

## **PROFILES OR BASIC PROJECT DATA**

<b>PROJECT TITLE</b>	:	Coastal Resource Management Project
<b>PROJECT DURATION</b>	:	7 Years (1996-2002)
<b>PROJECT LOCATION</b>	:	LEARNING AREAS (Regions 4-B, 7 and 11) - Palawan, Cebu, Bohol, Negros Oriental, Davao del Sur, and Sarangani
		EXPANSION SITES (Region 4-A, 5, 6, 8, 13)
<b>FUNDING AGENCY</b>	:	U.S. Agency for International Development (USAID)
<b>PROJECT COST</b>	:	US\$ 23,217,386
<b>TOTAL FOREX</b>	:	21,016,028
<b>TOTAL GOP</b>	:	2,201, 358

### **SHORT PROJECT DESCRIPTION:**

The Coastal Resource Management Project (CRMP), a component of NRMP II used an Integrated Coastal Management (ICM) as its basic approach , in its 7-year project life, have carried out several groundbreaking activities in different Learning Areas and Expansion Site in various levels of Local Government Units. These include participatory coastal resource assessment, municipal coastal database, and assistance to formulation of municipal CRM plan, extensive IEC activities and pilot testing of CRM Certification System in region 7 and 11.

## **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 extended by USAID beyond the initial 5 years to the planned 7-year duration in consultation with DENR and the following 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. Expansion of the project's CRM initiatives is promoted to other LGUs throughout the country through collaborative efforts with national government agencies (NGA), 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 technical team that includes U.S. – and Philippine-based subcontractors, and Philippine NGO and academic partners. Project implementation is also supported through cooperative partnership with the U.S. Peace Corps, and related USAID-funded projects and grantees, including the International Marinelife Alliance (IMA), Silliman University, and the U.S. Coast Guard.

As detailed in progress reports submitted by the Contractor and the Regional Offices, CRMP has made substantial gains in facilitating collaborative as well as adaptive coastal resource management in the Philippines. Through multiple partnerships and the use of participatory methodologies and processes, CRMP is building momentum in modeling the way for developing capacities for coastal management in the Philippines.

## I. PROJECT DESCRIPTION

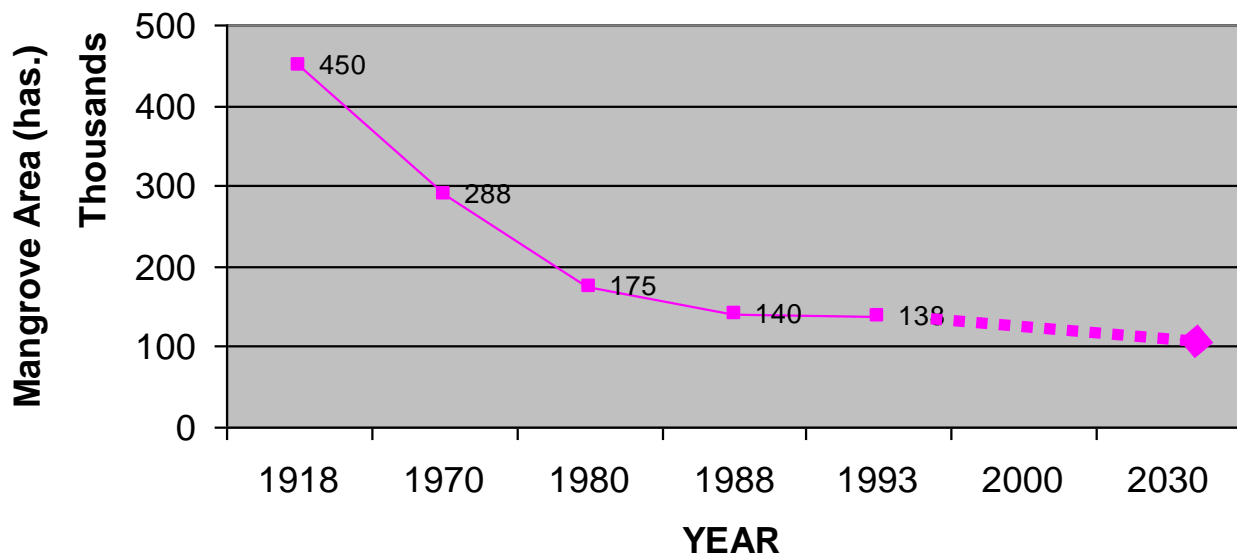
### A. Rationale

**Problem Statement:** Coastal habitats that support marine production which are vital to the livelihood and well being of a majority of Filipinos, especially the poor, are being lost and fishery stocks seriously depleted. If this situation continues, major food and income sources will be lost and already severe rural poverty will worsen.

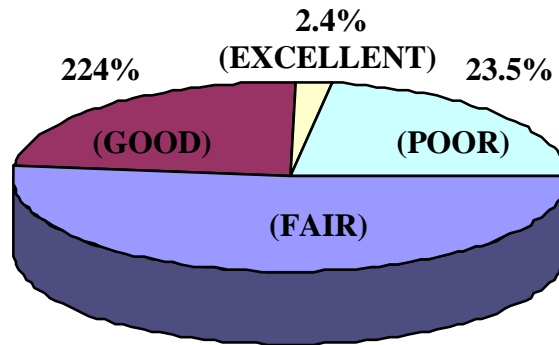
The Coastal Resource Management Project (CRMP) came into the Philippine scene at a critical time, when coastal communities were under severe and increasing threat from the worsening effects of decades of overfishing, destructive fishing, rapid population growth, uncontrolled and haphazard shoreline development, and government programs that continued to encourage increased fisheries production despite a depleted resource base.

Most of the extensive shallow seas of the Philippines – once rich in fish, shellfish, and the habitats (coral reefs, seagrass beds and mangroves) that nurture them – were seriously depleted. Mangrove forests had dwindled to a mere 120,000 hectares in 1995, from about 450,000 hectares in 1918. (Fig.1.1) (DENR 1995). Extensive areas of the country's coral reefs had been decimated by dynamite, cyanide, and other destructive fishing practices, leaving less than 5% in excellent condition. (Fig. 1.2) (Gomez et al 1994) Up to 50% of the seagrass habitats had been lost to heavy siltation and coastal development.

**Fig. 1.1 Mangrove resources decline in the Philippines (DENR 1988, World Bank 1989)**



**Fig. 1.2 Status of Philippine coral reefs in 14 localities (Gomez et al 1994)**



**% of hard coral**

Meanwhile, the government continued to pursue coastal and marine development along the premise that fisheries production could be increased through the use of more efficient gear and technology, that the fisheries industry could keep operating within an open access regime, and that the sea could be harvested as if it was an infinite resource. When allocating resources, whether in terms of funding or personnel development, the government favored increased agro-fisheries production, and its food security programs rarely factored in fishery and aquatic resources. (Courtney et al, 1999) Resource use, without management, characterized its fisheries development programs, resulting in excessive fishing pressure, overfishing, stock depletion, and habitat destruction. Interventions and solutions generally were not comprehensive enough to cover the issues of poverty, food security, sustainability and ecological soundness.

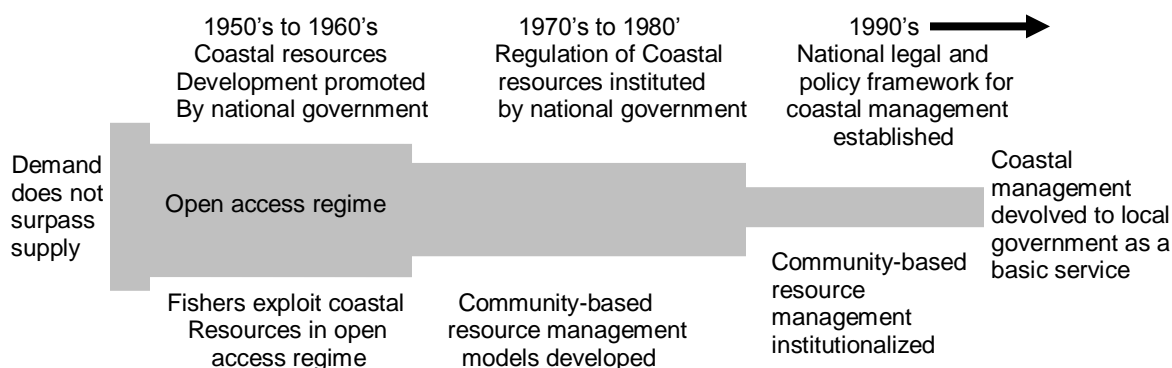
The Bureau of Fisheries and Aquatic Resources (BFAR) noted in its 1995 policy brief on the allocation of fishing areas for the exclusive use of the municipal fisheries sector: "Philippine marine fisheries suffer from excessive fishing pressure, and resource competition is intense, particularly in the near shore, traditional fishing grounds" Fishing level in these areas was said to be 50-75% higher than the level necessary to harvest maximum sustainable yield (BFAR 1995).

Worse, public awareness of what was happening to the country's marine and coastal resources was dismayingly low (Social Weather Station 1997). Advocacy activities for marine and coastal issues were confined to fisherfolk groups and a few conservation-oriented non-governmental organizations (NGOs). Marine and coastal issues were not a priority for the government's lead agency for conservation, the Department of Environment and Natural Resources (DENR), whose primary focus and capabilities

were forestry-based. (CRMP 2000) Even the local government units (LGUs), who were closest to the hard realities in the coastal zone, appeared largely detached from CRM-related problems, preoccupied as they were with infrastructure, health, sanitation and economic problems. (GreenCOM 1996).

## B. Identification, Preparation and Appraisal

The Philippines has a long history in CRM that started in the early 1980s with the establishment of marine protected areas (MPAs). When CRMP started in 1996, CRM applications in the country had evolved from top-down approaches with practically no community involvement (Fig. 1.3) to resource management programs involving community participation (Ferrer et al 1996). There were thus many lessons that CRMP could use to develop new approach to CRM and the specific strategies needed to achieve our Project objectives.



**Fig. 1.3 Evolution of coastal resource management in the Philippines**

Moreover, there were encouraging developments at the national policy and legal fronts that sought to address the overexploitation of natural resources. The 1991 Local Government Code (LGC) mandated local government units (LGUs) to maintain ecological balance, and devolved the management of coastal resources and municipal waters to coastal municipalities and cities. The National Integrated Protected Areas System (NIPAS) Act, enacted by Congress in 1992, established the Philippines' national park system for terrestrial and marine environments. Department Administrative Order 93-13, issued by the DENR in 1993, created the Coastal Environment Program (CEP), which has the specific mandate to conserve and manage the coastal environment. And, the National Marine Policy, adopted in 1994, articulated the Philippine government's response to the growing awareness of the importance of the marine sector and the ocean environment for national and international security (DENR 2001).

The Government of the Philippines (GOP) and United States Agency for International Development (USAID) took these policy developments into account in laying out CRMP. Perhaps the most significant of the policies that came out in the 1990s in the Philippines was the LGC, which devolved certain powers and responsibilities in the areas of health

and sanitation, agriculture, social welfare, and environmental management from the national government to the LGU.

The LGC provided the initial policy structure needed to decentralize the management of coastal resources. It expanded the scope of municipal waters to 15 km from 7 km, giving LGUs greater jurisdiction over the use and conservation of the area. It also repealed State policies favoring maximum utilization of fishery resources and exportation of fish and fishery products, and devolved some powers and functions of the Department of Agriculture (DA), DENR and other concerned national government agencies (NGAs) to the LGUs, including the right to grant licenses, leases and permits for the use of municipal waters.

At the beginning of the Project, however, these policies were only just starting to filter down through the layers of government bureaucracy. Policy reforms had been largely implemented only at the national level, mostly as policy intent and direction, and had not been operationalized into concrete actions. The gap between national policy and what was happening at the local level was glaring in most places. LGUs recognized the problems besetting their constituents in fishing communities, but because of their lack of awareness of their mandate over municipal waters, they regarded such problems as primarily the national government's concern. Compared to such devolved functions as health and agricultural services, natural resource management in general received low LGU prioritization (GreenCOM 1996).

### **C. Objectives and Scope**

Originally conceived as a 7-year effort (1996-2002) "to address serious overfishing and the imminent collapse of fisheries in coastal waters", CRMP was tasked to support a "strategic spread" of CRM among LGUs, thus operationalizing the national policy of coastal and marine management. The Project's design was articulated in a 37-page Statement of Work (SOW) issued by the USAID, which provided the general and specific objectives, indicators, target groups, approach, and implementing strategy for CRMP. (USAID 1995)

As stated in the SOW, the Project was to use the best experiences in the Philippines' long history in CB/CRM and other innovative approaches to achieve five results:

1. Communities effectively managing their coastal resources, limiting access to their resources in equitable ways and reducing fishing effort, yet attaining sustainable harvests and realizing an increase in their profit;
2. Effective teams of site staff who will continue to provide assistance to coastal communities and their local governments in managing coastal resources during and after project life;

3. Strengthened local government capacity to support community initiatives, and national government capacity to monitor resource status and implement policies that support community management efforts;
4. An effective delivery system for communication, education and information-sharing in place; and
5. Increased public and private sector investment in CB/CRM and in developing alternative and viable livelihood enterprises.

In site selection, the key criteria cited by the Program Assistance Approval Document (PAAD) are the following:

1. Conditions and availability of coastal resources for management;
2. Geographic proximity and access to the site;
3. Presence of management constraints;
4. Receptiveness of LGUs and community to CB/CRM plans and program implementation;
5. Community organization/institution and awareness of coastal environment problems;
6. Presence of unique and/or special opportunities such as (i) opportunity to test new approaches, (ii) opportunities for micro-enterprise development such as ecotourism, (iii) potential for donor coordination, and (iv) collaborative/complementary efforts with other ONRAD projects like Governance and Local Democracy, Industrial Environment Management, and Natural Resources Management.

#### **D. Implementation Arrangement and Schedule**

The SOW specified the following Project performance objectives, along with a preliminary results framework containing two sets of indicators —one for fiscal year 2000, the 5<sup>th</sup> year of CRMP's implementation, and the other for 2002, the end of the original life of the Project (Table 1.1):

1. Coastal waters long 3,000 km of shoreline managed for sustainable harvests by local communities in about 140 municipalities;
2. Increased public sector investment in CRM activities;
3. Mechanisms for providing equity in access to coastal resources established and widely applied; and

4. Established incentive system for long-term industry investment in CRM and fishery-related activities.

**Table 1.1 Performance objectives and indicators, as defined in the CRMP SOW (USAID 1995)**

OBJECTIVES	INDICATOR	CUMULATIVE INDICATORS (LIFE OF PROJECT: 2002)
1. Coastal waters along 3,000 kms of shoreline managed for sustainable harvests by local communities (in about 140 municipalities)	<p>Along 2,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>a. Management plans being developed and implemented by communities for the management and protection of at least 2,000 km coastline;</li> <li>b. Municipal governments include community-initiated CRM activities in their annual development plans.</li> </ul> <p>In support of communities along 2,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>c. 680 site level staff trained to coach coastal communities and their local governments as they implement sustainable management.</li> <li>d. Increased capacity of DENR, DA-BFAR and other agencies to monitor coastal resources and plan from a common database;</li> <li>e. 13,000 hectares of mangrove are cleared for fishponds reverted to forest land by DENR and DA-BFAR;</li> <li>f. Effective IEC program developed and implemented.</li> </ul>	<p>Along 3,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>a. Management plans being developed and implemented by communities for the management and protection of at least 3,000 km of coastline;</li> <li>b. Municipal governments include community-initiated in their annual development plans;</li> </ul> <p>In support of communities and municipalities along 3,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>c. 920 site level staff trained to coach coastal communities and their local governments as they implement sustainable management;</li> <li>d. Increased capacity of DENR, DA-BFAR and other agencies to monitor coastal resources and plan from a common database;</li> <li>e. 20,000 hectares of mangrove area cleared for fishponds reverted to forest land by DENR and DA-BFAR</li> <li>f. Effective IEC program developed and implemented</li> </ul>
2. Increased public sector investment in CRM activities	<ul style="list-style-type: none"> <li>a) National government investments in support of CRM increased by 3-4% annually starting 1997.</li> <li>b) Municipal governments along 2,000 km of coastline annually allocate 2-4% of their internal revenue allotment to support community CRM initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>a. National government investments in support of CRM increased by 3-4% annually starting 1997;</li> <li>b. Municipal governments along 3,000 km of coastline annually allocate 2-4% of their internal revenue allotment to support community-based CRM initiatives.</li> </ul>
3. Mechanism for providing equity in access to coastal resources established and widely applied	<p>Along 2,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>a. Municipal ordinances that regulate coastal resource use to provide equitable access within the context of the requirement to limit access are enacted and implemented</li> <li>b. 50% of available mangrove forest land under small holder management with secure tenure.</li> </ul>	<p>Along 2,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>a. Municipal ordinances that regulate coastal resources use to provide equitable access within the context of the requirement to limit access are enacted and implemented</li> <li>b. 70% of available mangrove forest land under small holder management with secure tenure.</li> </ul>
4. Established incentive system for long-term	<p>Along 2,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>a. Enterprise opportunities and appropriate links with credit sources, markets and technical assistance</li> </ul>	<p>Along 2,000 km of shoreline:</p> <ul style="list-style-type: none"> <li>a. Enterprise opportunities and appropriate links with credit sources, markets and technical assistance</li> </ul>



industry investment in CRM and fishery-related industries

- identified and made available to concerned community members;
- b. 20% of participating coastal municipalities enacted ordinances that encourage increased private sector investment;
- c. Increased collaborative effort between the national and local government to develop mechanisms that promote partnership between the government and private sector in coastal resource-based industries and product development.

- identified and made available to concerned community members;
- b. 30% of participating coastal municipalities enacted ordinances that encourage increased private sector investment;
- c. Increased collaborative effort between the national and local government to develop mechanisms that promote partnership between the government and private sector in coastal resource-based industries and product development.

The SOW would serve as the basis for formulating the mission statement, which said: “To catalyze CRM in the Philippines to a threshold that will expand nationwide and be sustainable beyond the life of the Project.”

This mission statement incorporated three conditions of technical assistance to address the urgency of the coastal situation in the Philippines. First, CRMP must serve as a catalyst for CRM initiatives and leadership, promoting self-reliance, empowering coastal communities with responsibility and information, and building a cadre of leaders and constituencies to support CRM initiatives. Second, expansion of CRM through institutional and sectoral networks was critical to achieve a condition of mutual reinforcement, and a critical mass of CRM in the country. And, third, the objective was to achieve a threshold of CRM, the basic capacity and institutionalization required to sustain CRM beyond the life of the Project. (CRMP 2000)

The two years that it took to evolve the Revised Results Framework (Fig. 1.4) was a period of tremendous learning and innovations for the Project. At the outset, the operational framework pointed out what the mission demanded: It must go beyond implementing pilot-scale projects to impelling the spread of CRM initiatives to a broad cross-section of coastal stakeholders. The Project had to move from a purely CB/CRM approach with the fisherfolk as a primary target group to a strategy that focused on local government mandates to deliver CRM as a basic service, with coastal municipalities and provinces as a strategic entry point. This shift was considered essential for sustainability of the Project’s interventions. While it is generally recognized that community participation is an important element of sustainable CRM, LGUs are the legally mandated government units to implement CRM, and if they choose it, can easily derail community efforts.

As Project implementation progressed, it began to see more clearly just what capacity development for CRM entailed. The challenges was not so much in convincing LGUs that CRM was not only a critical need but also their mandate – most LGUs were aware of the declining state of coastal resources (Table 1.2) and, once informed, acknowledged their role in CRM readily enough. The bigger challenges were capacity limitations at both the local and wider systems level. Human resource deficiencies were a big limiting factor, and key success factors – policy frameworks, decision-support and management mechanisms, and accountability structures – were also largely missing.

National government staff devolved to the local government in 1991 had little or no experience in coastal management. Fisheries officers devolved to community were trained primarily in fisheries development and fishing gear technology, skills that could no longer be applied to current issues of overfishing and habitat degradation found throughout the country. Even though the 1998 Fisheries Code promoted coastal management as a national strategy, capacity-building activities had to facilitate a mental transformation from resource exploitation to management and protection. (Courtney et al 2002)

In 1997, coastal mayors participated in a survey conducted by CRMP in partnership with the LMP, the national association of all municipalities in the Philippines. The survey results provided an estimate of the condition of coastal resources based on the perceptions of over 250 coastal mayors (approximately 30% of all coastal mayors) throughout the country. As shown in the table below, the mayors were aware that the condition of coastal resources was deteriorating. Few coastal mayors considered their coastal habitats and fisheries to be in excellent condition, and over 40% of coastal mayors rated their coral reef, seagrass, and mangrove habitats in poor condition. These perceptions are fairly consistent with scientific studies of 85 coral reefs conducted by Gomez et al 1994, where less than 5% of coral reefs surveyed were considered in excellent condition. Furthermore, coastal mayors identified a lack of technical expertise and trained staff (over 80% of responses), and inadequate funding (over 70%) as the key obstacles to fulfilling their mandate to manage coastal resources.

**Table 1.2 Mayors' views on their CRM mandate and the coastal environment (Courtney et al 2002)**

Resources	No. of respondents	Condition		
		Poor(%)	Good(%)	Excellent(%)
Coral reef	293	40	52	8
Seagrass	267	41	54	5
Mangrove	276	47	48	5
Estuary	308	28	71	1
Beach	299	23	61	16
Municipal fisheries	297	28	63	9
Obstacles		% of respondents (n=343)		
Lack of staff trained in coastal management/lack of technical expertise in CRM		81		
Inadequate funding for CRM		74		
Lack of integrated environmental management, planning, and implementation		67		
Low participation level by community in CRM		52		
Unclear legal jurisdiction over resources		43		
<i>Survey respondents were coastal mayors assessing the status of coastal resources in their municipalities and identifying multiple issues. Survey was conducted by CRMP during the 1997 National Convention of the League of Municipalities of the Philippines</i>				

**Table 1.3 Comparison of key elements of CRMP project design and operational framework**

<b>Project Design</b> <b>(USAID Statement of Work, 1995)</b>	<b>Operational Framework</b> <b>(CRMP Work Plans 1996-2002; USAID Results Framework 1998)</b>
<p><b>Goals and Purpose</b></p> <ul style="list-style-type: none"> <li>• To achieve sustainable management of coastal resources in sufficiently large areas of the Philippines in such a way that ongoing resource degradation in these areas is offset or even reversed</li> <li>• To support widespread, sustainable and replicable (strategic spread) of the CB/CRM approach</li> <li>• To achieve effective community management of the coastal resources with an enhanced in-country capacity and efficient incentive system for increased and continuing public and private sector investment to support replication and sustainability</li> </ul>	<p><b>Mission Statement</b></p> <ul style="list-style-type: none"> <li>• To catalyze CRM to a threshold that will expand nationwide and be sustainable beyond the Project life</li> </ul>
<p><b>Project Objectives/Indicators</b></p> <ul style="list-style-type: none"> <li>• Coastal waters along 3,000 km of shoreline managed for sustainable harvests by local communities</li> <li>• Increased public sector investment in CRM activities</li> <li>• Mechanisms for providing equity in access to coastal resources established and widely applied</li> <li>• Established incentive system for long-term industry investments in CRM and fishery-related industries</li> </ul>	<p><b>Results Framework/Performance Targets</b></p> <p><i>Strategic Objective</i></p> <ul style="list-style-type: none"> <li>• 3,000 km of shoreline where improved management of coastal resources is being implemented by the end of 2002</li> <li>• Increased fish abundance and coral inside and adjacent to marine sanctuaries</li> </ul> <p><i>Intermediate Results</i></p> <ul style="list-style-type: none"> <li>• Improved local implementation of CRM: For each coastal municipality/city: <ul style="list-style-type: none"> <li>○ Annual budget allocated for CRM</li> <li>○ Resource management organizations formed and active</li> <li>○ At least 2 CRM best practices are being implemented</li> </ul> </li> <li>• Improved awareness of CRM problems and solutions: <ul style="list-style-type: none"> <li>○ Widespread availability and utilization of CRM guidance and training materials among government and NGOs</li> <li>○ Public awareness of CRM issues</li> </ul> </li> <li>• Improved policy and legal framework for CRM: <ul style="list-style-type: none"> <li>○ Adoption of sound CRM policies by key national government agencies</li> </ul> </li> </ul>
<p><b>Target Groups</b></p> <ul style="list-style-type: none"> <li>• Small-scale coastal resource users</li> <li>• NGOs and other institutions that facilitate the application of CB/CRM by coastal communities</li> <li>• Local government units</li> <li>• National government agencies</li> <li>• Commercial and industrial businesses</li> </ul>	<p><b>Strategic Entry Points</b></p> <ul style="list-style-type: none"> <li>• Municipal/city government with active participation from coastal resource users</li> <li>• Provincial governments</li> <li>• League of Municipalities, cities and provinces</li> <li>• Local/national NGOs and academic institutions</li> <li>• DENR/DA-BFAR and DILG</li> <li>• Media, tourism and seaweed industry</li> </ul>

### **Approach**

- Community-focused
- Watershed system approach
- Donor collaboration

### **Implementing Strategy/Activity Areas**

- Promote management of coastal resources for widespread application of CB/CRM approaches
- Conduct continuing research and development of CB/CRM approaches and fishing technologies
- Enhance local government capacity to support community resource management initiatives
- Train large numbers of community-level workers to teach CB/CRM approaches and assist communities and their local governments
- Develop alternative economic opportunities for displaced fisherfolk and assist fisherfolk adopt a more enterprise-oriented approach fishing
- Assist national government agencies better define their roles in view of devolution and implement policies supportive of CB/CRM and resource monitoring
- Develop broad support for sustainable fishery resource management at local and national levels through the use of mass media, multi-media public information campaigns, awareness building and production of training and extension materials

### **Approach**

- Coastal local government with active participation from coastal resource users
- Provincial governments
- League of municipalities, cities and provinces
- Local/national NGOs and academic institutions
- DENR/DA-BFAR and DILG
- Media, tourism and seaweed industry

### **Strategic Interventions**

- Mainstream coastal resource management as a basic service of local government
- Develop state-of-the-art CRM approaches, models, best practices and guidance through an adaptive, learning-based approach
- Build local government capacity to develop and implement coastal resource management plans and programs through a participatory process involving coastal stakeholders
- Develop critical mass of trained CRM leaders from key institutional partners in LGUs, NGAs, NGOs, and academic institutions to provide ongoing technical assistance and training to LGUs
- Develop enterprise development models integrated as CRM best practices
- Enhance CRM policies and develop mechanisms to align national government policies, plans and programs in support of local government CRM initiatives
- Establish CRM on national and local agendas using multiple communication models, including social marketing, social mobilization, development support communication, and advocacy

An enhancement of the Project design was the use of a two-track approach, where national and local implementation activities were conducted simultaneously and iteratively. Using such two-track approach was essential. On the one hand, to demonstrate how CRM could benefit coastal stakeholders and to create local demand for CRM services, we had to implement concrete, on-the-ground experiences and build a solid body of knowledge in the application of CRM best practices at the community level. On the other, to achieve the desired spread or threshold level of CRM, we needed to bring to the collegial attention of the country's highest leaders the urgent call for government to support CRM as a basic services to coastal communities. Given the centralized nature of decision-making in Philippine politics, without the convergence of national policies and local initiatives, no amount of CB/CRM programs will reach the threshold of sustainability. For us to achieve a threshold of sustained CRM over 3,000 km of shoreline, we had to move coastal issues to the forefront of the country's political landscape and public milieu, and transform perception of these issues from "local, sectoral and productivity issues" to "national, general public and environmental problems". We had to expand ownership of coastal issues beyond sectoral confines to a much broader and "noisier" political base. And we had to repeatedly affirm the LGUs' mandate to manage coastal resources.

“Agenda-setting” was thus one of the most important aspects of our work in the early stages of the implementation of CRMP. At the national level, our immediate objective was to “create buzz” around marine and coastal issues and engage the general public so that these issues were perceived as urgent problems requiring national attention and solutions. Our strategy included the extensive use of mass media, conduct of special events and promotional activities, partnerships with strategic institutions and organizations to serve as “multipliers” and “pressure points” for CRM, and the inclusion of the general public as a broad base of support for CRM initiatives.

