Random sampling will be conducted in all target municipalities, Cebu, and Manila. Target groups include: policy makers, local government officials, and fisherfolk. Respondents will only be counted when they demonstrate knowledge of: (1) current conditions/problems affecting coastal resources; and (2) solutions to coastal problems. Information will be collected twice over the life of the project

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<b>YEAR</b>	<b>PLANNED</b>	<b>ACTUAL</b>
1996		
1997		
1998	0	
1999		
2000	10	
2001		
2002	30	

**COMMENTS:**

1999-Qualitative surveys for this new indicator were conducted in 1999 and quantitative surveys will be completed in early 2000. Results of these surveys will be presented in the year 2000 semi-annual report.

**PERFORMANCE DATA TABLE**

**ORGANIZATION/PROGRAM:** USAID PHILIPPINES  
**STRATEGIC OBJECTIVE:** ENHANCED MANAGEMENT OF RENEWABLE NATURAL RESOURCES  
**INTERMEDIATE RESULT:** Improved Coastal Resources Management  
**APPROVED:** December 31, 1998 (Revised)

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**IR INDICATOR:** Harmonization of national policy for CRM

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**UNIT OF MEASURE:** No. of adoptions of CRM guidances and training modules by key national government agencies

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**SOURCE DOCUMENT:** Contractor's activity report  
**SOURCE ORGANIZATION:** TetraTech (contractor); USAID staff

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**INDICATOR DESCRIPTION:** CRM guidances and training: (a) legal and jurisdictional guidance; (b) integrated coastal management policies and procedures; (c) ICM, PCRA, mangrove management Information will be collected annually.

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<b>YEAR</b>	<b>PLANNED</b>	<b>ACTUAL</b>
1996	0	0
1998	3	3
1999	20	6
2000	30	
2001	33	
2002	36	

**COMMENTS:**

1998-Legal and jurisdictional guidebook was completed and adopted in 1997 by three national government agencies (Department of Environment and Natural Resources, DENR; Bureau of Fisheries and Aquatic Resources, BFAR; and Department of Interior and Local Government, DILG).

1999-11 guidebooks are in the final stages of being completed for publication and adoption by DENR, BFAR, and DILG. During 1999, PCRA guidebooks and methodology were adopted by DENR and BFAR. In addition, a mangrove management toolkit guidebook was completed and adopted by DENR for 1999.

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