

The Coastal Resource Leadership Challenge

To change the current reality of dwindling coastal fisheries, destruction of coastal habitats and loss of marine biodiversity, we need government leaders who have the courage to stand by their convictions, the integrity to make informed decisions, and a vision that environmental quality, social equity and economics must be embraced in every decision. We need leaders in NGOs to reach out to those who are in government, as well as those who are outside the mainstream of society, and foster active participation in problem solving. We need community leaders to make difficult day-to-day decisions that will impact the quality of life of their families and their communities. Perhaps most of all, we need children to recognize early in their lives that they can act now to make a difference to give all of us hope for a better future.

Based on the premise that leadership can be learned, the CRLC promotes the five practices of effective leaders originated by *Kouzes and Posner (1997)*.

- ◆ *Challenge the process.* Search for answers to the open access problem, stop destructive practices, experiment and take risks to achieve extraordinary results.
- ◆ *Inspire a shared vision.* Envision a future with sustainable use of coastal resources; enlist others through active participation and multisectoral partnerships.
- ◆ *Enable others to act.* Foster collaboration in planning and implementing coastal resource management; strengthen others through participation and sharing of information.
- ◆ *Model the way.* Set an example by participating in and contributing to coastal resource management activities; accomplish small successes to improve the quality of the coastal environment.
- ◆ *Encourage the heart.* Recognize the hard work and commitment of others and spread their successes to other coastal communities.

(Courtney, et al, 1997)



chapter 1

Sharing the Challenge: A story of our journey

The following anecdote perhaps best exemplifies how far we have gone in the first three-and-a-half years of Project implementation – that is, if one remembers that it is but a snippet in our still unfinished story, one of countless thruways and byways in a journey that has taken us so far and yet has only really just begun.

The story unfolds in 1996 during the first months of Project implementation, when the Coastal Resource Management Project-Philippines (CRMP) and the United States Agency for International Development (USAID)-funded Governance and Local Democracy (GOLD) Project invited 370 non-governmental organizations (NGO), national government, and local government partners from CRMP's six Learning Areas to a series of training workshops called the Coastal Resource Leadership Challenge (CRLC). (Courtney, *et al*, 1997) Designed to teach participants to integrate the practice of leadership skills and technologies of participation with technical and practical experience in coastal resource management (CRM), these workshops also generated information that proved invaluable in the formulation of strategies for project implementation. As intended, they provided us with a working knowledge of the local government units' (LGU) level of understanding of their role as frontline stewards of coastal resources. They also gave us an indication of what the LGUs perceived as the key CRM issues in their areas of jurisdiction, and what initiatives, if any, had been taken to address these issues.

LGUs speak up about key CRM issues in their municipalities at the Coastal Resource Leadership Challenge workshop on May 5, 1996.



The CRLC revealed, for example, that while the LGUs viewed the decline of fisheries as a major issue, most of them were not aware that, by virtue of the Local Government Code of 1991, they now hold the responsibility for much of the coastal zone. Given this lack of awareness, they failed to factor in CRM in their development plans and operational budgets – the average annual budget for CRM allocated by the CRMP Learning Area municipalities in 1995 (our pre-project baseline) was estimated at less than Php40,000 (USD1,000 at Php40:USD1).

More significantly, however, the CRLC spun a web of events that took us full circle through all levels of CRM implementation. For one, they signaled the intensification of Project implementation in the Learning Areas, where LGUs were soon immersed in the participatory techniques of CRM. CRM organizations, such as the Barangay Fisheries and Aquatic Management Resource Councils (BFARMC), were formed and soon were participating in the CRM process – from resource assessment through planning to implementation, then to monitoring and evaluation. As the LGUs’ awareness level increased, so did their budgets for CRM. By 1998, the average annual budget for CRM allocated by our Learning Area municipalities rose to about Php101,395 (USD5,375), or 174% over the 1995 pre-project baseline. Such investment has begun to pay off. At the end of 1999,

significant increases in fish abundance and hard coral cover in and around selected marine sanctuaries in our Learning Areas were reported.

Aiming to expand our reach, we also took the Challenge to the national level. Among the key results of the CRLC was a compilation of “Commonly Asked Questions” about the use and management of coastal resources. These questions became the basis for the first policy forum that CRMP convened in Manila, which in turn provided directions for the publication of the *Legal and Jurisdictional Guidebook for Coastal Resource Management in the Philippines*. Seeking a strategic venue for the distribution of the *Guidebook* to its primary audience – the more than 800 coastal municipal LGUs in the Philippines – we then initiated contact with the League of Municipalities of the Philippines (LMP), a collegial body composed of the Philippines’ 1,527 municipal mayors, to explore the possibility of launching the *Guidebook* during the 1997 LMP Convention. This “connection” literally put CRM issues in the headlines: starting with the *Guidebook* launching, it snowballed into a high-impact collaboration with the LMP that drew national and local attention to coastal issues.

In 1998, CRMP and LMP – along with corporate partners such as Petron Foundation, Coca Cola Bottlers Philippines, and ABS CBN Foundation, and later with donor partner, the Government of Japan – concluded the first Search for Best Coastal Management Programs in Philippine Municipalities. The Search not only recognized “model municipalities,” it also made for friendly competition among coastal mayors over who would get the next awards. At that year’s LMP Convention, the spotlight was focused, albeit briefly, on CRM, when President Estrada announced that he would declare May as Month of the Ocean in the Philippines. That declaration came in January 1999, providing impetus for the holding of the historic Conference of Coastal Municipalities of the Philippines in May, and firmly putting CRM at centerstage.



The community’s full participation in the CRM process is crucial to achieving success and sustainability of CRM initiatives.



CRMP finds in the League of Municipalities of the Philippines' National Convention in November 1997 a strategic venue for the launching and distribution of the Legal and Jurisdictional Guidebook for Coastal Resource Management in the Philippines, a crucial resource for resolving legal and jurisdictional issues affecting CRM. Then President Fidel V. Ramos is shown here after being presented a copy from the first print run of the Guidebook.

More than 700 mayors representing 90% of coastal municipalities in the Philippines converged in Manila for the three-day (May 26-28, 1999) Conference, which was organized jointly by CRMP and LMP. The forum, the first of its kind in Asia and only the second in the world after Canada, was unprecedented in terms of mass attendance, cabinet-level interest and participation, media coverage and intensity of discussions. Four cabinet secretaries, a presidential adviser, and a presidential assistant spelled out their respective departments' agendas in empowering LGUs for CRM. The Chief Justice of the Supreme Court challenged the mayors to exercise their political will in protecting and conserving the country's marine and coastal resources. And the President delivered a historic "State of the Ocean" address, challenging LGUs to maintain CRM as one of their basic services and "lead in the sustained management of municipal waters."

The Conference is clearly a milestone in the history of CRM in the Philippines. At one broad stroke, it brought to the collegial attention of the country's highest leaders the urgent call for government to promote CRM as a basic service to coastal communities. A direct result of the Conference was a series of Presidential directives that put into motion the formulation of a national coastal and marine policy framework; the creation of an inter-agency task force on coastal zone management; the fast tracking of the delineation of municipal waters as provided for in the country's Fisheries Code of 1998; and a closer study

to increase national funding for CRM by way of amending the Local Government Code to include municipal waters in the computation of the LGUs' share in the legally mandated Internal Revenue Allotment (IRA).



Philippine President Joseph Ejercito Estrada shows off his "I Love the Ocean" wristband after delivering a historic "State of the Ocean" address on May 28, 1999, the final day of the three-day Conference of Coastal Municipalities of the Philippines at the Manila Midtown Hotel. The address was broadcast nationwide through the government's radio network.

For their part, the mayors drew up a 15-point set of resolutions requiring executive and legislative actions that would enable LGUs to effectively manage their municipal waters. They also committed to undertake "doable" CRM best practices in their respective municipalities.

And, true enough, the results of the Conference had barely been collated when mayors began approaching CRMP for technical advice and assistance on various CRM issues. Soon, the Project was receiving reports from all over the country about LGUs taking on CRM as a basic service, a small but certainly firm indication that our

*Resolution adopted by the Conference of Coastal Municipalities of the Philippines
on May 28, 1999*

**RESOLUTION NO. 01, Series of 1999
A RESOLUTION CALLING FOR THE ENACTMENT/IMPLEMENTATION
OF MEASURES EMPOWERING THE LOCAL GOVERNMENT UNITS FOR
INTEGRATED COASTAL MANAGEMENT**

WHEREAS, the League of Municipalities of the Philippines (LMP), a league of local government units (LGUs) created under the Local Government Code of 1991 (LGC), has served as a venue for member municipalities to articulate, ventilate and crystallize issues affecting municipal government administration and secure through proper and legal means solutions to these issues;

WHEREAS, 832 (54%) of the 1,527 member municipalities of the LMP are classified as coastal municipalities;

WHEREAS, recent studies indicate that such coastal municipalities are among the poorest of the poor municipalities in the Philippines;

WHEREAS, there is a need to develop a general program for coastal municipalities that will address, among others, the following issues: coastal resource management for food security; poverty eradication in coastal municipalities; jurisdictional issues in municipal waters; coastal law enforcement; and financing mechanisms for managing coastal resources;

WHEREAS, the government is now confronted with the serious problem of depletion of marine resources;

WHEREAS, infrastructure and facilities for an efficient and effective implementation of coastal management are seriously lacking;

WHEREAS, coastal LGUs generally do not have sufficient funds to implement their municipal coastal management and development plan;

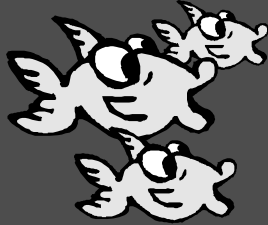
NOW THEREFORE BE IT RESOLVED AS IT IS HEREBY RESOLVED THAT:

- 1) The League of Municipalities of the Philippines through its President, Mayor Jinggoy Estrada, be urged to request His Excellency President Joseph Ejercito Estrada to direct the proper agency to finally establish water boundaries of coastal municipalities within the soonest possible time;
- 2) The Congress be urged to amend the LGC to include "municipal waters" for purposes of IRA computation so as to increase the LGUs' resources to fund programs/projects for the development/preservation of marine resources;
- 3) His Excellency President Joseph Ejercito Estrada be urged to certify a bill as urgent to Congress calling for the amendment of the LGC to enhance enforcement of existing fisheries laws and to create a special Task Force to be headed by the local chief executive to monitor the implementation of the same;
- 4) The Congress be urged to review existing laws, policies and programs on coastal resource management with the end in view of according more powers to local governments and ensuring integration for national development; henceforth,
 - a) Coastal LGUs be urged to establish monitoring, control and surveillance mechanisms to come up with strategies for the effective enforcement of the country's fisheries law;
 - b) Coastal LGUs be urged to formulate a comprehensive and sustainable municipal coastal resource management development plan;
 - c) Coastal LGUs be urged to organize their municipal/barangay coastal resource management councils;
 - d) Coastal LGUs be urged to source funds from local/national funding agencies in relation to the

- municipal coastal resource management development action plan that may be formulated;
- e) Coastal LGUs be urged to strictly implement ordinances imposing taxes/fees involving marine products;
 - f) Coastal LGUs' legislative bodies be encouraged to pass more ordinances that will aim to increase coastal resource management finances.
- 5) Congress be urged to ensure the passage of the bill localizing the Philippine National Police so as to ensure effective implementation of the country's fisheries laws;
 - 6) His Excellency, President Joseph Ejercito Estrada be requested to direct the concerned national agency to issue the corresponding Fisheries Administrative Order (FAO) of RA 8550;
 - 7) His Excellency President Joseph Estrada be urged,
 - ♦ to facilitate the delineation of functions of various national government agencies (DENR, DILG, DA, among others), public corporations (Laguna Lake Development Authority, Philippine Ports Authority, among others), and the local government with respect to coastal resource management;
 - ♦ to direct the Department of Justice to adopt measures that would strengthen enforcement and prosecution mechanisms;
 - ♦ to fill up vacant courts for speedy disposition of cases.
 - 8) His Excellency President Joseph Estrada be urged to provide augmentation funds for coastal resource management programs and projects and release the same directly to local governments;
 - 9) His Excellency President Joseph Estrada be urged to certify as urgent a bill giving to local governments a portion of the revenues raised and collected by the Philippine Ports Authority;
 - 10) His Excellency President Joseph Estrada be urged to appropriate the necessary funds for the purchase and maintenance of at least two patrol boats for every municipality;
 - 11) The LMP be urged to identify the different private and government agencies that may provide grants/ funding sources for coastal resource management;
 - 12) The proper government agency be urged to promulgate the necessary rules and regulations to ensure that LGUs are oriented with their powers and responsibilities under the LGC with respect to the collection of fees/taxes and other regulatory revenues over coastal resources;
 - 13) Coastal LGUs be urged to source funds from local/national funding agencies in relation to the municipal coastal resource management development action plan that may be formulated;
 - 14) The proper government agency be urged to implement an information and/or education campaign where seminars/conferences shall be conducted to:
 - a) Equip the LGUs with skills to resort to alternative livelihood programs;
 - b) Orient the LGUs with the different coastal resource management financing schemes;
 - c) Enlighten participants with the need to preserve the country's coastal resources.
 - 15) Congress be urged to enact a law creating a Department of Fisheries and Aquatic Resources.

Adopted.

May 28, 1999, City of Manila, Philippines.



New paradigms for coastal management in the Philippines

- ◆ *Shifting from programs on fisheries development to coastal management*
- ◆ *Devolving responsibility and mandate for managing municipal waters to LGUs*
- ◆ *Redefining roles of National Government Agencies (NGAs) toward assisting LGUs with CRM*
- ◆ *Establishing multisectoral collaboration to solve complex problems associated with coastal management*
- ◆ *Broadening the base of local and national support to sustain community-based CRM initiatives*
- ◆ *Mainstreaming CRM on the national social agenda*

(Courtney and White, 2000)

chapter 2

Of New Paradigms and Strategies: The CRMP mission and approach

For a country that is made up more than 7,100 islands and heavily dependent on marine and coastal resources for food and livelihood, linking marine habitat protection with food security and the economy should come as a matter of course. In fact, CRM issues in the Philippines have traditionally not figured prominently at the national policy level or been regarded with as much urgency as land-oriented problems.

Like many other countries endowed with rich marine habitats and coastal waters, the Philippines has historically pursued coastal and marine development along the premise that fisheries production can be increased through the use of more efficient gear and technology; that we can continue to operate within the open access regime; that marine and coastal issues are primarily the problems of fishers and coastal communities; and that we can take as much as we want from the sea as if it were an infinite resource. When allocating resources, whether in terms of funding or personnel deployment, the government has been biased toward increased agricultural production resources, with food security programs rarely factoring fishery and aquatic resources into the equation (Courtney *et al*, 1999). Where fisheries were concerned, the response of the government in the past was largely to promote increased efficiency in fishing effort rather than to introduce or enhance management measures. This framework of development has led to excessive fishing pressure, overfishing, stock depletion, and the destruction of freshwater and marine habitats. Generally, interventions and solutions have not been comprehensive enough to cover the issues of poverty, food security, sustainability and ecological soundness.



The Philippine coastal zone is under severe pressure from high population growth, overfishing, and habitat destruction.

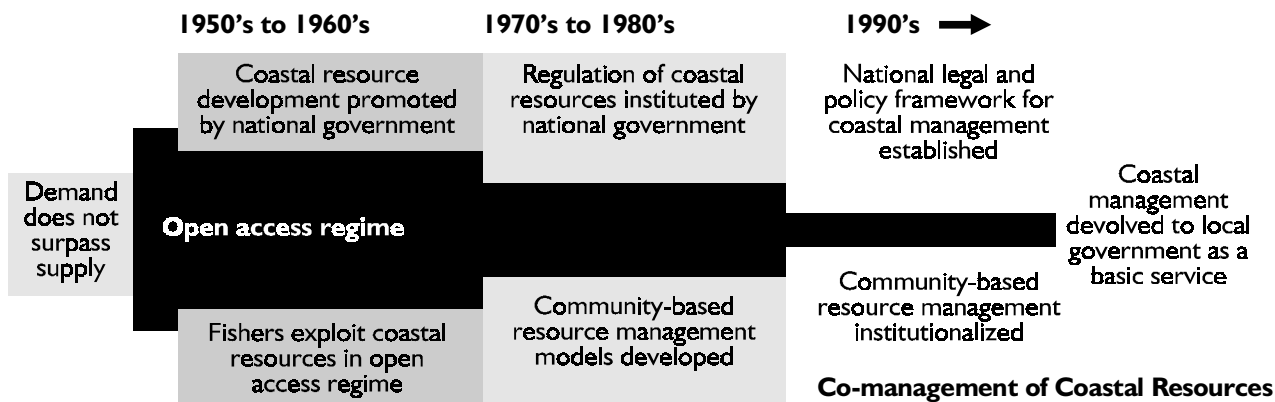


Figure 2.1. Evolution of coastal management mechanisms in the Philippines

Thus, most of the extensive shallow seas of the Philippines – once rich in coastal resources, fish and shellfish and the habitats (coral reefs, seagrass beds and mangroves) that nurture them – have now become depleted.

The area of mangrove forests in the Philippines has declined significantly from an estimated 450,000 hectares at the beginning of the century to approximately 120,000 hectares in the mid-1990s (DENR, 1995). Major losses of mangrove areas occurred in the 1970s and 1980s, when the government, in an effort to boost fish production from

aquaculture, encouraged the conversion of mangrove forests to shrimp and fish ponds. Unfortunately, the mangroves were converted without any analysis of the appropriate rent for such areas, or the potential losses that might occur as a result of their destruction. Thus, when many fishponds were abandoned in the 1980s because of disease outbreaks and declining economic returns, the country found itself losing not only the production of the fishponds, but also natural fishery production from clear-cut mangrove areas.

Most reef areas, meanwhile, have been adversely affected by human activities, and less than 5% are considered to be in excellent condition. Siltation from deforested uplands, destructive fishing practices, pollution and physical removal are the major factors causing their degradation. Such loss is nothing short of ominous, especially when viewed in the context of the country's



View from the coast

Last night, some fishers went out to sea, but they barely caught anything. Not like before. There was a time when all our bridges were destroyed. We had to go by boat to another town to buy rice. The price of rice hit Php28 per kilo, but people hardly complained. Now rice sells for Php18, and people can't afford it. We have enough supply of rice, but we do not have enough money to buy it. In the past, our fishers were able to catch fish to sell and earn enough to buy rice. Now they don't get much from the sea.