At the same time, we started the process for the prioritization of CRM in the local agenda of the country’s more than 800 coastal municipalities, at the national level, primarily through a strategic partnership with the League of Municipalities of the Philippines (LMP) and, in our Learning Areas, through direct interventions at the community and LGU levels. We developed capacity building approaches to achieve the following objectives, which simultaneously addressed capacity issues at both the local and wider systems levels:

- ◆ Foster a critical mass of local leaders in CRM
- ◆ Promote CRM in the daily operations of local government as a basic service
- ◆ Develop and increase the technical capacity of local CRM core groups
- ◆ Catalyze multi-sectoral and multi-institutional collaboration to sustain capacity building efforts
- ◆ Benchmark LGU performance in CRM through M&E.

When the CRMP Revised Results Framework (Fig.1.4) was completed in the late 1998, it considered the wealth of lessons and experiences we had accumulated over at least three years of solid, on-the-ground work involving the application of specific CRM strategies, and thus both affirmed and clarified the direction we were taking and provided the focus necessary to more clearly orient our efforts and resources toward our goal.

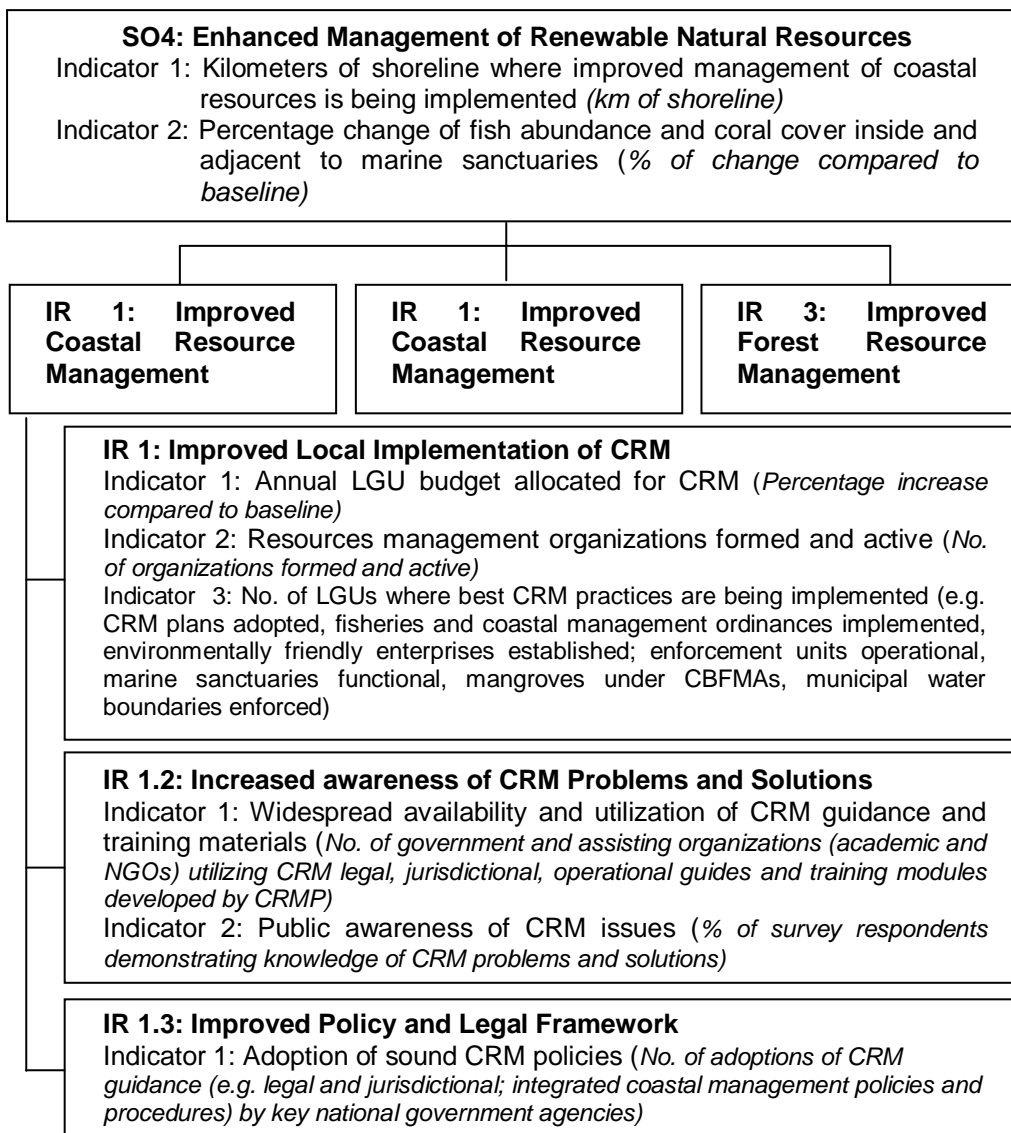
## **E. Components**

The Project’s mission statement was contained in the operational framework, which was developed early in the Project and which also included the preliminary results framework and performance targets, strategic entry points, approach, and strategic interventions. Coincidentally, at almost the same time that we began Project implementation in April 1996, the International Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) reviewed various initiatives to address the rapidly deteriorating condition of the coastal environment around the world and found that they were unable to determine if such initiatives were actually working, or if lessons learned from successes and failures in other countries could be articulated and shared. They agreed that there was an urgent need to develop an accepted integrated CRM evaluation methodology. This led to a series of international workshops

and meetings where international experts continued to debate and consolidate monitoring and evaluation (M&E) themes and indicators from CRM. (CRMP 200)

Taking GESAMP's cue, the GOP, USAID and CRMP agreed to review the preliminary results framework contained in the Contractor's Statement of Work (SOW) in order to develop more relevant indicators to measure the success of the Project, and translate lessons learned from Project experience into strategies and approaches that could be applied elsewhere. The review process took two years, and culminated in 1998 in the approval of a revised result framework (Fig.1.4), which, for the rest of the life of CRMP, served as a cornerstone of our operations, and guided most decisions, implementation strategies, and expenditure of Project funds.

The 1998 Revised Results Framework highlighted two top-level indicators and three intermediate results and corresponding indicators.



#### **Fig.1.4. Revised Results Framework for CRMP (December 1998)**

**Strategic Objective.** The target for the first indicator at the strategic objective level – kilometers of shoreline where improved management of coastal resources is being implemented (*km of shoreline*) – was 3,000 km of shoreline or roughly 17% of the Philippines' total coastline of 18,000 km under improved management by the end of 2002.

Reflecting the partners' common interest to show biophysical impact as an ultimate result of the Project's initiative, the second indicator at the strategic objective level measured two biophysical attributes of the coral reef environment:

1. *Fish abundance inside and adjacent to marine sanctuaries.* Average percentage change (in comparison to base years) in fish abundance inside and adjacent to marine sanctuaries, using standard survey methods. Fish abundance was estimated three times over the life of the Project)
2. *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 was estimated three times over the life of the Project.

The intention was not to measure biophysical impact in order to determine cause-and-effect relationships. Given the multitude of variables outside CRMP's control – the El Niño occurrence in 1997 and 1998 that resulted in widespread bleaching of coral reefs throughout the Philippines and Indo-Pacific Region, for example – it was difficult to make any conclusion about biophysical impact with statistical certainty. Instead, CRMP focused on contributing to the databases of local and national government programs by collecting data to monitor long-term trends in biophysical indicators, employing appropriate technologies that could be replicated spatially and temporally.

**Intermediate Results.** Three intermediate results fed into the strategic objective (Fig.1.4). The first intermediate result, *IR1.1. Improved local implementation of CRM*, defined the essential basic ingredients for CRM, including monitoring of ecological and social changes resulting from improved management as well as policy, legal and institutional changes characterized by enhanced governance. The following criteria were used to evaluate local CRM implementation:

1. *Annual LGU budget allocated for CRM.* The target was for municipal LGUs to allocate increasing annual budget allocations for CRM, from a baseline of Php 37,023 per year based on a pre-Project survey of the 1995 budget allocations of 23 municipalities in our six Learning Areas.
2. *Resource management organizations formed and active.* Organizations were counted as "active" when they met regularly (more than six times a

year), discuss CRM-related issues, implement projects and plans for CRM, facilitate training for members, and undertake networking and linkages with other people's organizations (POs) and LGUs involved in policy and advocacy work for CRM.

3. *Best CRM practice implemented.* The following practices were considered: CRM plans adopted, fisheries and coastal management ordinances implemented, environment-friendly enterprises established, law enforcement units operational, marine sanctuaries functional, mangroves under community-based forest management agreements (CBFMA), and municipal water boundaries enforced.

When a municipality achieved these indicators, kilometers of shoreline represented by that municipality were counted under the strategic indicator as kilometers of shoreline where improved management coastal resources were being implemented.

CRMP's operational targets for this strategic objective were:

1. Municipal management systems implementing improved management of coastal resources along 670 km of shoreline in 29 Learning Area municipalities by the end of 2000.
2. 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.

For *IR1.2 Increased awareness of CRM problems and solutions*, the following indicators were used:

1. Widespread availability and utilization of CRM guidance and training materials
2. Public awareness of CRM issues

Both qualitative and quantitative surveys were conducted to evaluate the impact of the Project's key interventions and utilization of CRM products (guidebooks and training modules, for example) by national government agencies (NGAs), LGUs, and assisting organizations, including those in the academic and NGO sectors. Respondents were deemed to have acquired increased awareness of CRM issues when they demonstrated knowledge of the current conditions and problems affecting coastal resources, and solutions to coastal problems.

For *IR1.3 Improved policy and legal framework for CRM*, the indicator was a measure of the degree to which NGAs agreed on and adopted an integrated policy and legal framework for CRM.



## **F. Cost and Financing Arrangements**

A total of \$21 million was allocated for CB/CRM from Natural Resources Management Program initial funding. While the GOP counterpart equivalent to the amount of \$2,190,300 composed of cash and in kind contribution.

It was understood then that the biggest investments of the Project (75%) would be made at the LGU level, but to even begin to catalyze the many changes required to bring about sustainable CRM, the Project had to consider the broader environment in which the LGU must function and address national policy and structural issues that affect local implementation. Such requirement to approach CRM from a wider systems perspective was recognized in the original Project design, which specified, as a key strategy, assistance to NGAs in define their role in CRM under a decentralized governance system (USAID 1995). This implied the need for close coordination between concerned NGAs and the LGU and, to ensure the continued relevance of policy emanating from the national level, a mechanism for measuring progress in CRM by ensuring a constant flow of information from the field to policy level and back.

Thus, even as the Project continued to use the SOW as a basic guide, the Contractor innovated and refined the strategies, retaining, modifying, and in some cases eliminating from and adding new design elements to the operational framework (Fig.1.5), to more accurately reflect the realities in the field and respond to windows of opportunity that had not been previously anticipated. Capturing the lessons learned from field experiences provided us the best opportunities to improve our operational framework and field implementation. With our GOP partners and Learning Area teams, the operational framework through annual strategic planning exercises was evolved, and documented the experiences and the lessons they generated in annual work plans.

## **II. IMPLEMENTATION ACHIEVEMENTS**

### **A. Design**

A key premise of the CRMP approach was that, to achieve strategic spread, we needed to build a critical mass of leaders, LGUs, agencies and institutions supporting and implementing CRM, defined in the 1998 CRMP Revised Results Framework (Fig 1.4) by the strategic objective of 3,000 km of shoreline under improved management and intermediate results *IR1.1* through *IR1.3*. For much of the first half of Project implementation, we focused on building the momentum for the spread of CRM from our core Learning Areas by creating such critical mass of leaders, bringing to a national scale our effort to create LGU awareness and demand for CRM services, and identifying and developing the CRM process, approaches, methodologies and tools to be adapted by the LGUs. In the second half, banking on our success at building national awareness for CRM and focusing on the strategic objective and intermediate results defined in our Revised Results Framework, we made remarkable progress in refining the approaches and tools we developed and promoting their adoption among our

network partners nationwide. Thus, by end-2001, going into our 7<sup>th</sup> year of Project Implementation, we had surpassed most of our targets for the entire life of CRMP.

## **B. Local Level Implementation**

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

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." (The Philippines "Medium-Term Program Development Plan (MTPDP) targets some 6,000 kilometers of shoreline for improved CRM by the end of 2004). Improved management of coastal resources is measured primarily under IR 1.1 by three indicators.

#### IRI.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

## PERFORMANCE MONITORING MATRIX

**Table 1.4 Strategic Objective Indicator on Kilometer of Shoreline Managed**

ORGANIZATION/PROGRAM:	USAID-Philippines, DENR	
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources	
APPROVED:	December 31, 1998 (Revised)	
SO INDICATOR:	Kilometer of shoreline where improved management of coastal resources is being implemented	
UNIT OF MEASURE:	Kilometer of shoreline in core areas and expansion areas	
SOURCE DOCUMENT:	Local government unit records, contractor's activity report, independent surveys	
SOURCE ORGANIZATION:	Local government units; DENR; contractor; USAID staff	
INDICATOR DESCRIPTION:	<p>Kilometer of shoreline from municipalities are counted when the following criteria in local implementation are reached:</p> <ol style="list-style-type: none"> <li>1. Annual LGU budget allocated for CRM</li> <li>2. Resources management organizations are formed and active</li> <li>3. Best CRM practices are being implemented</li> </ol> <p>Data is collected annually.</p>	
YEAR	PLANNED	ACTUAL
1996	0	0
1997	0	0
1998	40	0
1999	670	132
2000	1,200	741
2001	2,100	1,410
2002	3,000	3,056

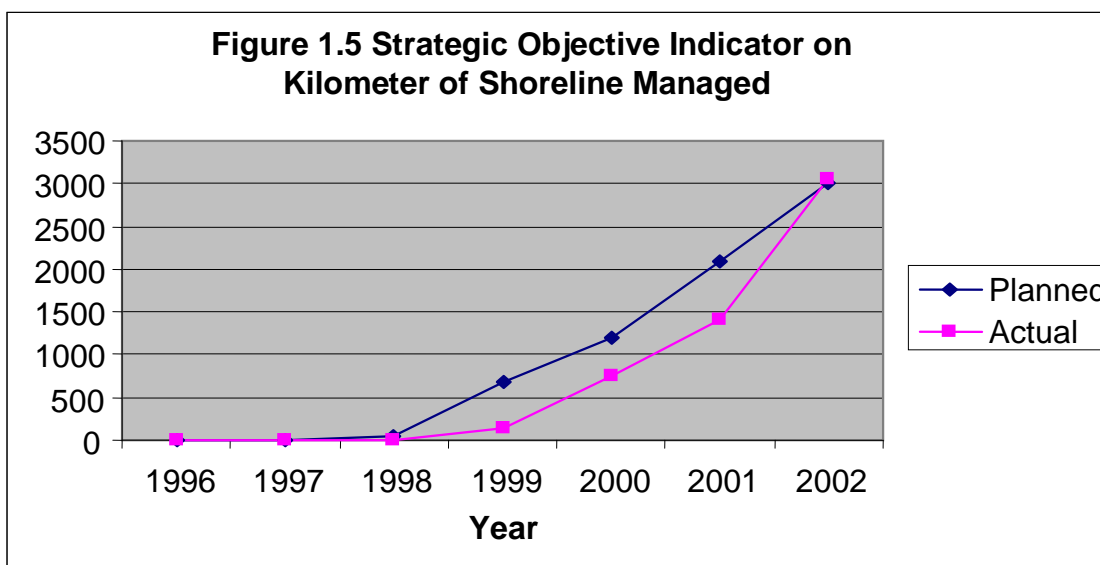
### COMMENTS:

1996 is activity start-up year; however, the result framework for the CRM activity was revised in the Quarter 1998, mid-term during the project. A total of shoreline (670 km from core areas plus 1,300 km from expansion areas) was targeted for completion by the end of the year 2001.

Kilometers of shoreline where improved management of coastal resource 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 resource 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, services limited technical assistance. 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.

2001 – Municipal Coastal Database Summary Table provides supporting data by municipality for Strategic Objective and Intermediate Result 1 indicators.



Those areas with all indicators completed are presented in Figure 1.4. CRMP has initiated technical assistance to 113 LGUs covering 3,640 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), Mangrove Management, and the Philippine Coastal Management Guidebook Series comprising 8 volumes; (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 about 100 municipalities in the Philippines.

A similar collaborative arrangement was made with the USAID-funded Governance and Local Democracy (GOLD) project that ended in December 2000. Cooperation with GOLD has been effective in the Provinces of Negros Oriental, Bohol, Aklan, and Antique. Another cooperative agreement was made with the Southern Mindanao Integrated Coastal Zone Management Project (SMICZMP) supported by the Japanese Government. CRMP and SMICZMP - developed training modules, IEC materials, and

the MCD. The use of the MCD enables collaborating projects to contribute to and report accomplishments under a common set of indicators.

**Table 1.5 Strategic Objective Indicator on Percentage Changed of Fish Abundance and Coral Cover**

ORGANIZATION/PROGRAM:		USAID-Philippines, DENR		
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:		Bio-physical survey data, contractor's activity report		
SOURCE ORGANIZATION:		University of the Philippines Marine Science Institute; contractor		
INDICATOR DESCRIPTION:		<p><i>Fish abundance inside and adjacent to marine sanctuaries:</i> Average percent change (in comparison to base years) in fish abundance inside and adjacent to six marine sanctuaries, using standard survey method. Fish abundance will be estimated three times over the life of the Project</p> <p><i>Coral cover inside and adjacent to marine sanctuaries:</i> 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.</p>		
YEAR	PLANNED (Fish abundance) (Inside/Adjacent)	ACTUAL (Inside/ adjacent)	PLANNED (Coral cover) (inside/ adjacent)	ACTUAL (inside/ adjacent)
1996				
1997				
1998	0/0	175/332	0/0	37/-28
1999	10/0	381/784	5/0	84/-19
2000	20/5	74/109	10/2	9/-3
2001	30/10	233/79	12/4	43/39
2002	40/15		15/6	

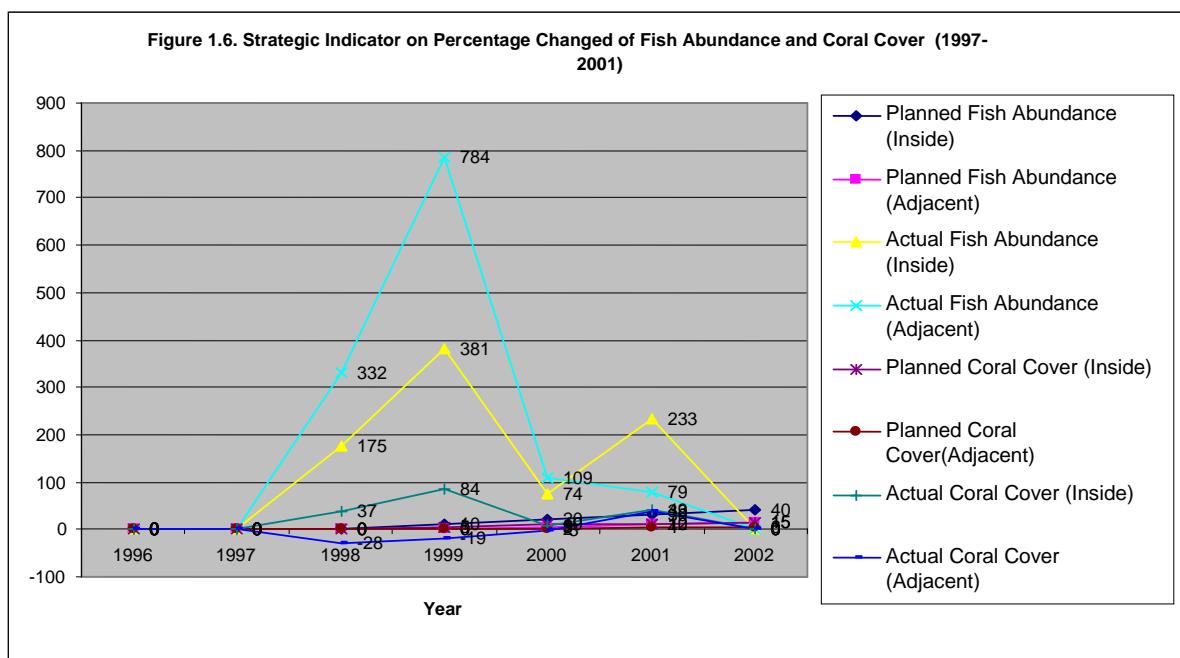
**COMMENTS:**

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 temperatures that result in coral bleaching.

1998 – El Nino 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).

1999 – Baseline data collection 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 Malalag LA). Annual monitoring completed for all 6 sanctuaries.

2001 – Recovery of living coral cover continues as well as fish abundance reflecting enforcement and stable environmental conditions.



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 assessment of fish abundance (focusing on key fish families that are commonly targeted for harvest) and live coral cover are conducted in six marine sanctuaries, one in each learning area.

The result of surveys conducted in 2002 show fish species abundance increased some 233 percent above the baseline inside marine sanctuaries (versus a 2001 target of 20 percent) and 79 percent above the baseline adjacent reflects the success of the sanctuaries in relation to the relatively low baseline figures for fish populations due to the degraded and poorly managed condition of these sanctuaries during the baseline year (1997), as shown in Figure 1.5.

Live hard coral cover increase 43 percent above the baseline inside marine sanctuaries (versus a 2001 target of 12 percent) and increased 39 percent above the baseline adjacent to marine sanctuaries (versus a target of 4 percent; Figure 1.5). Record high tropical sea surface temperatures during the 1997-1998 El Nino event resulted in coral bleaching throughout coral reefs in the Philippines as well as the Indo-Pacific Region. In 1999 and 2000 unusually heavy rains persisted in many areas of the Philippines and localized outbreaks of the coral eating, Crown-of-Thorns seastar, *Acanthaster*, were noted. Year 2001 has been a relatively normal and healthy year for coral reefs without any outstanding natural perturbations. Changes in living coral cover in sanctuaries monitored by CRMP, although influenced by these large-scale climatic events as reflected in the declines of 1999 and 2000, has recovered in 2001. Overall, the strength of management activities in marine sanctuaries monitored in CRMP learning areas is increasing with active community involvement and is being reflected in the quality of the coral reef environment.

**Table 1.6 Strategic Objective Indicator on Annual LGU Budget Allocated for CRM**

ORGANIZATION/PROGRAM:	USAID-Philippines, DENR		
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources		
APPROVED:	December 31, 1998 (Revised)		
SO INDICATOR:	Annual LGU Budget Allocated for CRM		
UNIT OF MEASURE:	Percentage increase compared to baseline		
SOURCE DOCUMENT:	Local government unit records; Contractors activity report; DENR report		
SOURCE ORGANIZATION:	Local government units; Tetra Tech (contractor); DENR Regional Offices; USAID staff		
INDICATOR DESCRIPTION:	Indicator targets increasing and sustaining regular budget allocations for CRM by LGUs. Information was collected on an annual basis.		
YEAR	PLANNED	ACTUAL (Municipalities)	ACTUAL (Cities)
1996	20	250	106
1997	40	232	104
1998	60	274	142
1999	100	292	265
2000	100	691	-
2001	120	622	590
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)

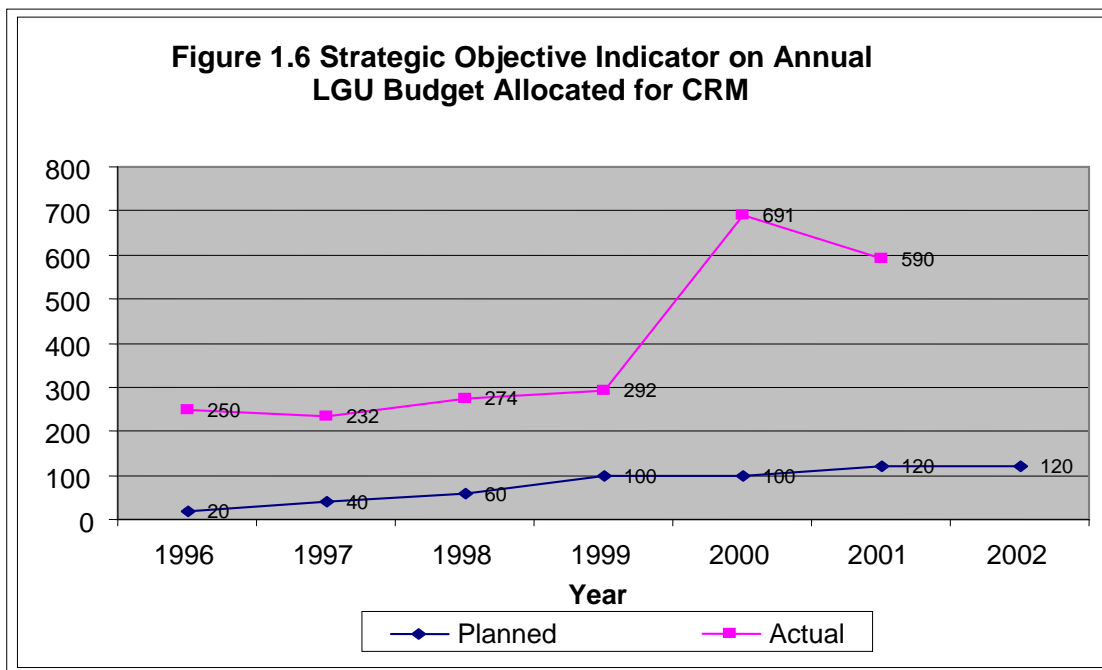
1998	P 101,395	(16 municipalities with validated CRM budget)
1999	P 107,981	(19 municipalities with validated CRM budget)
2000	P 255,682	(22 municipalities with validated CRM budget)
2001	P 230,241	(24 municipalities with validated CRM budget)

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	P 1,320,518	(3 cities with validated CRM budget)
1999	P 2,456,400	(2 cities with validated CRM budget)
2000	NA	
2001	P 5,476,240	(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.



In 2001, CRM budgets decreased about 10% reflecting a weaker economy and many priorities for among LGUs. The number of LGUs allocating an annual budget for CRM and the amount of these allocations continued to increase during 2001 (Figure 1.6). For



example, in 1995, 10 out of 29 LGUs in the CRMP learning areas reported that they allocated an annual CRM budget. A present, all 29 learning area and 71 expansion-area LGUs report allocating such a budget. From reported baseline budgets, average annual CRM budgets have increased some 590 percent for municipalities (to an average CRM budget of P230, 241.)

**Table 1.7 Strategic Objective Indicator on Resource Management Organizations Formed**

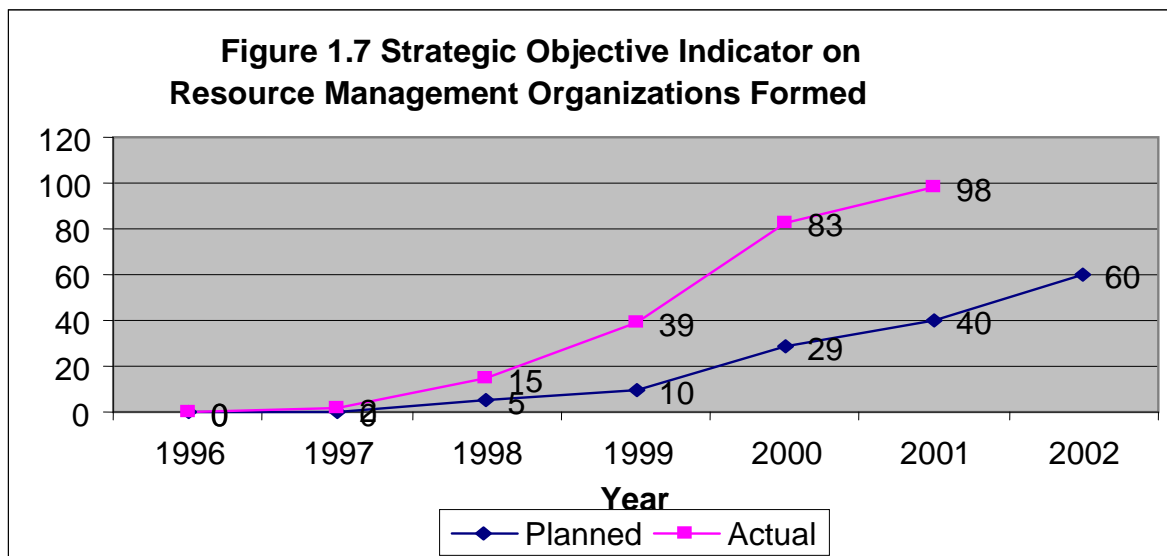
ORGANIZATION/PROGRAM	USAID-Philippines, DENR	
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources	
APPROVED:	December 31, 1998 (Revised)	
SO INDICATOR:	Resource management organizations formed and active	
UNIT OF MEASURE:	Number of resource management organizations formed and active	
SOURCE DOCUMENT:	Contractors activity report; DENR report	
SOURCE ORGANIZATION:	Tetra Tech (contractor); DENR Regional Offices; USAID staff	
INDICATOR DESCRIPTION:	To be counted as formed and active, organizations must meet regularly and discuss CRM-related issues. Information was collected on an annual basis.	
YEAR	PLANNED	ACTUAL
1996	0	0
1997	0	2
1998	5	15
1999	10	39
2000	29	83
2001	40	98
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) have been formed out of a total 253 coastal barangays in the 6 CRMP learning areas.

2000 – Active MFARMCs were augmented through expansion cities and municipalities.

2001 – More MFARMCs became active through various CRMP training, planning and monitoring activities in expansion areas.



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 69 expansion area LGUs. To be considered active, each MFARMC must formally meet at least 6 times a year (Figure 1.7). CRMP has also assisted in organizing and strengthening barangay-level FARMCs (BFARMC) and Bantay Dagat, or local coastal law enforcement groups.

**Table 1.8 Strategic Objective Indicator on Best CRM Practices Implemented**

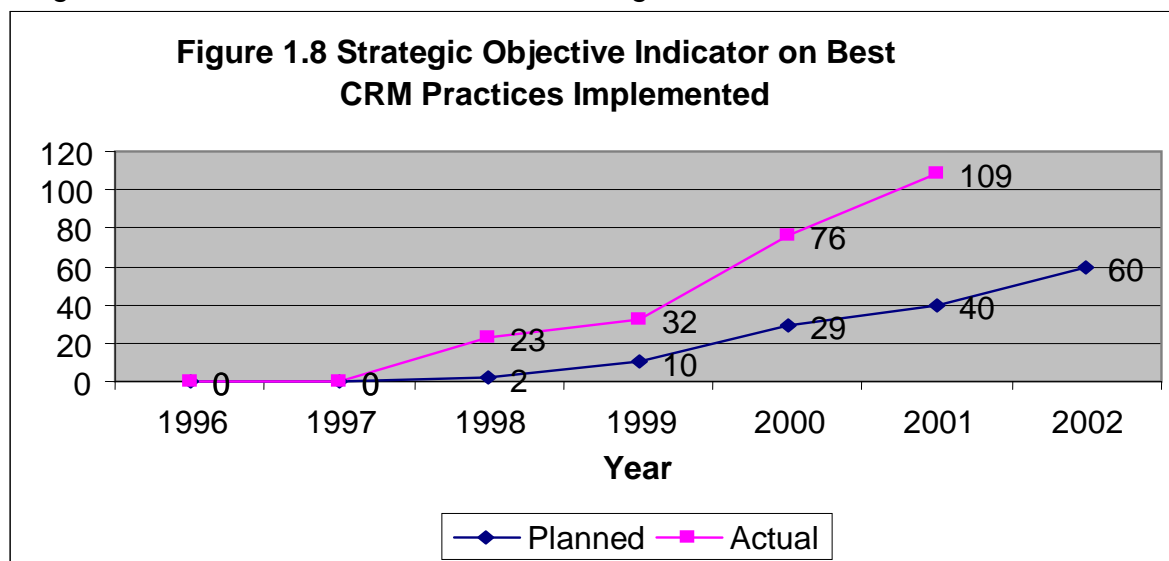
ORGANIZATION/PROGRAM:	USAID-Philippines, DENR
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources
APPROVED:	December 31, 1998 (Revised)
SO INDICATOR:	Best CRM practices are being implemented
UNIT OF MEASURE:	Number of local government units where more than one CRM best practices is being implemented
SOURCE DOCUMENT:	Local government records, contractor's activity report, DENR reports
SOURCE ORGANIZATION:	Local government units; Tetra Tech (contractor); DENR
INDICATOR DESCRIPTION:	CRM best practices: CRM plans adopted, fisheries and coastal management ordinances implemented, environment-friendly enterprise 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 was collected on an annual basis.

YEAR	PLANNED	ACTUAL
1996	0	0
1997	0	0
1998	2	23
1999	10	32
2000	29	76
2001	40	109
2002	60	

**COMMENTS:**

2000 – Local government units implementing best practices are from all 6 learning areas as well as 3 expansion areas Masbate Province; (Mabini, Batangas; Palompon, Leyte; Cagayancillo, Palawan) as listed in Municipal Coastal Database Summary Table. Best practices being implemented include: CRM plans drafted/adopted, fisheries and coastal ordinances implemented, marine sanctuaries functional, enforcement units operational, mangroves under CBFMAs, environment-friendly enterprise established and municipal water boundaries enforced.

2001 – The number of LGUs where two or more CRM best practices are being implemented has increased dramatically within CRMP activities due to increased budget for CRM within the Provincial Learning Areas and its vicinities.



A total of 109 LGUs were implementing two or more CRM best practices by the end of 2001 (Figure 1.8)

Example of best practices being implemented in 2001 include:

- CRM plans were adopted by most LGUs that had not already done so. This included adoption of bay-wide or multi-municipal/city plans for Olango Island,

Cebu Province; Sarangani Bay, Negros Oriental; and Calape Bay, Bohol, building upon completed training courses and technical workshops, participatory coastal resource assessment (PCRA), and coastal environment profiles.

- Eighty-three marine sanctuaries were established covering over 1,600 ha (not including the 6,500 ha Port Barton Marine Park that is not all sanctuary and includes open-water areas) of coral reef and sea grass habitat, within the CRMP learning areas since 1996. In comparison, the pre-project baseline was 15 marine sanctuaries, involving 127 ha, 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.

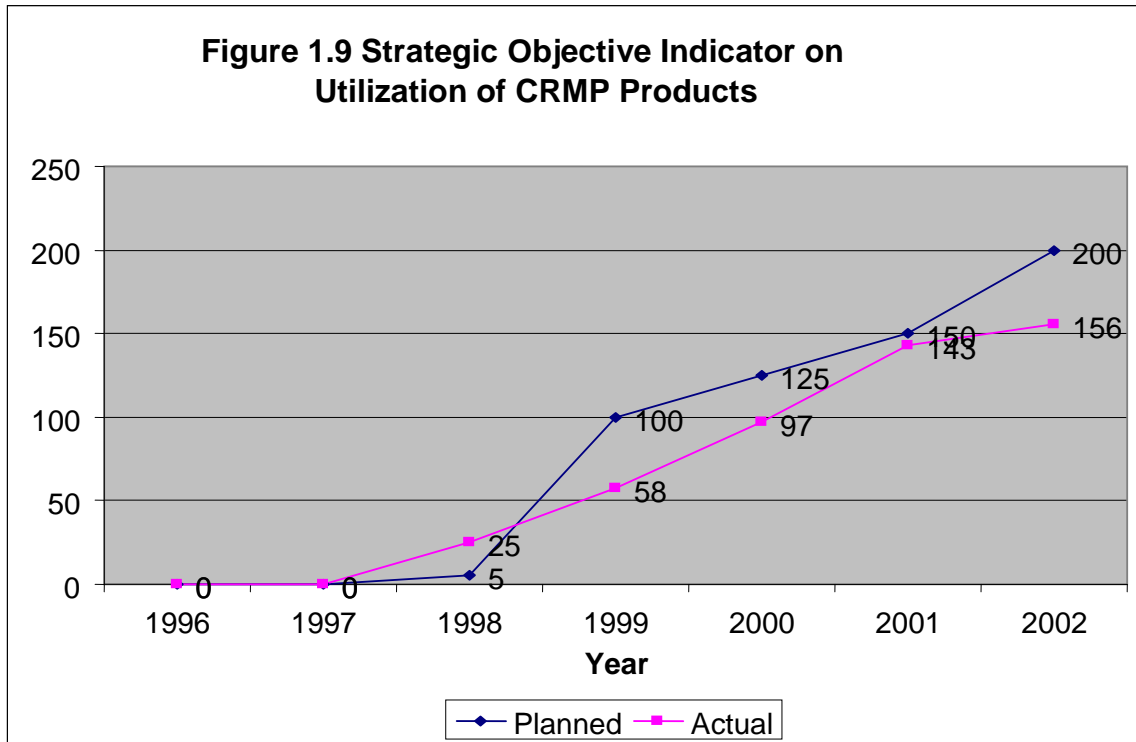
**Table 1.9 Strategic Objective Indicator on Utilization of CRMP Products**

ORGANIZATION/PROGRAM:	USAID-Philippines, DENR		
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources		
APPROVED:	December 31, 1998 (Revised)		
SO INDICATOR:	Widespread utilization of legal,		
UNIT OF MEASURE:	Number of government and assisting organizations utilizing legal, jurisdictional, operational guides and training modules for CRM developed by CRMP		
SOURCE DOCUMENT:	Local government records, contractor's activity report, DENR reports		
SOURCE ORGANIZATION:	Local government records, contractor's activity report, DENR reports		
INDICATOR DESCRIPTION:	Assisting organizations include academic and NGOs. Information was collected on an annual basis.		
	YEAR	PLANNED	ACTUAL
	1996	0	0
	1997	0	25
	1998	5	58
	1999	100	97
	2000	125	143
	2001	150	156
	2002	200	-

**COMMENTS:**

2001 – 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 offices (provinces and municipalities); state colleges and universities; private colleges and universities; non-government organizations. A summary listing of 156 agency organizations and projects are provided on the next table. Several of the listed donor-assisted projects are national

in scope and in turn encompass numerous additional local government units, as well as involved agencies and organizations.



Extensive surveys for this indicator were conducted in 1999 and 2000 and reported in 2000. Key activities completed during 2001 to support public awareness of CRM issues include:

- Comprehensive, local community to national IEC program, including the celebration of May as the national Month of the Ocean, in collaboration with national and local partners.
- Formation and deployment of a national coalition building effort to promote awareness about the issue of municipal boundary delineation to curb illegal commercial fishing within municipal waters all over the country.
- Development and production of numerous requested IEC materials including production and distribution of over 12, 225 requested IEC publications and materials during the year.
- Through efforts of the IEC and Cebu Learning Area team, 18 municipalities in Cebu Province actively pursuing CRM planning and interventions mostly supported by their own budgets and personnel.

## **Summary Documentation**

**IR Indicator: Widespread utilization of legal, jurisdictional. Operational guides and training modules**

### **National Government Agencies (11)**

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)  
Philippine National Police (PNP)

### **Local Government Units (105)**

29 Learning Area LGUs

67 Expansion Area LGUs

8 Provinces (Bohol, Cebu, Davao del Sur, Masbate, Negros Oriental, Palawan, Romblon, Sarangani)

League of Municipalities of the Philippines (LMP)

### **Donor Agencies and Donor-Assisted Projects (8)**

Community-Based Resource Management Project (CBRMP) – World Bank  
Eco-Governance Project – USAID  
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 (22)**

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 Marinelife Alliance (IMA)  
Palawan Conservation Corps  
Palawan NGO Network, Inc. (PNN)  
Participatory Research, Organization of Communities and Education towards the  
Struggle for Self Reliance (PROCESS), Bohol  
Phildhra  
Philippine Business for Social Progress (PBSP)  
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**

Camiguin Polytechnic State College  
Cebu State College of Science and Technology – School of Fisheries  
Divine World 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)

**Table 2.0 Strategic Objective Indicator on Public Awareness of CRM Issues**

ORGANIZATION/PROGRAM:	USAID-Philippines, DENR	
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources	
APPROVED:	December 31, 1998 (Revised)	
SO INDICATOR:	Public awareness of CRM issues	
UNIT OF MEASURE:	Percent of survey respondents demonstrating knowledge of CRM problems and solutions	
SOURCE DOCUMENT:	Random survey by target groups	
SOURCE ORGANIZATION:	Independent survey; Tetra Tech (contractor); USAID staff	
INDICATOR DESCRIPTION:	Random sampling was 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 was collected twice over the life of the Project.	
YEAR	PLANNED	ACTUAL
1996		
1997		
1998	0	
1999		
2000	10	Approximate 60%
2001		
2002	30	

**COMMENTS:**

1999 – Qualitative survey 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.

2000 – Approximately 60% of fisherfolk respondents demonstrate high level of awareness and knowledge regarding current conditions, problems and solutions affecting coastal resources. As a result of CRMP activities and interventions over the last 4 years to an estimated pre-project low awareness levels (<10%) based on surveys conducted by SWS in 1995 and GreenCom Philippines 1996.

2001 – No new information available by survey techniques. Nevertheless, informal surveys in CRMP core and expansion areas indicate continuing and higher awareness of CRM. Since the target of 30% was surpassed in 2000, it was decided to not repeat the public awareness before the end of project in 2002.



**Table 2.1 Strategic Objective Indicator on Harmonization of National Policy for CRM**

ORGANIZATION/PROGRAM:	USAID-Philippines, DENR	
STRATEGIC OBJECTIVE:	Enhanced Management of Renewable Natural Resources	
APPROVED:	December 31, 1998 (Revised)	
SO INDICATOR:	Harmonization of national policy for CRM	
UNIT OF MEASURE:	Number of adoptions of CRM guidance and training modules by key national government agencies	
SOURCE DOCUMENT:	Contractor's activity report, DENR reports	
SOURCE ORGANIZATION:	Local government records, contractor's activity report, DENR reports	
INDICATOR DESCRIPTION:	Information was collected on an annual basis.	
YEAR	PLANNED	ACTUAL
1996	0	0
1997		0
1998	3	3
1999	20	6
2000	30	33
2001	33	36
2002	36	-

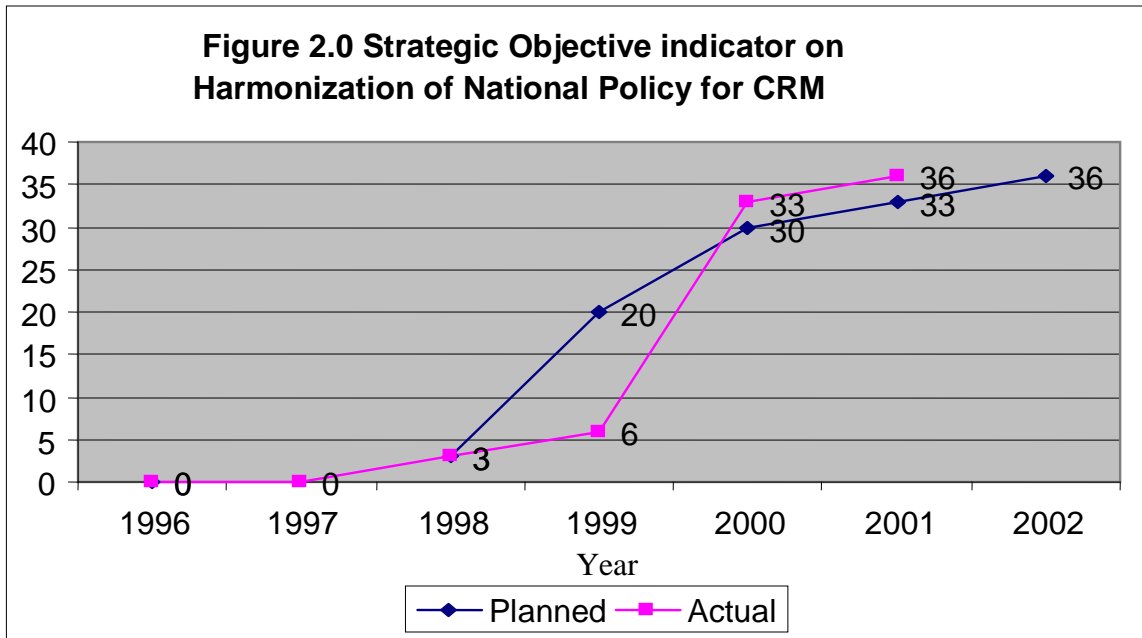
**COMMENTS:**

1998 – Legal and jurisdictional guidebook was completed and adopted in 1997 by three national government agencies (Department of Environment ND 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. CRM for Food Security document adopted by BFAR and DA as policy guidelines guidance on fishery issues.

2000 – Joint Memorandum Order RP 8550 adopted by BFAR and DENR. 8 Coastal Management Guidebooks adopted by DENR, BFAR, and DILG and Mangrove Management Handbook adopted by BFAR through FRMP in addition to DENR's adoption in 1999.

2001 – National CRM policy adopted by DENR. DAO 17 approved by DENR. Draft DAO for Coastal and Marine Management Office in DENR.



As detailed in this Figure, the project continues to contribute towards this indicator through the number of adoptions of CRM guidance materials and training modules by key government agencies. During 2001, the cumulative number of adoptions of CRM policies, guidances, and training modules was 36 exceeding the target of 33. The Philippine Coastal Management Guidebook Series (8 volumes) was adopted by DENR, DA-BFAR, and DILG in 2000 and formally launched in November 2001. In 2001, the draft National Coastal Management Policy was formally turned over and accepted by DENR for national level consultations in 2002.

Other key accomplishments during the year 2001 that contribute to this intermediate result include:

- The policy study in 1999 to develop standard procedures for delineating municipal water boundaries in partnership with National Mapping (NAMRIA) and FRMP was adopted by NAMRIA in a DENR Department Administrative Order No. 17 in June 2001. This DAO will hopefully to standardize and expedite the completion of municipal water delineation in 832 coastal municipalities in the country.
- Working with Coastal Environment Program (CEP) of DENR to address the institutional and human resource development needs of CEP resulted in DENR moving towards formal approval for the “Coastal and Marine Management Office” within DENR that would institutionalize the functions of CEP and CRMP in DENR in a major program that builds on CRMP approaches and results framework.

### **III. IMPLEMENTATION PERFORMANCE**

- a. *Design*
- b. *Organization and Management*
- c. *Cost and Financing*
- d. *Performance of Consultants, Contractors and Suppliers*
- e. *Engagement of Consultants & Procurement of Goods and Services*
- f. *Compliance with Loan/Grant Covenants*
- g. *Disbursement*
- h. *Operation and Maintenance*
- i. *Performance of Funding, Executing and Implementing Agencies*
- j. *Contracting, Construction and Commissioning*

### **IV. PROJECT RESULTS**

- a. *Institutional Development*

#### **At the Frontline: Participatory Governance and Coastal Management**

The technical assistance is expected to enable local governments to accept and act on the responsibilities and authorities delegated to them by the 1991 Local Government Code to assist communities protect and manage their coastal resources.(USAID 1995)

In the Philippines, coastal villages are the key stakeholders of coastal resources. Although the entire country depends on coastal resources to supply protein for the population, these villages depend on coastal resources for their whole livelihood. This is what makes it vital for them to be the ones at the forefront of the implementation of any coastal management activity.

Lack of management and control by the community over the resources on which they depend often leads to de facto open access, a condition where resources are exploited without limit, using whatever means of harvesting may be currently available. Despite the existence of laws regulating fisheries and coastal resource use, open access- and consequently overfishing- remains the single most pervasive cause of the continued depletion and degradation of our coastal resources.

The Philippines' more than two decades of experience in CB/CRM has taught us that it is only when resource users themselves become involved in the management of the area can resources become better managed. Experience has also taught us, however, that community-based resource management efforts will continually be hounded by problems of sustainability if they are not viewed as a governance responsibility. Heeding international recognition that the municipality is "the main institutional protagonist for sustainable development" (Serrate 1998), the Philippine government, through the 1991 LGC, has devolved many important functions related to CRM to the municipality, making municipal LGUs the frontline stewards of our coastal resources.

The municipality, making municipal LGUs the frontline stewards of our coastal resources. The municipality is not only a direct stakeholder of coastal resources, but also one with tremendous influence on what happens in the coastal zone.

Our operational framework therefore aimed at moving CRM from being merely community-based to being merely community-based to being LGU-driven as well. Although CB/CBM- in the traditional sense- remained a primary goal for CRMP, it recognized the strategic and vital role of the LGU in ensuring that community efforts translate into sustainable development and long term benefits to stakeholders and the greater community alike. It thus expanded our definition of community to include not only fishers and other resource users, but also the municipal LGU.

This chapter explains the CRMP approach to capacity development at the LGU level, and describes the various tools and strategies we used to promote CRM as a basic LGU service to coastal communities.

### **Building local capacity in CRM**

**CRMP's** community-level interventions were largely oriented toward developing and testing appropriate tools that could be adopted by the LGUs and NGAs in the delivery of their resource management mandates. To increase buy-ins for these tools among our partners, we had to show that these tools, in fact, worked. Building on past experience in CB/CRM, we focused on enhancing the participation of the community in the management of their coastal resources, CRMP worked closely with the LGU in a few strategic villages across each of our Learning Areas, looking to set up small models of good CRM that over time can be sustained and replicated in other villages.

Our approach was premised on a number of considerations related to the complex nature of the issues we were dealing with. To begin with, we had to contend with the fact that CRM is not a wholly attractive proposition to direct users of coastal resources, particularly the fishers. Because the issue is often about resource over-extraction, CRM necessarily entails regulating, sometimes restricting, resource use. Without the prospect of immediate benefit and with only the impalpable promise of “a better future”, resource users are understandably reluctant to submit to any curtailment of their economic activities. This in turn makes CRM an unattractive proposition to political leaders, many of whom are inclined to weigh their decision to support CRM against how it will affect their future political success. Their apprehension is not completely unfounded. In Bohol in the 2001 elections, 30% of the mayors who openly supported CRM and strictly enforced fishery laws during their 1998-2001 term failed in their reelection bid. (CRMP2002)

Our preferred tools therefore emphasized setting and mainstreaming CRM in the local agenda, by making full use of tested technologies of participation in decision-making and planning processes. Mainstreaming required us to package our Project objectives so that they mirrored as closely as possible the development agenda and priorities of the LGUs we were working with. When speaking with our LGU partners, we talked

about their development objectives, not our own Project objectives. We zeroed in, not on our targets, but on how CRM could facilitate and enhance the development they envisioned for their municipalities. Recognizing that LGUs are first and foremost concerned about addressing poverty, we equated CRM with food security, as a management framework to guide the development strategies and activities of the different sectors operating within and around the coastal zone. Our Project objectives were anchored on local implementation of specific “best practices” focusing mainly on fisheries, but, by farming CRM as a cross-cutting, unifying management framework for development efforts in the coastal zone, in many cases, we were able to integrate crucial CRM services into the local government system in the municipalities we were working with.

In all this, capacity building was our underlying objective, encompassing most of our activities, from resource assessment to planning. To enhance learning and participation, our training and information-education activities drew on adult learning approaches – learning by doing, peer learning, and adding the element of ‘fun’ through energizers and ‘ice breakers’ – that focused on changes in behavior as the objective of the learning process, and engaged participants in a process that had meaning to them. In many cases, these activities resulted in the formation of a pool of CRM practitioners trained and skilled in the various aspects of CRM and able to implement specific resource management activities, including training and IEC.

If there is one common thread that connects the specific local implementation programs employed in Learning Areas, however, it is this: Flexibility, the ability to adapt to local dynamics, and to the diverse and constantly changing environment that characterizes the coastal zone. While the Project’s individual plans might have come out initially as carbon copies of each other, their implementation easily mutated into various shapes and sizes, the better to meet the needs of every situation. In short, we learned to work like strategists, sometimes taking a roundabout way to reach our goal, calibrating or modifying our steps around the obstacles and opportunities we faced. We learned that we must allow the LGU and the community to evolve their management strategies in their own unique way, according to what is feasible for them from the perspective of financial and human resources. As many projects before us have found, “different situations dictate different strategies. Strategies are specific to nations, to regions, to people... (and) can only be created by the people involved. Externally designed strategies never work.” (Serrate 1998) We learned that the first message we need to put across is not “So you should do this,” But rather “So what are you going to do about It?” We learned that it is only when the community learns to share our vision for CRM that they begin to accept the “ought-to-be’s” and “ought-to-do’s” we are espousing. We learned that there is no single formula that will work in all cases. What we have is a set of tools that, in various combinations, have been proven to be effective not only in resource management, but also to support advocacy and key local government capacities to achieve high-impact results for, CRM. These tools are incorporated in a capacity development framework that defines the inter-related activities needed to improve management of coastal resources by LGUs and the communities they are mandated to serve.

One of the best combinations of tools we found starts with the PCRA combined with intensive IEC, which leads automatically to CRM planning and the development of an MPA. These and other tools for CRM are discussed in greater detail below.

## **The PCRA**

PCRA has proven to be particularly invaluable tool in our work with the community. It consists of the following key steps (Fig. 3.1) (CRMP 1998):

1. Gathering of documented information
2. Direct observation of the local coastal resource system
3. Purposeful gathering of local knowledge
4. Generation of local feedback on information collected
5. Integration of all information into a coastal area profile, an important reference for participatory planning

All five steps outlined above involve the direct participation of resource users and LGU technical staff and officials. Such participation offers the following benefits (CRMP 1998):

1. Important information that would otherwise not be obtained and considered using traditional scientific approaches such as local knowledge of resource locations, is made available for CRM planning purposes;
2. Resource management is made more participatory as local fishers and resource users are more intimately involved in an essential first phase of CRM;
3. Local users are more likely to participate actively in subsequent phases of the CRM process and contribute to decisions that will be supported by the community; and
4. PCRA demonstrates the relevance of the information provided by the resource users and shows how the information is used for management needs.

There have been some questions about the reliability of the information generated from PCRA, especially when the assessment is done for the purpose of establishing an MPA. In our experience, however, PCRA is sufficient to address the practical needs of many planning situations, including the establishment of MPAs. While 'expert' assessment may be required for setting scientifically accurate baselines, the information generated by PCRA suffices for most planning purposes, and indeed often provides insights on trends in resource abundance and levels of exploitation that cannot be obtained by other methods.

PCRA's real worth, however, lies in its educational and capacity-building value. Being first (usually) in a series of capacity-building and planning activities, PCRA empowers stakeholders through ownership of the CRM process in their municipalities and primes them for other resource management activities that would later be introduced. As an educational tool, it not only contributes to learning, but also provides a springboard for

participants to reach a shared vision for the future that is grounded on ethical values and a sense of empowerment. Cirilo Apurado, a fisherman, participated in a PCRA training conducted by CRMP in his town in Badian, Cebu, because, as he puts it, “I like to attend meetings.” The training transformed him. “I’ve been fishing since 1973,” he says, “so even before I joined PCRA, I knew right from wrong, what fishing methods are legal and which ones are not. And I knew who among my neighbors were engaged in illegal fishing. But, I figured, who am I to tell them off? I’m nobody. PCRA changed me. I realized I should be concerned, that I should help educate other people, because I know more than they do.”

In many of our Learning and Expansion Areas, we used “peer learning” techniques to enhance the educational value of PCRA. We found that fishers generally responded better to inputs and insights shared by fellow fishers. In Cebu, we formed a core team of 12 fisherfolk leaders drawn from various southern municipalities to assist in the conduct of PCRA in our expansion sites. Coached and nurtured by CRMP and able to instantly establish rapport with other fishers, these leaders proved to be effective facilitators in the PCRA activities in the 18 southern Cebu municipalities we assisted. Their facilitating skills relating to problem analysis, working meetings, and CRM planning, however, still have to further develop.

## **Planning**

The planning process that CRMP adapted for Philippine LGUs consists of five phases covering the entire CRM cycle (Fig 3.2). It begins with issue identification and baseline assessment, into which results of PCRA activities are inputted (Phase 1). The identification of key issues is needed to guide CRM preparation and adoption of the CRM plan (Phase 2), which charts the course of future action, serves as a guide for managers to direct annual and day-to-day activities, and fosters informed decision-making. The strategies and actions articulated in the CRM plan are then implemented through specific programs (Phase 3) and monitored and evaluated regularly (Phase 4). These phases are supported by Phase 5 (information management, education and outreach), which is implemented throughout the planning cycle. (CRMP 2001a)

Note that implementation is put within the “planning process.” This does not mean that CRM places more emphasis on planning than implementation. Certainly, program execution remains the priority. That implementation is depicted as a part of the planning process merely underscores that, because of the many variables that cannot be anticipated during the preparation of the plan, continuous programming – finding new possibilities, devising alternative solutions and paths to take, adjusting timeframes according to the needs of the program in real time – characterizes the CRM process.