—Proserfina Belano, Panindigan, San Vicente, Palawan
Focus Group Discussion, CRMP, August 10, 1999

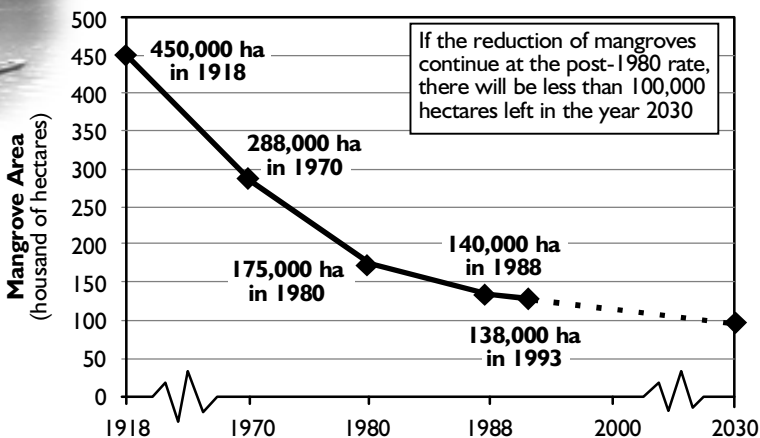


Fig. 2.2. Mangrove resource decline in the Philippines (DENR 1988, World Bank 1989)

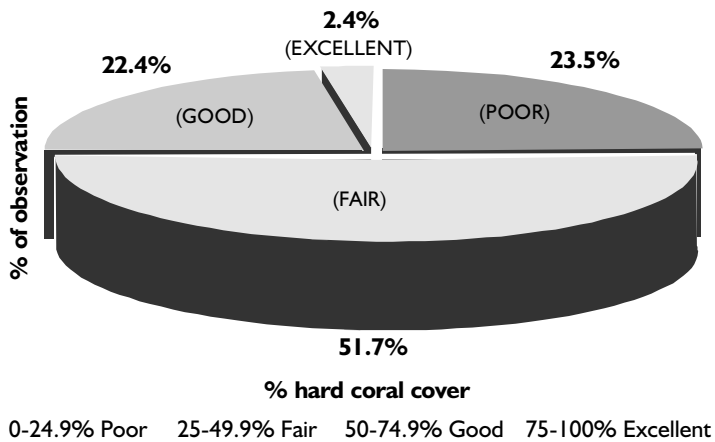
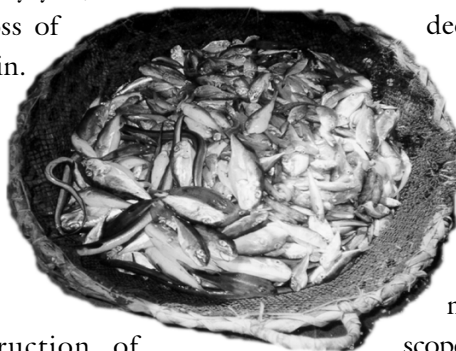


Fig. 2.3. Status of Philippine coral reefs in 14 localities (Gomez et al. 1994)

ability to produce food for its people. A healthy coral reef can produce 20,000 kg of fish per square kilometer per year, enough fish to provide 50 kg of fish per person per year to 400 people. One square kilometer of reef in poor condition, on the other hand, produces no more than 5,000 kg of fish per year, barely enough to feed 100 people. (McAllister and Ansula, 1993)

In the face of a dramatic increase in population, overfishing and habitat destruction, fish stocks have dwindled at an exponential rate. Over the last 10 years, even as fishers used more efficient (but mostly illegal) gears, capture fisheries have stagnated, with significant declines in municipal fisheries throughout the country. And, even with new technology and the expansion of fishpond areas, the once robust growth in fish production from aquaculture has turned sluggish. The total amount of fish available as food from capture fisheries and aquaculture has remained relatively static since 1987. With the population growing at about 2.5% every year, this translates to a net loss of locally derived fish protein. Indeed, if current trends of overexploitation of coastal resources continue, fish will not be a staple food of Filipinos much longer.



Although the destruction of Philippine ecosystems has been very pervasive, however,

a study conducted two years ago showed that public awareness of what was happening to the country's marine and coastal resources was low. (Social Weather Station, 1997) Marine and coastal issues were not a priority of the Department of Environment and Natural Resources (DENR), whose primary focus and capabilities were forestry-based. Furthermore, advocacy activities for marine and coastal issues were confined to fisherfolk groups and a few conservation-oriented NGOs. Outside these sectors, there was relatively little sympathy for marine and coastal problems from the bigger spheres of influence in the country.

The situation was not much better at the local level. For about a decade now, by virtue of a new Local Government Code (LGC) promulgated in 1991, the Philippine government has been undertaking a

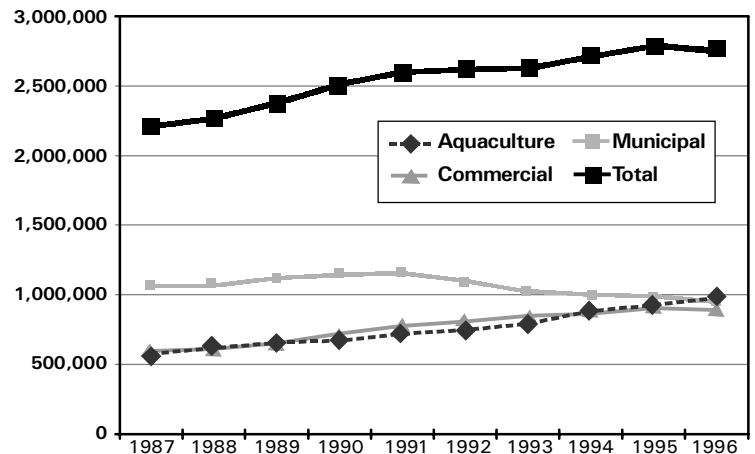


Fig. 2.4. Per capita fisheries-related food available for consumption for 1987-1996 (BEAR 1997)

decentralization process aimed at transferring certain powers and responsibilities in the areas of health and sanitation, agriculture, social welfare, and environmental management from the national government to the local government. The LGC provided the initial policy structures needed to decentralize the management of coastal waters. It expanded the scope of municipal waters to 15 km from about 5.5 km, giving LGUs greater jurisdiction over the usage and

Salient features of the Local Government Code of 1991 related to CRM

1. The expansion of the scope of municipal waters to 15 km from 3 nautical miles (approximately 5.5 km). This means that LGUs have greater jurisdiction over the usage and conservation of the area.
2. The repeal of the anti-conservation policy of the state, as established by Section 2 of PD 704, which promoted maximum utilization of fishery resources and exportation of fish and fishery products.
3. Devolution of some powers and functions of the DA, DENR, and other concerned national line agencies to the LGUs.
4. Assignment of the right to issue licenses, leases and permits for the use of the municipal waters to the municipality.
5. Provision giving preferential treatment to the municipal fishers in the grant of fishery licenses.

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 NGAs to the LGUs, including the right to issue licenses, leases and permits for the use of municipal waters. In short, for almost a decade now, local governments have been primarily responsible for the vast coastal zone of the Philippines.

And yet, as recently as in 1996, a majority of LGUs was found to be unaware of their roles in managing municipal waters, as much as they were uninformed about the roles of government institutions that have been tasked to assist them. In stark contrast to the fisherfolk, they were perceived to be detached from CRM-related problems, preoccupied as they were with infrastructure, health, sanitation and economic problems (GreenCOM Philippines, 1996). Compared to such devolved functions as health and agricultural services, natural resource management in general received low LGU prioritization in the Philippines (GreenCOM Philippines, 1996).

To address this situation and adapt to the changed policy environment for CRM meant that CRMP's mission and approach must be a departure from the *status quo*. The Government of the Philippines and USAID recognized that it would take a strategic spread of sustainable resource management within the Philippine coastal zone to prevent a general collapse of marine resources due to increased population pressure and the rapidly rising demand for marine-based protein. In their

view, any effective response must first begin with a slowing down of the decline, followed by stabilization and regeneration of the complex ecological systems involved. In the design of CRMP, therefore, they sought to move beyond implementing pilot-scale community-based projects to catalyzing the spread of CRM initiatives to a broad cross-section of coastal stakeholders (USAID, 1995). This objective is reflected in the Project's mission statement:

“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 incorporates 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 is critical to achieving a condition of mutual reinforcement, or a critical mass of CRM in the country. And, third, CRMP aims to achieve a threshold of CRM, the basic capacity and institutionalization required to sustain CRM beyond the life of the project.

Our mission was operationalized using strategies that simultaneously addressed issues at both local and national levels. The two-pronged approach was necessary: for CRM to get anywhere as a sustainable development strategy, marine and coastal issues must first be perceived

as priority problems needing action by both national and local governments and the bigger sectors of society. Given the centralized nature of decision-making in Philippine politics, no amount of community-based CRM programs will reach the threshold of sustainability without the convergence of national policies and local initiatives. For us to achieve our strategic objective – that is, a threshold of sustained CRM over 3,000 km of the Philippines’ more than 18,000 km of coastline – it seemed evident that our first task was to move coastal issues to the forefront of the country’s political landscape and public milieu, and to transform perception of these issues from “local, sectoral and productivity” issues to “national, general public and environmental problems”. Clearly, ownership of coastal issues must expand beyond sectoral confines to a much broader and “noisier” political base. And, given that LGUs now have the mandate to sustainably manage coastal resources, we also recognized the need to repeatedly affirm this mandate.

CRMP’s mission dictated that our approach must be integrated, encouraging participation through multi-sectoral partnerships, favoring enterprise-driven management options, and encompassing both coastal and terrestrial environments. It must be strategic, meaning, it must be issue-driven, build upon lessons learned and the best information, be able to expand geographically, and lead to the development of a critical mass of CRM leaders. And it must be sustainable, that is, it must build institutional capacity, focusing on the municipality as the basic operational unit, maintaining investment in CRM, and achieving a threshold of CRM activities for continued expansion.

This is not to say that the specific applications of this approach were clear from the start. The still changing policy environment for CRM dictated a high degree of flexibility to allow us to switch gears as necessary in response to opportunities and challenges in our working

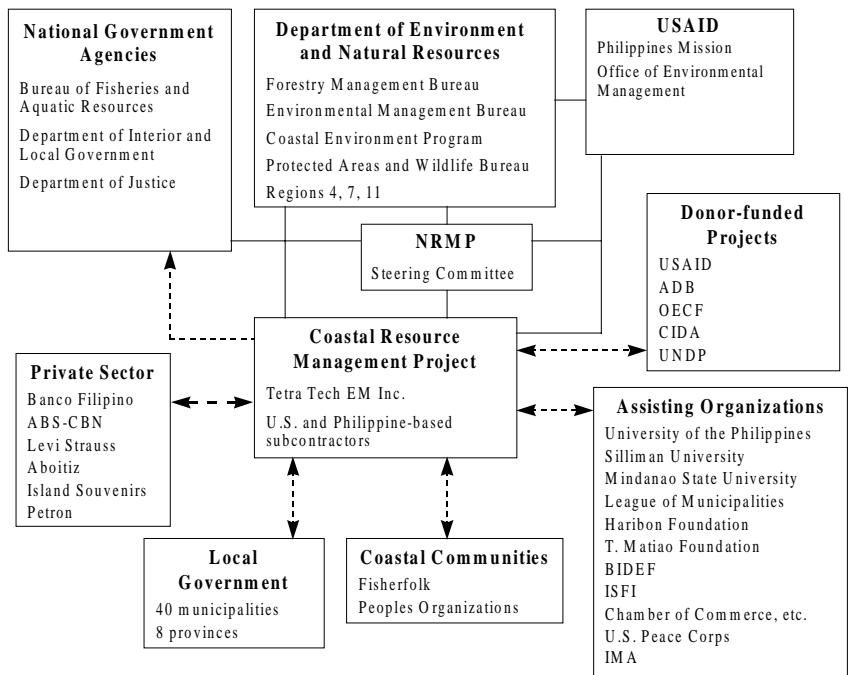


Fig. 2.5. CRMP partners

Characteristics of the CRMP approach to CRM implementation

- ♦ Integrated
 - ♦ Participation through multi-sectoral partnerships
 - ♦ Enterprise-driven management options
 - ♦ Coastal and terrestrial environment
- ♦ Strategic
 - ♦ Issue-driven
 - ♦ Builds upon lessons learned and the best information
 - ♦ Geographic expansion
 - ♦ Develops critical mass of CRM leaders
- ♦ Sustainable
 - ♦ Institutional capacity-building
 - ♦ Municipality as basic operational unit
 - ♦ Investment in CRM maintained
 - ♦ Threshold of CRM activities for continued expansion

environment, tempered only by the parameters set by our mission. Although CRMP’s overall direction was largely unchanged, our approach was constantly reshaped as new policies, opportunities, lessons, and gaps in implementation emerged. Indeed, even now, rich in learning and going into the next three years of implementation, we can say that what CRMP is, is still evolving.

Establishing networks and partnerships for CRM: Let's get personal

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 staff. Friends and friends of friends greatly facilitated the introduction of CRMP to the country's top leaders in government, media, business, NGOs, the academe, the church, and even the entertainment sector.



We have a particularly successful and enduring relationship with the media, which has been instrumental in catalyzing the spread of awareness of coastal management issues on a national scale. Tapping a network developed by its staff over years of involvement in the media, we initiated joint production efforts with both government and private media companies. Our partnership with the ABS-CBN Foundation, which is closely affiliated with the country's biggest media network ABS-CBN, resulted in the airing of broadcast features and TV plugs during the prime-time showing of the country's highest rating programs. Such broadcasts were highly cost-effective – CRMP assumed only a part of production costs, as the Foundation's production staff provided the creative services, and the network, the air time. Free air time donated by the network amounted to approximately Php10 million (US\$265,000), while CRMP's contribution was only about US\$20,000.

The production of a special episode on fisheries and coastal programs for the President's nationwide radio and TV program *Jeep ni Erap* was achieved through representations made with the Office of the Press Secretary and the Philippine Information Agency (PIA) in the context of the Month of the Ocean celebration in 1999. In addition, PIA provided live nationwide radio coverage of the plenary sessions of the Conference of Coastal Municipalities of the Philippines and the President's “State of the Ocean” address. It also jointly produced with CRMP two 30-second TV and radio spots aired several times daily on national TV and radio networks. Such partnership with PIA proved to be a win-win situation for everyone concerned, as broadcast companies, through a “broadcast order” mandated by the PIA, were able to claim tax deductions in the equivalent amount of air time used in broadcasting the plugs. Such incentives for the private media sector proved highly beneficial to the project.

More significantly, the media's exposure to coastal issues resulted in increased coverage of and media advocacy for CRM in particular and marine protection in general. On their own, various print and broadcast media groups produced info plugs, documentaries and articles on coastal issues as well as successful CRM initiatives. In May, during the first celebration of the Ocean Month in the Philippines, leading TV network ABS CBN not only provided free air time for info plugs on coastal issues, it also carried the Ocean Month's theme and message on its station ID. Through their firsthand exposure to coastal environmental problems and the daily struggle of fishing communities who must eke out a living from a fast diminishing resource, a number of Philippine print and broadcast journalists were transformed from mere commentators on coastal issues to strong advocates for CRM.



Some missing ingredients for CRM in the Philippines

While, indeed, the Philippines has been a pioneer in the development and practice of community-based CRM... it is observed that there has been no comprehensive documentation of experiences and "lessons learned" from past projects. As such, an important source of information to improve on new community-based CRM initiatives has been left untapped. (ICLARM, 1995) There also remains a need to develop an accepted evaluation methodology that will provide an objective assessment of the effects that these projects had — and probably still have — on intended beneficiaries.

chapter 3

Counting Kilometers of Shoreline: Measuring success in CRM

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), during their annual meeting halfway across the world, decided that there was an urgent need to develop an accepted integrated CRM evaluation methodology. This decision was fueled by the recognition that they were unable to determine if CRM initiatives to address the rapidly deteriorating condition of the coastal environment worldwide were actually working, or if lessons learned from successes and failures in other countries could be articulated and shared. This initial meeting led to a series of international workshops and meetings where international experts continued to debate and consolidate monitoring and evaluation themes and indicators for CRM.

With this as a backdrop, the Government of the Philippines, USAID, and CRMP worked toward the development of the most relevant indicators to measure the success of, and to translate lessons learned from the project. The review process resulted in several intermediate stages which were tested and either revised or rejected. By December 1998, after two years of discussion, review, and revision, a final results framework and indicators were approved for the Project.

CRMP falls under USAID/Philippines Strategic Objective 4 (SO4), Enhanced Management of Renewable Natural Resources. The revised results framework highlights two top level indicators as follows:

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

Three intermediate results and corresponding indicators feed into the strategic objective:

- IR1.1 Improved local implementation of CRM
- IR1.2 Increased awareness of CRM problems and solutions
- IR1.3 Improved policy and legal framework for CRM

Working with academia

The Project is working with some of the best academic institutions in the Philippines to backstop its efforts, set baselines and measure biophysical and other impacts of CRM interventions in its Learning Areas. These institutions include:

- ♦ Silliman University, through its Center of Excellence in Coastal Resource Management (COE-CRM), Marine Laboratory (SUML), and Legal Environment Assistance Program (LEAP) in the Negros Oriental Learning Area, providing assistance mainly in policy work for CRM and the scientific monitoring of marine sanctuaries in Negros Oriental. SUML also produced preliminary environmental reports that served as reference for subsequent profiling activities in the CRMP Learning Areas. USAID funded through CRMP the construction of SUML building to further strengthen marine science education in the country.
- ♦ The University of the Philippines-Marine Science Institute (UP-MSI), providing technical backstop in the assessment of marine protected areas (MPAs) in all CRMP Learning Areas. With CRMP, it is also working on a manual on participatory methods of monitoring coral reefs involving both the community and scientists.
- ♦ University of San Carlos (USC), in the Olango Learning Area, helping in coastal resource assessment and in the preparation of the Olango coastal area profile.
- ♦ The Mindanao State University (MSU), in the Sarangani Learning Area, providing planning support, primarily by generating baseline data for Sarangani Bay.



Numerous discussions were held as to the practicality and viability of elevating a biophysical indicator to this level because of the multitude of variables outside the Project's control that can affect the outcome. For instance, 1997 and 1998 were marked as years of record highs in tropical sea surface temperature, which resulted in a widespread bleaching of coral reefs throughout the Philippines and Indo-Pacific region. The relatively short duration of a project makes it difficult to measure biophysical impact, let alone suggest cause-and-effect relationships with statistical certainty under these conditions. But, certainly, the collection of data to monitor long-term trends in biophysical indicators is a high priority for local and national government programs, and projects, such as CRMP, should contribute to their databases, employing appropriate methodologies that can be replicated spatially and temporally.

The indicators defining IRI.1 underwent the most rigorous review and revision and are central in achieving the Strategic Objective. In the process of developing the indicators, we defined essential basic ingredients for local CRM, combining both the need to monitor ecological and social changes characterized by improved management as well as policy, legal, and institutional changes characterized by enhanced governance.

Progress made by each municipality in establishing CRM as a basic service is monitored and evaluated according to the indicators for *IRI.1 Improved local implementation of CRM*. The following criteria are used for improved local implementation:

1. *Annual LGU budget allocated for CRM*. This indicator targets increasing and sustaining annual budget allocations for CRM by LGUs. CRMP

uses a baseline of Php37,023 per year based on a pre-project survey of 1995 budget allocations of 23 municipalities in its six Learning Areas. Only municipal budgets are reported.