The key to the planning process is that it underscores not only plan formulation, but also and more importantly developing the capability of the LGU, encouraging the participation of all stakeholders, defining the roles of the agencies and LGU officials in CRM, and putting all this into a five-year focus. To this end, a CRM Technical Working Group (TWG) or Core Group may be organized at the municipal/ city level, with the

Municipal of City Planning and Development Office (M/CPDO) as the overall coordinator of CRM planning activities. Members may include the MFARMC, Municipal Agriculture Office (MAO), Municipal Environment and Natural Resources Office (MENRO), *Sanggunian Bayan* (SB – municipal council), and all coastal *barangays* (villages). (CRMP 2001a)

To be sustainable, CRM must be included in local development plans, such as the comprehensive land use plan (CLUP), and planning must be integrated into the local government system as an essential part of the governance process. The phases of the process must be matched and adjusted as needed with corresponding powers, authorities and responsibilities devolved to the LGU. Specific activities, functions and areas of responsibility must be detailed for each phase of the process based on field experience and knowledge of the organizational and operational features of typical municipal governments. And, the timing of iterations of the cycle must coincide with government-mandated medium-term and annual planning and budgeting time horizons. (Courtney et al 2002)

Having said that, we must emphasize that planning does not necessarily have to proceed sequentially – it would be an ideal but highly unusual situation where CRM moves from assessment through planning to implementation in a linear manner. The reality is that many LGUs regard planning and resource assessment exercises with skepticism, if not disdain – “All you do is gather information and plan, but nothing is ever done!” In such cases, even before PCRA can be conducted and planning can begin, on-the-ground results must be demonstrated through the implementation of small but strategic activities.

The most effective entry strategy – the strategy that will secure the LGU’s and community’s involvement in the CRM process – directly addresses the resource users’ most urgent concerns, or the LGU’s priorities. In many of our Expansion Areas – Masbate City and a number of towns in southwest Cebu, for example – the LGUs’ interest in CRMP technical assistance entered on specific resource management activities, such as MPA establishment and mangrove management. In Buenavista, Bohol, the LGU warmed up to CRM only when community-based ecotourism and allied activities were introduced to the village of Cambuhat. Enterprise development was also our “re-entry” strategy in Panindigan, a village in San Vicente, Palawan, to revive the waning enthusiasm and erase the growing disenchantment of the groups organized for CRM there.

It is important to note that in all these cases, capacity building was built into every step of the process, which was made deliberately participatory and involved resource assessment and project-specific management planning that served as a model of how CRM can create benefits for the community, and subsequently became the vehicle for municipal-wide integrated CRM planning and capacity-building.



## **MPA establishment**

MPAs in particular have proven to be useful microcosms of CRM, demonstrating the impacts and benefits that can be derived directly from resource management, and serving as small models of a resource management system. The key activity is the process of establishment itself, which involves all the key steps in the CRM planning process, implemented on a smaller scale. It begins with the assessment of the area and quickly progresses through planning to the actual demarcation of the zones and boundaries and the eventual management and maintenance of the MPA, all undertaken by the resource users themselves, often with minimal assistance from technical experts.

The process of establishing a community-based MPA is significant in that it devolves the management of a small area of municipal waters into the hands of the community, and installs a locally controlled and managed system with the resource users themselves managing the area, thus changing once open access resource use regimes into “closed access” resource management systems. In our experience, well-manage MPAs, combined with IEC, are especially potent agents of attitudinal and behavioral change in a small community setting are especially potent agents of attitudinal and behavioral change in a small community setting involving the direct resource users and their immediate governing authorities. If successful and in 80% of the areas we were involved in it was – an MPA becomes the stepping-stone to having other communities and stakeholders take over management and “ownership” of one area of their resources, and lead the LGU into embracing the CRM process in its entirety.

The story of Apo Island in Negros Oriental is well known: the residents of this small island of the municipality of Dauin are dedicated protectors of the marine sanctuary that they themselves manage. It took at least 10 years of intensive community organizing and education efforts by Silliman University outreach workers to convince the people to participate in the management and protection of the island’s coral reef habitats. These days, as the word about the benefits of MPAs spreads, it takes much less to persuade communities to set aside a portion of their fishing ground as a protected area. This trend is reflected in the dramatic increase in the number of MPAs in our Learning Areas from a pre-Project baseline of 15, covering an area of 127 ha, in 1995 to 83, covering an area of more than 1,600 ha, in 2001 (Fig.2.9)

We emphasize the word “well-manage”. MPAs generate the greatest benefits and are therefore most sustainable when they are done properly. This means taking sufficient time over their implementation, with the community taking the lead on the pace and, as implementation progresses, involving the other stakeholders one by one. If done well, MPAs stand like a beacon as an example of one CRM tool that has relatively fast benefits (6 months or so), is cost-effective, promises nothing that cannot be reasonably attained, and should last forever, while increasing the fish catch of small fishers from the surrounding area. With more and more of these MPAs cropping up around our Learning and Expansion Areas, a new regime of “closed access” is taking shape, as increasing numbers of fishers begin to accept the fact that their fishery can no longer be free for all. There may be some resistance in the short term – some community residents or

outsiders may attempt to violate the MPAs just to test the system and resolve of the people who committed to protect them. But the number of communities who want to set up their own MPA and declare their own area of sustainability is increasing. If this trend continues, it could well lead to the creation of a network of MPAs large enough to make a positive impact not only on certain local fisheries but on national fisheries as well.

## **Enterprise development**

Our experience in Cambuhat, Buenavista, Bohol and Panindigan, San Vicente, Palawan demonstrates another important lesson, already underscored in many documents on sustainable development: Even as we must ease pressure off our coastal resources, we cannot ignore the need for production, wealth creation and sustaining livelihoods. “Strategies that do not consider the need to improve the economic quality of life don’t work. Growth without social or environmental action is not sustainable, but it is also true that sustainable development without growth is impossible.” (Serrate 1998) The argument that we must “save the Earth for the future” does not stick in the face of the harsh reality of poverty in our coastal communities. As Robert Solow, Nobel laureate in economics, pointed out, “There is at least as strong a case for reducing contemporary inequality ) and probably stronger) as for worrying about the uncertain status of future generations. Those who are so urgent about not inflicting poverty on the future have to explain why they do not attach even higher priority to reducing poverty today.” (UNDP 1996)

At the outset, our Project design recognized the need to address the livelihood concerns of fishers, and recommended the following approaches:

1. Resource assessments to increase fishers’ understanding of the biological and economic limits of their fishery, combined with assistance that demonstrates how to reduce costs and increase profits from limited harvests or add value to products; and
2. Identification of alternative enterprise opportunities for surplus fishers to reduce fishing effort with minimal economic dislocation, combined with effective controls on resource access.

The requirements of CRM shaped our enterprise development approach to one that focuses on commodities that do not cause harm to the environment, are marketable, and, where practicable, will have a positive impact on the coastal environment. This commodity specific approach is geared specifically toward the development of enterprises based in rural households, involving in particular the fishers and their families. Emphasis is placed on commodities with existing marketing channels that are not already saturated or monopolized by a certain sector and thus can still capture a high value for rural clientele. For example, the OBST – serves as their empowering agent. It is their leveraging chip, as money and product are leveraging chips. Because enterprise is the language of business, and because business dominates relationships, it gives them the language and power of business and therefore empowers them.

Critical to the success of enterprise development as a resource management tool is commodity selection: the commodity or product mix chosen must meet the criteria of relatively fast return on investment, sustainability and environmental soundness. Ideally, the profitability of the enterprise should be linked to the health of the environment, so that the enterprise enhances environmental protection. In Olango, ecotourism successfully equated conservation with a higher economic value than if the resources were extracted. In Cambuhat, it was clearly demonstrated that the viability of the community's oyster culture business depended on water quality.

But even with the right commodity or product mix, there is no guarantee of success without adequate support mechanisms in place. Our free market system generally works against small start-ups with poor capital, as community-based enterprises usually are. Government support is essential, especially where policy changes are necessary to provide the community stakeholders the preferential use rights to the resources that sustain their business, at least for an appropriate incubation period that will but them time to grow their business to scale and give them a fair chance and an even playing field in a free market.

One remarkable characteristic of the enterprise development strategy that resulted from CRMP's field implementation is that, in many cases, largely out of the need to install the necessary support systems for and improve the sustainability of the enterprise, it evolved into a more holistic resource management approach. Our enterprise development component initially focused on expanding the basic approaches outlined in our Project design, while establishing functional models of enterprises that support CRM. Drawing from past lessons and our own initial experiences in the field, we developed an approach that considers the potential of enterprise as an alternative source of income; resource management tool; rallying, collaborative or unifying tool; educational tool; and revenue generating scheme for government or other entities that are managing the resource.

With these potentials fully harnessed, enterprise development proved to be a powerful tool for facilitating collaboration between different stakeholders that may otherwise have conflicting interests in the use of a resource. When positioned as a formal or non-formal concession instrument, it also secured the stakeholders' cooperation in resource management, not only where it could affect their business but in the holistic sense. Olango Island, once considered by development workers as a "difficult area", is now internationally recognized as a working model of ecotourism as a CRM tool, and many acknowledge that this is a result of the success of the OBST. The key was that the community and LGU were engaged as key players in all stages of a transparent process, from planning, through decision-making, product development and marketing, all the way to product and service delivery.

In Cambuhat, the process started with environmental scanning and planning for enterprise, and resulted in two key outputs that went beyond enterprise and was fully supported by the once vacillating LGU: a 5-year strategic CRM plan, and a "bridge plan" that captured current realities in the area and identified three priority components. The

bridge plan identified enterprise, local governance and resource management (primarily the management of Cambuhat River) as the three priority components and linked them with the strategic vision of the community. Implementation during the first two years focused on these three priorities, giving community and LGU stakeholders concrete activities to undertake that were strategic to achieving their 5-year plan, as well as material and psychological benefits (in the form of recognition from the external CRM community) that further spurred them to sustain and expand their effort to include other aspects of CRM.

## **Mangrove management**

A similar combination of enterprise, local governance and resource management characterized the work of our mangrove management component, which in most areas focused on installing the systems that would make mangrove protection a more attractive economic proposition than converting mangroves to other uses. A key objective was to promote community stewardship over mangroves through the CBFMA, as specified in our Project design and 1998 Revised Results Framework (Fig. 1.4).

The CBFMA is a 25-year production-sharing agreement entered into between a community (through a duly registered people's organization (PO) or similar organization) and the government to develop, manage, use and conserve a specific portion of forestland consistent with the principles of sustainable development and pursuant to an approved Community Resource Management Framework Plan (CRMFP). CBFMAs, which integrate all of the old tenurial instruments on forestlands prior to 1996, are used by the DENR to award tenurial rights over forestlands (including mangroves) to organized communities. It also provides a mechanism for cooperation between DENR, the LGU and resource users.

It is not always easy to "sell" the CBFMA to stakeholders or the LGU. Unlike other fishery resources, mangrove areas have for quite some time been governed by regulatory-oriented forestland management, where some individuals hold some form of permit or contract – the nipa-badawan (mangrove) permit, for example – to use or harvest a specific resource. These individual permit-holders are likely to resist the idea of "sharing" the resource with the community. In addition, the CBFMA creates new roles and responsibilities for the LGU and even the DENR, which may still have to be defined and integrated into their official functions and performance indicators.

The DENR holds the primary jurisdiction over mangroves in the Philippines, but under the LGC, its responsibility for mangrove conservation is shared with the LGU. In an attempt to integrate management of fisheries resources and mangrove habitats more closely, the Fisheries Code of 1998 (Section 81) encourages the establishment of marine/coastal sanctuaries, which must include large areas "to be set aside for the cultivation of mangroves to strengthen the habitat and the spawning grounds of fish". The Code (Section 89) also mandates the DENR, DA-BFAR and the LGU to use participatory processes in determining which abandoned, undeveloped, underutilized

fishponds covered by Fishpond Lease Agreements can be reverted to timberland for rehabilitation to their original mangrove state. (CRMP 2001b)

These legal provisions and the CBFM framework provided the basis for our work with the LGUs and 9 Pos in 4 towns in Bohol (Candijay, Getafe, Inabanga and Mabini). A critical consideration was to equip the LGU for CBFM. Under an agreement with CRMP, each of our 4 LGU-partners assigned a community organizer (CO) to their respective management area to assist the PO in community organizing and training, coordinate management activities, and monitor compliance with the terms of the CBFMA. In most areas, the CO's services were paid for by CRMP initially, and later by the LGUs involved. It seems that, as the commitment of the PO to manage the area is secured and new livelihood opportunities open up for the community, the LGU becomes more willing to invest its own money in the endeavor.

It is important to explain, from the outset, both the benefits and limitations of the CBFMA. As a land tenure instrument, the CBFMA benefits the PO members, solely by its own merit. Following the basic premise that an empowered community with a strong sense of ownership over a resource will be better motivated to protect and manage that resource, it gives resource users the legal right to use the mangrove area according to the approved CRMFP for a period of at least 25 years. As with other resource management systems, however, it is often necessary to introduce livelihood opportunities to enhance the stakeholders' sense of economic security. Alternative livelihoods in mangrove forests include crab fattening, bee and honey culture, limited aquaculture, and sustainable use of selected wood products. CBFMAs allow communities to plant and harvest plantation in area that have been depleted by over-harvesting of fishpond conversion. Instead of cutting entire trees, however, residents learn to "thin" and "prune" trees more efficiently, to promote faster growth and better quality wood [products. (CRMP 2001b)

An essential aspect of any extraction from the mangrove forest ecosystem is to determine the amount that is sustainable and does not lower the ecosystem integrity. In some areas, the mangrove sanctuary, where no direct uses are allowed, is an important management intervention. (CRMP 2001b)

Although not required, resolutions, ordinances and letters of support from the barangay (village) council and SB help facilitate CBFMA processing. Also, the LGU is often in a position to assist a PO financially or on logistical matters. In Talibon, Bohol, for example, the LGU appropriated an initial budget of Php 1.5 million from its internal revenue allotment (IRA) for soft loans that cooperative could use to purchase equipment, supplies and working capital.

Indeed, many LGUs are pouring funds into mangrove management, even outside the CBFMA system. CRMP provided mangrove management training to LGUs and communities in Masbate Province and Davao del Sur, for example, where a number of municipalities have since pursued their own community-based mangrove rehabilitation programs. Masbate City has invested more than Php500, 000 to restore its mangrove

areas, while the town of Hagonoy, Davao del Sur has established a mangrove nursery and plantation. Like enterprise, MPA, and other CRM “best practices”, mangrove management often becomes the take-off point for integrated CRM planning, which in turns leads to the LGU’s adoption of CRM as a basic service.

There are some policy issues that need to be addressed to strengthen the CBFMA system. A moratorium on the issuance of leases on islands, for example, has frustrated the efforts of the community of Banacon Island in Getafe, Bohol, to get a CBFMA. In many areas, coordination and relationships between the DENR and LHU need to be improved although at the policy level it is understood that the DENR is mandated to provide technical assistance to LGUs, its field personnel still perform mostly regulatory functions. In a few areas where they do provide technical assistance, they often work directly with the communities and resource users without going through the LGU channels.

The reversion of abandoned, illegal, and undeveloped fishponds – many of which are potential CBFMA areas – is hardly moving. Meanwhile, because it carries no penalties for low production and does nothing to discourage conversion, the low annual rent for Fishpond Lease Agreements (FLAs) (US\$2/ha/year) has encouraged more mangrove conversion. (CRMP 2001b)

Our hope is that, with the CBFMAs already established, the practice of community based mangrove management will spread to other communities. There is a continuing need for community organizing to strengthen the POs responsible for the protection and management of the CBFMA areas. Intensive IEC and continuous monitoring is essential to minimize poaching, a problem that can be expected especially in the early stages of implementation, when residents and resource users from outside still have to fully accept the new resource use rules and practices as the norm. During a visit to Buyuan, Candijay, for example, our mangrove team detected signs of mangrove cutting, reportedly perpetrated by outsiders, about a year after the PO was awarded its CBFMA. In this regard, close coordination with and intervention from municipal authorities or the DENR may be required to ensure that pertinent rules and laws are consistently applied and respected. The terrain and dense vegetation within a mangrove forest makes it extremely difficult to detect cutting, even from a 20-meter distance, so the PO members’ vigilance is essential. (Candijay authorities subsequently apprehended suspected poachers based on the PO’s reports.)

### **Coastal law enforcement**

Certainly, in all CRM programs, no amount of community organizing and “best practices” will succeed without the adequate application of the law. CRM involves limiting access to resources, gear use restrictions and other measures requiring regulatory and enforcement activities.

With the passage of the 1991 LGC and 1998 Fisheries Code, a broad range of powers and responsibilities, including law enforcement, were devolved to LGUs as the primary

unit of governance for CRM. (CRMP 2001c) Our strategy therefore focused on affirming this LGU mandate, by encouraging LGUs to form and strengthen the organizations legally mandated to enforce coastal laws, such as the Bantay Dagat (literally, “sea watch”, a patrol team organized especially for purposes of enforcing fishery laws). In many of our Learning Area municipalities, CRMP worked with BFAR to organize fishers and deputize them as wardens to assist in the implementation of the fishery laws in their own municipalities.

Improving law enforcement in the context of CRM, however, involves more than enhancing the capacity of law enforcement officers to apprehend violators; it also involves the application of a broad range of approaches by different institutions as well as coastal law enforcement framework that relates coastal law enforcement to the desired result of compliance with management measures and incorporates the following four principles of effective environmental law implementation articulated by Oposa (1996):

1. Law is an agreement of minds or a “social product” that must be deemed desirable and supported by a mental and emotional agreement by individuals and society at large. The law and the reason behind the law must be fully understood and appreciated by individuals and the society at large.
2. Legal marketing or selling the law is necessary to promote voluntary compliance. To promote and legitimize the desired conduct, people must be made aware of the consequences of their actions and the corresponding administrative, legal, and judicial sanctions that would result when the law is violated.
3. Socio-cultural sensitivities and pressure points must be considered in the manner used for implementing the law. Special cultural attributes – for example, the highly personal nature of relationships and transactions, debt-of-gratitude, loss of face - must be understood and incorporated into the design of enforcement approaches.
4. Swift, painful and public punishment must be carried out in order to modify behavior and serve as a deterrent. The judicial process must be carried to the fullest extent of the law possible and must be supplemented with IEC so that the penalty that may be meted out is properly equated in the public’s mind with the act deviating from conduct that promotes the social good.

This framework reflects our view that, to achieve compliance with the requirements of the law, government must rely on a variety of interventions in a continuum of activities ranging from “soft” preventive measures such as public education to “hard” sanctions imposed by apprehension, prosecution and conviction. The municipality of Talibon in northern Bohol, for example, has realized significant improvements in local governance, the condition of coastal resources, and the health and welfare of coastal communities by diligently and consistently applying both soft and hard law enforcement approaches as an integral part of its CRM system. (CRMP 2001c)

Lack of political will is often cited as the major cause of the pervasiveness of illegal activities in the coastal zone. Even when the LGU is determined to enforce the law, however, it is challenged by the fragmented state of our law enforcement system as well as logistical constraints. Records from our MCD show that in 2000, only 15% of the LGUs had budgets for law enforcement; of these, only 7% had operational patrol boats. (CRMP 2001c)

During a coastal law enforcement summit called by the Province of Bohol in 2000, participants concluded that law enforcement is a responsibility that must be shared between the LGU and higher levels of government, and that adopting a multi-sectoral and multi-agency approach is necessary. The summit resulted in the formation of the Coastal Law Enforcement Councils (CLECs), one for each of the three districts of Bohol.

The CLEC's operational arm is a coastal law enforcement team led by the Philippine National Police (PNP) and PNP Maritime Command. To get the CLECs up and running, the Provincial Government provided each team with a fully equipped patrol boat and gasoline budget. The teams then held community meetings to explain the law and communicate the government's intent to fully enforce it. These meetings also helped to resolve small issues and coordinate the law enforcement activities of the CLECs. Since then, several arrests (more than 6a0 as of end-2001) have been made for violations ranging from dynamite fishing to commercial fishing in municipal waters.

Initially, the province fully funded the operations of the CLEC boats, but more and more municipalities are slowly taking on the burden of the costs of patrolling, and some are even making significant economic returns from fines imposed on violators. PNP stations around the province have also set up environment desks to complement the CLECs' efforts.

Bohol's initial success in law enforcement is built on three key ingredients: multi-sectoral collaboration, IEC, and the support of the provincial government. Provincial support, in particular, must be emphasized. Although law enforcement must primarily and ultimately involve local action, inter-LGU collaboration and higher-level interventions covering a wider geographical area are essential to adequately control violations characterized by a high degree of mobility, as most fishery law violations are. At the provincial level, this can best be facilitated by the provincial government, which under the LGC (Section 447) holds the legal mandate to "protect the environment and impose penalties for acts which endanger the environment, such as dynamite fishing and other forms of destructive fishing... and such other activities which result in... ecological imbalance."

The ongoing delineation of municipal waters, a provision of the Fisheries Code, is expected to improve coastal law enforcement interventions in general, as it will define the LGUs' area of jurisdiction and operations. CRMP assisted the NAMRIA to facilitate municipal water delineation in a number of provinces, including Antique, Surigao del Sur and Masbate. As of this writing, NAMRIA has certified the technical descriptions of the municipal waters of 12 municipalities in Masbate.



Clearly, however, illegal fishing will continue to pose the biggest threat to the LGUs' effort to manage their fisheries, at least in the near to medium term. Commercial fishing in municipal waters, in particular, will remain a major issue, as commercial fishers have vowed to challenge – before the court of law as well as in the fishing ground – the municipalities' jurisdiction and authority over the 15-km municipal water zone. The national government and donor projects would do well to assist LGUs to face up to this challenge, and institute the appropriate regulatory and monitoring systems to improve law enforcement, ideally through voluntary compliance by all sectors concerned and, where necessary, through the implementation of sanctions for coastal law violations.

### **Selling the law**

A key objective of CRMP was to clarify jurisdictional issues, and address policy obstacles to CRM. In this, CRMP faced many challenges, one of the most diverting of which was the controversy arising from the efforts to delineate municipal waters nationwide.

One of the most important developments related to CRM that emerged in the 1990s was the government's official declaration of municipal fishers' preferential rights over municipal waters. The concept of municipal waters is not new. It has been established under Philippine law since as early as 1916. The boundaries of these waters, however, were never delineated, so there was never any clear definition of the limits of the jurisdiction of local governments over their so-called "municipal waters". (Batongbacal 2001)

In 1999, to comply with its mandate under the Fisheries Code, NAMRIA, assisted by CRMP, started the process of formulating the guidelines for the delineation and delimitation of municipal waters based on the archipelagic principle. The guidelines went through a series of consultations and trial runs in different provinces before they were officially approved under DENR Administrative Order 2001-17 (DAO 17) in 2001.

Formulating and then repeatedly amending the guidelines over several consultation workshops with various stakeholder group was a challenging process, but what really proved challenging was defending DAO 17 when it came under attack from a group of commercial fishing operators who alleged the order was invalid because of "legal infirmities."

CRMP facilitated discussions to explain DAO 17 to government leagues, POs, NGOs, NGAs and various other groups that were involved in CRM. These discussions led to the formation of a loose coalition of DAO 17 advocates, who led information campaigns and consultations to counter the commercial fishing lobby. The defense focused on DAO 17's solid legal basis: the 1987 Philippine Constitution, which enshrined the archipelagic principle as the fundamental pillar of the Philippine concept of territory and recognized the preferential rights of subsistence fishers over communal waters; the LGC, which first defined municipal waters to include marine waters up to 15 kms from

the shoreline; and the Fisheries Code, which declared municipal waters off-limits to commercial fishing, and mandated municipal water delineation. Pressure from DAO advocates encouraged DENR, through NAMRIA, to push the delineation. As of this writing, despite continuing opposition from commercial fishing operators, at least five provinces have delineated their municipal waters, and three municipalities have passed ordinances officially adopting the NAMRIA-certified technical descriptions of their municipal water boundaries.

### **Monitoring and evaluation**

M&E is perhaps the one phase of the CRM process that receives the least attention from Philippine LGUs. By and large, whether in law enforcement, CRM or development in general, this function is viewed as an “external” function, a requirement of donor-assisted and NGA projects to be performed by outside experts, and, if introduced as a component of a project, an unnecessary workload for already overworked LGU staff. It was important for us therefore to emphasize that M&E is an integral part of the CRM process, essential for sustaining management measures designed to improve the productivity and integrity of coastal ecosystems and restore benefits derived from coastal resources. (CRMP 2001d) To this end, CRMP designed a performance assessment tool that is intended principally for the city or municipal LGU’s use but also encourages assistance from and collaboration with other institutions and organizations, including provinces NGAs, NGOs and academic institutions.

The M&E procedure CRMP developed deviates from traditional approaches in two ways. First, while traditional approaches employ strictly quantitative methodologies, the CRMP approach uses both quantitative and qualitative methods. Second, it promotes broad stakeholder and multi-sectoral participation in an “internal” process of self-evaluation and continuous quality improvement, quite unlike the traditional models, where monitoring is an “external” process conducted by outside groups checking up on the implementers as a requirement for compliance in a top-down governance framework. This model follows recent international trends in project M&E design, which focus not only on the assessment function of M&E, but on its potential to contribute to overall capacity development. (UNDP 1997)

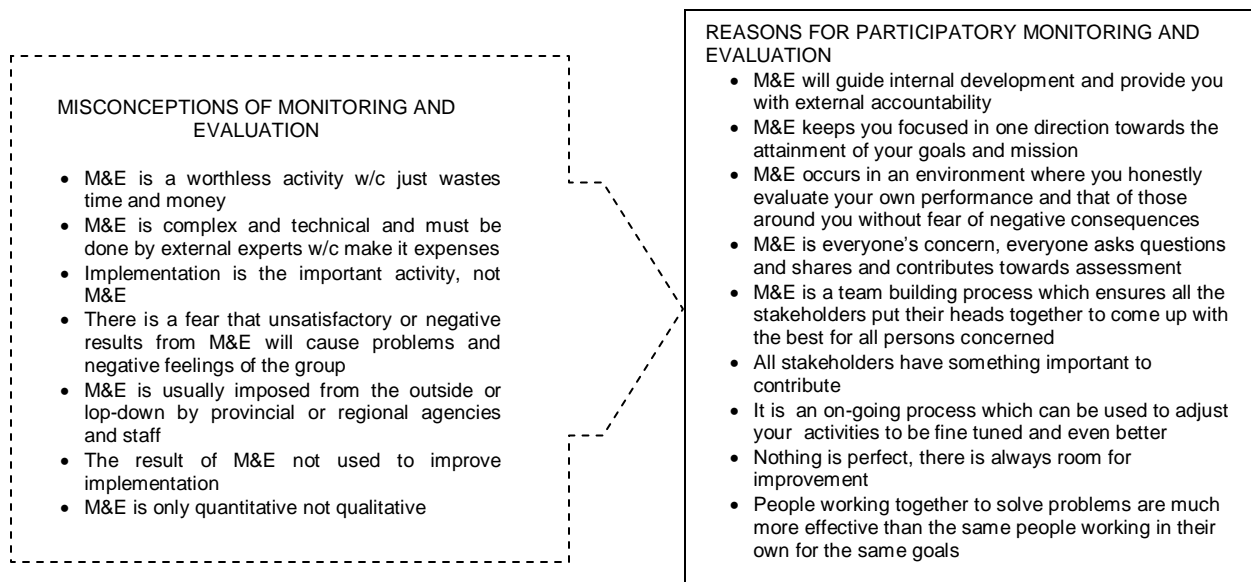


Fig. 2.1 Paradigm shift in monitoring and evaluation approaches (CRMP 2001d)

The CRM planning process adapted for Philippine LGUs (fig. 2.1) entails annual M&E to assess the plan and plan implementation and help to answer such questions as:

- How far have we come in implementing the plan?
- Are the strategies addressing the issues and plan objectives?
- Is the plan working?
- Is the capacity of the municipal staff, MFARMCs, and coastal law enforcement units adequate to implement the plan?
- Is the legal and institutional framework adequate for CRM plan implementation?
- What issues have arisen since the plan was implemented?
- What is the level of community support for the actions being implemented?
- Have the fish catch and coastal habitat quality improved?
- What refinements to the plan are needed to improve implementation?