2. *Resource management organizations are formed and active.* To be counted as formed and active, organizations must meet 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 POs and LGUs involved in policy and advocacy work for CRM.
3. *Best CRM practices are implemented.* These practices include: 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.

Our Municipal Coastal Database (MCD) is used to consolidate and manage data for each municipality. When a municipality meets the criteria above, the kilometers of shoreline represented by that municipality are counted under the SO4 indicator as kilometers of shoreline where improved management of coastal resources is being implemented.

The indicators for *IR1.2 increased awareness of CRM Problems and Solutions* are as follows:

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

These indicators assess the knowledge, attitude, and practices of key target groups in assimilating and echoing CRM messages and best practices. Both qualitative and quantitative surveys are being conducted to evaluate the impact of the project's key interventions as well as the utilization of CRMP products such as guidebooks and training modules by NGAs, LGUs, and assisting organizations, including those in the academic and NGO sectors. Target groups include policy makers, LGU officials and fisherfolk. Respondents are considered as showing increased awareness of CRM issues when they demonstrate a knowledge of (1) the current conditions and problems affecting coastal resources, and (2) solutions to coastal problems.

IR1.3 addresses the need for an improved policy and legal framework for CRM. The indicator for this intermediate result is a measure of the degree to which NGAs agree on an integrated policy and legal framework for CRM.

That there were costs as well as benefits as a result of this lengthy review and revision process for the results

framework and indicators can be readily appreciated. Without an approved results framework and indicators at the very start of a project, some pre-project baseline conditions could not be established against which we could measure future successes or failures of any particular intervention. On the positive side, perhaps we would benefit in the long run by taking the risk that something extraordinary could evolve from our lengthy struggle. One recent development which is now beginning to materialize as an offshoot of IR1.1 is the concept of developing a "CRM Certification System" for local governments based on the MCD.



The Municipal Coastal Database (MCD) developed by CRMP is designed to serve as a tool for planning and monitoring of CRM programs at the LGU level.

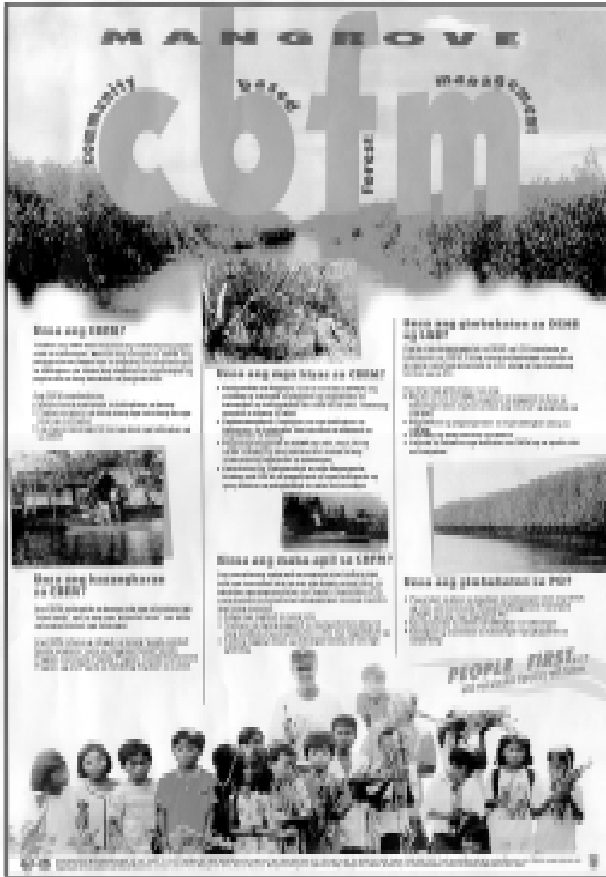
**Community-Based Forest Management for Mangroves:
A new best practice**

The mangrove habitat's changed status from a forgotten (perhaps even unwanted) resource to a valuable natural asset is one indication of the new focus with which government regards the coastal environment. The road to change was paved by the issuance of DENR Department Administrative Order No. 29 series of 1996, promulgating the implementation of community-based forest management (CBFM). In accordance with DENR's prevailing policies at the time, the CBFM program was initially focused on upland reforestation. In 1997, the USAID-funded Forest Resource Management Project of DENR

implemented one pilot area for mangroves in Pagbilao, Quezon, with promising results. CRMP then seized the opportunity to expand the adoption of CBFM in other mangrove areas and, in 1998, started the program in Bohol. Word about the program spread, along with anecdotal evidence of rehabilitated mangroves bringing renewed vigor to once moribund municipal fisheries in many areas around the country. Consequently, demand for technical expertise in mangroves grew. Today, mangrove management training is one of CRMP's most sought-after services, and CBFM often serves as entry point for CRM initiatives in many LGUs.

The CBFM program's popularity with LGUs stems from the fact that it allows them to participate in the management of mangrove resources, which are under DENR jurisdiction. Under the program, the community, through qualified POs, is given the preferential privilege to manage a mangrove area under a 25-year contract, which may be renewed for another 25 years.

Initial results from our management areas, the participatory nature of the program, and the enthusiastic response and express commitment of LGUs all point to CBFM as at least one area where we are likely to achieve the success and spread needed for sustained resource management.



View from the coast

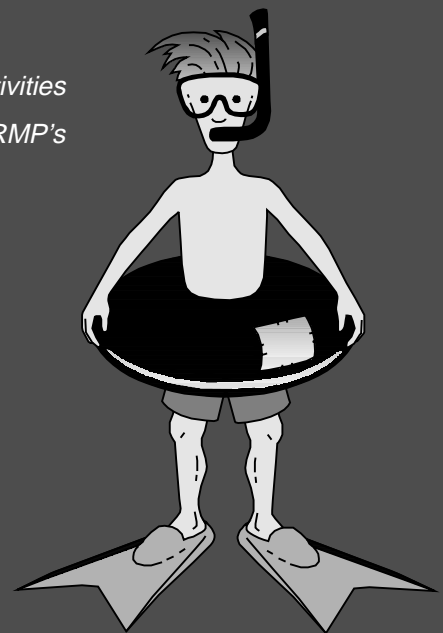
Mangroves are very important. They serve as breeding ground and nursery for fish, as well as shelter and protection. In the mangrove, small fish are safe from predators, and safe from being caught by fishing nets. That's why the cutting of mangroves is not allowed.

—Pacita Morillos, Panindigan, San Vicente, Palawan
Focus Group Discussion, CRMP, August 10, 1999

Key features of field level interventions for CRM in CRMP Learning Areas

- ◆ *Memorandums of agreement between CRMP and local governments who commit personnel and budgets*
- ◆ *Identification of local organizations and individuals who can potentially play key roles in the planning and management process*
- ◆ *Implementation of participatory coastal resource assessment and mapping exercises with community-level groups*
- ◆ *Development of coastal environmental profiles through local community participation and collaboration with local academic institutions*
- ◆ *Conduct of integrated coastal management training for key local government, community and NGO participants*
- ◆ *Promotion of participatory strategic management planning at the barangay (village), municipal and Learning Area levels*
- ◆ *Implementation of an enterprise and livelihood development scheme through community groups and the private sector which provides livelihoods outside of fisheries*
- ◆ *Definition and integration of coastal resource management plans and projects within large-area and other sectoral plans*
- ◆ *Facilitation of integrated coastal management interventions, monitoring and evaluation*

Training, information, education and communication activities aimed at promoting capability building are integral to CRMP's approach to local implementation.



chapter 4

Laying the Groundwork: Developing local capabilities

Perhaps more than any other donor-funded project of its kind, CRMP has championed the ascendancy of local governments as frontline stewards of coastal resources. From the beginning, our major emphasis has been to assist local governments in recognizing and realizing their mandate under the Local Government Code of 1991 to manage coastal resources using an integrated, participatory, and community-based CRM process.

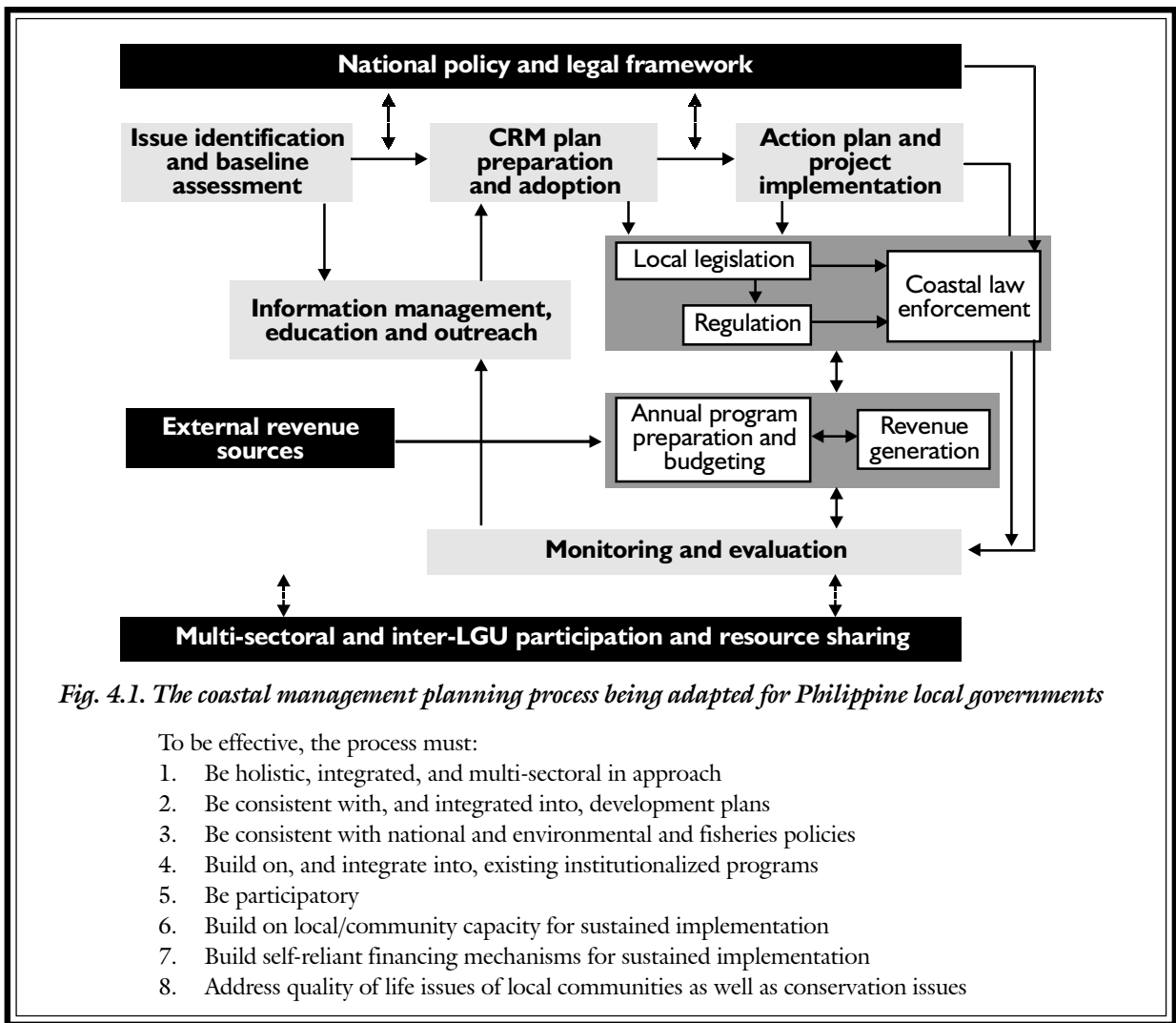
During CRMP's first year of implementation, we conducted the Coastal Resource Leadership Challenge (CRLC), a series of workshops for all Learning Area municipalities and provinces. These workshops, designed in collaboration with the USAID-funded GOLD, combined CRM and leadership philosophy with the technology of participation to enlist the support of LGUs, NGAs, and NGOs for CRM, to foster a shared vision for managing coastal resources, to develop 3-year action plans, and to make commitments for our multi-sectoral partnerships for CRM. (Courtney, *et al.* 1997)

The CRM process

CRM is the process of planning, implementing, and monitoring sustainable uses of coastal resources through participation, collective action, and sound decision-making.

The process is facilitated by activities that promote community participation:

- ♦ *Community Organizing.* This process helps to “upskill” and empower the community so that they become capable of managing and protecting their coastal resources.
- ♦ *Information, Education and Communication (IEC).* This is ideally a transformative and normative process built around those activities designed to help create an environment conducive to the transformation of social norms, a crucial step to changing individual behavior in favor of the objectives of CRM. It is focused on building a constituency for CRM, a critical mass – 10%-30% of the population – that is environmentally literate, imbued with environmental ethics, and prone to environmental advocacy and action.
- ♦ *Multi-sectoral Collaboration/Partnerships.* This process can help create an environment that is supportive of the principles of CRM, foster dialogue and understanding among various sectors and bring them to a consensus on certain issues and resolutions related to a particular resource or the coastal environment as a whole, build on the unique strengths of key players in CRM, and mobilize resources and funding for CRM implementation.



We compiled all the questions generated during the CRLCs and developed answers to these “Commonly Asked Questions.” As a result, we learned that many LGUs were either (1) unaware of their primary mandate to manage municipal waters, (2) still assigned primary management responsibility to the national government, or (3) viewed CRM as an optional activity of the local government. These observations formed the basis for promoting CRM as a basic service of the local government. The questions also served as an invaluable input to CRMP’s national policy component, focusing our attention on explaining the existing national legal and jurisdictional framework for CRM with the goal of catalyzing local implementation.

Inevitably, our priority was to build local capabilities for CRM, both by promoting a policy environment that

helped strengthen the LGUs’ mandate, and through direct interventions such as training and technical assistance designed to empower the local government and community for CRM. Generally, the Participatory Coastal Resource Assessment (PCRA) served as take-off point for local implementation.

Resource assessment is accomplished primarily to facilitate the numerous decisions that must be made in planning and implementing successful CRM. It involves gathering and analyzing environmental, ecological, social and economic information about the management area. In CRM, it is most useful when the information collected and analyzed helps managers to understand the past, present and potential usefulness of coastal resources, and identifies limits and opportunities for coastal resources to contribute to environmentally sustainable economic

development in coastal areas. (Walters, *et al.* 1998)

PCRA focuses on resource assessment from the perspective of local coastal users. By using this approach to resource assessment in addition to traditional scientific methods, we were able to identify not only the coastal resources, issues and problems, but also

View from the coast

CRMP continues to train us. We have already taken a number of measures to protect our coastal resources, such as warning people against the use of cyanide for catching fish, and regulating the use of fine mesh nets.

—Barangay Chairman, Negros Oriental
Focus Group Discussion, CRMP
August 6, 1999

lies also in the compilation and analysis of the information it provides. (Walters, *et al.* 1998)

Using multi-level interventions, we provided training through existing government agencies (DA-BFAR's RFTC, DENR's Coastal Environmental Program (CEP), etc.) or directly to LGUs. Our

training packages include training in integrated coastal management (ICM), PCRA, ICM planning, mangrove management, establishment of marine protected areas, enterprise development, and MCD.

CRMP assisted in the collection of coastal area data through the PCRA and initial data management, but the LGUs were encouraged to gradually take on the task of gathering and managing these data. For the most part, CRMP limited its role to that of a facilitator, providing guidance as needed in order for the community to make an informed decision, but generally allowing the stakeholders themselves to generate and carry out their own ideas. Decision-making was participatory, and interventions were demand- and issue-driven, guided only by general directions and strategies, and not set by any formula. The consequence was that the speed at which Project activities could be implemented differed from community to community, depending on each community's level of awareness and acceptance of, as well as their perceived need and absorptive capacity for, the technology and philosophy of CRM.

the key players in, and the strengths and opportunities for CRM in our management areas. It also moved us closer to one of our primary goals, which is to institutionalize CRM as a basic function and service of government at the local level. Through PCRA and other training programs that emphasize the technology of participation, we have set into motion the process of developing in the individual LGUs a high sense of ownership for the CRM process and its outcomes.

One of the most important outcomes of PCRA is the coastal area profile, a document which presents the results of PCRA field methods in ways that will assist CRM planning decisions. The profile provides a benchmark for planning, as well as baselines for subsequent monitoring and evaluation of CRM activities. The basic descriptive information provided by profiles is useful, but the value of a good profile

View from the coast

The job of our fish wardens is very difficult. They've had training, but it's of little use to them because they have no patrol boat. Suppose you have to arrest an illegal fisher in the sea and you have no boat, what will you do, swim?

—Hilconida Carcallas,
Bonbon, Clarin, Bohol
Focus Group Discussion, CRMP
August 23, 1999

Recognizing that institutionalization is inherently a long drawn out process and that CRM involves changes that promise few immediate benefits to coastal stakeholders, we embarked on an approach anchored on environment-friendly, economically driven alternatives that allowed both regulators (local



Fishers join mapping exercise during PCRA in San Vicente, Palawan.

Arquiza/Bernalor 1997

government) and resource users to realize in the short and medium term returns from their investment in CRM. These alternatives include mariculture development, community-based ecotourism, municipal water use zoning, community-based mangrove management, and licensing and fees. (Flores, 1999b)

Technical-assistance type projects such as CRMP generally are not designed to provide direct commodity and financial assistance to beneficiaries. This initially proved to be a handicap, as economic barriers often got in the way of our effort to promote sustainable behavior. Where the target specific behavior—for example, reduce fishing effort—could have a substantial impact on livelihood, we recognized early on that change could only be attempted with at least a promise of economic assistance to resource users. This would be a major challenge for any project with no built-in credit facility for affected resource users, especially where the target of behavior change are collateral-poor marginal fishers with no access to land or capital, as is the case in most areas in the Philippines. In many cases, the success of a CRM program

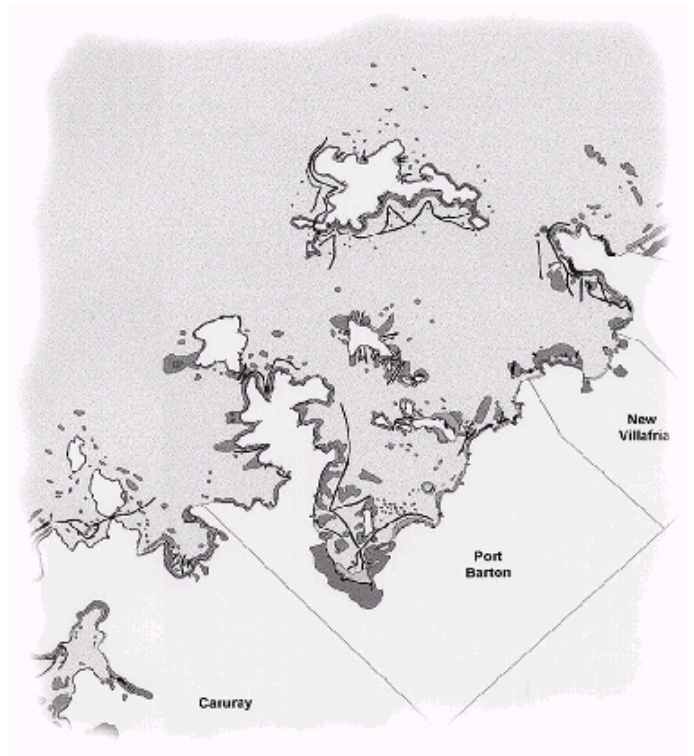


Fig. 4.2. Sample map produced through PCRA (Walters et al. 1998)

PCRA Handbook

Habitat Management concerns	Polson (Mangrove)	Apilaya (Seaside)	Hiboon (Saltflat)	Damayan (Seagrass bed)	Bohara (Sea/strand)	Isala (Deep water)
Major fish or invertebrate (aquatic resources)	shrimp, fish, shell, mollusk	seafood, shell, shrimp (mangrove-pond), pompano (Pomponus), mung (Mungus), ngip (Ngip), mullus (Mullus)	hermit crab, tolong (sea urchin), sea slug, sea cucumber, shell, shrimp (hermit)	seaweeds, fish + shrimp, goni, gonat, squid, banyaw-banyaw, bantol	sea turtles, dugite (seafood), shell, mangrove (banyaw), bantol (sea cucumber)	sea shrimp
Major using (fish or invertebrate) (type of habitat, opportunities)	singleton (fish), banyaw (shell for house), pompano (sea cucumber), shrimp (firewood)	harvest (shell above, goni ng banyaw, etc.) (making mats, etc.) (sea products, pond/corral shingles, etc.)	salvador (sea cucumber, shell)	harvest and sell (above)	harvest and sell (above)	harvest and sell (above, fish (sea) mats with compressor (not recommended))
Migrational (problems, issues)	salvador (mangrove) cutting is illegal, etc. (cutting the mangrove)	using mung (shrimp) coconut (shell)	none	more common disturbance of pond (gill net), bantol (shrimp)	sodium cyanide fishing, fish fishing, fish/generous (not used to catch fish), tagging (spooned pond)	trawling, local fishing, sodium cyanide fishing, fish (spooned) (not used to catch fish), tagging (spooned pond)

Fig. 4.3. Sample diagram produced through PCRA (Walters et al. 1998)

Encouraging feedback through participatory coastal resource assessment

A profile should be produced using a process that facilitates feedback from local resource users.

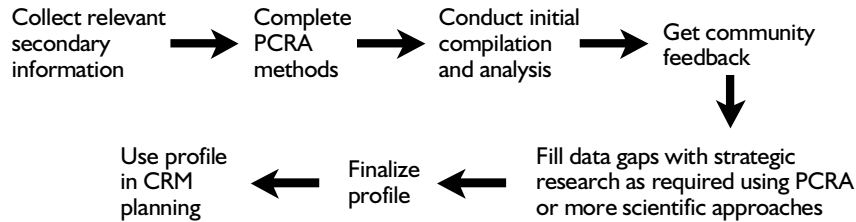
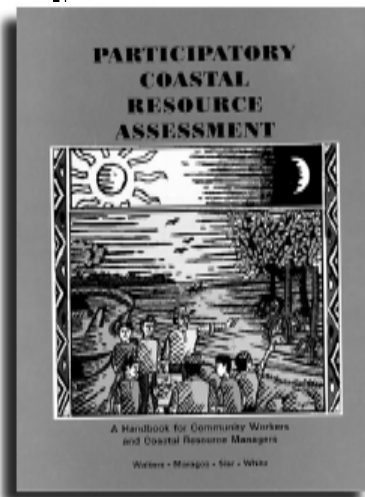


Fig. 4.4. The coastal area profiling process (Walters et al., 1998)



A good general procedure is to conduct a preliminary analysis of the PCRA results and produce a draft profile for community review, feedback, verification and correction. In an appropriate setting with community members, the main points and findings of the draft profile can be presented and reviewed. It is helpful to explain the analyses of findings concerning constraints and opportunities, since fishers can validate or question many of the basic assumptions. Once fishers have validated the findings of the field assessment activities and the subsequent analysis, local feedback can then be taken into consideration in producing the final version of the profile.

Using the finalized profile in CRM planning completes the process of making PCRA useful in CRM. This is when local feedback can help, since local resource users are more likely to consider in their planning decisions information that they helped generate than information that comes from outside sources. If other stakeholders have also had significant input, a profile can serve as the common reference for all involved in planning. If all stakeholders feel their knowledge and opinions are considered, the profile can also help catalyze the planning process.

(Walters, et al., 1998)

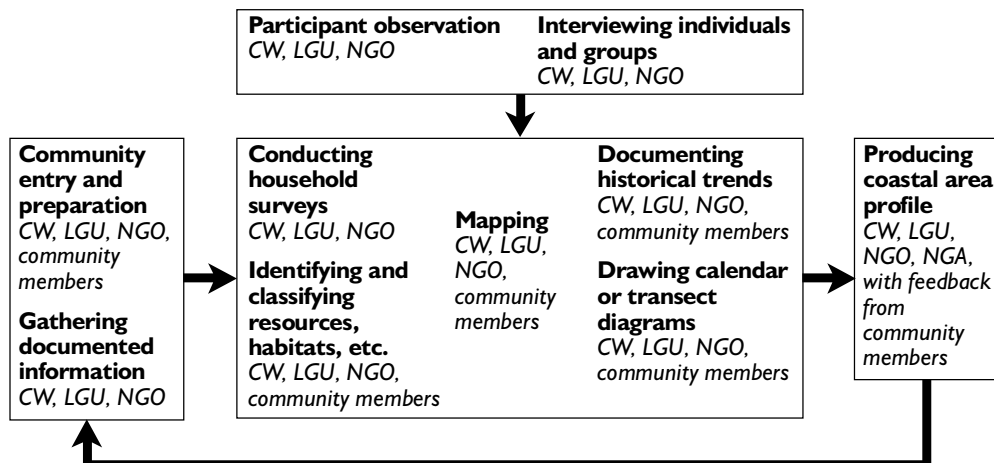


Fig. 4.5. Basic PCRA activities (Walters et al., 1998)

**A participatory coastal resource assessment experience
(San Vicente, Palawan)**

The first CRMP Learning Area to complete its coastal area profile was San Vicente, Palawan. In a departure from the standard format for documents of its kind, the San Vicente profile was in parts written and illustrated in a storybook style reflecting the mood and tenor of the community's PCRA experience.

“A typical day for us started with a boat ride at 8 a.m. to our destination, where we looked for our contact persons and scouted for a suitable venue. We quickly learned to be very flexible about the venue, which could be anywhere from a chapel to someone's yard in front of the beach. Before we could start the PCRA process, we usually had to wait until the fishers arrived from the sea, sold their catch, and had breakfast. Three basic activities were undertaken: resource mapping, group interviews, and habitat assessment.”

“At first we were a bit apprehensive that participants would not be willing to reveal sensitive information, such as the location of coral reefs, which amounted to intellectual property for some of them. But we experienced very few occasions when the fishers showed reluctance in putting everything they knew on the map. In general, the level of participation was very high, resulting in quality information.”

*Rhythm of the Sea: Coastal Environmental Profile of
San Vicente, Palawan (Arquiza, 1999)*

is dependent on a carefully planned and managed economic development program which reduces human impact on the environment. Often, CRM requires resource users to withdraw from using a particular resource to conserve that resource or allow time for regeneration and ultimately greater and more sustainable yields. For those to whom the resource in question appears to be the only source of living available, short-term needs will always come before the promise of long-term gains—unless alternative economic opportunities become available.

Our response was to create commodity- or service-specific enterprises that provide opportunities for self-employment and generation of surplus capital to community members as well as promote the sustainability of resources. A key component of our enterprise development strategy was to form and strengthen community organizations and “sell” them to lending institutions and the corporate sector as “bankable” entities engaged in producing marketable products and services. In this regard, two promising areas of development emerged: community-based ecotourism and mariculture. Besides providing technical assistance in the development

of products and services, we also brokered a number of successful business partnerships between community beneficiaries (as commodity and service providers), lending organizations (as credit suppliers) and the corporate sector (as wholesale buyers).

Several developments came up in the national scene that affected local implementation, sometimes adversely but on the whole for the better. In 1998, the Philippine Fisheries Code was promulgated, giving priority to municipal fishers in the preferential use of municipal waters, a policy that would be operationalized through the creation of FARMCs in coastal municipalities and cities. Despite some initial confusion about how the FARMCs would operate *vis a vis* the LGUs, this policy affirmed and thus generally facilitated the CRMP Learning Area LGUs' acceptance of the Project's participatory approach to CRM. At the same time, consultations conducted by CRMP on the Code generated feedback that revealed a need for the national government to clarify certain provisions of the Code, such as those pertaining to active and passive fishing gears and municipal water delineation.

Benefits of participatory coastal resource assessment

1. Important information, such as local knowledge of resource locations, that would otherwise not be obtained and considered using traditional scientific approaches 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.
4. PCRA demonstrates the relevance of the information provided by the resource users and shows how the information is used for management needs.
5. PCRA helps empower local fishers and other resource users to productively participate in and benefit from CRM projects.

(Walters, et al, 1998)

Also in 1998, the campaign leading up to the general elections caused a slowdown in Project implementation, as many incumbents seeking reelection opted to downplay CRM in favor of more “popular” issues. The elections resulted in a change of administration in many areas, with more than 70% of incoming mayors serving their first term of office. They also underscored the need for institutionalization of CRM. In some cases, as a consequence of the election results, we had to backtrack several steps to secure the support of the newly elected officials for draft ordinances, budgets and operational plans already approved in principle by previous officials.

Another crucial development was the approval in December 1998 of the final Results Framework and indicators for the Project (*Chapter 3*). In line with this Framework and its corresponding indicators, we focused much of our effort in 1999 on defining priority activities for implementation, emphasizing local results through the following measures:

- ◆ LGUs allocating budget and resources to support CRM

- ◆ Participatory CRM plans at municipal and Learning Area levels developed and implemented
- ◆ Appropriate ordinances by LGUs passed and enforced, *barangay* (village) and municipal (or city) resource management organizations (FARMCs and others) functional
- ◆ An office designated for and personnel trained and functional in CRM
- ◆ Increased enterprise opportunities in place
- ◆ Marine sanctuaries functional

With these six measures instituted, there would be a much greater chance that CRM would be sustained at the local level.



A fisher in Olango, Cebu finds alternative livelihood in seaweed farming.

View from the coast

People say, “We do whatever we have to do, so we can eat today.” But what about their future? And their children’s future? What will happen to them tomorrow if they continue what they are doing today? We’re already old, we are not too concerned about ourselves. But our young people, we should worry about them. That’s why we have fish sanctuaries. Fish sanctuaries are a way to protect our coastal resources so there’s enough left for future generations.

—Restituto Ampan, Glan, Sarangani
Focus Group Discussion, CRMP,
August 12, 1999

Pro-CRM policies in the Philippine Fisheries Code of 1998

The Philippine Fisheries Code of 1998 (Republic Act 8550) repealed Fisheries Decree of 1975 (Presidential Decree 704). Compared to the decree, the Code is more consistent with the provisions of the Constitution and offers hope for a more pro-municipal fishers, pro-local autonomy and pro-CRM law. The overriding policies embodied in the Code are as follows:

1. Food security as the primary goal and consideration in the utilization, management and conservation of coastal and fishery resources.
2. Limiting access to fishery resources for the exclusive use and enjoyment of Filipino citizens.
3. Rational and sustainable development, management and conservation of coastal and fishery resources.
4. Protection of the rights of fishers, especially the coastal communities, with priority given to municipal fishers in the preferential use of municipal waters. To operationalize this policy, coastal municipalities and cities are mandated to organize FARMC.
5. Management of coastal and fishery resources along the concept and principles of ICM.

Out of the shadows

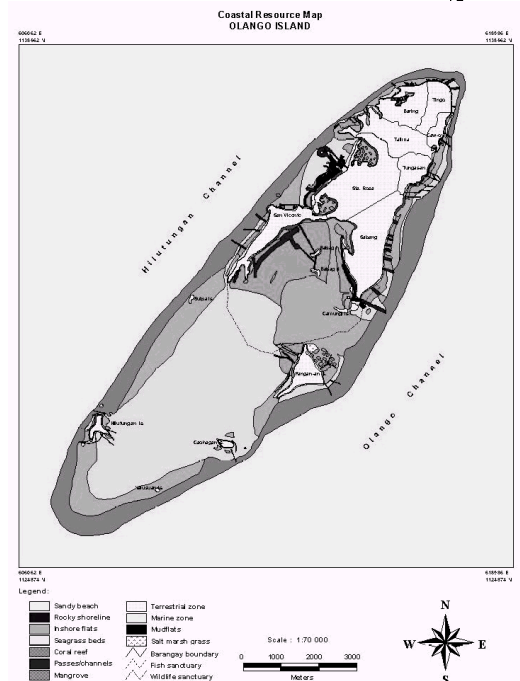
(The Olango Learning Area experience)

The Olango group of islands in Lapu-Lapu City paints a typical picture of the Philippines' numerous small island communities: low-income, densely populated and groaning under the strain of ever-increasing pressure on its resources. The area has 20,000 human residents packed on 1,014 hectares of land. The economy is heavily dependent on fisheries. Of the estimated 4,000 households, 75% are engaged in fishing or related livelihood activities based on the extraction of coastal resources. The fisheries around the island have long been depleted. According to the Olango fishers themselves, average daily fish catch dropped from about 20 kg per fisher in 1960 to less than 2 kg today.

Two reasons are often cited for such decline: increased population pressure and the use of destructive fishing practices. Blast fishing is reported to be rampant in the area, and a thriving aquarium fish trade has made compressor-aided cyanide fishing the preferred method of catching fish. Indeed, a study conducted to assess threats and prospects in the area revealed that the residents themselves pose the greatest threat to the fragile ecosystem that remains their single biggest source of livelihood.

Development has long been knocking on Olango's door. The main island is only 5 kms away – a 20-minute boat ride – from Mactan, a major tourist destination and industrial zone in Cebu. Such proximity to a highly developed (some say overdeveloped) tourism area ensures its place as the next "frontier" of sorts. Already, resort facilities have risen on a few of its surrounding islets – unfortunately, without any apparent tangible benefits to residents. Even now, the island lacks basic infrastructure such as water supply and waste disposal systems.

On the whole, local communities feel they have not benefited from tourism development, even when this happens right in their own backyard. Olango's most outstanding feature is the Olango Island Wildlife Sanctuary (OIWS), an internationally recognized preserve for migratory birds touted as being potentially beneficial to the residents. But, for much of the sanctuary's existence, residents assert they have not enjoyed a single benefit from the sanctuary. Fisherfolk used to traverse the area to reach their fishing grounds or to glean; now it is off-limits to fishing activities.



There is no question that the Philippines needs viable parks and sanctuaries to preserve its rich biodiversity, and the significance of Olango Island as a critical habitat for migratory and resident bird populations cannot be dismissed. Clearly, a compromise between the needs of the residents and the necessity to protect this unique and environmentally sensitive area must be sought.

In the last few years, through the efforts of CRMP and its partners, Olango has seen the beginnings of CRM, which is now starting to take hold. Different groups are engaged in CRM efforts to help address the issues plaguing Olango and provide long-term, viable solutions. These groups include the Protected Areas Management Board (PAMB), Save Nature Society (SNS), University of San Carlos, International MarineLife Alliance-Philippines (IMA), Department of Education, Culture and Sports (DECS), Department of Tourism (DOT), Department of Health (DOH), DA-BFAR, Philippine Navy, DENR-Community Environment and Natural Resources Office (CENRO), DENR-Protected Areas and Wildlife Division (PAWD), and the governments of Cordova and Lapu-lapu City.

At the end of 1997, a team of trainers and community development workers from IMA entered the community to teach fishers, especially cyanide and blast fishers, alternative methods of catching fish. Some 300 ornamental fish collectors have been identified and trained in the use of the barrier net method and hook-and-line techniques.

An Olango Synergy Group has been created, with members from different sectors, including the LGU, DENR, DA-BFAR, CRMP, NGOs, the academe, and various church and youth groups. These members share information to prevent overlapping of activities and determine the best plan of action for development in Olango.

To ensure community involvement in the process, CRMP employs participatory methods, allowing the local community to be actively involved in assessing their own resources and looking at ways to better manage these resources. More than 100 Olango residents participated in on-site resource assessment, surveying mangroves, seagrass beds and coral reefs, as well as conducting interviews. They recorded their findings and even drew detailed maps of their respective *barangays*, thus providing some baseline information necessary for planning and future resource monitoring and assessment. This has enabled the residents themselves to evaluate CRM issues and constraints in their community.

Because many of Olango's resource problems stem largely from economic need, enterprise development is a key element in Olango's CRM plan. By developing enterprises that are site-specific and commodity-specific, we hope to enhance the way local residents use their coastal resources in strategically positioned communities while promoting environmental sustainability. These enterprises include ecotourism development in two of Olango's unique and critical coastal environments: the OIWS and the nearby Gilutongan Marine Sanctuary at Gilutongan Island, Cordova. Seaweed farms have also been planted at Sabang and Gilutongan, with fishers, the youth and women identified as beneficiaries.

There have been initial successes. Residents are heartened by the interest shown by the tourism industry in the "Olango Birds and Seascape Tour" that they themselves help organize. Once known only to naturalists and avid bird watchers, Olango has become a favorite subject of print and broadcast journalists for environmental features, as well a mainstream ecotourism destination. To the islanders, every word of thanks and appreciation from visitors has served not only to boost their confidence in their capability to manage their own tourism enterprise, but also as an affirmation of the need to protect the unique, globally significant, natural treasures in their midst.

(adapted from *Parras, et al, 1998*)

Expert opinion. "I've only been here three days, I've only been to one place, which is Olango, an island off Cebu. But it was so interesting because that was a very good example of a very well-developed and well-thought-out marine resource [ecotourism project]. It has shorebirds. It's a day trip within a protected zone, an internationally recognized protected place. It's like a refuge for migratory birds. Very nice, and there's a village nearby. There's a combination of the wetlands, where the tourists are and the underwater park, most of which is well-protected, and then a little village right in between. You learn about it as you go. The villagers are deeply involved in this, in giving you the experience. They come and they pick you up in their paddlers, and you eat there; they give you a nice example of how they go about cooking their food. We got some demonstrations on how they make cassava bread, and they also have their local doughnuts. And then we went to the bird-watching area in their boats, had lunch, and then went to the marine area for some snorkeling. It's a very lovely, lovely place." – **Megan Epler Wood**, Ecotourism Society Worldwide President, *The Philippine Star*, 11.07.99

A timely change of heart (Lessons from Port Barton, San Vicente, Palawan)

Our Learning Area in San Vicente covers 10 barangays spread out over 82,057 hectares, including 24 islands and islets, and has a coastline of 120 km. Port Barton, the biggest *barangay* in terms of land area (22,779.47 hectares), is our pilot area for CRM. It is one of Palawan's better known tourist destinations, and a rival of San Vicente Poblacion as a hub of commercial activity in the municipality. Until 1980, it was the site of a big logging concession operated by Jardine Davies. When the logging operation shut down, the community fell into hard times, and many residents turned to fishing. Today, fishing is the main source of income for 65% of the local population.