A key input to the M&E process is the MCD. The MCD, which is available electronically as well as in printed form (for LGUs lacking computer facilities), contains information on the coastal environment and the CRM activities undertaken and is updated periodically by each LGU to reflect changes in the indicators used and provide a measure to evaluate plan implementation and enforcement. CRMP used the MCD as an M&E tool from as early as 1997, and refined it over 3 years of application in the field.

Full-blown M&E activities started only in 2000, however, rather late in the Project implementation. Some would say that the M&E system would have been put to better use had it been installed at the outset. Perhaps that would have been ideal, but the time it took to develop the system and guidelines was time spent learning from the field, and identifying the most appropriate benchmarks to measure LGU performance as well as the institutional arrangements necessary to establish M&E as an internal function of the LGU. The process that resulted from this effort incorporates the participatory elements that have proven so effective in the other phases of CRM, and expands the review

process to include certification. Patterned after international standards for organizational and environmental management system (ISO 9000 and ISO 14000), CRM Certification (CRMC) aims to encourage LGUs, many of whom still have to acquire the habit of self-monitoring and self-encourage LGUs, many of whom still have to acquire the habit of self-monitoring and self-evaluation, to comply with the M&E requirement of CRM. It is discussed in greater detail in Chapter 4.

### **Training, IEC and building networks for CRM**

Being primarily a technical assistance project, CRMP focused on two modes of developing LGU and community capacity for CRM: training and IEC supported by policy and advocacy, and building networks for better coordination of resources (both external and internal). Our most crucial challenge was to develop a programmatic approach that would effect the transition of our “clients” – both individuals and institutions - from a “learning mode” to the actual application of newly learned CRM principles, knowledge and expertise as part of their daily custom. An IEC or policy and advocacy intervention was usually our vehicle for introducing individual LGUs to the CRM concept. Such intervention was normally characterized by face-to-face, highly personalized interactions with political leaders and technical staff at all levels of the LGU. The immediate objective was to “sell” CRM as an indispensable ingredient for achieving LGUs’ development goals. Thus, although our message about the crucial need for CRM was consistent, the manner by which it was communicated varied from LGU to LGU.

For example, many LGUs regard CRM as a “marginal” activity relative to their “more important” agriculture and fisheries program, which in most areas involves mainly promoting efficiency and production from a purely resource utilization perspective. Our message would therefore focus on changing this perception by highlighting the negative impacts of development programs devoid of the resource management context, or the benefits that CRM can generate to enhance their program and improve its performance. Sometimes, the message may emphasize CRM’s critical role in food security, or, in the case of our expansion municipalities in the southern part of Cebu, as a requisite for optimizing the benefits of that area’s designation as a tourism zone in the Cebu Provincial Master Plan.

It is not easy to pin down the specific message that will favorably influence LGU and community decisions about CRM. Communication theory suggests that people respond to messages in terms of their “frames of reference” – the closer the “meaning” or “impact” of a message to an individual, the quicker that individual will respond or react to that message. The message “hits home” when people can relate to it. Generally, we found that messages affirming the LGU’s mandate in CRM promotes public awareness of the LGU’s responsibility for managing municipal waters – a 1999 survey revealed a high level of public awareness (85%) of such LGU mandate among coastal residents (Trends-MBL 1999) – which in turn promotes local accountability in CRM (Table 3.2).

Table 3.2. What the public knows about CRM and their coastal environment

<b>KNOWLEDGE / ATTITUDE STATEMENTS</b>	% of Respondents		
	Strongly agree/Agree	Strongly disagree /Disagree	Undecided
The LGU is responsible for managing municipal waters	86	5	9
MPAs will contribute to the rejuvenation of fish stocks and recovery of coral reefs	87	8	5
Responsibility for managing coastal resources is everyone's responsibility	92	4	4
Unproductive fishponds should be converted back to mangrove areas	89	6	5
Limiting fishing effort is one way of reversing declining fish catch	69	23	8
<b>AWARENESS OF CRM</b>	Total Philippines	CRMP learning areas	Other Areas
	41	50	25

(TRENDS-MBL 1999)

Localizing information regarding the state of coastal habitats and corresponding issues and problems is also highly effective as an agent to move people to action. This is why PCRA is such a valuable educational tool. A good number of community members and LGU officials we worked with were observed to have become more supportive of CRM after a PCRA exercise, when they had personally seen or were presented with information after a PCRA exercise, when they had personally seen or were presented with information about what was happening to their own coastal environment, literally, in their own front or backyards.

Cecille Burgos, member of the Provincial CRM Core Group and lead PCRA and MPA trainer of Masbate Province, recalls the response of Mayor Arturo Vicente P. Maristela of Aroroy, where they conducted a PCRA training in 2000: "The mayor attended the visioning and planning workshop that followed the assessment exercises, and sat through the entire presentation of results by the fishers who participated in the assessment. He must have been moved by how the fishers described the condition of their coastal resources, because not much later, during their annual municipal planning session where the MPDC presented the CRM plan that resulted from the PCRA workshop, he directed the allocation of Php 1.5 million out of their 20% economic development fund to implement the plan."

To orient LGUs and community members to the more technical aspects of CRM, we packaged training programs in a way that made them as relevant and as responsive as possible to participants' perceived learning needs. The training modules we developed emphasize the use of hands-on, participatory methodologies, and inject the element of "fun" to enhance learning. "Fun" – in the form of on-site resource assessment involving snorkeling and swimming, and the telling of humorous "fish tales", for example – has a great educational value, improving participants' understanding and recall of scientific principles they would find difficult to grasp in a purely classroom setting.

LGU demand for training is often focused on specific activities, such as MPA establishment or mangrove management. While responding to such demand, our training programs also provided the “big picture” – a comprehensive overview of the entire CRM process, so that participants were able to make the necessary connections between the new skills they acquire with CRM and sustainable development as a whole. This was essential to developing in participants a mindset that CRM is a mainstream LGU service that must be prioritized in the LGUs’ programmatic directions and resource allocations.

While training is an inherently capacity development activity, it can be properly directed so that it provides the LGU not only the technical capacity for CRM, but also the other skills needed to run a successful CRM program. The key is to involve LGU staff in the “backroom” operations of each activity leading up to the “main event”, and not just as participants in the “main event” itself. This will expose them to organizational management training not normally available in regular training programs of technical assistance projects like CRMP. Given the diverse and cross-sectoral issues that CRM interventions must address, some level of competence in coordination, facilitation, events organizing, and conflict resolutions would be useful to the LGU.

Training and IEC activities can also serve as occasions for building coalitions and networks of formal and informal organizations to support local CRM implementation. To this end, counterpart funding must be engaged. Through the counterpart funding with partner organizations, CRMP was able to leverage resource in order to cover more areas, while enhancing LGU ownership and commitment to the CRM process. Analysis on the counterpart funding arrangements in our Learning Area municipalities in Negros Oriental revealed that municipal LGUs were contributing an average 73% of the necessary annual funding requirements of Php 1,776,000 for CRM, while CRMP, NGAs, and NGOs were providing 16%, 6% and 5%, respectively. (Courtney et al 2002)

As a rule, in all the municipalities and provinces we assisted, training also involved organizing a technical assistance team from among the participants. By requiring representation from various LGU units and national government line agencies, our training design helped ensure that there was a good mix of government institutions represented in the team.

In Palawan, one-on-one meetings with local officials, community leaders and other potential leaders and champions for CRM laid the groundwork for coalition building. Such personalized and informal meetings were followed by larger group discussions, often organized and facilitated by the identified champions themselves.

The important role of local champions and leaders is well organized. Local champions can help catalyze policy change, build consensus and clarify goals. With local “heroes” and not the project taking the spotlight, the LGU’s sense of ownership over the CRM process is heightened, accountability is promoted, and sustainability enhanced. Local champions must therefore be nurtured, by providing them with training, resources and an enabling environment. Where necessary and considering local expectations, values

and power relations, CRM networks should support and advocate institutional and policy change in a way that ensures recognition and adequate incentives for individual performers. “Institutional change”, however, does not necessarily mean creating new institutions, rather developing, strengthening and improving the organizations and systems already in place. The key is to make better use of people and resources, and the existing organizations and systems for program implementation. To sustain local CRM initiatives, support for local champions must be extended beyond the LGU to the community at large, and to the entire bureaucracy through mechanisms that facilitate communication, collaboration, and exchange of experiences.

- b. Economic Re-Evaluation*
- c. Socioeconomic and Sociocultural Results*
- d. Women in Development*
- e. Environmental Impacts Control*
- f. Gestation and Sustainability*

### **Beyond the Community: Support Structures and Mechanisms for Coastal Management**

The key to a sustainable approach to coastal resources management lies within the overall political, economic and social institution of the concerned communities... The Project purpose is to achieve effective in-country capacity and efficient incentive system for increased and continuing public and private sector investment to support replication and sustainability. (USAID 1995)

In the early stages of CRMP, a decision was made to operationalize the Project mission using a two-pronged approach to address issues simultaneously at the national and local levels. This decision was prompted by our realization that, while local implementation is the primary and ultimate requirement for success in any resource management initiative, higher level interventions are needed to achieve the desired spread, sustainability and streamlining of CRM services. This chapter discusses such interventions, focusing on what has been accomplished and key lessons generated by our experience in catalyzing a critical mass of support for CRM.

### **Achieving “critical mass”**

Our first consideration-spread-was firstly a programmatic requirement related to our strategic objective of 3,000 km of shoreline under improved management by 2002: Our Learning Areas had a combined total of only 670 km of shoreline, not even one-fourth our target reach. Obviously, we needed to expand to other areas to achieve our objective, and we needed a strategic vehicle to introduce CRM in the shortest time and most efficient way to as many LGUs as possible.

As has already been noted in the previous chapter, the introduction of CRM to LGUs was largely through an IEC or policy and advocacy intervention. The “mother” of all such interventions was the historic Conference of Coastal Municipalities of the Philippines organized jointly by CRMP and the Philippine mayors’ league, the LMP, in 1999. More than 700 mayors representing 90% of coastal municipalities in the Philippines attended the forum, the first of its kind in Asia and only the second in the world after a similar event held in Canada. This resulted in tremendous exposure of the LGUs to the concept of CRM, with dramatic impacts. Many mayors across the country have since credited the Conference for awakening their interest in coastal issues, and redirecting their programmatic focus to the critical coastal issues of overfishing, habitat destruction, and resource degradation.

The choice of the LMP proved to be particularly strategic. From the time CRMP first connected with the League in 1997, the partnership started the process of the prioritization of CRM and LMP developed the Best CRM Program Awards for coastal municipalities. A national search committee, composed of LMP, NGAs, NGOs, academic institutions and CRMP, formulated a set of evaluation criteria which covered integrated coastal management planning and implementation processes, community participation, local government capacity, inter-governmental linkages, quality of life, impact on environment, and sustainability. The search committee conducted the review and field validation of all finalists, and in 1998, out of 15 nominees, 6 municipalities were recognized nationally for their leadership efforts in CRM. (Courtney et al 2002)

The awards served as a venue for friendly competition among LGUs in the field of coastal management. By recognizing outstanding performance in CRM from its own ranks, the LMP leadership effectively issued a challenge to all members to prioritize CRM in their local agenda. Members quickly responded, affirming their commitment through a 15-point resolution, which they formulated and approved at the historic 199 Conference.

From there, demand for technical assistance from LGUs seemed to us to have grown exponentially, as manifested by the many requests for assistance we received from LGUs across the country. Such increased interest in CRM provided the impetus for CRMP to expand to other provinces-and to achieve its strategic objective of 3,000 km of shoreline under improved management-ahead of schedule. Without the high-profile activities that characterized CRMP’s operations between 1998 and 1999, such expansion would have happened only in at least twice the time it actually took.

LGUs covering 3,640 km of shoreline, 96 (3,056 km) of which completed the minimum three indicators for improved management of coastal resources for the year ending 2001. The target was set at 3,000 km- about 15% of the 18,000-km Philippine coastline-based on the critical mass theory, which states that a self-reinforcing mechanism emerges when 10-30% of the targeted population has adopted a particular behavior (Marwell and Oliver 1993).



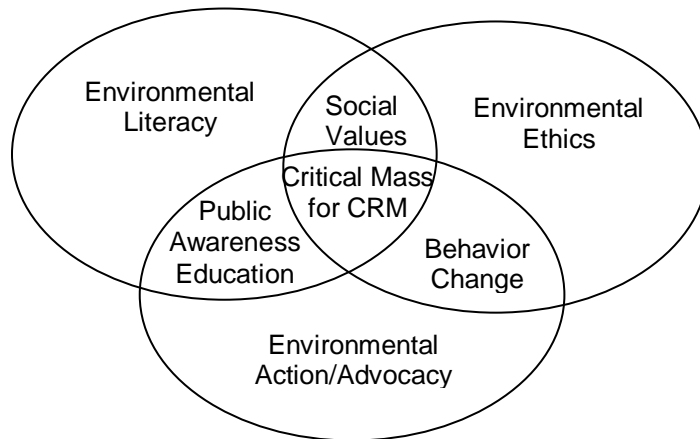
As interest in CRM spread among LGUs around the country, and as we began to analyze the lessons generated from our Learning Areas, however, it became obvious that the lack of convergence between national policy and what happens in the field was not a function of LGU interest only. WE realized that the gaps existed not only because of the LGUs' lack of awareness and understanding of their role in CRM, but also because of the NGAs' low-and slow-adaptation to their new role in a decentralized governance system. And, while local action is the primary and ultimate engine that drives CRM, LGUs and communities face a rough-and-tumble ride without the cloak of support of the other State sectors. In short, we needed to "sell" CRM not only the LGUs, but to the entire national government bureaucracy, both rank and file alike, and to the general public, so that a network of support is built around local initiatives to ensure their success. Moreover, to increase buy-ins for CRM, we needed to promote the idea that CRM is a mainstream, public issue that concerns not only fisherfolk but the entire society as well.

To jumpstart the process, we adopted four inter-linked modes to define our IEC strategy: development support communication (DSC), advocacy and institutionalization, social marketing, and social and community mobilization.

DSC, the oldest of the four modes, involves development, production and dissemination of IEC materials in support of other program components and activities. Advocacy uses different strategies to influence decision-making at the various government levels, while institutionalization directly addresses the need for ensuring the sustainability of the CRM process. (CRMP 2000e) Social marketing employs "programs aimed at increasing the acceptability of a social idea or practice in one or more groups of target adopters" (Kotler and Rovertto 1989). And the fourth mode, social and community mobilization, focuses on collective action and uses public participation processes and techniques to bring about consensus and inform and educate the public about CRM. (CRMP 2000e)

These four modes represent differing perspectives on program communication, and are often applied singly and distinct from the others. Adopting only one or two modes, however, is not adequate to address the broad range complex issues affecting CRM. Our operational framework was designed to integrate the four modes to produce synergy and strategic expansion covering the LGU as the core target of change, and the wider community as pressure point or supporting system. (Flor et al 1997, Smith et al 1999).

Fig 2.2. CRMP framework for information, education and communication



### **Moving CRM beyond sectoral confines**

Our campaign to “sell” CRM to sectors outside the LGU and fisheries’ groups was well underway even before the 1999 Coastal Mayors Conference. In 1998, the world celebrated the International Year of the Ocean, which opened up an excellent opportunity for CRMP to build alliances and generate the necessary public and private sector commitment to improved management of Philippine coastal resources. That year, CRMP mounted “Our Seas, Our Life”, a traveling exhibit which made the rounds of seven Philippine cities between 1998 and 1999 and was participated in by tens of thousands of people from all walks of life. Supported by broad-based communication and social mobilization activities, the exhibit proved to be a most effective promoter of the CRM cause. At each of its three stops between February and September 1998, it engendered such high interest in CRM issues never before seen in the country, opening many avenues for the Project to advance and mainstream its cause.

Our social mobilization activities were large-group interventions that attracted representation from many of the country’s leading sectors and organizations – the Philippine Navy, Philippine Coast Guard (PCG), PCG Auxiliary, Boy Scouts of the Philippines, Girl Scouts of the Philippines, schools, church-based groups, fishers’ associations, business, LGUs, NGAs, and NGOs. Designed to double as media events, they also proved effective in drawing the media’s attention to coastal issues. More than merely encouraging media coverage or the presence of various organizations, however, social mobilization also emphasized the active involvement of key partners in the planning and coordination activities leading up to each event. This ensured that, in line with our strategy, each activity was process-oriented, synergy-driven, participatory and built on existing capacity for CRM. To fulfill our mandate of producing video materials on CRM, for example, we passed over projects with the country’s top media networks, such as ABS-CBN through *Sine’skwela* and GMA network through *Agri Siyete* and *Brigada Siete*. This strategy not only cost-effective, it also helped to institutionalized CRM in the media sector. Largely as a result of this media strategy, the various TV

networks and news agencies began to look at coastal and marine environmental issues as a priority subject for their public affairs shows.

Thus, when the 1999 Coastal Mayors Conference unfolded, the media and a large segment of the public were already “primed” on coastal issues, an attentive audience sympathetic to the CRM cause. Until then, we did not fully appreciate the amount of goodwill generated by our social marketing and mobilization activities, partnerships and prioritization of CRM that evolved as a result of our social marketing, advocacy and institutionalization efforts during the previous year. As noted above, our framework was designed precisely to bring about, in the most cost-effective way possible, a fast spread of CRM amidst a host of potentially hindering factors. With the LGU community, the public, the media and other lead actors deeply engaged in the process, we multiplied our reach a thousand-fold, creating a multitude of pressure points and a broad base support for the view that CRM is both a social norm and a basic service of LGUs to coastal municipalities.

But more than quantity, we wanted quality, result that would generate benefits for coastal communities that could be sustained beyond the life of CRMP. The only possible way to support CRM that address all the complexities of issues in a meaningful way is through partnerships and good collaboration. In many ways, our large-group interventions in 1998 and 1999 built many relationships crucial to collaboration in CRM. These relationships, however, needed to be more effectively coordinated, the synergies clearly identified, roles defined, and the working mechanisms and directions spelled out, all in support of local actions by LGUs and communities. At the municipal level, various LGU offices (planning and development, agriculture, natural resources, social welfare and development) and people’s organizations (fishers, women, youth, resort owners, boat operators) were engaged in planning to ensure that all views were represented, and there were an adequate mix of personnel and expertise to meet the requirements of the diverse of range of issues that needed to be addressed. In many of our Learning Area and Expansion municipalities, CRM TWGs formed the core mechanism for collaboration in others, CRM offices were created to coordinate the CRM-related activities and programs of the various LGU offices.

With local coordinating mechanisms thus defined, mechanisms to connect and align LGU functions with other entities that affect CRM had to be identified. The success of efforts to develop CRM capacities at the local level is greatly affected by existing capacities in the broader system within which the LGU operates. If such capacities are inadequate or absent, or do not match or align with the needs and priorities of the LGU, service delivery at the local level cannot function effectively. Without the appropriate coordinating mechanisms where their programs cannot progress because of lack of local expertise, or because their programs must give way to some national “priority” project. The experiences of our Learning and Expansion Area municipalities affirmed that, for local CRM activities to succeed, capacity development must address capacity gaps not only at the local level, but also from a systems perspective.

With the success of our large-group IEC interventions in generating widespread interest in coastal issues and forging relationships between institutions and individuals from a wide range of sectors, we were not wanting in opportunities to foster meaningful collaborations for CRM. Our challenge was to identify and define effective mechanisms to allow such collaborations to happen and become sustainable. The mix of mechanisms described below, although still needing refinement, shows the best potential for improving the flow and exchange of information and services among sectors concerned with CRM.

**Donor collaborations and leveraging.** The directive to seek out collaborative arrangements with other donor projects involved in CRM or related activities was articulated in the original Project Design (USAID 1995), and reiterated in the 1998 mid-term evaluation report (Rassas et al 1999). The 1995 design specifically identified the USAID-funded GOLD, Growth with Equity in Mindanao (GEM), Industrial Environmental Management Project (IEMP) and GreenCom Project; and the ADB-funded FRMP as key partners. In addition to these, the 1998 evaluation report recommended linkages with the World Bank-funded Community-Based Resource Management Project (CBRMP); USAID-funded Environmental and Natural Resources Accounting Program (ENRAP) and Global Plan of Action (GPA); and the United Nations Development Programme (UNDP)-supported Capacity Building Coastal Management Project.

As directed by the Project design, we were to achieve 50% - 1,500 km – of our target kilometers of shoreline by working with other donor groups involved in CRM in the Philippines. The strategy was to promote the use of our Revised Results Framework among donor projects, so that whether it was CRMP or some other project that was working in the field, we would all be moving toward the same strategic objective, and applying the same indicators to account for our results. Such level of collaboration and leveraging with other donor projects would have helped us catalyze the development and operationalization of a national coordinating mechanism for CRM.

But that, as we found out, was easier said than done. There was considerable sharing of experiences, expertise and products between CRMP and projects like FRMP, CBRMP, and the GOLD Project. FRMP, for example, now uses CRMP methodologies and training materials for CRM planning, PCRA, mangrove management and MPA establishment, while Joint training courses were conducted and, in some cases, handbooks and guidebooks were co-published with other programs. Between 1996 and 2001, CRMP collaborated in this manner with more than 150 different organizations and institutions. (Courtney et al 2002). These are all significant initiatives contributing to the spread of CRM best practices to areas outside the CRMP sphere of influence.

For donor activity to be effectively coordinated, however, collaboration has to be taken to a higher level, where a common results framework and benchmarking and reporting system are shared across donor projects. This proved to be the bigger challenge. The national government's medium-term development plan (MTDP), which sets a target for CRM (CRM adopted by 250 LGUs along 3,000 km of shoreline by 2004), was seen as a unifying element, but it does not specify the parameters for measuring such target, nor

the particular agency responsible for delivering the target. Different project were administered by different NGAs – CRMP by DENR, FRMP by DA-BFAR, and CBRMP by the Department of Finance (DOF), for example- and were often greatly influenced by the priorities and development orientations of their respective lead agencies. No one office had the mandate to collate and consolidate information emanating from the field into a single integrated national report that accurately tracked local implementation and showed how much further it needed to go relative to the national target. Promoting the use of the CRMP Results Framework, therefore, literally involved approaching individual donor projects to get them to adopt the benchmarking system we developed. To this end, we put together the MCD not only as an M&E tool for LGUs, but also to facilitate the exchange of information, at the local level, between LGUs and assisting projects and, at the national level, between and among projects and NGAs.

We had anticipated development in this area to be slow. We realized that each donor project has its own orientation and priorities, and is accountable to its donor agency for a specific set of results on which it must focus attention and resources. Also, each project works at the pace required by its own timeframe and; learning and experience curves. Bound by our own life-of-project targets, we thus directed our efforts at achieving spread through other means, and by responding directly to increased LGU demand for technical assistance that resulted from our IEC campaign in 1998 and 1999. Nevertheless, the work toward the establishment of a coordinating mechanisms for CRM at the national level must continue. In February 2002, the CMMO was created under the DENR to monitor and coordinate local CRM implementation. The donor community's efforts must now focus on assisting this office to develop the policy, procedures, mechanisms and terms of reference for regular project donor coordination.

**LGU “cluster”.** Among the earlier mechanisms we employed to improved service delivery in CRM at the local level was inter-LGU coordination. The municipalities bordering Sarangani Bay in Sarangani Province and Malalag Bay in Davao del Sur were the focus of our initial attempts to establish a coordinating mechanism among LGUs. The primary objective there was to bring about the harmonization of the regulatory ordinances of the concerned LGUs to address one of the downsides of increased local autonomy: the preponderance of inconsistent, sometimes conflicting regulations on resource use and management. The need to harmonize local ordinances, especially for bay-wide planning and management such as in Sarangani Bay and Malalag Bay, was articulated on our Project Design, which stated, “Regulatory ordinances... should, ideally, be in agreement from one place to another.” (USAID 1995)

The cluster concept later evolved as a strategy to create a “ripple” of CRM from one LGU cluster to neighboring municipalities. In Cebu, Negros Oriental, Sarangani and Bohol particularly, each LGU cluster served as a network of support and a mechanism for a group of municipalities to plan together, leverage resources, share experiences, and generate a common vision and shared commitment for CRM. Regular checkpoint meetings served as the venue for sharing and some friendly competition and peer pressure, as well as windows for ventilating issues and concerns affecting cluster members. In Negros Oriental, for example, the number of MPAs (28 as of 2001,)

reflects the desire of each LGU to replicate what is working and popular in a neighboring LGU (Courtney et al 2000). In Cebu, the LGU cluster successfully lobbied for funding support from the provincial government, which until then had shown little interest to promote CRM.

Clustering is only effective, however, where there is an impartial “broker” that orchestrates and coordinates cluster activities, builds consensus among members, and where necessary, push for a formal written agreement on outstanding issues. Donor projects can serve this purpose, as CRMP did particularly in Cebu, but the objective is to transfer the coordinating capacity to the government. Our experiences points to the province, given the right motivation and capacities, as a most effective coordinator of CRM activities at the provincial level, and therefore an efficient conduit for the delivery of CRM services to municipalities.

**The Province.** In a wake of a national policy shift from centralized governance to increased local autonomy, the role of the national government in service delivery has largely been ignored as capacity development efforts focused on filling capacity gaps at the municipal and community levels. Yet the province is strategically positioned not only to coordinate municipal-level capacity development activities, but also to integrate CRM into the development framework of the LGUs under its jurisdiction.

Project management decided to shift from direct assistance to municipal LGUs to the provincial service delivery mode in 1999, in response to a recommendation contained in the CRMP mid-term evaluation report (Rassas et al 1999). At the time, it was apparent that, because of basic differences in orientations, timelines and targets between CRMP and other donor projects, donor collaborations alone would not give us the expansion required to achieve our strategic objective of 3,000 km. In our Learning Area Provinces – Bohol, Cebu, Davao del Sur, Negros Oriental, Palawan, and Sarangani – the shift primarily involved engaging the provinces as a partner in “expansion” activities covering municipalities outside our core Learning Area municipalities, and at the same time continuing our municipal-level efforts. In our Expansion Area provinces, such as Masbate, we focused solely on developing capacities at the provincial level, while instituting the mechanisms for inter-agency cooperation through the Provincial CRM Core Group. This firmly put the province in the lead role as primary CRM technical assistance provider within its sphere of jurisdiction, with NGAs such as DA-BFAR, DENR, DILG, Department of Trade and Industry (DTI), the Department of Social Welfare and Development (DSWD) and coastal law enforcement agencies in a supporting role.

Four element make the province strategic as a channel for CRM technical assistance to municipal LGUs: the existence at the provincial level of mechanisms for regular consultations between municipal LGUs, assisting NGAs and the province, such as the Provincial Development Council (PDC); availability of funds for capacity development that can be strategically directed to promote municipal-level capacities in CRM; provincial influence on municipal development thrusts through a review process

undertaken by the Provincial Land Use Committee (PLUC); and Policy and legal mechanisms for setting a provincial framework to support local CRM implementation.

A key to success in capacity development at the provincial level is visible leadership the political will, ownership and commitment manifested by both political leaders and technical staff for CRM. Such leadership was present in varying degrees in most of our Learning and Expansion Area Provinces. The more important challenge for us, however, was to define and install suitable instrument and mechanisms to ensure that capacities were sustained beyond the terms of government officials who initially championed the capacity building effort.

In Davao del Sur, several institutional mechanisms have been put in place, including a provincial CRM council created by an executive order issued by the provincial governor, designation of the Provincial ENRO as the lead CRM office also through an executive order from the governor, CRM TWG, CRM certification committee, and Provincial Anti-Illegal Fishing Task Force (PANTIF-TF). These groups worked together to formulate a 5-year (2001-2005) provincial CRM plan, believed to be the first of its kind in the Philippines.

In Palawan, a provincial CRM team was organized through a special order from the governor. It is supported by a Provincial Board resolution adopting CRM as a basic service of the provincial government.