In some ways, Port Barton and the rest of San Vicente have made significant achievements in coastal marine conservation. The municipality is one of the pioneers in the implementation of the Strategic Environmental Plan for Palawan, or SEP. Since 1993, it has protected more than 1,500 hectares of mangroves and identified several fish sanctuaries, including 123 hectares in Port Barton.

But when CRMP started in Port Barton in 1997, it found a community that was openly skeptical of its intentions and ability to "deliver the goods." Past experiences have made residents of Port Barton distrustful of government projects, explains Tess Tatoy, a long-time resident and community leader. "I can't say I blame them. I can't recall how many training workshops we attended, and how many baskets and placemats we made. Nothing came out of it."



"But I don't blame the government either," she hastens to add. "Their intention was good. They saw how much our community needed help, and they did the best they could. But we were not ready, and the market was not ready."

For two years, our Learning Area staff cajoled and reasoned with the community, insisting on their participation in the CRM process, from resource assessment through planning to implementation. And one by one, the various groups were won over.

"It was difficult in the beginning, but through sheer hard work we were able to convince them," says Bantay Dagat chairman Edmundante Tayco. Mr. Tayco was the chairman of the technical working group that CRMP convened in 1997.

Many agree that the turning point came in 1999, when all of the key CRM players finally began to work together to legislate the establishment of the Port Barton Marine Park. The *barangay* council has drafted an action plan and the prescribed resolution. Also, Barangay Captain Romeo Garganta Sr. committed 20% of Port Barton's development fund as initial operational budget for the Marine Park. An alternative enterprise – seaweed farming – has been identified, and a pilot farm has been established involving about a dozen cooperators.

For all intents and purposes, legislation will be a mere formality. Already, Mayor Alejandro Villapando has ordered the establishment of two outposts to prevent unauthorized entry and “illegal” activities in the Marine Park. The municipality has a Php500,000 annual CRM budget and assigned three personnel to work in CRM.

The Mayor admits his municipality still faces many challenges. “We still have to totally stamp out illegal fishing, and we have yet to prevent the encroachment of commercial fishing boats into our municipal waters. Our people must fully support and participate in CRM because they have much to gain from it.”

For Mrs. Tatoy, however, the community’s newfound faith in government projects could not have come a moment sooner. “We needed the social preparation,” she says. “I think this time we are ready for both the blessing and responsibility that come with CRM.”

Up to the challenge *CRMP extends reach through LGU volunteers*

Of the 300 LGU officials, NGA and NGO representatives that CRMP has trained, a number now serve in our pool of volunteer trainers. One of these volunteers is Gerardo Cuadrasal, Jr., a councilor of Calape, Bohol, who took our 10-day training course in ICM in Panglao in November 1998.

Councilor Cuadrasal’s involvement in our training program started in April 1999. “We were organizing a short course on ICM in Calape and couldn’t find a resource person,” he relates. “I figured, ‘We completed a trainor’s training, why don’t we use what we’ve learned?’”

His first assignment was as a resource person on coastal leadership. Since then he has been giving lectures on other topics as well. Because his platform of office is environment and youth development, he is perhaps a natural speaker on CRM. He started his environmental advocacy work in the early 1990s, when he responded to a call for volunteers from a newspaper column. But, he insists, “I speak not as an expert, but as an advocate.”



Councilor Cuadrasal and other LGU volunteers like him do have one edge over the ‘experts’. “I share not only what I know but what I have experienced as an LGU official involved in CRM. I share practical experiences, actual examples from the field. I guess if it’s something that you do you can speak about it with authority.”

LGUs should allocate a budget for human resource development for CRM, he says. “Ultimately, it’s people who make the difference, not the position or the institution.”

LGU volunteers are CRMP’s “extenders” – they help us bring our training programs to areas that we are not able to serve because of resource constraints. More significantly, they are our best chance for sustaining CRMP’s effort to develop a new breed of leaders willing and able to take on the challenge of institutionalizing CRM as a basic service of local government.



CRMP strategies for agenda setting

- ◆ *Tapping the LMP as an “authentic” voice and advocate for CRM*
- ◆ *Use of mass media*
- ◆ *Adaptation of CRM Messages to “hit the gut” of targeted audiences*
- ◆ *Careful “packaging” of CRM as a mainstream, not an “activist”, cause through information, education and communication products and activities that were “mainstream” in look and content*
- ◆ *Developing a broad base of support for coastal resource management initiatives by cultivating people’s shared “set of beliefs” through the I Love the Ocean Movement*
- ◆ *Conduct of strategic information, education and communication activities that creatively integrate the four development communication approaches/modes: development support communication, social marketing, community mobilization, and institutionalization/advocacy*
- ◆ *Cultivation of alliances and synergy with business and other sectors including church-based groups, professional, civic and environmental organizations, people’s organizations, the Philippine Navy, Philippine Coast Guard, the Boy Scouts and Girl Scouts of the Philippines and others to initiate their own IEC activities on CRM*
- ◆ *Leveraging of project resources and counterpart schemes*
- ◆ *Lobbying for Presidential Proclamation Declaring May and every May thereafter as the Month of the Ocean in the Philippines*

(Smith, et al, 1999)

chapter 5

Into the Mainstream: Promoting CRM on the national social agenda

The need for the adoption of CRM at both the national and local levels prompted CRMP to formulate a framework that would take into account the complexities of environment programs. Early in the Project, we faced some difficulty in the identification of specific sets of intermediary environmental behaviors that would lead to CRM adoption. There were just too many behaviors and too many crosscutting sectors for us to deal with. In view of this, while behavioral change remains the ultimate goal, we have adopted a framework (dubbed as the “transformational communication” process) that is normative and “agenda-setting” in its approach. (Smith, *et al.* 1999)

The framework integrates the major communication modes to development undertakings (social marketing; social mobilization; information, education and communication (IEC); and development support communication) and promotes institutional (network) development and capacity building (Fig. 5.1). It recognizes the role of leadership and the critical mass and incorporates the elements of literacy, ethics, action and advocacy as central to sustained social change (Fig. 5.2). It aims not just for behavioral targets but for the initiation of social processes as well. Such processes in turn would have their own momentum, thereby triggering large-scale social transformation.

The paradigm thus moves away from the more conventional linear approaches to one that is more systems thinking. It calls for approaches to be synergy-driven, multi-level, inclusive, and strategic, identifying pressure points or nodes within these social processes that would lead to the greatest impact at the shortest possible time. (Flor and Smith, 1998)

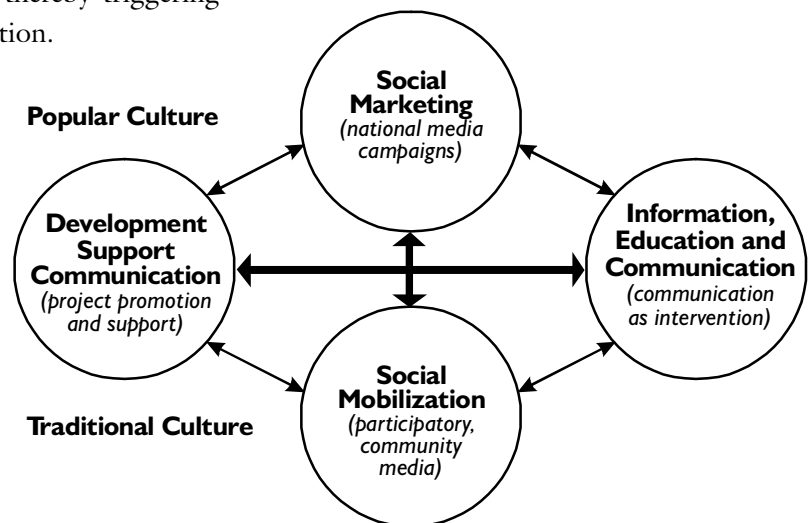


Fig. 5.1. CRMP operational framework for national agenda-setting and mainstreaming (Smith et al. 1999)

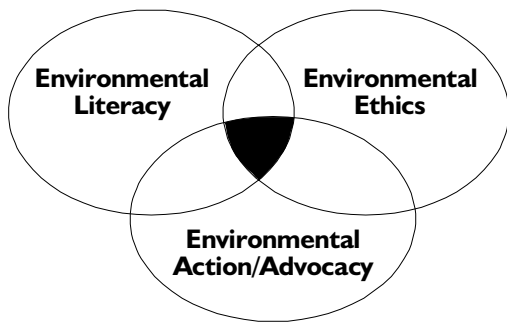


Fig. 5.2. CRMP substantive framework for national agenda-setting and mainstreaming (Smith et al. 1999)

CRMP's framework design is based on the following considerations:

- 1) **Too many players and stakeholders.** CRM is a complex strategy involving not only many sectors of society but also various types of resources that need to be conserved and/or utilized in a sustainable fashion. It means "trying to influence the behavior of groups and individuals whose activities contribute to the problem. [These groups and individuals] include large-scale hotel builders, industrialists, miners, aquaculture operators, as well as the thousands of villagers who clear mangroves to make charcoal or create farmland, the fishermen who overfish and others whose small, individual actions can have large, cumulative impacts. In most countries, the personnel in other agencies are among those whose behavior must be modified if coastal problems are to be mitigated or development objectives are to be achieved." (Lowry, in T.E. Chua and Pauly, 1989)
- 2) **Lack of immediate benefits.** The benefits offered by CRM are long-term benefits. Unlike health, population and agricultural programs, environmental programs can offer no immediate benefit in exchange for dropping environmentally unfriendly behaviors. Between earning a living and environmental considerations, the former would have more takers than the latter, anytime. Moreover, health, population and agricultural benefits are much easier to equate with behavioral

change in a person than environmental benefits. A change in one person's behavior, by itself, can improve at least that person's health, or his or her income, or his or her family's well-being, but it is unlikely to have any significant impact on the environment.

- 3) **Negative rewards from behavioral change.** Although changing fisherfolks' behaviors – such as stopping the use of dynamite or cyanide in fishing – is in everyone's best interest in the very long term, it often has instant negative rewards for the fishers (fishing puts food on the table and money in the pocket). It is not a coincidence that the population sectors with the highest poverty are at the two ends of the watershed: the forest folk and the coastal folk, both highly resource-dependent populations with very little alternatives in the form of secure employment. It is possible to make minor modifications in individual behaviors. For example, persuading fishers to change the size of their nets, to fish seasonally, to keep only fish of a particular size or to limit fishing to a well-defined area to allow other habitats to restore themselves may rely on voluntary changes in behavior. The "bigger" behavioral changes, however, such as stopping dynamite and/or cyanide fishing, are largely involuntary, triggered by regulatory and enforcement measures.
- 4) **Need for regulation and law enforcement.** Regulatory and enforcement activities can mandate involuntary behavioral change and, in the short run, may be the most effective way to proceed. When consistently done, it can effect large-scale involuntary behavioral change to turn around the resource. There are social and financial costs to enforcement, however, and sustainability is a problem.
- 5) **Complexity of environmental programs.** With its array of biological, geophysical, institutional and socio-economic concerns, environmental programs possess a higher order of complexity

than agricultural, population and health programs. Environmental programs therefore require a set of higher-order interventions than traditionally practiced.

- 6) **Too many behaviors to deal with.** The behavioral approach works well in health, population and agricultural programs, but it falls short of expectations when applied to the environment, where one must contend with many related behaviors and crosscutting sectors. Applying specific interventions for each behavior may not be realistic and focusing on a given few may be fragmented and ineffective from a holistic perspective.
- 7) **Need for community involvement.** In the context of the environment, individuals and groups are not autonomous enough to undertake “action” when many limitations and constraints circumscribe them. Tenurial disputes, policy conflicts among and between national agencies and local government, as well as “political squabbles”, are real issues that impinge on the “decision-making” and environmental activism of communities.
- 8) **Political and social dimension of environmental problems.** In the Philippine context, focusing on behavior as a strategy may detract from the structural and systemic weaknesses that largely contribute to the state of Philippine natural resources. Environmental issues are not just “individual” issues involving individual behavioral change, but collective and political problems requiring collective initiatives and political solutions. For example, the issue of dynamite fishing is best understood not just in behavioral terms but also in the context of the social and political situations in which people live.
- 9) **Need for a pragmatic approach.** It may be more pragmatic to focus on “agenda setting” and a more normative approach to the environment. Such an approach may be akin to a religious movement wherein the elements of literacy,

ethics, action and advocacy are key to the movement’s adoption and sustainability. These elements reinforce one another and can lead to sustained and consistent changes in social norms and consequently in behavior.

The concept of agenda-setting and mainstreaming CRM on the Philippine national agenda was born out of the desire to help “jumpstart” the process of transformation. CRM is not only a new issue but also challenges the *status quo* of Philippine fisheries development policies and practices. CRM as a sustainable development strategy has historically ranked low in the priorities of national and local governments, so effort must be undertaken to move it quickly into the national and local agenda. Viewed from this angle, agenda setting must be the first phase of the “transformational communication” process. Indeed, from a policy perspective, it may be said that agenda setting was one of the most important aspects of our job in the first three-and-a-half years of implementation of CRMP.



CRM affects and is affected by many different types of resource use and other activities in and around the coastal zone.

In the beginning, national level awareness lagged behind local level awareness in terms of marine and coastal problems, so our immediate objective was to “create a buzz” around marine and coastal issues and engage the general public to help transform perception of these issues into urgent problems requiring national attention and solutions. Given this, our agenda-setting strategy at the national level included the extensive use of mass media, conduct of special events and promotional activities, partnerships with strategic institutions/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.

For maximum impact and media framing, we timed our promotional activities to coincide with international, national or local events such as the 1998 International Year of the Ocean, International Coastal Cleanup Day, Month of the Ocean, World Food Day, Fisheries Week, etc. These activities were optimized for their media-drawing potential and public participation values. Efforts were made, however, to converge national with local level activities to allow the interaction of national leaders with local leaders, and national media with local experiences. A rule of the thumb was the aggressive solicitation of mass media coverage and business sector support. While partnerships were strategic, we also emphasized IEC activities that were inclusive in nature, so that anyone and everyone who wanted to be involved were encouraged and accepted.

By cultivating alliances with the mass media, we ensured that the ventilation of marine and coastal issues and problems contributed significantly to the promotion of CRM on the national agenda. Our IEC activities were planned for their media and public participation values. In this respect, 1998, the International Year of the Ocean, was particularly fruitful for us. That year, we mounted a traveling exhibit called “Our Seas, Our Life,” which proved valuable not just for itself but also for its media drawing power. During its provincial tour, the exhibit provided opportunities for the convergence of national

and local press conferences as well as media invitational visits to CRMP Learning Areas. Such events served as take-off points for a proactive media program involving TV and radio show appearances and print media interviews. Radio-TV plugs—some jointly produced by CRMP and major broadcasting networks, others initiated by the media outfits themselves—were aired for the duration of these special events.

Media coverage was not limited to the environmental or agricultural pages of news-papers. To allow for a more in-depth treatment of stories, we targeted the lifestyle/tourism sections of the country’s major dailies. Media invitational tours to CRMP Learning Areas provided good material for such articles. In addition, CRMP was a most willing resource center for media inquiries and facilitation of media visits to other CRM sites. Our website, <http://www.oneocean.org>, also served as a good source of media material for stories on CRM.

We targeted high-rating public affairs shows patronized by policy-makers and decision-makers for appearances by spokespersons for CRM, including CRMP and environment officials, coastal mayors, and fisherfolk leaders. Our proactive stance paid off with the ripple effect witnessed in various radio and TV programs as well as editorial cartoons, columns and special features.

In 1999, as an offshoot of our agenda-setting initiatives, President Estrada issued a Presidential Proclamation declaring May as Month of the Ocean in the Philippines. Drafted with technical assistance provided by CRMP, the Proclamation opened windows of opportunities for the institutionalization of IEC activities on CRM issues by concerned and partner agencies, as it allows government agencies to allocate resources for the observance of the Month of the Ocean. The first observance of the Month of the Ocean generated tremendous print and media publicity, from stories on CRMP-supported enterprise development projects to multi-media interviews on CRM issues. Through our initiative, a discussion on marine and coastal issues was

Our Seas, Our Life: Calling attention to coastal issues

One of the most successful social marketing events organized by CRMP for the 1998 International Year of the Ocean was a traveling exhibit called “Our Seas, Our Life,” which was shown in seven Philippine cities from February 1998 to October 1999, drawing more than 1.4 million visitors. Conceived by CRMP and the National Commission on Marine Sciences (NCMS) with support from SUML, National Museum and DENR-Protected Areas and Wildlife Bureau PAWB), the exhibit was launched in Cebu City, from where it traveled to Pasig City (a commercial and business district in Metro Manila), Dumaguete City in Negros Oriental, Davao City, General Santos City, Tagbilaran City in Bohol, and Muntinlupa City in southern Metro Manila.

Our Seas, Our Life proved invaluable in calling media and public attention to coastal issues. It was also a highly effective social marketing tool, primarily by providing a forum for discussion of CRM problems and solutions among a wide range of sectors in the cities it visited.

Crucial to the success of Our Seas, Our Life was the participatory way by which it was organized. Whether held in the polished interiors of a mall in Pasig City or the public market of Dumaguete City, the exhibit became an occasion to “connect” people and organizations from many sectors and involve them in the advocacy work for CRM. To this end, the preparations leading up to the exhibit were as important as the exhibit itself. Various groups were encouraged to participate and were recognized as co-organizers, so that they felt a sense of pride in the exhibit’s success. In many areas, this opened the way for closer cooperation among the different groups involved in CRM promotion, building partnerships that endure to this day.

Using their experience in organizing Our Seas, Our Life in Davao City, DENR-Region 11 has designed a traveling “mini-Ocean-exhibit”, which has already toured a number of places in the region. True to the original, this exhibit is a product of a multi-sectoral effort, and has become a venue for creating and building partnerships for CRM.

The original exhibit, meanwhile, was split up into two components. The specimen displays returned “home” – most to SUML, the rest to the National Museum and PAWB, where they originally came from. The panel exhibit had a final mall run at the Alabang Town Center in Muntinlupa City in October 1999, an entirely private sector undertaking, managed and organized by an events organizer with advertising support from the corporate sector. It is now housed at the PAWB offices in Diliman, Quezon City.



The “Our Seas, Our Life” exhibit opens at SM City-Cebu in February 1998, focusing the spotlight on CRM and marine conservation issues.

included in the President's nationwide radio and TV program *Jeep ni Erap* the equivalent of a Presidential Press Conference closely monitored by national and foreign media, legislators, cabinet secretaries and policy makers.

It was also in 1999 that we put together the still much talked about Conference of Coastal Municipalities of the Philippines, which achieved many firsts for CRM in the Philippines. The Conference was an offshoot of a strategic partnership initiated in 1997 by CRMP with the LMP. The partnership started the process for the prioritization of CRM in the local agenda of the country's more than 800 coastal mayors, which was affirmed through a 15-

point resolution formulated and approved by the coastal mayors at the Conference of Coastal Municipalities of the Philippines (Chapter 1).

To get the attention of policy-makers and decision-makers, we looked for an appropriate opportunity to frame proposed messages against existing agenda. Two opportunities presented themselves, which allowed us to find a niche in our efforts to mainstream CRM in the existing national programs of government. One was President Estrada's Food Security and Poverty Eradication Program, and the other, the Omnibus Amendment to the Local Government Code.

Awards and accolades

Because CRM challenges the *status quo*, it is vulnerable to being marginalized as a cause and could easily be viewed or perceived as an "activist" strategy and movement. On the one hand, given the history of political activism in the Philippines, where some elements of distrust at varying levels characterize the relationship between government and "activist" groups, such perception would be a major deterrent to promoting CRM on the national agenda. On the other hand, while CRMP is a Philippine government initiative, we did not want to be perceived as just another bureaucracy-oriented project.



To overcome these constraints, we packaged CRM as a mainstream cause through IEC products and activities that were mainstream in look and content. CRM messages were presented in visually arresting and compelling formats that drove home the point about the severity and urgency of the country's coastal problems. High production and content values were consistently observed, resulting in several media and public relations industry awards and citations for CRMP. These awards have contributed to our reputation among government, private sector and donor organizations as *the* source of "state-of-the-art" information on CRM (USAID Mid-term Evaluation Report, 1999). They include:

- Oscar Florendo Best Information Tool (Video), 1997 for the instructional video series on CRM, a joint production of CRMP/GreenCOM, GMA-7 and the Technology and Livelihood Resource Center (TLRC)
- Kapisanan ng mga Brodkaster sa Pilipinas (Association of Broadcasters in the Philippines) Golden Dove Award for Best Provincial Radio Drama Series for *Kapitan Barongoy*, a joint production of CRMP, DENR-Region 7, and GMA-7
- Anvil Award of Merit 1998 for the Philippine observance of the 1998 International Year of the Ocean, a joint initiative of CRMP, the UNESCO National Commission on Marine Sciences, and DENR's Coastal Environmental Program.
- *Sine'skwela* series co-produced by CRMP and ABS-CBN Foundation was an official entry of ABS CBN to the 1999 International Film and TV Festival (New York)
- Philippine Web Awards 1999 Most Outstanding Web Site for Environment for CRMP's web site, www.oneocean.org



The first celebration of May as Month of the Ocean in the Philippines is highlighted by the Conference of Coastal Municipalities of the Philippines graced by top dignitaries, such as, (from left), US Ambassador Thomas Hubbard, Philippine President Joseph Ejercito-Estrada, LMP President Mayor Jinggoy Estrada and DILG Secretary Ronaldo Puno.

The Philippines' Agriculture and Fisheries Modernization Act (AFMA) of 1997 mandates LGUs to play a central role in delivering frontline agricultural and fisheries services that could help bring about higher productivity and thus achieve food security in the country. The devolution of public resources and support services to local institutions under the management and stewardship of LGUs is an essential part of the strategy towards the country's self-sufficiency and security in food. Because AFMA is production-driven rather than resource-management-driven, CRM needed to be put in the context of food security and poverty. Such contextualization opened opportunities for CRM to be affiliated with an existing national agenda. In partnership with LMP, we organized workshops and consultations on CRM for Food Security, which allowed in-depth discussions and consultations on the issue. We also developed a series of information materials woven around the theme "Coastal Resource Management for Food Security." These materials enjoyed high recall value, with the Presidential Adviser for Food Security quoting extensively from the CRMP publication *Coastal Resource Management for Food Security* in his speech at the Conference of Coastal Municipalities.

In addition, the issue of poverty in coastal communities received programmatic attention from the National Anti-Poverty Commission (NAPC), which included a campaign against illegal fishing as one of the 10 priority key result areas of the Estrada administration's poverty eradication program. The

poverty eradication program, a major component of the Presidential *Erap para sa Mahirap* (Erap for the Poor) policy thrust is considered an anchor program of the Estrada administration.

The Omnibus Amendment to the Local Government Code provided us another opportunity to find a niche for the promotion of CRM. The idea of including municipal waters in the computation of the country's IRA was proposed originally by Governor Perpetuo B.

Ylagan of Romblon. In February 1999, we presented the same idea to the LMP, and the mayors, recognizing an advocacy position they could fully endorse, quickly responded. In May, during the Conference of Coastal Municipalities, the mayors included a proposal on additional IRA for coastal municipalities in the resolutions they submitted to the President.

The IRA is the percentage of national government revenues set aside for LGUs. It is computed based on the following formula: population – 50%; land – 25% and equal sharing – 25%. As proposed, the additional IRA for municipal waters would be performance-based and would provide coastal municipalities the much-needed infusion of external funding for CRM implementation. Such an amendment entails a lengthy legislative process and may take many years to happen. Nevertheless, with the message about the need for additional funding for the management of municipal waters receiving the



Coastal mayors express their concern about and suggest solutions to pressing coastal management issues during the Conference of Coastal Municipalities in the Philippines on May 26-28, 1999.

Tambuli: Sharing technical information on CRM

Probably the single most important venue for disseminating technical information on CRM to all levels of government and stakeholders in the Philippines is *Tambuli*. Designed and produced by CRMP for coastal management practitioners, *Tambuli* has carried articles on important issues and technical matters related to coastal management. These include:



- ♦ *Onwards to more aggressive leadership in Philippine coastal resource management.* C.A. Courtney and A.T. White (November 1996)
- ♦ *Mangrove resource decline in the Philippines: Government and community look for new solutions.* A.T. White and R.O.D. De Leon (November 1996)
- ♦ *The Central Visayas Regional Project: Lessons learned.* H.P. Calumpong (November 1996)
- ♦ *Integrated coastal management: Lessons to build on.* A.T. White (November 1996)
- ♦ *Enabling local government units to exercise their regulatory powers for coastal management.* B. Francisco (May 1997)
- ♦ *Community organizing in the Fisheries Sector Program: Lessons learned.* G.S. Abad (May 1997)
- ♦ *A common vision for sustainable coastal resource management.* C.A. Courtney, E.T. Deguit, N.Q. Melendez, and L.G. Paredes (May 1997)
- ♦ *Symbiosis between fish and fishers.* S.B. Olsen (May 1997)
- ♦ *Community-based coastal resource management, Bolinao, Philippines: An evolving partnership among academe, NGOs, and local communities.* L.T. McManus. (May 1997)
- ♦ *Participatory coastal resource assessment: San Vicente, Palawan and Sarangani take the lead.* A.T. White and D.A.D. Diamante-Fabunan (May 1997)
- ♦ *Tubbataha Reef National Marine Park: Media and management collaborate.* A.T. White (May 1997)
- ♦ *Colors of the Sea: A celebration of Philippine maritime culture and heritage.* M.D. Fortes, C.A. Courtney, and A. Sia (November 1997)
- ♦ *Transformational communication: A normative approach to environmental education.* A.G. Flor and R.P. Smith (November 1997)
- ♦ *Philippine Fisheries Code: Some features and prospects.* A. Cruz-Trinidad (November 1997)
- ♦ *Planning for integrated coastal management: What are the steps?* A.T. White (November 1997)
- ♦ *Reclaiming the Island Reefs.* L. Bolido and A.T. White (November 1997)
- ♦ *A little less 'bahala na' in Talibon, Bohol.* S.J. Green (November 1997)
- ♦ *Coastal resource management in Olango Island: Challenges and opportunities.* D.A. Parras, M.F. Portigo and A.T. White (August 1998)
- ♦ *Cleansing the seas: Strategies to combat cyanite fishing in the Indo-Pacific Region.* C.V. Barber and V.R. Pratt (August 1998)
- ♦ *The Fisheries Code of 1998: Something old, something new, something better?* A. Cruz-Trinidad (August 1998)
- ♦ *Banacon: The first mangrove community-based forestry management area in a protected area?* C.E. Yao (August 1998)
- ♦ *Enterprise alternative: Lobster farming.* (August 1998)
- ♦ *Sustainable sea farming: Some factors to consider.* C.A. Courtney (August 1998)
- ♦ *Integrated coastal management in Negros Oriental: Building on experience* J.M. Murphy, W.E. Ablong and A.T. White (May 1999)
- ♦ *Fishing and biodiversity: The complex tale of the Komodo National Park, Indonesia.* J.S. Pet and R.H. Djohani (May 1999)
- ♦ *Local government management of coastal resources: Defining the outer limits of municipal waters in the Philippines.* C.A. Courtney and K.P. Traub (May 1999)
- ♦ *Bakauan hybrid, the fourth Rhizophora species in the Philippines?* C.E. Yao (May 1999)
- ♦ *Ecotour product development.* M.M. Flores (May 1999)

attention of no less than the Chief Executive, a giant leap has been taken for CRM.

Yet another indication that the national government has begun to pay serious heed to coastal management issues is the inclusion in the Philippine Medium-Term Development Plan (1999-2004) of this strategic objective for CRM: *integrated coastal management adopted by 250 LGUs along 6,000 km of shoreline by 2004.*

That we were able to achieve some success in promoting CRM on the national agenda can be attributed to our flexibility, willingness to innovate and opportunistic attitude. Going by our experience, it does not take a budget of tremendous proportions (although a big budget certainly helps!) to cultivate the beginnings of a social transformation, if the Project is willing to enter strategic partnerships, build alliances and adopt a flexible and opportunistic attitude.

The League of Municipalities of the Philippines: An authentic voice for CRM

At first blush, Mayor Rey Roquero is an unlikely spokesperson for CRM. As mayor of Valderrama, a landlocked town in the province of Antique in central Philippines, he is a surprising advocate for a cause that is far removed from his own constituency's immediate concerns.



But as secretary-general of LMP, Mayor Roquero recognized early on that coastal issues are a complex matter of national significance, requiring a concerted effort at both the national and local levels. He was among the first LMP officials who saw the need for a national conference of coastal mayors to discuss common concerns and find solutions to coastal issues. He was also among the first mayors who took on the challenge of promoting CRM on the national agenda.

Just days before last May's Conference of Coastal Municipalities of the Philippines, Mayor Roquero was in his element, speaking in behalf of LMP, or cheering other mayors on as they made the rounds of TV and radio shows to promote the Conference. At one breakfast meeting hosted by President Estrada in Malacanang, he was an able spokesman for the CRM cause, reporting the state of the country's coastal resources to an engaged group consisting of some of the President's closest advisers.

Mayor Roquero is just one of many "voices" for CRM in the LMP. Calape (Bohol) Mayor Julius Caesar Herrera, who is vice president for operations of the League, has taken the lead in pushing for the amendment of the Local Government Code to include provisions for a supplemental internal revenue allotment computed based on the size of the municipal waters under an LGU's jurisdiction. Also active in the effort to promote CRM on the national agenda are Mayors Gaudencio Ferrer of Hermosa (Bataan), Myrna Lacanilao of Brooke's Point (Palawan), Cesar Lopez of Loon (Bohol), and Marcelo Adanza of Zamboanguita (Negros Oriental), all of whom have made CRM their personal cause.

In tapping these local chief executives as spokespersons and advocates for CRM at the national level, CRMP has found an authentic voice and a most effective pressure point for catalyzing national and local policy changes that can have far-reaching positive impacts on the way we manage and utilize our coastal resources. The active involvement of the LMP in the national agenda-setting process, the participation of 90% of coastal mayors in the first Conference of Coastal Municipalities of the Philippines, their resolutions for improved CRM (Chapter 1), and the subsequent "legitimization" and acceptance of these resolutions by President Estrada were critical perception points that helped push CRM issues into the sphere of the Philippines' national agenda setting. At the very least, this sequence of events is a classic demonstration of the transformational communication framework in action, where a "set of beliefs" is shared, affirmed, and legitimized.

Count us in

The private sector responds to the call to action for CRM

“Help, help, help!” cried actor-comedian Redford White after a dive at Dizon Reef Wall off Kaputian, Island Garden City of Samal. “The corals here are in a pretty bad shape,” he reported.

Singer Jim Paredes agreed. “I saw a lot of coral damage,” he said. “Everywhere you dive in the Philippines, you can see how badly we need to clean up. I don’t think you can swim 20 meters without seeing debris and damaged corals.”

Mr. White and Mr. Paredes are just two of the thousands of Filipinos – celebrities as well as ordinary folk – who have actively embraced the CRM cause. They are part of the I Love the Ocean Movement (ILOM), which includes more than 13,000 card-carrying members nationwide.

ILOM was initiated by CRMP in 1998, during the International Year of the Ocean, as part of its mainstreaming and agenda-setting strategy to provide a forum for the general public – at least those who are already sympathetic to environmental causes – to participate in the discussion of CRM issues and help advocate the CRM cause. Members were drawn to the CRM cause by messages carefully chosen for their “emotional appeal”. Housewives, business people, doctors, nurses, policemen, students, factory workers, scuba divers, teachers, media practitioners, priests, nuns, movie stars, artists, etc. – some with their entire families – came out through voluntary membership (for a fee of Php50 [USD1.25]) to support the cause of marine conservation and, as one of our messages put it, “to rediscover our lost maritime heritage.”

Through all this, we maintained an inclusive and a “connective” stance, welcoming everyone who cared enough to want to become part of the CRM process, and linking individuals and groups so they could work together in areas where they could be most effective.

We also deliberately pursued strategic partnerships with groups that required “low maintenance” and had the organizational capability and mindset to promote CRM. These include church-based groups; professional, civic and environmental organizations; POs; the Philippine Navy; the Philippine Coast Guard; the Boy Scouts and Girl Scouts of the Philippines; and the business sector. Recognizing that the fastest way to gain entry to the corporate sector was through the marketing door, we staged media-oriented events designed to promote CRM messages as well as allow sponsoring business corporations and private sector groups to achieve some public visibility and goodwill.

More than 60 companies from diverse industries – hotel, shipping, food and beverage, print and broadcast media, retail, garment, computer, banking, transport, oil, etc. – heeded our request for logistical support in the seven cities where the “Our Seas, Our Life” Exhibit was mounted.

Even more significant perhaps is that many of our strategic partners have adopted CRM as their institutional cause. Banco Filipino Mortgage and Savings Bank, which first got involved in the initial staging of our exhibit, has organized its own information and public awareness campaign on marine conservation. Petron Corporation, through its Foundation, has embarked on a project promoting CRM in its areas of operation. The Central Luzon Regional Council of the Girl Scouts of the Philippines has adopted our Blue Tapestry, a community arts project promoting marine conservation, as a mainstay activity for their annual Regional Family Camp.

We are counting on these partners and the thousands of ILOM members to carry on the task of promoting sustained CRM in the Philippines, whether through advocacy or by undertaking their own site- and issue-specific projects that directly enhance our coastal environment.



Local government:
Front-line stewards and the last
safety net

- ◆ *Local government units must serve as stewards of coastal resources to sustain food production and economic benefits*
- ◆ *Partnerships with private sector, financial institutions, and donor agencies must support sustainable economic development alternatives for coastal communities*
- ◆ *Multi-sectoral implementation groups must consolidate financial and technical resources in support of LGUs*



chapter 6

Inspiring Local Action: CRM as a basic service of local government

For CRM to be institutionalized and sustained, it must be recognized by LGUs as a basic service to communities. Our success in setting CRM on the national social agenda has sparked local government interest and increased demand for technical assistance in CRM. Over the past three-and-a-half years, the Project devoted at least 75% of its personnel and resources to responding to community and LGU needs for technical assistance and training in all aspects of the CRM process, including PCRA, community organization, CRM planning, and coastal law enforcement. To sustain CRM, however, at least three elements must be put in place at the local government level. These are investments in CRM, active participation by all concerned sectors, and the observance of best CRM practices. There is also a need to assist the LGU in setting up a mechanism that will ensure the delivery of CRM as a basic service to communities.

Investing in CRM

Fundamental to the growing interest in CRM is the ability of local governments to invest in managing their municipal waters. Just as in the start-up of a business, an initial capital investment is needed and a portion of future profits must be re-invested in CRM to sustain the coastal environment and its benefits. Comprehensive management is the only effective approach, as single-issue or sector interventions will always miss important contributing causes to coastal management issues. The question, at least as far as most LGUs are concerned, is whether they can afford the cost and what are the real benefits of CRM. (White and Trinidad, 1999)

Historically, fisheries and other resources have been taken from the sea at very little cost, essentially free to the resource user. The concept of investing in management to sustain economic benefits derived from coastal resources has been a relatively new concept for most municipalities. Moreover, the traditional concept of investment in resource management is investment in infrastructure, which is generally viewed as primarily a function and responsibility of the national government.

To support our argument for increased investment in CRM, we promoted the idea of assigning economic values to coastal resources based on proven models of maintaining coral reef productivity for economic benefits from fishing and tourism for small island communities, and calculated the level of investment in management and protection warranted given the value of these resources to the local users. A 1998 CRMP publication, *The Values of Coastal Resources in the Philippines*, estimated that a hypothetical municipality in the Philippines with healthy coral reef areas, some mangroves, fisheries, and coastal economic activities may derive over Php15 million in annual economic benefits from coastal resources. Annual management costs to sustain this level of economic benefit are estimated at 9% of the value or approximately Php1.4 million. (White and Trinidad, 1999)

One of the primary strategies we employed was to require counterpart funding and resources in exchange for technical assistance and training. Prior to the start of the Project, most Learning Area municipalities allocated a minimal annual budget, on average Php39,023 pesos per year, for CRM. Since then the average annual LGU budget allocated for CRM has steadily increased in most Learning Area municipalities to a 1999 annual average of over Php107,981. While this represents a substantial increase in annual budget allocation, additional funds must be invested to sustain CRM as a basic service of local

Why invest in CRM?

- ♦ All coastal ecosystems are inherently productive and valuable.
- ♦ The natural and real economic benefits from coastal resources in the Philippines have been grossly underestimated, and this has contributed to the massive destruction of coral reefs, mangroves and fisheries in recent years.
- ♦ The cost of effectively managing our coastal resources is generally a small fraction of the annual potential revenues accruing directly from healthy coastal systems.
- ♦ Most ecological benefits of coastal ecosystems can be valued in monetary terms and considered in the valuation of the resource for planning and management.
- ♦ It is essential to analyze the actual present and future benefits derived from our coastal resources in terms of both ecological and human-derived benefits.

(White and Trinidad, 1999)

government. We have begun helping LGUs to explore funding windows, such as the World Bank's Community-Based Resource Management Project (CBRMP), and linking people's organizations and other community groups with funding institutions that provide credit or grants for CRM or environment-friendly enterprise development.