In Bohol, a provincial environment code formulated in 1998 with assistance from the GOLD Projects provides the policy and institutional framework for environmental management. The code created the Bohol Environmental Management Office (BEMO) responsible for all environmental management activities in the province. CRMP focused on integrating CRM into BEMO's development and organizational framework and at the same time guiding the office's CRM section staff through the development of seven "learning area municipalities". This resulted in the spread of CRM outside of our initial Learning Area, provide individual BEMO staff countless opportunities to gain competence in CRM through hands-on experiences, and installed an institutional memory that outlives political term limits.

In Masbate, the institutionalization of CRM in provincial governance with the creation of a Provincial CRM Core Group, which is now looked up to by municipal LGUs at the primary provider of technical assistance and training in CRM in the province. In 2000, the province adopted a provincial environment code, which defined the policy and organizational framework for environmental management. Utilizing and building on existing capacities at the provincial level, the code affirms the province's supportive role and provide at least two sustainability mechanisms for CRM: The creation of a provincial office on environment and natural resources, which includes a CRM division responsible for coordinating all CRM activities in the province; and the formulation and adoption of a provincial CRM framework for eventual integration into the Provincial Physical Framework Plan (PPFP) and the CLUPs of all municipal and city LGUs within the province. Integration into the PPFP and the CLUP, in particular, is strategic in that it

builds CRM into the planning and review cycle that is already installed in the province. The CLUP contains the LGU's road map to development, which detailed resource use, annual investment, and action plans covering a five-year period. It is based on the PFP, which directs municipal-level development planning over 10 years. Both the PFP and CLUP go through an intensive review process at the provincial, regional and national levels, and are officially adopted through a local ordinance.

The application of these mechanisms to CRM, however, is in its early stages of development. Much remains to be done to fully develop the capacity of provincial governance to promote CRM best practices, harmonize local policies, provide information management support, and service the technical assistance and training needs of coastal municipalities and cities. And even more remains to be done to realign NGAs priorities and service delivery models to take advantage of the strategic role of the provinces as a channel for technical assistance and a venue for multi-sectoral collaboration in support of local CRM initiatives.

**NGA coordination.** One of the biggest challenges in the effort to improve local governance for CRM is fragmented manner by which technical assistance and other services are channeled from the national government to the LGU. In many areas, but particularly in CRM, national government has yet to make the full transition from its old, centralized, command-control-do culture to the centralized, demand-driven, service oriented style of management required by devolution. At the field level, NGAs largely operate independently of each other, and often work directly with target beneficiaries without coordinating or consulting with the concerned LGU. At best, this has resulted in redundant functions and inefficient utilization of limited resources; at worst, it has fostered jurisdictional and policy conflicts and confusion, mismatched programs and objectives, and a culture of distrust that impairs LGU-NGA relationships. Thus, while the great majority of NGA field workers are doing above the call of duty – they often fail to meet the expectations of the LGUs and communities they are trying to serve.

In focus group discussion and interviews conducted by the research firm Trends-MBL in 1999, or consulting with the concerned LGU. At best, this has resulted in redundant functions and inefficient utilization of limited resources; at worst, it has fostered jurisdictional and policy conflicts and confusion, mismatched programs and objectives, and a culture of distrust that impairs LGU-NGA relationships. Thus, while the great majority of NGA field workers are doing above the call of duty – they often fail to meet the expectations of the LGUs and communities they are trying to serve.

In focus group discussions and interviews conducted by the research firm Trends-MBL in 1999, *barangay* captains (village chiefs) and key members of academe, NGOs and civic organizations expressed a lack of confidence in national government, particularly DENR, which they perceived as “undermanned, generally with lazy and inefficient employees, and graft-ridden”, and said that, in general, “only a few national government employees know their job”. Mayors, on the other hand, said that compared to outreach workers from academe, people’s organizations and donor projects, they found NGAs



“less cooperative”. Most discussant also said national government support to local CRM initiative was “insufficient”. (Trends-MBL 1999).

CRMP initiated a number of mechanisms to improve coordination between LGUs and NGAs, and between the various NGAs with CRM mandates. A typical coordinating mechanism at the LGU level is the CRM-TWG, whose membership comes not only from within the LGU but from assisting NGAs, NGOs, and donor projects as well. At the provincial level, CRM core groups also have a multi-agency, multi-sectoral composition and likewise serve as a venue for coordinating technical assistance and training services to LGUs. TWGs and core groups are typically created by an executive order from the governor or a MOA between participating agencies.

For coastal law enforcement purposes, the Coastal Law Enforcement Alliance in Region 7 (CLEAR7) was established through a Memorandum of Understanding (MOU) signed in June 2000 between regional offices of DENR, DA-BFAR, DILG, PNP-Maritime Group (PNP-MG), National Bureau of Investigation, Cebu City *Bantay Dagat* Commission, and some NGOs. In Bohol, the CLECs are composed of representatives from fishers’ organizations, LGU executive and legislative branches, PCG, PNP-MG, PIA, and civil society.

Regular meetings and consultations have resulted in a better exchange of information and coordination of activities of member-agencies, but divergence often occurs where inter-agency activities do not address the individual NGAs “key result areas” and performance targets, which are usually set at the central and regional offices. This indicates a misalignment between national government targets, and implies the need to realign government policies and programs at all levels toward a common vision for CRM. The DENR, with technical assistance from CRMP, has recently completed the development of a proposed National CRM Policy incorporating the vision, guiding principles and integrated action agenda for sustainable use of coastal resources. This policy will be subjected to nationwide consultations and could serve as the mechanism to build a common vision for sustainable coastal resource use. (Courtney et al 2002).

Another recent initiative to restructure and strengthen the national government’s role and supporting machinery for CRM is the CMMO under the DENR. The CMMO will serve as the primary coordinating agency of CRM programs, technical assistance and services emanating from the national government. However, its organizational and implementing structures still have to be defined, key positions staffed, relationships spelled out, and operational guidelines drawn up. All this will have to be done soon, as LGUs are getting an increasingly firmer grasp of central-local government relationships in the context of decentralization, and are therefore demanding more and “better” service from NGAs that are mandated to support them.

### **Feedback and incentive systems**

An important dimension of coordination that must be considered is communication and information exchange. For coordination to happen there must be continuous flow of

information and feedback between field implementers (LGUs) and their sources of technical assistance, services and policy directions (national government).

The MCD, although developed primarily as an information management system for local use, can double as a system of information exchange for purposes of monitoring 1999-2004 National Medium Term Development Plan (MTDP) targets for CRM and coordinating national government assistance and services to LGUs. Between 1997 and 2001, CRMP tracked local CRM initiatives throughout the country by collecting MCD data into a master database. As of end-2001, the database contained information from more than 500 coastal municipalities (60% of all coastal municipalities nationwide). This represents the first attempt establish a national database for local CRM initiatives, with one limitation: Although quality control measures were used to review for typographical errors and to investigate possible erroneous numbers, the data were not independently validated in the field, except in the case of our Learning Area municipalities.

To encourage individual LGUs to continue to contribute to the national database, CRMP devised a CRM Certification System that also serves a double purpose: as a guide for LGUs to evaluate their progress and plan their next step, and as an incentive system to motivate LGUs to stay within the CRM process.

The Certification System was developed to catalyze annual M&E and validate results by an independent multi-sectoral body. CRMP promoted certification as a voluntary process where a municipality may submit the results of annual M&E to a regional certification committee, composed of relevant NGAs, NGOs and academic institutions, for validation.

It is early days yet to gauge LGU acceptance of the concept of certification. So far, only two municipalities – Inabanga, Bohol and Hagonoy, Davao del Sur – have achieved Level 1 CRM Certification. Both received assistance in documentation from assisting projects, including CRMP. Some LGUs, daunted by the paperwork required for certification, have already expressed disinterest in getting CRM-certified because they have “other priorities”. Certification was also designed to assist national government to prioritize investments to LGUs based on performance, but until this “incentive” part of the system is realized, few LGUs will appreciate the value of certification.

The 1997-98 Search for Best CRM Programs was the first attempt at “rewarding” LGUs specifically for good performance in CRM. Our M&E and Certification System in fact was built on the evaluation criteria and process used for the Search, as well as internationally recognized practices and locally tested experiences in M&E and process certification. The primary advantage of the Certification System over the Best CRM Program award is that it emphasized that CRM is a continuing process that consist of many small steps, each building on the others.

The system defines three levels of performance benchmarks: beginning intermediate, and advanced. Beginning level benchmarks mark successful implementation underway. Intermediate level benchmarks denote successful implementation. And advanced level

benchmark address sustained implementation and socio-environmental improvement. Indicators and activities for each benchmark are incorporated in the MCD.

This stepladder approach encourages the LGU to plan on “small wins”, which help to sustain support and momentum, and sets definite timelines for review of successes (and failures), which in turn generate valuable lessons that can be inputted into the planning cycle.

## ***V. KEY ISSUES FOR THE FUTURE***

### **Challenges for the Future: Zooming In on Key Sustainability Issues**

One of the most important aspects of CRMP’s work involved forward-looking assessments of the governance systems that affect service delivery in CRM. These assessments-most of them have done collaboratively with other projects and organizations. They also, however, pointed to serious capacity gaps in systems of local governance and CRM that must be addressed to ensure that the gains are sustained and developed further.

Since the enactment of the LGC in 1991, the Philippine government has been pursuing decentralization policy that devolved many CRM-related functions to the LGU. The goal decentralization is to enable government to respond quickly to local needs and conditions by bringing it closer to the people. This goal presupposes that authority and resources as well as responsibilities are appropriately “decentralized” so that LGUs and civil society organizations can participate more effectively in governance. It also assumes that organizational structures are supportive of local service delivery.

### **Capacity Gaps at the Local Level**

There are two key aspects of capacity development where LGUs need assistance in order to effectively carry out and sustain CRM implementation. The first aspect relates to the technical requirements of project implementation, and the second concerns organizational and operational needs. Much of CRMP’s effort at capacity building focused on developing technical capacities at the individual level. In most CRMP Learning Area municipalities, some level of competence in specialized technical functions, such as underwater assessments, mangrove management, M&E, has been achieved. More importantly, in a number of areas, personnel and resource users have also been exposed to IEC interventions and learned to advocate and champion CRM within the LGU.

Nationwide, however, lack of technical expertise remains a top concern – in a 1997 survey of 243 coastal mayors, it ranked even higher than inadequate funding, the perennial top-of-mind LGU concern. As a result, most LGU are unable to adequately perform their CRM mandates under the LGC and 1998 Fisheries Code. Currently, only about 50 coastal municipalities, most of them in the CRMP Learning and Expansion Areas, are estimated to have achieved beginning level benchmarks necessary to

establish a fully functional municipal coastal resource management system (DENR 2001)

Much work needs to be done to address organizational and operational constraints. Although coordinating mechanisms – in particular CRM Core Groups, TWGs and in some LGUs, CRM offices – have been established at the municipal and city level in a number of CRMP areas, there remains a need to define more clearly and align the CRM functions of the different offices and units within the LGU, such as the municipal social welfare and development office for community organizing, engineering office for foreshore/shoreline management, and the agriculture office for fisheries. Capacity development must be pursued further to address critical institutional issues, such as lack of political will; lack of continuity between political term limits in the implementation of CRM and other environment programs requiring sustained effort; absence of and inconsistency between multi-year CRM plans, CLUPs and municipal development plans; weak law enforcement capabilities; and inconsistency and conflicts between plans, programs, and legislation within and between local and national government. (DENR 2001)

While the national average annual LGU budget for CRN has increased substantially from Php 31,000 in 1995 to about Php 240,000 in 2001, this amount is still way below the investment needed for sustainable CRM at the municipal and city level. MFARMCs need to be established, strengthened, and financially supported as required under the Fisheries Code, to promote active participation by fisherfolk and coastal stakeholders. (DENR 2001) Meanwhile, the system must be geared up as demand for technical assistance is expected to increase further, with more LGUs beginning to plan for CRM, following the trend set by a growing number of LGUs that are already adopting CRM as a basic service.

An important supporting role that must be given greater importance is that of the province. Experience from CRMP's Expansion Areas has proven that coastal provinces are uniquely suited to foster harmonized local policies and programs through a provincial policy framework, provide technical and information management support services to coastal municipalities and cities, and thus contribute to the sustainability of local CRM programs. But, as in municipal and city LGUs, capacities still need to be developed in many provinces, in the context of both the technical and organizational requirements of CRM. Currently, about 10 coastal provinces or 15% of all coastal provinces nationwide have established provincial CRM units with budget allocations; a few are beginning to develop CRM framework plans to address the delivery of CRM as a basic service to coastal LGUs. (DENR 2001) The policy instruments and initial institutional arrangements installed in the provinces of Bohol, Davao del Sur and Masbate, for example, are good beginnings and models for development aimed at improving provincial governance systems must continue to ensure that these initial provincial initiatives and successes are sustained.

## **Weaknesses in Multi-Sectoral Support Mechanisms**

Some of the most meaningful experiences in CRM in the Philippines relate to the participation of coastal communities, NGOs, academic institutions and private sector in co-management regimes at the local level. There are a number of mechanisms to promote community participation through the establishment of MFARMCs and coastal watch groups such as *Bantay Dagat* as well as participatory processes for assessment, planning, and M&E. With adequate capacity-building interventions, these mechanisms tested well in the CRMP Learning and Expansion Areas, but in most places, their implementation remains weak and often fragmented. In general, LGUs have not taken advantage of the participatory approaches in CRM assessments, planning, and M&E that promote multi-sectoral collaboration. While MFARMCs are required under the Fisheries Code, most lack technical and financial capacity to function properly as the advisory body on all aspects of CRM to the LGU. The *Bantay Dagat* is supposed to serve as a multi-sectoral support system assisting PNP for coastal law enforcement, but in many areas, it is a largely fragmented effort that lacks leadership from LGUs. (DENR 2001)

NGOs, meanwhile, lack training and skills in catalyzing and facilitating local CRM. Many bypass the LGU and work directly with fishers, thereby losing important opportunities to mainstream CRM in the local government agenda. Academic institutions involved in research of the socio-environmental aspects of CRM can play a vital role by providing sound scientific studies and assessments needed for management decisions, but they too are under-utilized. In general, information flow from assisting organizations is unidirectional with feedback mechanisms to government decision-makers lacking.

## **Inconsistencies, Overlaps, and Conflicts at the National Policy and Program Level**

Farther away from the core level of the service delivery system, the gaps widen. Policy assessments undertaken by CRMP show that, higher up the government hierarchy, NGAs involved in CRM have not kept up with the process of decentralization. Inconsistencies, overlaps and conflicts between national policies and programs have long existed, but devolution has magnified and dramatized their negative impact on service delivery. As the pace of development picks up, the need to realign government functions and policies toward supporting local initiatives in CRM becomes increasingly urgent.

NGAs with the bulk of the CRM-related responsibilities include the DENR, DA-BFAR, DILG (including the PNP), and the Department of Transportation and Communication (DOTC), in particular the PCG. Since the devolution of major CRM responsibilities to local government in 1991, national government not only should have realigned and prioritized policies and programs toward the common goal of improving local government capacity to adopt CRM, it was also expected to provide consistent and clear policy guidance, training, and technical and financial assistance to LGUs, as well as monitor and evaluate the condition of coastal resources and progress of local management programs. Instead, considerable inconsistency, overlap, inaction, and

conflict continue to exist within and between NGA policies and programs related to CRM. (DENR 2001)

The proposed National CRM Policy points out that while some environment-related responsibilities have been devolved to LGUs under the LGC, DENR still retains important tasks, such as pollution control, the environmental impact system, management of nationally protected marine areas, and jurisdiction over mangrove forests and foreshore areas. Realignment of DENR functions toward assisting the LGU to implement environmental management systems has not been realized nationwide, as training and technical assistance is usually provided in selected *barangays* (village) through the DENR's under-funded and understaffed CEP. (DENR 2001)

Moreover, within DENR itself, different offices have conflicting mandates and policies – some even posing a threat to coastal resources and the environment – and, often, there is no continuity between political administration in program prioritization and implementation, a particularly critical issue in CRM and other environmental programs, which require sustained effort. Closer to the field, more specific operational issues hound the system: Foreshore lease agreements are routinely issued by DENR officers without consultations with LGUs, consideration of environmental impacts, or monitoring foreshore use. Monitoring of compliance of large coastal development projects with the Environmental Impact System is weak, if not together absent. Protection goals of DENR administered protected areas are not achieved because mechanisms for consultation and co-management are not functional. An, overall, there is no long-term program for capacity building in CRM. (DENR 2001)

Like DENR, the DA-BFAR, the country's lead national agency in charge of fisheries, faces serious issues that hamper its ability to balance its mandate for increased production with sustainable use of the nation's fishery resources. Foremost among these is the current state of fisheries where municipal fishers, commercial fishing operations, and fishpond operators compete for the same degraded resources. Being principally responsible for the development and implementation of the National Fisheries Development Plan, issuances of commercial fishing licenses and FLAs, and monitoring fish stocks and catch limits, the DA-BFAR has traditionally held a bias for policies oriented to fisheries production and exploitation. At the policy level, there is a pervasive lack of acceptance of the degraded condition of fishery resources, and poor understanding of the management have yet to be institutionally internalized. Although primary management responsibility for municipal fisheries has been devolved to LGUs, the bureau does not have a capacity development program for LGUs in assistance and training directly to marginal and municipal fishers. Also, significant conflicts exist between bureau's mandates in the implementation of the 1997 AFMA and its mandates in the implementation of the Fisheries Code. These conflicting internal mandates create confusion at the local level, help perpetuate the use of unsustainable fishing methods and gear by both marginal and commercial fishers, and therefore call for a serious review. (DENR 2001) A policy paper prepared by CRMP to examine the major issues related to AFMA can serve as starting point.

The third NGA that must be engaged in the capacity development effort is DILG, which holds two key functions that can directly impact LGU adoption of CRM as a basic service: capacity development in governance, and monitoring of LGU performance. To assist LGUs in CRM service delivery and increase their capacity in environmental governance, the department must broaden its functions to include policy review and technical assistance in environmental and natural resources management, and work toward establishing collaborative relationships in CRM with DENR and DA-BFAR. Also, DILG has authority over the PNP, which performs all police functions over territorial waters and rivers and coastal areas. Currently, the ability of the PNP to enforce coastal laws at sea, however, is severely hampered by the lack of trained coastal law enforcement officers and equipment, including patrol boats, required to do the job. (DENR 2001)

Other agencies that should support local capacity development are handicapped in similar ways. Like the PNP under DILG, the PCG under the DOTC is undermanned and under-equipped to perform their mandate to safeguard marine resources and enforce laws governing marine pollution. The absence of regular coordinating and information-sharing mechanisms between the DA-BFAR and these law enforcement agencies results in the issuance of commercial fishing licenses by the DA-BFAR to repeat violators of national laws. The role of other national councils, committees, and task forces, such as the Philippine Council for Aquatic and Marine Research and Development (PCAMRP) in monitoring aquatic and marine research projects, the Cabinet Committee on Marine and Ocean Affairs (CABCOM-MOA) in formulating national policies on marine-and coastal-related matters, and the Anti-Illegal Fishing Task Force, should reviewed and realigned with local CRM requirements and mandates. (DENR 2001)

### **Closing the Gaps**

Many of the answers to current issues are already in the form of policy that needs only to be operationalized, with some refinements, if necessary. For instance, three important issuances made in the past few years directly address the need to coordinate the activities of NGAs and to eliminate or reduce their overlapping jurisdictions. First, the Fisheries Code of 1998 consolidated parts of many pertinent national laws into a single law that addresses fishing and the protection of the aquatic ecology. In addition, it reconfirms the municipal and city LGUs “shall be responsible for the management, conservation, development, protection, utilization, and disposition of all fish and fishery/aquatic resources within their respective municipal waters.” However, amendments to the LGC should be considered to reconcile and clarify LGU mandated for CRM in light of certain provisions of the Fisheries Code. (DENR 2001)

Second, a Joint Memorandum Order issued in mid-2000 by DENR and DA clarifies their perspective authorities and jurisdictions over management of fisheries and aquatic resources, and requires the two departments to coordinate in the implementation of the Fisheries Code. This JMO paves the way for harmonizing policies and policy implementation relative to CRM between the two departments. Mechanisms to involve

other NGAs with CRM-related functions, however, still have to be established at national and regional levels for effective implementation of CRM-related laws. (DENR 2001)

And third, the 1999-2004 Philippine National MTDP, the implementation of which is coordinated by the National Economic and Development Authority (NEDA), provides a national results framework for improving CRM. The MTDP goals and objectives for coastal and marine resources targets *250 LGUs along 3,000 km of shoreline adopting integrated coastal management for the improved management of municipal waters by the year 2004*. NGAs together with LGUs can use the MTDP as an integrated framework to harmonize and prioritize national and local policies and programs and align funding assistance to address priority local needs. (DENR 2001)

In addition, the development and application of a number of sustainability instruments and mechanisms are underway and need only to be pursued. These include the proposed National CRM Policy, DENR's newly created CMMO, municipal water delineation, and the results framework and benchmarking and reporting system developed and tested by CRMP. These instruments and mechanisms, as well as coastal law enforcement and financing arrangements, two critical success factors in CRM are discussed below.

**National CRM Policy.** The Philippines already has a National Marine Policy, which was adopted in 1994 as an official response to the growing awareness of the importance of the marine sector and the ocean environment for national and international security. Following the adoption of the Philippine Agenda 21 in 1996, however, efforts were undertaken to revise this policy to cover principles of sustainable development. The revised policy would include a component on coastal and marine environment, which DENR through CRMP, was tasked to develop.

The absence of a national CRM policy has been identified as one of the biggest hindrances to sustainable management and improved management of coastal resources in the Philippines. The policy proposed by DENR seeks to address this issue by building on CRM capabilities that have been developed in the country in the last three decades. This option, as noted in the policy document, is more politically feasible than the massive policy, legal and institutional restructuring that some quarters demand. In the Philippines, as most knowledgeable observers agree, the existing legal regime is already sufficient. Some changes in laws and policies may be desirable, but the laws governing the management of coastal and other environmental resources are fairly characterized as excellent. Similarly, although our institutions with responsibility for the country's natural and environmental resources might not be as well-structured as we might like, the creation of new agencies is unlikely to be a suitable solution. Creating a new agency or department is always difficult, especially when its success depends on the weakening or demise of existing agencies. (DENR 2001)

Rather than prescribe the creation of a new agency, the proposed CRM policy focuses on the LGUs as the core implementor of CRM in the Philippines and NGAs as



supportive of this function. It calls on NGAs to re-define their mandated and operational structure and foster a genuine collaborative atmosphere among one another, and defines leadership roles and responsibilities for specific policy actions, targeting LGUs and NGAs in particular. In addition, it offers a statement of long-term goals and a medium-term policy agenda for action for coastal management. The agenda focuses on encouraging local leadership to emphasize that CRM is a basic service of LGU and that CRM planning is within the realm of LGU functions; realigning national institutions, in particular, DENR, BFAR, and DILG and redefining their mandated and responsibilities in support of CRM plans and programs of LGUs; and enhancing the effectiveness of multi-sectoral support systems to widen the operating vista for national support for CRM with specific strategies and responsibilities from government and NGOs. (DENR 2001)

Nationwide consultations are underway to solicit inputs from the widest possible range of sectors that may be affected by the policy, and to promote acceptance of policy provisions by ensuring that they are publicized and thoroughly discussed before adoption. The greater challenge, of course, will be to ensure that the policy, unlike many existing policies of government, can and will be operationalized across all sectors and up and down all layers of the bureaucracy, and that it will serve its purpose of realigning and harmonizing NGA mandates and responsibilities to support the CRM plans and programs of LGUs.

The CABCOM-MOA, which was established by presidential directive in 1994 to oversee the administration of the National Marine Policy and to consult with all concerned and affected sectors, will serve as oversight body to review policy implementation at the national level and as an integrative and monitoring body among the various agencies with CRM mandates. The DENR will be the lead NGA for coastal and marine management and liaison agency for multi-sectoral and multi-institutional collaboration in the implementation of the policy. In addition, DENR will be tasked to coordinate inter-agency policy review, analysis, and development as well as the provision of the technical assistance, training and primarily for this purpose that the CMMO was created.

**CMMO.** The CMMO is the national coordinating office of the DENR for coastal and marine environment management development. Among its functions are to formulate and oversee the implementation of a National CRM Policy; provide overall policy guidance to the DENR in matters pertaining to CRM; provide technical assistance to NGAs, programs and projects operating in the country; and manage CRM-related data (maps, studies, MCD). (DAO 08-2002)

The CMMO seeks to address crucial issues related to the implementation of programs and the delivery of services in CRM. It will, for example, be responsible for defining and setting up regular coordinative mechanisms between NGAs to harmonize national policy implementation guidance on sustainable CRM; developing review processes that genuinely involve NGAs and LGUs; providing clear, consistent consultative and integrated capacity building programs on CRM for LGUs; and coordinating delivery mechanisms within and between NGAs providing CRM technical assistance and training to coastal LGUs and communities.

A primary concern of the office is the establishment of a coordinating mechanism with DA-BFAR, particularly in the regulation and management of commercial fishing effort, management of migratory fishery stocks whose harvest in coastal waters needs to be regulated by LGUs, and the reversion of mangrove areas cleared for but not properly used as fishponds.

In short, the issues the CMMO must tackle are well understood, and therefore its functions are fairly well set. Efforts must be taken to build into the office the capacities required for it to perform its mandates effectively. But in addition to technical capacities, there must also be a conscious effort to consider the other dimensions of capacity – leadership skills, professionalism, interpersonal and presentation skills, skills, and even attitudes, values and ethics. This will help ensure that the CMMO does not evolve in to the command-control-do mode of the traditional NGA, but rather, an organization that is truly oriented toward assisting LGUs develop their own capacities in CRM service delivery to stakeholder communities, and, moreover, an organization that promotes a culture of efficiency, openness, accountability, transparency and client service.

**National Benchmarking and reporting system.** As the office responsible for the management of data on coastal management, the CMMO is also tasked to establish a national M&E framework for local plans and programs, and coastal resource uses and conditions. One of the major constraints the office faces in the performance of this task is the current lack of an integrated information management and reporting system for CRM at the municipal, provincial, regional and national levels. The MCD and certification system developed by CRMP provides a working model to fill this gap, but the mechanisms for its full operation at the different levels of government still have to be established. CMMO will have to put this mechanism in place, as well work toward establishing coordinated information-sharing system within and between NGAs with regulatory and enforcement mandates (DA-BFAR, PNP, PCG), to reduce if not totally arrest coastal resource use by repeat violators of the law. (DAO 2002-08)

Good information management system help organizations track the implementation of programs and projects, and are an essential ingredients in any capability building effort, especially for cross-sectoral programs such as CRM. By making relevant information easily accessible and available, these systems makes government more responsive to the needs of the public, and therefore more efficient in its performance of its responsibilities. The best information management system provide not only for efficient storage and retrieval of data, but also for free flow, effective sharing and communication of data across the sectors involved in and affected by a development endeavor.

**CLUP.** Data and plans generated from the CRM process must at some timely point be integrated into the LGU's CLUP. This will enhance sustainability, because funding for activities is assured over each five-year plan period. It is an efficient way to influence development direction for a broad range of sectors at the local level. A key objective is to get CRM into the coastal land use planning system, which in the Philippines is pretty well set, review, M&E protocols defined at every stage. This will mainstream CRM into

each LGU's planning cycle, precluding the institution of another bureaucratic process that may, in the long run, be difficult to integrate into the LGU's core operations.

To make effective use of the coastal land use planning system, it is important to work closely with the province, which under the present set-up, plays a most strategic role as "integrator" of national, regional and municipal land use plans. The province, through the PLUC, can be assisted by providing it with the capacity to review CLUPs for compliance with CRM. In addition, technical assistance should focus on adding the coastal management perspective to the PFP, which in practically all provinces is presently focused primarily on land management.

Formulated through a participatory process, the PFP translate provincial development goals, objectives and policies into a spatial plan indicating the manner in which land should be put to use during each 10-year plan period. It provides the mechanism to resolve land use and land resource management conflicts of municipalities and endeavors to achieve an efficient and equitable, spatial relationship among them. It delineates the direction and extend of expansion of urban and other built-up areas of cities and municipalities within the province, all major land developments proposed during 10-year plan period that have provincial, regional or national significance, the major transportation networks, and the location of other major infrastructure services and facilities. (Masbate Provincial Development Council 1997) In short, it is the reference point from which all municipal land use planning proceeds and the basis by which municipal CLUPs and their implementation are evaluated. This makes it a compelling instrument for bridging gaps between planning and implementation in CRM. Indeed, one can influence the long-term directions of coastal area development of all municipalities in a province simply by expanding the scope of the PFP to include CRM.