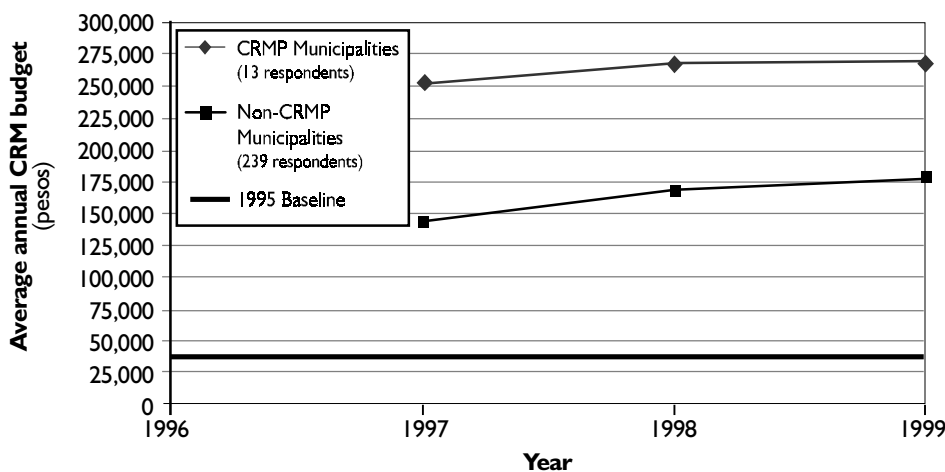


Fig. 6.1. Trends in LGU annual budget allocations for CRM based on respondent survey of 252 coastal municipalities

Resource values and cost of CRM

To show what level of investment in CRM is warranted, we used a hypothetical bay as an example of resources and values at stake. Our example bay has some coral reef habitat, some mangrove forest, and open-water space for marine fisheries. For simplicity, we will assume that our bay is relatively undeveloped, the income of people living in the area is derived from sustainable use of resources in the bay, and they have no other sources of income.

The values of the resources in this hypothetical bay are summarized below. These values can be compared with the potential cost of management and protection. Based on these resource values, we can justify management costs of less than or equal to the resource values. Of course, in reality, the amount we usually spend on management is only a very small fraction of the resource valuation.

Annual revenues (values of coastal resources in a hypothetical bay*) and the associated costs of management

ANNUAL REVENUES			ANNUAL COST OF MANAGEMENT	
Resources	Area (square km)	Potential annual revenue** (US\$)	Resources	Potential annual revenue** (US\$)
Coral reefs	5	250,000		
Fisheries		90,000	Staff for community level work (2 persons)	9,000
Tourism		75,000	Training	5,000
Shoreline protection		60,000	Sanctuary maintenance	6,000
Biodiversity		25,000	Patrol boat and operation	10,000
Mangrove forest	1	120,000	Information dissemination	2,000
Fisheries		50,000	Other	2,000
Wood		10,000	Total	US\$34,000
Shoreline protection and other contributions***		60,000		(Php1.36 million^a)
Open water fisheries not dependent on either reefs or mangroves	10	10,000		
Total		US\$380,000		
		(Php15.2 million^a)		

^aUS\$ 1 = Php40 in 1998

* Assumes a healthy, natural system without major destructive or polluting influences

** This analysis assumes that all revenues are derived from "management", which means that, without management, revenues would be significantly lower or zero. In reality, management is not responsible for all revenues; only an incremental portion of revenues is dependent on management efforts that prevent degradation and destruction. But this assumption does not make a large difference in the result since, without any management, revenues will eventually approach zero.

*** This figure is a small portion of the estimates of Costanza et al (1989) for shoreline protection, recreation and habitat, which have not been estimated for Philippine mangroves.

If we take a national perspective and add up the contribution of these basic marine coastal resources to the national economy, the annual benefits from the existence of our natural coastal resources will be US\$3.5 billion. This is a conservative estimate, as it does not include the economic values of all the ecological functions known to come from coral reefs, mangroves and healthy fisheries. And since the national expenditure on management from all sources (government, non-government, donor and others) combined is less than 1% of this amount, we can see that significant increases in spending for protection and management of resources are warranted. Even if we invested only 5% of the national economic rent equivalent of these resources, it would amount to about US\$175 million, or more than US\$7 billion every year. This should be considered as an absolute minimum to ensure some level of management of our coastal resources. The continued deterioration of these resources reflects the fact that we are not spending nearly enough to ensure their sustainability.

(White and Trinidad, 1999)

Fostering active participation in CRM

Active participation by the coastal community, including not only the day-to-day resource users but all coastal stakeholders – the local government, national government, NGOs, and the private sector – is essential through all stages of the CRM process. Functionally, the coastal zone is a broad interface between land and water where

production, consumption and exchange processes occur at high rates of intensity. The varied economic activities in the coastal area makes managing coastal resources difficult. Also, management of economic activities is often sectoral in nature, so a host of institutions have jurisdiction over coastal resources and no single entity manages the coastal zone in an integrated and holistic manner.

About FARMCs and other CRM organizations

Municipal-level CRM organizations, such as CRM councils and the legally mandated Municipal FARMC, are groups formed to serve in an advisory capacity to the LGUs. They assist in policy-making as well as CRM planning, implementation and the enforcement of fishery laws, rules and regulations in municipal waters. The MFARMC, in particular, also helps prepare the Municipal Fishery Development Plan, which forms part of an overall CRM plan, and submits such plan to the Municipal Development Council; recommends the enactment of municipal fishery ordinances to the Sangguniang Bayan (SB) through its Committee on Fisheries; and advises the SB on fishery matters through its Committee on Fisheries, if this has been organized.

CRM organizations must represent the direct stakeholders of coastal resources, and, ideally, the different sectors affected by or can contribute to the CRM process. These include:

1. Government agencies, both national and local
2. NGOs
3. Government-owned and controlled corporations
4. Academic institutions
5. Private sector (business and industry)
6. People's organizations
7. Community

As provided by law (RA 8550 or the Philippine Fisheries Code), the MFARMC is composed of:

- a. Municipal Planning and Development Coordinator
- b. Chairperson, Agriculture/Fishery Committee of the SB
- c. Representative from the accredited non-governmental organization
- d. Representative from the private sector
- e. Representative from the DA
- f. At least 11 fisherfolk representatives – 7 municipal fishers, 1 fish worker, and 3 commercial fishers – including representatives from the youth and women sector.

Theoretically, anyone can initiate a multi-sectoral CRM organization. A memorandum of agreement by all interested parties formalizes its establishment. What is important is:

1. The organization includes all agencies which have jurisdictional responsibilities over the resources, resource users which produce impacts on the resources, and others who are legitimately concerned with protecting coastal resources;
2. A consensus is reached about the use of resources, so conflicts can be resolved;
3. There is coordination, information-sharing and participation in planning (both sectoral and cross-sectoral), environmental impact assessment review of proposed development projects, construction permit review, and legislative hearings.

This way, rights are recognized, accountability is clear, measures are widely supported, compliance is secured and errors in decisions minimized or avoided.



The FARMC of Bacong, Negros Oriental during a meeting. The FARMC is a mechanism by which the community is allowed to participate in policy- and decision-making for CRM at the local level.

To foster participation in CRM, we have trained coastal communities in conducting participatory resource assessment and assisted in forming or strengthening CRM organizations such as barangay and municipal FARMCs and community coastal law enforcement groups such as *Bantay Dagat*. The formation of CRM organizations is part of the institutional arrangements that define the decision-making processes and bodies and the responsibility and accountability of individuals and organizations in implementing the CRM plan. Such institutional arrangements also provide the mechanism for CRM implementation, help integrate development among sectors, anticipate and avoid negative impacts, establish cooperative working relationships among the sectors, promote equitable sharing of resources and create implementable policies, plans and projects.

The passage of the Fisheries Code in 1998 institutionalized community participation in CRM through the FARMC. Initially, however, the idea of having to consult with another organization did not sit well with the LGUs. There were also “gray areas” related to the functions, responsibilities and powers of the FARMC *vis a vis* the LGUs that needed to be clarified. To address these concerns, CRMP, in cooperation with DA-BEAR, conducted a series of community meetings and training workshops on the formation of the FARMC. These meetings and workshops not only cleared up a number

of issues but also generated feedback on inconsistent or ambiguous FARMC-related provisions of the Code. Such feedback was provided to DA-BEAR for use in the issuance of the implementing rules and regulations for the formation and operation of the FARMC.

Adopting and sustaining CRM Best Practices

CRM best practices target the achievement of three critical results for food security from the sea: fishing pressure reduced to sustainable levels, illegal and destructive fishing and coastal development activities stopped, coastal habitats protected and managed. Specific management alternatives typifying CRM best practices include the establishment of a fishing registration and licensing system, marine sanctuaries, and Community-based Forest Management Agreement (CBFMA) for mangroves, and strengthening coastal law enforcement units.

A municipal CRM plan and municipal water use zoning scheme developed through a community-based and participatory process that begins with *barangay* plans is central to implementing an integrated CRM program. Communities as direct users are involved in the daily management of coastal resources. Their participation in planning and program implementation will lead to a stronger commitment during implementation, sustainable resource use and a higher degree of compliance. It will

Coastal management best practices

- ♦ Local government primary support mechanisms
- ♦ Environmental baseline assessment and profiling undertaken
- ♦ Resource management organizations formed and active
- ♦ Community participation ensured in CRM planning and implementation
- ♦ Habitat management implemented
- ♦ Fisheries management in place
- ♦ Coastal law enforcement available for CRM implementation
- ♦ Shoreline development and pollution controls in place

also develop the community’s capacity to improve their quality of life and overcome through their own efforts the problems confronting them. Moreover, the top-to-bottom approach has been proven ineffective, primarily because of lack of participation of the beneficiaries in the planning process.

In the beginning, LGU resistance was the major barrier to the adoption of CRM best practices, at least in some CRMP Learning Area municipalities. CRM was not only a relatively new concept for the LGUs, it also had to compete with many urgent issues needing LGU attention, as well as, in some cases, with local officials’ personal interests. Then, too, some communities were not receptive to CRMP’s initiatives to involve them in the process, especially if, in their perception, it would result in loss of income or livelihood for them.

Guided by our transformational communication framework, we employed a number of interventions to

hurdle these barriers. Direct lobbying proved to be effective in many cases, particularly when LGU resistance stemmed from a lack of understanding of CRM and the issues involved. Peer pressure, exerted through the Search for Best Coastal Management Programs organized jointly by CRMP and LMP, and political pressure through the FARMC, also worked in some cases, as did encouragement and lobbying by the DENR, DA and other NGAs providing services to the LGU. In a number of instances, a single visit to a successful CRM site proved to be just the push needed for an LGU to get the Project’s message right and finally move toward adopting CRM as a strategy for sustainable development.

Indeed, going into the second half of Project implementation, we find that our biggest challenge is no longer about convincing LGUs to adopt CRM, but about finding the time and resources to meet an ever-increasing demand for CRM training and services from the increasing number of “enlightened” LGUs across the country.

Banking on the community

The community-based approach to establishing marine sanctuaries is recommended for the following reasons:

1. Sharing of economic benefits from the marine sanctuary can increase income for local people, for example, from user fees (e.g. tour operators and entrance fees) and visitor facilities (accommodation, transport, food, guides, etc.).
2. Improved employment opportunities may arise, both in and outside the marine sanctuary, through the growth of services such as hotels and restaurants.
3. A successful marine sanctuary may result in improved yields in local fisheries.
4. Community involvement can facilitate enforcement of regulations, as local people will understand and accept their purpose more readily.
5. The community can assist or even be responsible for enforcement, thus reducing costs to government agencies.
6. Where there are financial constraints, local people can be mobilized to help develop interpretive programs and assist with education.

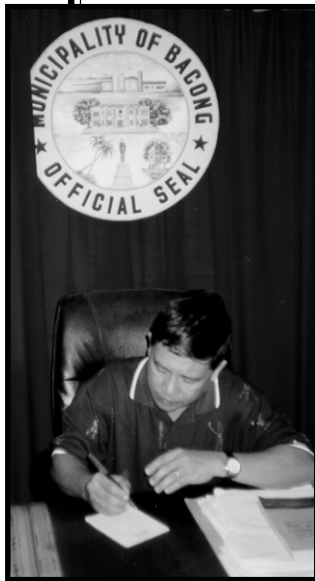


In order for a marine sanctuary to become self-sustaining in the long term, local fishers must be able to see the connection between their efforts and some improvement in their livelihoods and the marine and coastal habitats that they depend on. Communities must know how a managed area will function and how they will benefit from it if they are to support its establishment.

A mayor's view on CRM:
"We need this"

Mayor Lenin Alviola of Bacong, Negros Oriental is known to his constituents as a man of action. Early in his term as chief executive of this fifth-class municipality, he set certain priorities. First, infrastructure. "We needed water, and we needed roads," he says. Not a single household in Bacong had a reliable water supply, and roads were in a bad shape, if they existed at all.

Today, early in the second half of Mayor Alviola's second term of office, 80% of Bacong households are served by the municipality's water system. The Mayor has promised to bring water to the remaining 20% before the end of his current term, and no one is doubting him.



But this man of action had one failing, one he is quick to admit. "I must confess we neglected our seas. We were not as concerned about our coastal resources as we should have been."

Bacong has only a 7-km stretch of coastline and 7 coastal barangays, but 40% of its more than 19,000 residents live in the coastal area. Mayor Alviola reckons coastal resources are a major source of food or livelihood for up to 60% of his constituents.

CRMP did some groundwork on CRM in 1996, he recalls, but it did not make much headway. "We in the LGU forgot about it. Our people needed the essential basics and we believed we had to deliver those services first."

Shortly after the Conference of Coastal Municipalities in May 1999, however, he began to address CRM issues with a new vigor. "The Conference was a big help. I learned a lot, but what's more important to me is how I can translate what I learned into action."

He is making up for lost time. "As far as CRM implementation is concerned, we're not even at step zero yet. We're probably at minus 3. With CRMP's and Silliman University's help, we hope to complete our plan so that by January 2000 we can proceed with the first step of our CRM program, and by 2001, we will have the ordinances and the necessary systems in place."

"We really have to pay attention to conservation, and we have to act fast. The longer we wait, the more we will exploit our resources, and the more we will have to spend for rehabilitation."

Bacong invested Php150,000 in CRM in 1999, the first time since 1996 that it allocated a budget for CRM. In 2000, the budget will be increased to Php200,000, says Mayor Alviola, who has come to regard CRM as an essential service of government.

"Natural resource conservation must be centered on the LGU. Who cares more about Bacong's natural resources than us, the local administrators?" But while LGUs still have to be granted full authority over these resources, he says there is much a mayor like himself can do. "All it really takes is political will."



Beyond community-based CRM

- ◆ *Move beyond community-based coastal resource management while still employing people-driven, participatory processes*
- ◆ *Catalyze local implementation with 75% of effort working with LGUs and coastal communities*
- ◆ *Use networks and strategic alliances to expand coastal resource management beyond a few model sites*
- ◆ *Leverage resources and funds from private sector, donors and government toward a common coastal resource management objective*

chapter 7

At the Threshold of Sustained Coastal Management: Moving toward 3,000 kilometers and beyond

In the last three years, we have seen CRMP progress rapidly from community-based to collaborative CRM and multiple partnerships, to build momentum across a broad spectrum of society using proven methods. This chapter summarizes key Project achievements corresponding to the strategic objectives set by the Government of the Philippines and USAID for CRMP.

Six strategic objectives have been identified that contribute to the overall mission goal of the U.S.-Philippine partnership for democracy and development. CRMP contributes to coastal aspects of Strategic Objective No. 4: “Enhanced management of renewable natural resources.” Based on USAID’s Results Framework (Fig. 7.1) revised in December 1998, CRMP has two indicators addressing Strategic Objective 4 (SO4), SO4 1 and SO4 2. The indicators and performance monitoring system developed to measure progress and success of CRMP’s interventions for SO4 indicators and three intermediate results (IR), IR 1.1, IR 1.2, and IR 1.3 are discussed briefly below (see also Chapter 3).

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

IR1.1 Improved Local Implementation of CRM

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

CRMP is working in Learning Areas and expansion areas (Fig. 7.2) 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 680 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

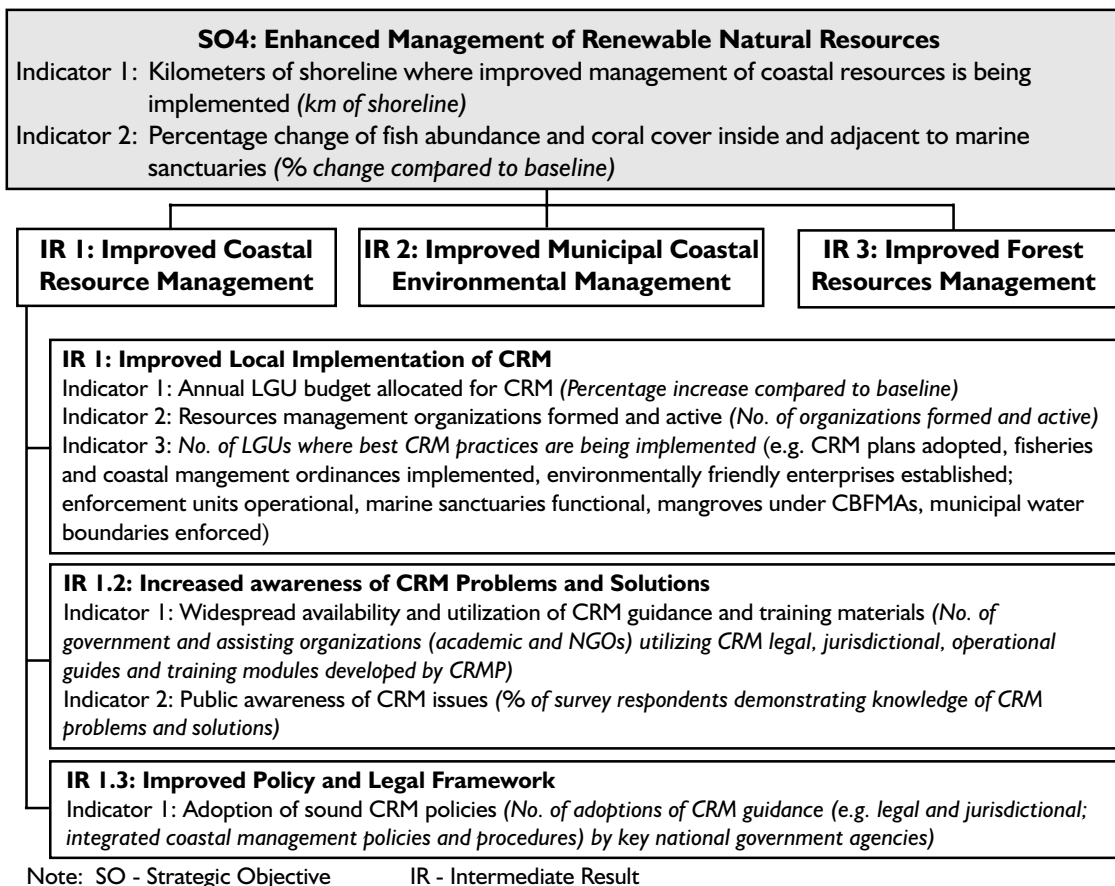


Fig. 7.1. Revised Results Framework for USAID/Philippines SO 4 Indicators: Coastal Resource Management Component

CRMP has developed a performance monitoring system called the Municipal Coastal Database (MCD) to track the progress and accomplishments of each LGU receiving technical assistance and training. The MCD was designed to serve the dual purpose of performance monitoring for both the Project and LGU. A LGU must complete the specific set of requirements as prescribed in the IR1 indicators, to be counted under the SO4 indicator. Each LGU must: (1) be annually allocating budget for CRM, (2) have an active MFARMC that meets 6 or more times per year, and (3) be implementing one or more best CRM practices. A menu of best CRM practices is provided under IR 1.1 (Fig. 7.1). The MCD is also being used as a self-assessment tool by LGUs to assess the current status of CRM and plan and prioritize future activities.