**Municipal Water Delineation.** Another sustainability mechanism that has only recently been started is the delineation of municipal waters. Delineation, which is provided in the 1998 Fisheries Code, aims to officially establish the territorial extent and limits of the LGU's municipal waters and fishery resources. It is an essential requisite in CRM, as it defines the geographical extent and limits of the city or municipality's taxation or revenue-generating powers, its law enforcement jurisdiction, resource allocation and general management powers. (NAMRIA 2001) Through delineation, the LGU can develop clear policies and ordinances on the use and management of fishery resources, including:

1. Protection/conservation (establishment of closed seasons, fishery reserves and sanctuaries);
2. Regulation (determination of fishing use rights for fish corals, aquatic beds and milkfish fry areas; licensing of municipal fishing vessels for operation within municipal waters; licensing of commercial fishing vessels for operation within the 10.1-15 km area of municipal waters); and
3. Coordination and consultation with other LGUs to promote integrated, inter-LGU management of contiguous fishery areas.

At the minimum, delineation and the recognition of municipal waters as part of the municipal territory should instill among coastal LGUs a sense of ownership over these waters and encourage them to be more aggressive in enforcing resource management measures, including national laws and ordinances aimed at conserving coastal resources and protecting the preferential use rights of small-scale fishers, as provided for in the 1987 Philippine Constitution and the Fisheries Code (NAMRIA 2001)

CRMP assisted in the consultative formulation of DENR Administrative Order No. 17 Series of 2001 (DAO 2001-17), which sets forth the technical guidelines for the delineation of municipal waters. As of this writing, pursuant to the 1998 Fisheries Code, the NAMRIA has delineated the municipal waters in at least three provinces – Antique, Masbate and Surigao del Sur – and certified the technical descriptions of 12 municipalities in Masbate, three of which have been adopted through ordinances by the concerned municipalities.

The delineation guidelines are being contested by a group of commercial fishers. The group's political and legal maneuvering has resulted in some delays, but the furor it has created has a silver lining: it provided the impetus to turn municipal water enforcement into a public issue, and for an unprecedented number of groups and individuals from a broad range of sectors to close ranks behind the delineation and full enforcement of municipal waters. This is significant because, while defending the guidelines has been a struggle, the bigger challenges lie ahead: The sheer number of municipal water boundaries that must be delineated is alone a major hurdle for government to surmount, and even more crucial, proper enforcement of municipal water boundaries is necessary to ensure that management measures will achieve their intended results.

**Coastal law enforcement.** The bottom line in improving CRM in the Philippines is to improve compliance with law, ordinances and plans. (Courtney et al 2000) Law enforcement remains a weak link in the CRM effort, however. There have been some advances in this area. Some mechanisms that worked well in CRMP sites include (Courtney et al 2000):

- ◆ Improved technical and financial support to LGUs to develop and fully implement CRM plans
- ◆ Improved legal basis for local communities to gain tenure rights over their own natural resource base and its management. Mangrove forests can be managed through CBFMAs and coral reefs can be managed through zoning laws that give rights to limited numbers and groups of stakeholders.
- ◆ Creation of special law enforcement units trained and equipped well to enforce fisheries and other laws pertaining to coastal law enforcement.
- ◆ Multi-sectoral partnerships to facilitate compliance by creating peer pressure from various groups and levels of society. Bohol's CLEC (Table 5.1) is a good model for provincial-level initiatives, while CLEAR& provides a useful example of a regional coalition supporting coastal law enforcement.

Table 5.1. Coastal law enforcement in Bohol

Across the board coastal law enforcement before and after the establishment of the CLECs in the three districts of Bohol has still some way to go, but it may be the key to the long-term success of CRM in Bohol. Ninety percent of Bohol's fishers do not use illegal fishing method, but everywhere we would go the fishers would tell us that their main problem was illegal fishing. With the province taking the lead in coastal law enforcement, fishers began to feel fairly rapid impact on their livelihood. Stopping illegal fishing eased a huge pressure off the resource, allowed fishery stocks and habitat to recover, and resulted in increased catches and incomes for small fishers. Fishers, feeling that they had at last the backing of the LGU and boosted by what they perceived in the CLEC as an apolitical enforcement unit, were encouraged to attend seminars implement activities that support CRM.

There remains a critical need to bring local successes to scale, however. As international fishery experts have pointed out, the high mobility of fishing operations renders traditional fishery-by-fishery solutions to the problem ineffective, because the effort simply moves to another area, "exporting" the overfishing practices and habits, widening the sphere of unsustainable resource use, thereby creating more "problem areas". While local action must also focus on finding solutions that address the more systematic causes of the illegal fishing problem.

Of particular concern are the government's production-oriented operational policies that do not consider ecological limits and other basic resource management tenets. During the 1960s and 1970s, government policy was to encourage capital investment and full exploitation of fish stocks. People were lured into the business by the promise of high returns on relatively low investment. General policy directions have been slowly shifting toward resource management and sustainable use of fisheries, but at the operational level, weak coastal law enforcement and remnants of the past policy – low fees and taxes and other incentives that encourage maximum fisheries exploitation – combine to perpetuate "efficient", industrial-scale but unsustainable methods of harvesting already fast declining fishery resources. Cost-and-return studies indicate that more than 90% of production cost in the fishing business is actually operating cost, indicating that fixed costs (taxes and fees) are very minimal. (DAP 1997)

In effect, government continues to subsidize illegal fishing practices that are devastating Philippine fishery stocks and habitats, and costing the country hundreds of millions of dollars annually. Fishery experts estimate that the Philippine is losing more than US\$400 million a year to overfishing of demersal and small pelagic species (Dalzell et al.1987)

Incentive-disincentive mechanisms must be advised to encourage enforcement of and compliance with coastal laws and regulations, promote sustainable coastal resource use, and direct fishing efforts away from overexploited near-shore fisheries and degraded coastal habitats. The incentives/disincentives must target both implementers and resource users alike, so that they reinforce the establishment of new norms encouraging "best practices" in fisheries and CRM.

**Financing mechanism for CRM.** All Discussion about gaps in local capacities for CRM inevitably lead to one subject: Funding. We noted earlier in this chapter that LGU budgets, while still inadequate, have been increasing in the last few years, indicating the

growing acceptance of LGUs of their CRM mandate. Indeed, we can always argue that funding is directly proportional to the LGU's acceptance of an issue as a priority. But to the deputy fish warden who cannot go after illegal fishers because the LGU has run out of gas money, or to the municipal fishery technician, who cannot begin PCRA or participatory CRM planning because the budget allocated for the activity had to be realigned to disaster and relief operations, the problem is real and cannot be glossed over. "Environmental protection also requires not only stronger enforcement of environmental regulations but also more market mechanisms and economic incentives to promote it." (UNDP 1997)

Part of the capacity development effort must therefore focus on helping the LGU institute revenue generation and financing mechanisms to cover at least some of the funding needs of CRM. Several financing mechanisms are available to the LGU for CRM, but these mechanisms are largely underutilized. Credit financing schemes, domestic loans, grants and other external funding for CRM are available, but few LGUs avail of them. (CRMP 1999)

LGUs can also generate their own revenues through development enterprise, inter-LGU cooperation and revenue generation from water use zone. But few LGUs currently apply taxes, fees or other charges to the use of municipal waters. This is partly due to the fact that no official delineation of municipal waters has taken place in most areas, and few municipalities have established CRM plans zone municipal water use and, even fewer have tax or fee structures that can apply the relevant economic rent. (CRMP 1999)

Safeguards – fishing quotas, closed seasons, size limits on harvestable fish, livelihood such as ecotourism that depend directly on keeping the resource pristine and healthy – must be installed to ensure that revenue generation and financing mechanisms are always aligned with the LGU's overall CRM policy, and that resource management objectives are not satisfied in the pursuit of higher revenues from resource use. Opportunities to maximize receipts by allowing high-paying "customers" to over-exploit the resource will be plentiful and can prove tempting to LGUs struggling to meet revenue targets, especially in a setting where the primary resource users – small-scale fishers – have little capacity to pay taxes, at least in the near term in severely depleted fishing grounds, before stocks have had the time to recover.

CRMP assisted in the adoption of CRM and zoning plans in most of its Learning Area municipalities that can serve as a basis for the establishment of revenue generation mechanisms. In particular, a number of MPAs in CRMP sites serve as pilot areas to evaluate the effectiveness of user fees as an incentive for LGUs and coastal resource users to sustain protection and management efforts. A working user-fee system is now operational at the Island, Cebu. In 2001, the municipality of Cordova, which has jurisdiction over Gilutongan Island, collected Php 900,000 in entrance fees and another Php 30,000 from the accreditation of dive boats and dive shop operators. These revenues will be allocated for the upkeep of sanctuary. (CRMP 2001)

At the national level, CMMO must have adequate funding, as well as access to funding for capacity development efforts and coordination activities. It must not be distracted from these primary functions by opportunities to administer grants and other funding intended for field-level resource management activities. Instead, it must concentrate on its role as broker, channeling such funds instead to the LGUs.

**The *Barangay*.** While maximizing the use of strategic channels for technical assistance delivery, capacity development efforts – whether by donor projects, the CMMO, the Province, or other institutions – must be ultimately geared toward enhancing the governance and leadership skills of the *barangay* (village) officials, and contribute to CB/CRM. At the municipal level, mayors set the tone in terms of urgency, funding and implementation of projects, but at the community level, it is the *barangay* captain (Village chief) that residents go to for advice or assistance. NGAs, provinces, municipal LGUs and other institutions must therefore be trained to assist in developing governance capacities for CRM of *barangay* officials, in particular, the *barangay* captain, the most visible government official at the community level.

## **VI. LESSONS LEARNED**

### **ON THE PROCESS AND APPROACHES**

- **CRM is a governance function.** There is no question that active community participation remains an essential ingredient for sustaining local CRM initiatives and that the community – people- must be at the center of the CRM process, but the idea that the community can make CRM happen without assistance from government is a romantic notion. The community cannot achieve sustainable CRM outside of current policy conditions and political, social and economic structures. It is the state that creates the conditions and enabling environment that makes it possible for stakeholders to equitably benefit from the CRM process, which in the final analysis is the primary motivation for their participation. The most effective CRM approaches therefore incorporate concepts of good governance into their design and implementation. Although the involvement and participation of NGOs and academe remain essential in catalyzing, funding and to some degree sustaining coastal governance norm that acknowledges the delivery of coastal (and environmental management) as a basic service (Courtney et al 2000)
- **CRM begins with LGU acceptance of their leadership role.** CRM is a new concept to Philippine LGUs, or a function that they still regard as a national government mandate. Unless and until they accept CRM as a responsibility, they will hold back crucial support, which can derail community resource management efforts. Effort must therefore be taken to encourage LGUs to take on the leadership role in CRM, and to constantly affirm and underscore such role. To increase the LGUs' appreciation of their role in CRM, the governance aspect of the LGC, Fisheries Code and AFMA must be cited. LGUs as a rule want to be perceived as responsive to their constituents' needs, and thus respond more

positively when CRM is presented as a basic government service that they are mandated and expected to deliver to coastal communities.

- **Intervention must be responsive to the LGU's "priorities"**. Often, LGUs are anxious to immediately implement specific CRM interventions, such as marine sanctuaries or closed seasons, because they want to see results that will establish the connection between resource management and certain benefits, for example, increased fisheries yield. Many LGUs reasonably regard CRM planning as a protracted process that offers few immediate benefits, and often generates negative impacts on people's livelihoods in the short term – therefore, a politically risky proposition. While technical assistance must work toward the eventual LGU adoption of the CRM planning process, it must also be perceived as timely and relevant to LGU needs. The opportunity of using specific "best practices" and management interventions to demonstrate the benefits of CRM must therefore not be ignored. Many allies can be won over with just a few small successes. Indeed, the LGUs who are most strategy are maintained on the fuel of its credibility, and this can only be ensured if success can be seen. It encourages one or two "quick victories" that have an impact on direct beneficiaries". Education can provide the initial understanding of why a program is needed, but, where there is pressure from the public for the LGU to produce results, only observable results can sustain a program (Courtney et al 2000).
- **CRM must directly address poverty issues.** The arguments that CRM will in the long term provide greater economic benefits to resources users than current unsustainable practices sounds lame when made against the backdrop of the hand-to-mouth existence that our poorest coastal communities live. In particular, marginal fishers who are asked to stop destructive fishing must be assured of livelihood assistance that will allow them to "survive" low yields and income for as long as it takes fishery stocks and habitats to recover their natural abundance and productivity. This is what makes enterprise development particularly appealing to LGUs as an entry point for CRM.
- **The process is essential.** No matter what the entry point may be, however, the process must promote capacity development for CRM and proceed progressively toward the integration of the CRM planning process into the local governance system. Whether the LGU opts to begin CRM implementation with the establishment of a marine sanctuary or enterprise development or some other specific intervention, capacity development for CRM planning is possible if the five CRM phases – issue identification and baseline assessment, plan preparation and adoption, action plan and project implementation, M&E, and IEC – is integrated in the design of every training program. In the same vein, every phase of the CRM planning process is an opportunity for building capacity. The process therefore is as important as the output, indeed, is in itself an output.
- **The message is the medium.** Many LGUs perceive CRM as a project focused on fisheries designed to meet certain specific, sectoral and primarily conservation



objectives. Where there are existing programs aimed at increasing fisheries productivity and efficiency for food production (which is nearly always the case), the LGU may regard CRM as low priority, redundant, or worse, an unnecessary workload and therefore inimical to its interest. The key to such LGUs acceptance of CRM often lies on how CRM is packaged and "sold" to the decision-makers and project implementers within the LGU. In general, the LGU officials become more accepting of CRM and its objectives when they are able to relate it to their development functions and goals, their "bread butter". Without exception, poverty eradication is the ultimate goal, and economic growth through sustainable development is the means to that goal. No LGU will deny the problem of declining fisheries, or its impact on the local economy. In many areas around the country, uncontrolled shoreline development is becoming a major concern, contributing to pollution, shoreline erosion, and the loss of water quality. No LGU therefore will refuse an offer to develop its capacity to solve these problems. In this sense, CRM becomes a much more attractive proposition as an integrating management "framework" for coastal development efforts than it would be as a fisheries-focused conservation "project".

- **Sell the law.** IEC efforts must focus on "selling the law" and must add the elements of environmental ethics in their message. There is a need to strongly advocate for a protective, holistic and precautionary mindset and perspective in addition to technical information and training in CRM.
- **People need to understand the 'why' of CRM.** Providing some biological information and explanation of natural and ecological laws contribute greatly to the understanding of why CRM is needed. When resource users understand the workings of certain natural laws, there is a better appreciation of the impacts of human activities on the environment and the importance of good resource management.
- **Integration is essential.** CRM will remain a marginal program if it is not integrated into the development framework of the LGU. The integration of resource management and economic development, in particular, is an essential ingredient to sustaining CRM initiatives in the government bureaucracy. The CRM plan and framework will have far greater impact if it is integrated in the LGU's overall development plan, for instance, the municipal CLUP. There must be involvement of both the executive and legislative branches, in addition to community-level participation by resource-users and village officials. And there must be a conscious effort to cut across the horizontal and vertical lines of government to ensure that all concerned sectors are integrated into the process.
- **Information is better appreciated when it is "localized".** The value of localizing information regarding the state of coastal habitats and corresponding issues and problems is best illustrated with the conduct of PCRA at the community level. PCRA serves not only as a research tool for information decision-making, but also as a high-impact educational vehicle for resource

users and decision-makers alike. Efforts to generate LGU and community support for CRM are generally more successful when backed up by information about local conditions. Through the presentation of locally derived research results and other relevant information, LGUs and community users are able to appreciate better the issues and problems and the need for a unified rather than a fragmented solution.

- **Ownership must be shared and spread as widely as possible.** Ownership of the program must be spread across the community and across as many sectors as possible. To foster such ownership, the process must be made as transparent as possible, giving all partners a complete say in what happens in the project. Counterpart funding of LGUs in the conduct of CRM activities must be negotiated so as to generate a level of LGU ownership over these activities. Formation of capable and respected community groups is critical, and groups working together on projects with real outputs are essential. In previous section, we cited the importance of cultivating local heroes and champions who feel a strong sense of ownership over the CRM process. These champions, however, must be taught to “distribute” power and accountability and manage relationships in a manner that will foster everyone’s sense of ownership over the process. It is essential that everyone work together at the same pace – assisting agencies, fisherfolk, and government officials – and those adequate second liners are developed and ready to take over at any time. Having just one or two people own the whole project and do all the activities means that ownership accrues only to a couple of people, and may not be sustainable in the long run. Similarly, while strong political commitment is a must for success, de-linking CRM from the political process and the political personalities makes management less vulnerable to changes in political leadership and therefore enhances sustainability.

**A low-profile approach favors collaboration.** In any endeavor, credit for the achievements that are realized must always go to one’s partners – the LGU, fisherfolk, village heads, NGOs and NGAs. By working behind the scene, equipping partners with training and information while ensuring that they are the ones who are leading the way, and taking into account the traditional structures of authority in the community, donor projects are better able to coordinate the actions and outputs of all the players in CRM.

**Planning is not implementation.** Priority must be given to implementation, not to planning. This does not mean that planning is not important, but to be useful, it must consider pragmatic concerns – time, money, and the need to adjust strategies, targets and speed as required, depending on how implementation proceeds and how the institutional, political and human relationships that affect it develop.

**Clear, measurable targets keep everyone on track.** Goals and priorities must be clearly identified and communicated, and consensus built around them. The use of measurable indicators improves program efficiency, as shown by CRMP’s experience in the application of its Revised Results Framework. It provides focus to project implementation, and guides all players in the same direction. It also helps to optimize

the use of resources, and improves the efficiency of implementation processes and systems. To be useful, indicators must reflect changes in the outcomes as well as the process, and must be monitored and evaluated regularly against program baselines and targets. Moreover, M&E should be conducted in a manner that allows those responsible for program implementation to assess their own progress and adapt their actions accordingly, and should in itself contribute to capacity development.

**Resource constraints are real, but counterpart funding must be encouraged.**

Capacity building efforts must adjust to the financial, technological and human resource realities at the local level. Capacity development in M&E database tools, while useful in most cases, have no immediate practical application in municipalities that do not have a reliable supply of electricity. Resource assessment and management methods must not require expensive, sophisticated gear that LGUs can barely afford. And, reporting and documentation requirements must not be so complicated as to stretch the LGU's manpower resources beyond their limit. Nevertheless, LGU investment in CRM must be encouraged, not only to allow assisting projects and organizations to leverage resources in order to cover more areas, but also to increase the LGUs' sense of ownership in a specific activity, and the intensity of their commitment in follow-up activities.

**CRM requires a broad-based support system.** CRM involves a complex network of issues involving a wide range of sectors, some outside the realm of the LGU. Capacity development efforts for CRM therefore cannot be confined to the LGU, but must encompass all institutional and state structures that play a role in development and other activities in the coastal zone. The degree of coordination of local initiatives and resources with external policies, resources and actions is within the LGU's control only to a limited extent. To avoid duplication and conflicts, and in order that resources are more effectively used and have greater impact, higher-level interventions are needed to coordinate the actions and resources of all levels of government for CRM. External driving forces – in particular, state structures and institutions – are important factors that must be included in the CRM equation.

## **ON SUPPORT STRUCTURES AND MECHANISMS FOR CRM**

**Mainstreaming need not be expensive.** Large-group interventions targeted at increasing general public awareness are normally expensive, but we were able to reduce costs considerably through leveraging and strategic selection of events and venues to serve multiple IEC purposes. Partnerships with national and local mass media groups, for example, yielded about half a million dollars in media values contributed by government and private media groups, both print and broadcast. TV plugs and short documentaries produced jointly by CRMP with ABS-CBN Foundation and the PIA continue to get airtime, especially in May, the Month of the Ocean. To mainstream CRM in the national government agenda, we looked for appropriate opportunities to frame proposed messages against the government's current priorities, such as food security.

**CRM is a collaborative undertaking.** Clearly, no matter how dedicated and determined, no LGU acting alone can be effective in addressing the multi-dimensional and multi-sectoral issues that characterize CRM. And given the complex network of activities affecting coastal resource use and management, no LGU can be self-contained in CRM. It must be supported from the inside as well as from the outside by all sectors whose activities affect the coastal environment. Even heroes need an enabling environment. Capacity development must not focus only on developing local champions and equipping them with the technical skills for CRM. It is also important to build the capacity of institutions within and outside the LGU to support these champions so that they can more effectively undertake and push for the right course of action toward sustainable CRM.

**Collaborations begins with and is strengthened by a policy of inclusion.** To encourage collaboration, one must not preclude anyone from participating in CRM, whether in advocacy or actual management activities. The policy of inclusion must apply to all stakeholders at all levels of implementation. This does not only ensures that issues are addressed across a wide range of sectors – it also fosters a broad mechanism of support that extends throughout the entire CRM system and helps promote sustainability by providing “back-up support” should the community’s internal support mechanism fail.

**Collaboration entails coordination.** Collaboration can only work with effective coordination. It is not enough that the various sectors come together and agree to work together, they must define their individual roles and responsibilities and functional relationships, and devise mechanisms by which their actions and interactions can be properly coordinated to serve the purpose of CRM.

**To promote CRM, one must speak the language of the bureaucracy.** To increase buy-ins for CRM at various levels of government, one must frame one’s message in a way that appeals to the prevailing bureaucratic mindset. Aside from policy, the bureaucracy is concerned primarily with development functions, which permeate their day-to-day decision-making and work practices. One must be able to frame CRM not only as a program or project, but also and more importantly, as an overarching strategy or framework that will support and enhance the development process. The goal is to influence the entire bureaucracy so that everyone is thinking resource management, and CRM principles and capacity development are considered in the formulation and implementation of development and land use plans and programs, in policies, and in legislation. This promotes horizontal and vertical integration of CRM into the governance system.

**Absorptive capacity is a key determinant of success in capacity development at any level.** Existing skills, knowledge and experience levels, as well as the attitude, ethics and values of individual within the organization affect the pace at which capacity initiatives are accepted and understood, and the desired capacities developed and utilized. All of our Learning Area provinces, at one time or another, had been the project site of earlier CRM or other resources management projects, and so had institutional

memory and previous experience in resource management. In Masbate, the high-caliber technical and decision-making competencies and professionalism of provincial staff members allowed for fast uptake and acceptance of the principles and technologies of CRM. Although they had no prior exposure to CRM, the individuals involved in the capacity initiative had extensive previous experience in development planning and change management, which made for a higher level of openness to acquiring new skills and taking on new responsibilities, and a minimal resistance to change and multi-tasking.

**M&E is a habit that LGUs still have to acquire.** Benchmarking keeps everyone on track, but it is not a practice that many LGUs are inclined to practice on a regular basis. Currently, the LGU is tasked to collect and collate data for various purposes, but these data are often not recognized for easy retrieval, and data collection is not done in a systematized manner. Computer-based tools such as the MCD that partially automates M&E can make data management less “tedious” and therefore improve compliance with M&E requirements. Utilization of such tools, however, remains low, even among LGUs with computer facilities. LGUs complain about having to maintain several databases, which require repeated encoding the MCD, into a single integrated information management system. Compliance can also be improved with incentives. As a non-monetary incentive, certification provides the “prestige” factor, which can encourage LGUs to regularly benchmark, monitor and evaluate their progress in CRM. Combined with financial incentives, it can be a powerful mechanism for cultivating LGU commitment to CRM, and thus promoting the sustainability of local CRM initiatives.

**Capacity development must be comprehensive.** Because CRM involves many interlinked issues that cuts across sectors, it is important to address capacity gaps across the sectors and at all levels of government. One cannot effectively build capacities at the LGU level without addressing the impacts of NGA support (or lack of support), cross-sectoral interactions and relationships, and the policy environment. Nevertheless, capacity development can only progress incrementally, one step at a time. CRMP took a two-track approach that directly addressed capacity gaps at the local level, while addressing national factors that hindered local capacity initiatives. The next step would be to strengthen the capacities that have been built, and then link national and local initiatives so that the capacities are coordinated and ultimately integrated into one seamless system that assures CRM services are delivered where they are needed in the most efficient and timely manner.

**Good coordination is key to success in CRM.** Like all cross-sectoral programs, CRM cannot work effectively without proper coordination. Coordinating mechanisms must be instituted at all levels of implementation. While progress has been achieved in this regard at the local level, the mechanisms that have already been installed still need to be strengthened. At the national level, the newly created CMMO will be the primary coordinating body of CRM, but this office has yet to be staffed and organized. To a limited extent, in the past few years, CRMP played the role of national coordinator for CRM. There must be a proper transition period to prepare CMMO for its role as CRM

“broker” and at the same time ensure that progress achieved in instituting CRM as a basic LGU service does not lose its momentum.

**Sustainability is a function of demand, which is built on success.** Now more than ever, servicing LGU needs for assistance is crucial to ensure that CRM initiatives are pursued long enough to generate economic, social and political benefits. Current demand for CRM best practices will peter out if LGUs are unable to sustain their initiatives, and thus can demonstrate no positive results to justify their CRM efforts. Results that are tangible and convincingly spell success will generate a self-sustaining demand for CRM that will ensure its continuity. One way that national government can help sustain local initiatives is by using the CRM Certification System as basis for prioritizing LGUs, especially for financial assistance. Such stepladder benchmarking system encourages progressive implementation of prescribed CRM best practices.

**National government reorientation is necessary.** The devolution of mandates to LGUs implies a change in the complexion of NGA-LGU relationships. No longer are NGAs expected to control, command and deliver many basic services directly to communities, as these have become the primary responsibility of LGUs. In resource management, particularly in CRM, where capacities have only recently begun to develop (Courtney et al 2002), national government has been slow in adapting to its new supporting role. At the policy level, there is recognition that the LGU now plays the lead role, but operational directions and performance targets, as well as authority and accountability structures, have not been sufficiently adjusted to allow the machinery of government to respond adequately to the needs of LGUs as the new CRM service units of government. The National CRM Policy, once adopted, can serve as a guide to reorient government’s central management targets and coordination functions to more closely fit NGAs’ assigned role in the new decentralized governance system. But, again, policy is only as good as its implementation. Every effort must be taken to ensure that the National CRM Policy is translated into concrete actions. NGAs must begin to perceive the LGU as their customer, and define their function as, generally, meeting the LGU’s needs and demands. They must learn to trust that the current decentralized governance system works, to support and inspire LGUs, and to focus on building LGU capacity and confidence to shape their own development.

**Resistance must be anticipated and addressed.** Policy and institutional reforms and other efforts that bring about radical changes are often met with resistance from those who benefit from the *status quo*, or those who fear they would be worse off if reforms were instituted, or those who simply do not see the need for change. There are many proven ways to manage resistance. These include education and awareness campaigns, implementing “bridge” activities to achieve early and visible wins that generate benefits for affected stakeholders, encouraging those who oppose change to participate in capacity development and related activities, providing support to those who need it, negotiations, co-opting, finding champions and innovators, and even taking disciplinary actions. (UNDP 1998) The important thing is that the resistance is anticipated, recognized, and addressed appropriately in a timely manner. For example, a paradigm shift from “open access” to “limited access” is now taking place – the

necessary legal and policy instruments are in place to limit access to municipal waters to small-scale (municipal) fishers. The commercial fishing sector has blocked efforts at implementing these instruments. Such resistance must be addressed – primarily through coordinated, consistent enforcement of fishery laws, public awareness campaigns, and where practicable, disincentives for investments in highly efficient industrial fishing gear and incentives for investments in environment-friendly enterprise.

**The province can play a strategic role as coordinator of CRM.** Provinces that appreciate the importance of CRM are the best “retailers” of CRM service to municipal and city LGUs. Many provinces have a good number of years of experience and adequate capacities in development planning and coordination that only need to be enhanced by the introduction of CRM technologies and skills. In particular, much headway can be achieved by working with the province to integrate a CRM framework into the PFP. The PFP provides the general directions of provincial development planning and programming and serves as the basis for all municipal CLUPs. It can provide a well-entrenched mechanism to establish CRM planning as a mainstream function of the LGU. Many provinces are now preparing to revise their PFPs for the next 10-year plan period (2003-2013). This is an opportunity to begin the integration and mainstreaming of CRM in the provincial agenda that must not be missed.

**Capacity development never ends.** Capacity building is an ever-ongoing process. It is important to be always responsive to requests for information, guidance, assurance and support from LGUs and communities as they undertake CRM. The emphasis must not be on creating new institutions, but rather on building and strengthening capacities by linking and connecting the mechanisms already in place in government institutions to support CRM. There must, of course, be a center for coordination, and in this regard, the creation of the CMMO is a step in the right direction. Effort must now be taken to ensure that the CMMO is properly organized to give it the ability to adequately perform its coordinating function and thus respond in a timely manner to request for technical assistance from LGUs. Organizational development must focus on developing within the CMMO a personnel complement that is technically competent in CRM, a leadership that is task-oriented inspirational and motivational, and a work culture geared toward efficient “client” service. In addition to building and strengthening technical capacities, therefore, the organization of the CMMO must also result in instilling good social values and work ethics among individual staff members. Important individual social values and capacities that must be developed include inter-personal, coordinating and communication skills; conflict, negotiating and change management proficiencies; initiative; and professionalism.

**Capacity development must aim for flexible, learning organizations.** Technical assistance must be combined with organizational development aimed at restructuring key organizations at all levels of government to equip them with flexibility and quick response mechanisms required in addressing the many cross-cutting issues related to CRM. Systems must be in place to create an enabling environment for CRM champions within each organization to be effective in their job in promoting CRM. The most important “technology” that we can give organizations – whether local (municipal and

barangay), provincial, regional or national – is the ability to learn from successes and mistakes, which gives them the capacity to implement CRM well into the future.

## **ON COASTAL MANAGEMENT CAPACITY INITIATIVES**

**The first step is always the most daunting.** Starting up a capacity development project as widely compassing as CRMP is often the most difficult part of project implementation. Getting the project support components – including administrative systems – up and running proved critical for CRMP, as it gave everyone, including field staff, the sense that a systematic management process was in place, and that they had a “home base” from which to operate, that they could rely on.

**Set clear, measurable, doable targets.** Unoriginal but not irrelevant, this advise was one we had to struggle to follow. As noted in chapter 1, the initial CRMP result indicators contained in our SOW (USAID 1995) had to undergo an intensive and lengthy review and revision process that took up more than two years of our life-of-project. Without an approved results framework and indicators at the beginning of the Project, we could not establish some pre-project baseline conditions against which we could measure the successes or failures of particular interventions. (CRMP 2000) To our Learning Area Coordinators, the 1998 CRMP Revised Results Framework provided clear directions on what specific pressure points to focus on and which activities and issues to prioritize, thus helping them avoid the trap of taking on too much work without any clear idea of what needed to be accomplished.

**Provided strategic management directions, not tactical details.** A common results framework is useful, but a cookie-cutter approach to managing field-level project activities does not work effectively in the unpredictable environment in which capacities for CRM should be built. In this environment, timeliness is of the essence, and to achieve timeliness and provide rapid response when requested, one must be flexible and adapt to the realities of one’s working environment. The success of CRMP was as much a factor of our well-defined result framework as well as flexible operational policies. Flexibility allowed us to respond in an appropriate and timely manner to opportunities and challenges that surfaced unexpectedly, without warning, during implementation. Project leadership focused more on the bigger picture, allowing Learning Area staff members, who were more closely in touch with the unique realities of the environment in which they were working, to do the micromanaging. This resulted in innovation and creative thinking, which in turn resulted in many new permutations of old approaches, and novel strategies for capacity development that built CRMP’s reputation as the primary source of state-of-the-art CRM technologies in the Philippines.

**The process is as important as the result.** The objective of CRM is sustainable use and better management of coastal resources, as indicated by an increase in fish abundance and improved coastal habitat conditions. Achieving this objective is, of course, essential, but in the context of capacity development, it is not the whole point – the process of getting there is equally, if not more, important. That our Results



Framework provided for monitoring of both progress and outcomes proved to be particularly useful. Compared to the time horizon required to effect the many institutional and social changes needed to bring about sustainable coastal development, our life-of-project was but a fleeting moment, not long enough for us to say with certainty, for instance, that we had eliminated the deep root of our fishery problems, or that we had reached a point of sustainability. It was important for us to know that we were moving in the right direction, progressively reducing obstacles to CRM, and achieving success that built on previous successes.

**Provide for “check-in” time.** Managing a project like CRMP with many broad and complex concerns necessarily entails regular progress monitoring, to ensure that field activities remain aligned with overall project directions and objectives, and that everyone is kept up-to-date and moving in step with the rest of the team toward the same goal. CRMP Learning Area activities were guided by quarterly planning and progress meetings. Held primarily in preparation for the compilation of quarterly reports to USAID and counterpart agencies, these meetings served as a forum to discuss program progress, identify major constraints, summarize lessons learned, do reality checks and recommend adjustments. Despite limited time spent on deliberate exchange and sharing of experiences between Learning Areas, the documentary outputs that resulted from these meetings provided useful reference points and information that staff members could use to plan their next steps in a systematic manner.

**Information management is key.** Complex projects generate copious amounts of information essential to decision-making and planning. A good information storage and retrieval system is therefore essential to ensure efficiency of project operations. Recognizing this, CRMP invested in the development of an information management system to handle both externally sourced and internally produced publications, papers and other literature on CRM, and provide timely information to both the Project and the external public. Considerable time and effort was also spent in the development of the MCD in order to automate the organization, analysis and reporting of data on CRM activities at the municipal level. Although primarily intended for use by its clients (both NGAs and LGUs), the MCD also served as an internal project management and assessment tool, allowing the Project to monitor compliance with CRM in its Learning and Expansion Areas and compare this with the level of CRM activity on other areas.

**Invest in processes that generate their own momentum.** Project implementation in the complex setting such as the one in which CRMP operated would never prosper if one were to micro-manage each and every detail, every step of the way. There were individual activities of CRMP that needed constant and close monitoring, so where it was possible, we invested in activities and processes that, once started, built their own momentum. For example, at the outset, CRMP intended to extend its reach to as wide an audience as possible through information dissemination. By investing in the development and maintenance of its own web site, [www.oneocean.org](http://www.oneocean.org), CRMP gained – with virtually no investment in advertising and promotion – a worldwide audience (almost 60 countries and territories) for the Philippines and could find application elsewhere. Driven by the inherent efficiency of the Internet as a

communication medium, this audience continues to grow – at the end of 2001, the web site was generating up to 12,000 visits (120,000 hits) a month, and visitor traffic appeared headed for sustained growth. With other mediums, this kind of reach would have been difficult (and very costly) to achieve.

**Don't be afraid to take risks.** Innovation necessarily entails risks, and CRMP took not a few calculated risks in innovating new approaches to mainstreaming CRM in the local and national agenda, for example, or taking the expansion route through the province. Although donor projects must strive at all times to be politically correct, some tough diplomacy is sometimes required to push certain agenda that are perceived as not entirely politically palatable, and this also entails some risks that CRMP did not hesitate to take when the issue was crucial enough to warrant it.

**Social capital is a priceless commodity.** One of the most precious assets on which CRMP built its success was the social capital that individual staff members brought in when they joined the Project. The Philippines has a highly personalized environment, where “who you know” can literally open doors. Many of our key institutional and sectoral partnerships evolved out of the personal contacts and connections of CRMP to the country's top leaders in the government, media, business, NGOs, the academe, the church and even the entertainment sector. Such introductions resulted in enduring relationships that time and again the Project was able to tap to help its agenda.

**Everything boils down to good communication!** Keeping the lines of communication between CRMP leadership and the various Project components open at all times was essential to ensure that all the different pieces in Project implementation fit together as parts of a single, whole process. Where they were available, modern telecommunications technologies, including E-mail and SMS, as well as field visits by home office Project management staff to the Learning and Expansion Areas, greatly facilitated communication. But more important was the manner by which the Project's general directions and vision were articulated and communicated to everyone who was involved in CRMP, so that everyone had the sense of being a part of the bigger picture and contributing to a process that was national in scope and had great inter-generational implications.

## **VII. CONCLUSION**

The Philippines is now at a stage where there is widespread acceptance among LGUs that CRM is an urgent need that requires priority action, and moreover, is a basic service they are mandated to deliver. Such acceptance comes with some level of dissonance, as people begin to question the *status quo*, government's capability and readiness to change it, and the appropriateness of remedies currently being applied. Such noise points to change, a shift from old mindsets to new perspectives, which is slowly paving the way for more and more LGUs and communities to accept CRM as the right way of doing things and consequently adopt sustainable resource use and management practices. In many ways, their journey is only just beginning: Many of the interventions applied in CRMP's time are only just starting to bear fruit, and there are

many challenges ahead to test everyone's resolve to remain committed to their CRM goals.

But wherever the road will take the CRM cause from here, we are reassured by one thing: It was not one broadstroke but many small steps – some planned, others fortuitous – that together made the last 7 years a singular success for CRMP. And it was not one but many institutions and individuals from diverse sectors sharing a common concern that helped put such success together. One way or the other, these institutions and individuals are bound to continue making the ripples that CRMP started.

Agreed, there is so much more to do. Over the last 10 years, the Philippines has been exploring and experimenting with new systems of governance based on decentralization, local autonomy and large-scale participation of communities and civil society in democratic processes (Rood 1998). But many policy directions for improved local governance and CRM in the Philippines still have to be implemented to support decentralization and accountability. National government must not resist further devolution by holding on to or trying to regain command and control functions and financial resources. At the same time, LGUs must continue to improve its delivery of basic services and provide real measures of learned in improved local governance and coastal management into a new framework of resource management. Co-management regimes between local government, NGAs, NGOs and coastal stakeholders must continue to be strengthened, guided by a common vision of sustainable coastal resource use. (Courtney et al 2002)

The future holds many uncertainties, the institutional terrain remains difficult, and implementing CRM is a big a challenge as ever. But, having gone this far, after overcoming so much and after achieving countless small wins and many significant successes, we now have no reason to say that sustainable coastal management cannot be done, and no reason for its implementers to break their stride.

For, “at the end of the lessons learned, the most comprehensive of them teaches that, when the strategy is going to be concluded, everybody feels as if they were only starting. So, they feel that so many are the new challenges to be faced, and so new are the coming realities, received or produced by the changes introduced in the country. It is a never-ending process, and it is important to know that history never ends, and that it requires permanent renewal at all times. This is one of the main characteristics of human lives, and it is the same for strategy lives. And when a strategy flies, the foreign community cooperates from the outside-in, and the national community works on it from the inside-out.” (Serrate 1998)

Where CRM is concerned, we believe we have learned to fly. We can get *there*, if we keep working together.

## **CRMP Training Courses for Coastal Management**

CRMP has successfully implemented several training courses in collaboration with the Department of Environment and Natural Resources, Department of Agriculture – Bureau of Fisheries and Aquatic Resources, other government agencies and non-governmental organizations. These include:

- Integrated Coastal Management
- Participatory Coastal Resource Assessment
- Coastal Law Enforcement
- Mangrove Rehabilitation and Management
- Strategic Planning for Coastal Management
- Coastal Tourism Planning and Management
- Marine Protected Area (MPA) Establishment and Management

**Integrated Coastal Management Short-term Training Course.** This three-day course consists of ten sessions covering a wide range of inter-related topics such as: coastal ecosystem, concept of ICM, coastal management options and strategic planning. The course aims to enhance the participants' awareness of coastal environmental issues and appreciate the integrated coastal management approach to address these challenges.

### Training Objectives:

- Introduce the participants to the economic, social and biological importance of coastal resources
- Describe the existing institutional system of coastal resource management in the Philippines
- Describe the role of leaders and public participation in coastal management
- Explain the importance of integrated coastal management for the Philippines in general, and for the participants' area in particular
- Describe the strategic planning process and its relevance to coastal management
- Design appropriate local institutional networks to implement coastal management plans

**Participatory Coastal Resource Assessment.** This three-day course is designed primarily for used by municipal-level trainers involved in community development for sustainable coastal resource use. It has two main purposes: first, to assist local resource managers in maximizing the contribution they can make to initial coastal resource assessment and project monitoring and evaluation; and second, to initiate dialogue and input from local community resource users in a relevant and meaningful fashion for planning purposes.

The output of this course will enable resource managers to work with local coastal resource users to generate valuable information for coastal management planning and implementation. This will be done simultaneously while improving community participation and local empowerment.

#### Training Objectives:

- Illustrate the coastal resource management process
- Enumerate the many benefits of a participatory coastal resource assessment
- Identify the various stakeholders in a coastal community
- Show the linkages between and among resources, people and sustainable coastal management and development
- Apply the various PCRA techniques: (a) interview, (b) transect, (c) habitat assessment
- Compile a preliminary coastal area profile based on PCRA results
- Develop a PCRA map of the local coastal management area

**Coastal Law Enforcement.** This 3-day course seeks to strengthen the enforcement of coastal laws involving deputized fish wardens, local government officials, police officers and other law enforcement units. It encourages the participation of the community in the enforcement process where such participation is sanctioned by law. At the end of the training, the participants will:

#### Training Objectives:

- Appreciate the role of law enforcement in coastal management;
- Understand environmental, fisheries and aquatic resource laws as applied in local situation;
- Map out local coastal law enforcement issues and develop strategies for effective enforcement;
- Demonstrate knowledge and skills in basic enforcement procedures;
- Formulate an operations plan for their localities.

**Mangrove Rehabilitation and Management.** This 3-day training program caters to personnel directly involved in mangrove management field implementation, such as people's organizations, technical staff of local government units, non-governmental organizations, and relevant national government agencies. The training aims to enhance knowledge and techniques in managing mangrove forests and appreciate the integrated coastal management approach to address these challenges. At the end of the course, the participants will be able to:

#### Training Objectives

- Discuss the components of mangrove ecosystem, functions, characteristics and their relationship to coastal environment;
- Appreciate the importance of mangrove identification in management;
- Demonstrate capabilities in identifying various species of mangroves;
- Explain the techniques and requirements of establishing mangrove nurseries;
- Determine appropriate regulatory and non-regulatory techniques of mangrove forest protection and maintenance;
- Illustrate the strategies and techniques of managing natural and plantation mangrove forests including harvesting and applicable intermediate treatment,
- Identify appropriate livelihood options and alternatives in respective mangrove areas,
- Demonstrate capabilities in designing mangrove plantation plan.

**Strategic Planning for Coastal Management.** This two-day workshop aims to impart the importance of strategic planning for coastal management to municipal-level resource managers and importance of strategic planning for coastal management to municipal-level resource managers and users.

Training Objectives:

- Answer basic questions on the concept of integrated coastal management and identify the major characteristics
- Define the unit of coastal management, as well as enumerate the goods and services derived from the coastal area
- Relate the coastal environmental issues of the municipality with the need for a coastal management plan
- Explain coastal management planning as a strategy
- Enumerate various coastal management options

**Coastal Tourism Planning and Management.** This five-day course introduces participants to the overall framework of integrated coastal management and to the role of coastal tourism as an available management option. It ties together the effects of human interventions within the coastal area to the health of the coastal ecosystem, and proposes “safe” methodologies for attaining economic security by local community members.

Training Objectives:

- Define planning and management processes used in creating strategic ecotourism plans (SEP)
- Endorsement of a/the local SEP, identification of key projects and development strategies by local decision-makers
- Outline of specific measures and activities for the implementation of the SEP
- Creation of a coordinating working group of public and private sector and communities for implementation

**Marine Protected Area (MPA) Establishment and Management.** This 5-day training course is designed to equip participants (LGU technical staff and local communities) with fundamental skills in establishing and managing a community-based marine protected area. Specifically, the participants, at the end of the course will:

Training Objectives:

- Enhance their knowledge and skills on the processes involved (i.e. resource mapping, baseline data collection, management plan formulation, monitoring and evaluation) in establishing and managing a community-based marine protected areas;
- Strengthen capabilities of technical staff in facilitating MPA establishment and management processes (i.e. site identification, planning, ordinance formulation and monitoring and evaluation) with local communities;
- Demonstrate the process of coming up with a MPA management plan using existing documented information and results of community consultation activities.

## **APPENDICES**

### **A. LIST OF IEC MATERIALS**

#### **POSTERS:**

1. A Call for Leadership. On the need for developing leaders for coastal resource management. (English and Cebuano).
2. Coastal Alert! Calling attention to the degradation of the coastal environment (English and Cebuano).
3. For Future's Sake. On the need to manage our coastal resources to ensure their long-term sustainability. (English and Cebuano).
4. Imagine the future without mangroves. On the importance of mangroves (bilingual).
5. Human Impacts on the Philippine Coastal Environments. Illustrates the range of activities that impact on the coastal environments and why CRM is a strategy that could balance coastal zone use and coastal zone care. (English)
6. Month of the Ocean posters. 'It's their Ocean too, and their Future'; 'Ang dagat ay buhay, ating kinabukasa'y, dito nakasalalay'- Announcements on the celebration of Month of the Ocean in the Philippines by virtue of Presidential Proclamation No. 57. (English and Filipino).
7. Philippine Fisheries in Decline: No time to Lose. Calling attention to the decline in fish catch and the need to: (1) reduce fishing effort to sustainable levels; 2) protect and manage coastal habitats; 3) stop illegal and destructive fishing practices. (English)
8. Nagkagamay na ang atong kuha gikan sa panagat. Calling attention to the decline in fish catch and the need to: (1) reduce fishing effort to sustainable levels; 2) protect and manage coastal habitats; 3) stop illegal and destructive fishing practices. (Cebuano)

#### **B. TECHNICAL PAPERS/REFERENCE PUBLICATIONS:**

1. **Tambuli Newsletter.** This bi-annual newsletter is targeted at government, non-government and academic professionals involved with implementation and research related to coastal management. While primarily a Philippine publication aimed at sharing information on coastal management within the country, it is open to international readership and contributions on relevant topics. The newsletter encourages the publication of useful primary information on research findings and implementation experience pertaining to coastal management. To date, Tambuli has published 5 issues. Print copies per issue – 3000.
2. **Legal and Jurisdictional Guidebook on Coastal Resource Management in the Philippines.** Produced in English, this guidebook is the result of a series of consultations with key sectors involved in coastal resource management. It provides detailed information on the major legal and jurisdictional issues affecting coastal resource management in the

- Philippines. Copies of this book were distributed to local government units, national government agencies and other concerned organizations. The book is being updated to reflect changes in the legal environment following the passage of the Fisheries Code of 1998. It is part of the planned guidebook series on Philippine coastal resource management.
3. **The Values of Philippine Coastal Resources: Why Protection and Management are Critical.** This book serves as a reference for finding and citing information required to make informed decisions about when and how to protect and manage coastal resources in the Philippines and elsewhere. Using resource valuation methods, the book provides information on the economic and other values of coastal habitats and ecosystems in terms of direct production, loss of earnings from destruction and values created by tourism, research and education uses as well as the mere existence of a natural resource. The book illustrates how the stream of benefits from a natural coastal ecosystem is basically free to people provide that ecological parameters are honored.
  4. **Participatory Coastal Resource Assessment Manual.** This is a procedural manual for the implementation of participatory coastal resource assessment or PCRA. It describes the PCRA process and provides samples of PCRA outputs such as resource maps and trend diagrams. The handbook is intended primarily for community workers and coastal resource managers involved in community development for sustainable coastal resource use, and the methods described here will allow community workers to work with local fishers and other coastal resource users to generate valuable information for coastal resource management planning and implementation.
  5. **CRM Primer.** This Primer on Coastal Resource Management was developed as a road map to the key steps in planning and implementing sustainable use of coastal resources. It describes the overall CRM process and provides snapshots of critical activities to be undertaken as part of this process. The Primer is designed for use by local government units as well as supporting and collaborating institutions such as national government agencies, non-government organizations, and academic institutions as an orientation tool for CRM. It provides a brief overview of the CRM process that can be used by coastal communities in developing sustainable fisheries, maintaining economic benefits from coastal resources, and preserving marine biodiversity. It describes the what, why and how for each step of the CRM process. In addition, the national policy and legal framework supporting CRM is identified.
  6. **Food Security and Coastal Resource Management.** This pioneering publication on food security and coastal resource management was developed in collaboration with the Fisheries Resource Management Project of the Department of Agriculture and Asian Development Bank and the Department of Agriculture's Agricultural Training Institute. The primary objective of this publication is to bring to national attention the importance of fishery resources in the country's food security equation. It proposes that food security and poverty alleviation in coastal areas will only be achieved when



- fisheries and coastal habitats are managed for sustainable use. Discussed in this publication are the trends in fisheries production of food; causes and factors contributing to the decline in fisheries-derived food particularly issues associated with commercial fisheries, municipal fisheries and aquaculture; and the range of management action needed to ensure fishing efforts are reduced to sustainable levels; illegal and destructive fishing practices stopped; and coastal habitats are protected and managed.
7. **Rhythm of the Sea:** Coastal Environmental Profile of San Vicente, Palawan. This book describes the procedures and results of the participatory coastal resource assessment undertaken by CRMP and its partners in San Vicente, Palawan, one of CRMP" six Learning Areas. It documents the wide range of coastal resources found in the municipality of San Vicente, Palawan and provides baseline information that would assist with management planning at the barangay and municipal government levels in San Vicente. It can also serve as a guide for other municipalities in Palawan.
  8. Coastal Environmental Profile of the Malalag Bay Area, Davao del Sur, Philippines
  9. Coastal Environmental Profile of Sarangani Bay Area, Philippines
  10. Coastal Environmental Profile of Negros Oriental, Philippines
  11. Coastal Environmental Profile of Olango Island, Cebu, Philippines
  12. Coastal Environmental Profile of Bohol Island, Philippines
  13. **Coral Reef Monitoring for Management.** Describes a system to monitor and evaluate coral reefs designed for local coastal communities who have no training in scuba diving.
  14. **Mangrove Management Handbook.** Contains useful information on how to protect and manage mangroves as a natural and productive resource; intended to help people who wish to become stewards of mangrove forest resources.
  15. **CRMP in mid-stream: On-Course to a Threshold of Sustained Coastal Management in the Philippines.** Chronicles the first three-and-a-half years of implementation of the Coastal Resource Management Project-Philippines.
  16. **Proceedings: Philippine Provincial Coastal Management Conference 2002**
  17. **Search for Best CRM Programs in Philippine Municipalities 2000.** Describes the conduct of the 2<sup>nd</sup> Search for Best CRM Programs and the winning programs.
  18. **Best Coastal Management Programs Awards 1998.** Includes the objectives, rules and mechanics of the Search for Best Coastal Resource Management Programs in Philippine Municipalities; profiles of the nominees to the 1998 Search and winners; a CRM Self-help Guide; and a description of the CRM process.
  19. **Coastal Management in Asia: Are Donor Projects Sustainable and Beneficial?**
  20. **Guidelines for Annual Monitoring and Evaluation of Municipal/City Coastal Resource Management Plans and Programs for Certification.** A guide for communities and field level staff who are involved in project

- implementation in how to do low-cost, less technical surveys to evaluate the effectiveness of their coastal management efforts.
21. **Philippine Coastal Resource Management Guidebook Series.** Designed to facilitate CRM-related initiatives of government, non-governmental and academic organizations, this eight-volume publication offers a full course in CRM consisting of the following titles:
- Coastal Management Orientation and Overview.*** An introduction to the coastal management process in the Philippines and to definitions and trends in coastal management.
  - Legal and Jurisdictional Framework for Coastal Management.*** Outlines the laws pertaining to coastal management and defines the jurisdictions affecting coastal areas and resources.
  - Coastal Resource Management Planning.*** Illustrates the planning process from the local government's perspective.
  - Involving Communities in Coastal Management.*** Explains the concept of community participation in resource management, a keystone approach to which the success of recent CRM initiatives has been attributed.
  - Managing Coastal Habitats and Marine Protected Areas.*** Demonstrates the relationships among organisms in the coastal marine ecosystem.
  - Managing Municipal Fisheries.*** Clarifies the issue on municipal waters and legal jurisdiction for fisheries management.
  - Managing Impacts of Development in the Coastal Zone.*** Stresses the importance of planning and environmental impact assessment in the process of developing coastal zones.
  - Coastal Law Enforcement.*** Lists the major issues in the enforcement of coastal laws.
21. **Introduction to the Establishment of a Community-Based Marine Sanctuary.** Describes a proven framework for the establishment of a community-managed marine sanctuary. (English and Pilipino versions available)
22. **Into The Mainstream:** Promoting CRM on the Philippine National Agenda. The widespread destruction and degradation of the Philippine coastal environment demands a strategic spread of sustained resource management within the country's coastal zone to prevent a general collapse of marine resources. A key, first step to achieving this spread is to "mainstream" coastal management issues in the consciousness of the general public, and promote coastal resource management on the national agenda. This paper describes the Coastal Resource Management Project's IEC strategies for promoting CRM on the national agenda.
23. **Mangrove Management and Development in the Philippines.** This paper traces the Philippines' experience in mangrove management and development, beginning with an analysis of some past ill-conceived programs that encouraged the conversion of mangroves to aquaculture and ending with a discussion of present community-based approaches aimed at sustaining mangrove rehabilitation and management efforts.

24. **Benefits and Costs of Coral Reef and Wetland Management, Olango Island, Philippines.** A case study of Olango Island, Cebu with 40 km<sup>2</sup> of poor quality coral reef is analyzed together with its wetland habitat and mangrove contribution. The current annual net revenue range from the Olango Island reef is US\$38,300 per km<sup>2</sup> or US\$1.53 to 2.54 million for the entire 40 km<sup>2</sup> reef area. Another US\$389,000 is added when wetlands are considered.
25. **A Crowded Shoreline: Review of Philippine policies on Foreshore and Shore land management.**
26. **Agriculture and Fisheries Modernization Act and Fisheries Code of 1998: Key areas of conflict and recommended courses of action.** Policy paper presenting the contextual premise by which the AFMA and Fisheries Code operate, and identifying possible areas of contradictions so that concerned national government agencies can give appropriate attention to reviewing and revising administrative rules and regulations that operationalize the laws.
27. **A Policy Study on the Clarification of Jurisdiction Between the Department of Environment and Natural Resources and the Department of Agriculture for Coastal Resource Management.**

#### D. POPULARIZED PUBLICATIONS

1. **The Coastal Resource Management Project: Promoting leadership for sustainable coastal resource management. A leaflet that describes the rationale, goals and objectives of CRMP.**
2. **Coastal Alert!** A leaflet that describes the rationale, goals and objectives of CRMP.
3. **Coastal Alert! # 1.** This publication is the print edition of the CRMP website, <http://oneocean.org> and contains selected stories and other articles posted in the website. It is intended to bring the CRM message to a bigger and wider national audience that has relatively limited access to the Internet technology. An annual publication, with special issues to mark special events/occasions.
4. **Coastal Alert! Special Edition on the Ocean Ambassadors homepage.** Contains excerpts from articles posted on the Ocean Ambassadors website (see Ocean Ambassadors below). Produced for the launching of the website.
5. **Coastal Alert! Special Edition on the Conference of Coastal Municipalities of the Philippines.** Contains proceedings of the conference held in May 1999 during the first celebration of the Month of the Ocean in the Philippines. The special edition includes excerpts from the conference speeches, workshop presentations and outputs as well as the 15- point resolutions formulated by the coastal mayors requiring executive and legislative actions.
6. **Saving the Philippine Seas.** Speech of His Excellency, President Joseph Ejercito Estrada at the Conference of Coastal Municipalities of the Philippines held in May 1999 printed in pamphlet form.

7. **Guide to the Video Course on the Establishment of Community-based Marine Sanctuaries (Filipino and English).** This seven-part Guide serves as a print collateral material to enhance retention and learning of viewers of the video series Establishment of Community-based Marine Sanctuaries. The Filipino version is currently being illustrated; the English version is under technical review and style editing.
8. **Save Our Seas Kapitan Barangay Coloring Book.** An educational coloring book that provides activity for children as well as messages of concern on the marine environment. About 2,000 copies were distributed to pre-school and elementary students who visited the Our Seas, Our Life Exhibit.
9. **Call to Action.** This flyer contains a list of simple practices by which people can help minimize the degradation of the marine environment. More than 100,000 copies were distributed to pre-school and elementary students who visited the Our Seas, our Life Exhibit.