Progress toward our Strategic Objective

SO4 1 Kilometers of shoreline where improved management of coastal resources is being implemented: A total of 29 learning and expansion area LGUs covering 741 kilometers of shoreline have met all three indicators for improved management of coastal resources for the year ending 1999, exceeding the target of 640 kilometers of shoreline. Progress in meeting the targets for kilometers of shoreline under improved management is summarized in Fig. 7.3.

CRMP has initiated technical assistance to LGUs covering 2,228 km of shoreline including both core and expansion areas. We are collaborating with a number of key partners to replicate the approach for improved

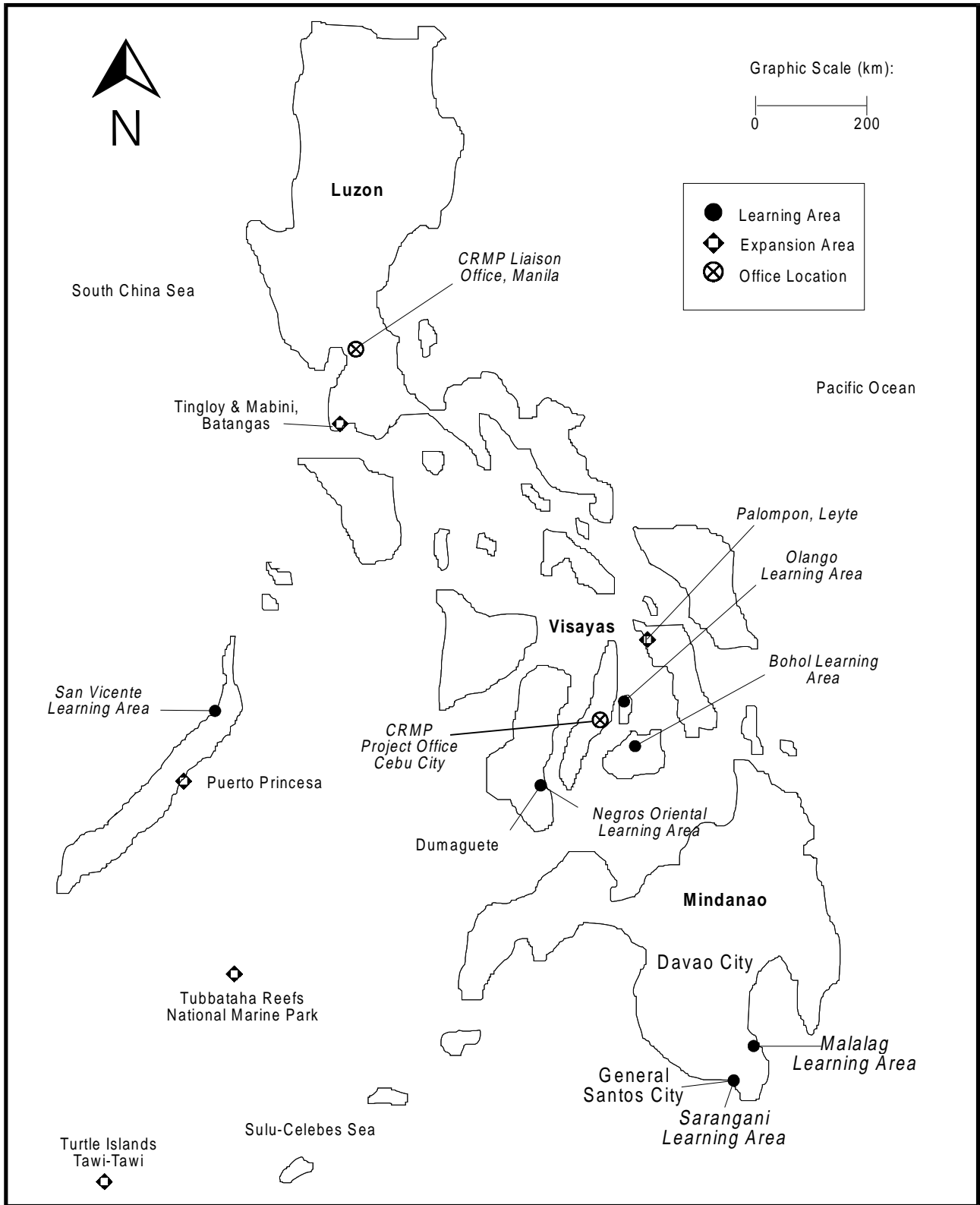


Fig. 7.2. General project location map

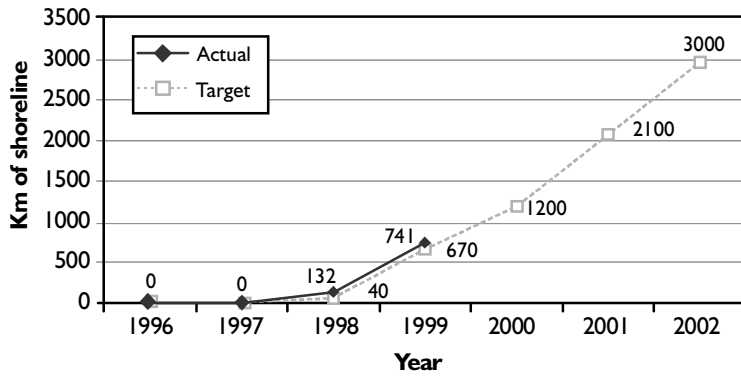


Fig. 7.3. Kilometers of shoreline “completed”

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 BEAR funded by the Asian Development Bank (ADB), is adopting CRMP-developed products including: (1) training modules on ICM, PCRA, and Mangrove Management; (2) IEC materials such as posters and pamphlets; and (3) the MCD for use in 18 bays covering 100 municipalities in the Philippines.

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

SO4 2 Percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries: Biophysical impacts of improved local implementation of CRM are measured using standardized monitoring methods developed in partnership with the UP-MSI. Annual assessments of fish abundance (focusing on key fish families that

are commonly targeted for harvest) and live coral cover are conducted in 6 marine sanctuaries, one in each Learning Area.

The results of surveys conducted in 1999 show fish abundance increased some 255% above the baseline inside marine sanctuaries (versus a 1999 target of 10%) and 70% above the baseline adjacent to marine sanctuaries (versus a target of 0%). These high percentage changes may be attributed to the extremely low baseline figures for fish populations due to the degraded and poorly managed condition of these sanctuaries during the baseline year. (Fig. 7.4)

Live hard coral cover increased 40 percent above the baseline inside marine sanctuaries (versus a 1999 target of 5 percent) and decreased -7 percent below the baseline adjacent to marine sanctuaries (versus a target of 0 percent; Fig. 7.5). Record high tropical sea surface temperatures during the 1997-1998 El Niño event resulted in coral bleaching throughout coral reefs in the Philippines as well as the Indo-Pacific Region. In 1999, unusually heavy rains persisted in many areas of the Philippines and localized outbreaks of the coral eating, crown-of-thorns seastar, *Acanthaster*, were noted. Changes in living coral cover in sanctuaries monitored by CRMP were influenced by these large-scale climatic events. Overall, the strength of management activities in marine sanctuaries monitored in CRMP Learning Areas is increasing with active

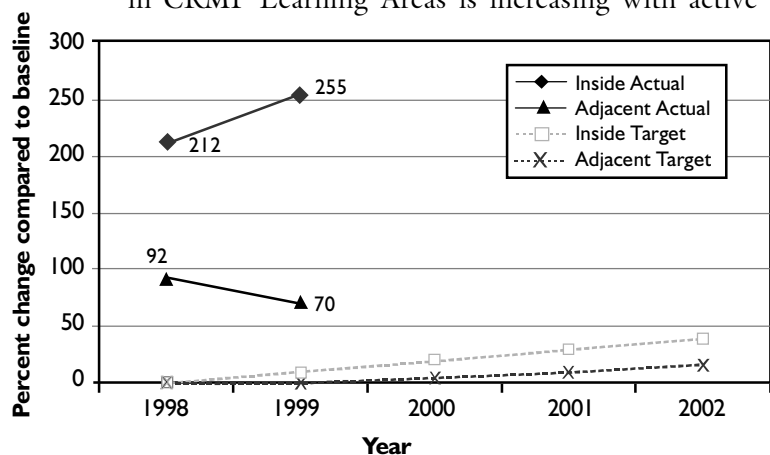


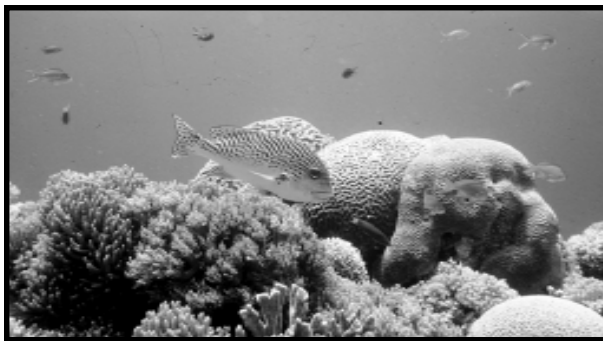
Fig. 7.4. Percent change of fish abundance inside and adjacent to marine sanctuaries

Tubbataha Park Protection and Management: Success through collaboration

The Tubbataha National Marine Park and World Heritage Site in the Sulu Sea was officially protected starting 1988. This 33,000-hectare marine area and coral atoll represents one of the world's most biodiverse and rich examples of a coral reef system. It is estimated that the Tubbataha reef system supplies at least 20% of the fish larvae to the Sulu Sea and Palawan area that provides large quantities of fish to the Philippines. It now attracts many scuba divers as one of a few excellent diving destinations in the world.

CRMP, through a series of strategic interventions, has been able to assist in the protection and management of Tubbataha. This successful example of assistance offers lessons in how multiple partners can collaborate to achieve conservation that protects a critical area and generates income to implement management. The process and partners involved are outlined below:

- 1988 Park is declared by Presidential Decree
- 1989 First draft of park management plan based on limited information is completed
- 1990 Sporadic patrols start to stop illegal and destructive fishing
- 1991 Illegal seaweed farm is removed from the Park
- 1992 Several research expeditions collect baseline data on the coral reef
- 1993 Park management plan is re-drafted; illegal activities increase
- 1994 World Heritage status declared
- 1995 Presidential Task Force is set up to implement management and provide funds; Philippine Navy assigned to guard the park
- 1996 CRMP refines management plan with support from the Japan International Cooperation Agency (JICA), DENR, Palawan Council for Sustainable Development (PCSD), KKP-WWF-Philippines, and stakeholders in Palawan and Cagayancillo
- 1997 CRMP initiates study of legal basis for the PAMB to become functional together with DENR, PCSD and WWF-Philippines; JICA sponsors planning and supports educational tour for media together with CRMP
- 1998 PAMB is formed based on DENR/CRMP recommendations; management plan endorsed in a workshop with all stakeholders with support from the PCSD, DENR, WWF-Philippines and CRMP
- 1999 PAMB becomes operational with a park manager appointed and supported by KKP based on management plan as designed by CRMP technical guidance; Global Environment Facility (GEF) five-year funding is approved for park management based on management plan; Marine Parks Center of Japan engages CRMP and the Sulu Fund to facilitate the construction of a Park ranger station
- 2000 Management plan is fully endorsed by the PAMB for implementation and fee structure designed based on willingness-to-pay study of CRMP and WWF-Philippines; revenue of between US\$50,000 and US\$100,000 to be collected; CRMP and Sulu Fund to jointly implement biophysical monitoring funded by volunteer divers in May.



The long journey to adequate conservation of Tubbataha Reefs is not yet complete but it is progressing well. For the most part, the reefs are now protected from destruction, and mechanisms for financing management are being tested. The Government of the Philippines, WWF-Philippines and others have committed enough support to protect the park until other means are in place.

community involvement; however, inconsistencies in management, especially enforcement, still exist.

Progress in meeting Intermediate Result (IR) indicators

In support of the Project’s Strategic Objective, significant progress was realized during 1999 in meeting each of the Project’s IR indicators.

IR 1.1 Improved Local Implementation of CRM

Annual LGU budget allocated for CRM: The number of LGUs allocating an annual budget for CRM and the amount of these allocations increased from 1996 to 1999 (Fig. 7.6). In 1995, 10 out of 29 LGUs in the CRMP Learning Areas reported that they allocated an annual

CRM budget. At present, all 29 LGUs report allocating such a budget. From the reported baseline budgets, average annual CRM budgets have increased to some 292% of baseline for municipalities (an average CRM budget of Php107,981) and 265% for cities (an average of Php2,456,400).

Resource management organizations formed and active:

The Project assisted in organizing or strengthening MFARMCs in all 29 Learning Area municipalities as well as in 10 expansion area LGUs. To be considered “active”, each MFARMC must formally meet at least 6 times a year (Fig. 7.7). In addition, a total of 176 barangay FARMCs have also been formed or activated out of a total of 253 coastal barangays in the 6 CRMP Learning

Areas. CRMP has also assisted in organizing and strengthening barangay-level FARMCs (BFARMC) and *Bantay Dagat*, or local coastal law enforcement groups.

Best CRM practices are being implemented: A total of 32 LGUs were implementing two or more CRM best practices by the end of 1999 (Fig. 7.8).

Examples of best practices being implemented in 1999 include:

- CRM plans drafted by various LGUs, including several bay-wide plans, building upon completed training courses and technical workshops, PCRA, and coastal environment profiles
- Establishment of 11 new marine sanctuaries in 1999, bringing the total to 34 sanctuaries involving over 3,171 hectares of coral reef and sea grass habitat, within the CRMP Learning Areas since 1996 (Fig. 7.9). In comparison, the pre-project baseline was 15 marine sanctuaries, involving 127 hectares, having been established in these same LGUs prior

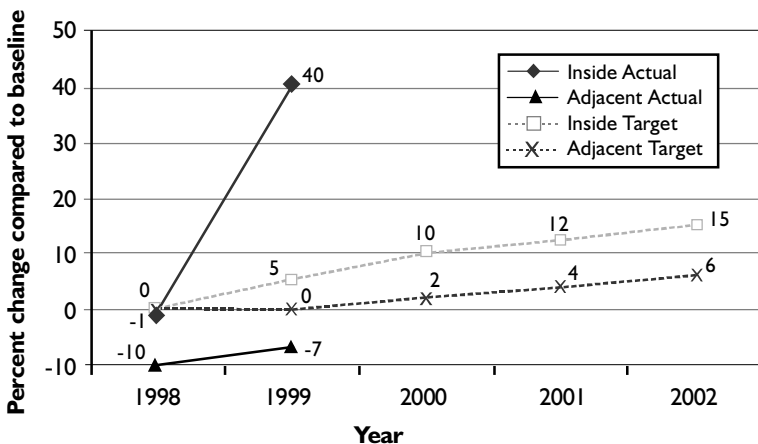


Fig. 7.5. Percent change of coral cover inside and adjacent to marine sanctuaries

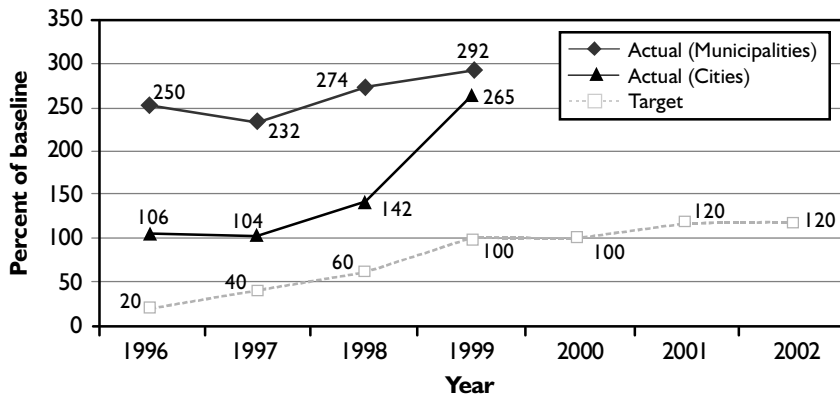


Fig. 7.6. Annual LGU budget allocated for CRM

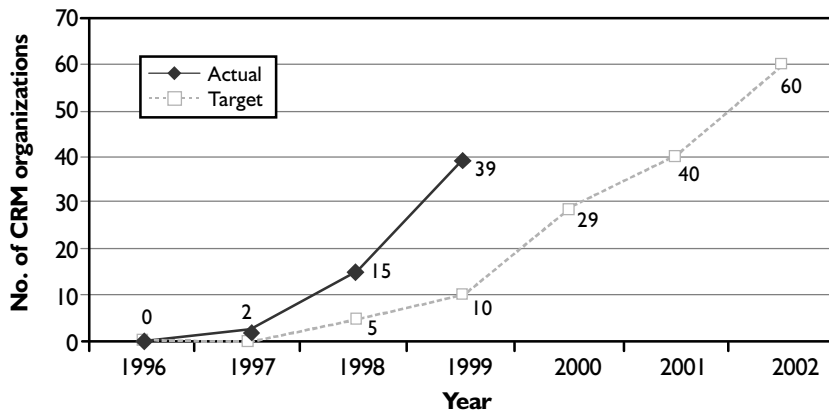


Fig. 7.7. Number of CRM organizations formed and active



Fig. 7.8. Number of LGUs implementing CRM Best Practices

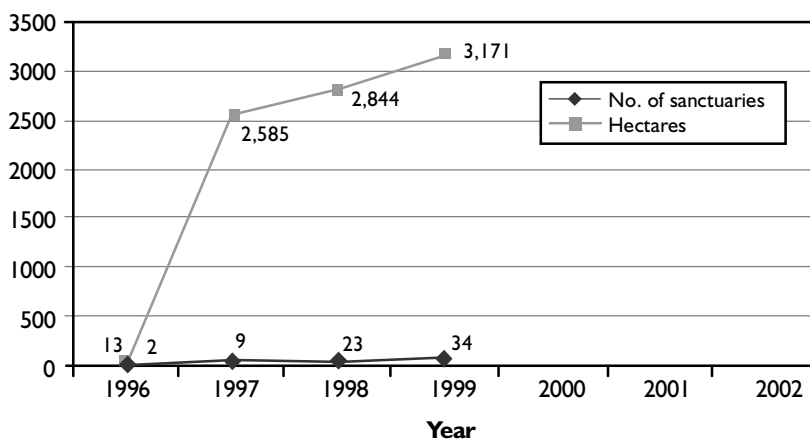


Fig. 7.9. Marine sanctuaries established within CRMP Learning Areas since 1996

to 1996. The Project assisted to strengthen the management of these protected areas, involving the development of supporting ordinances and management plans.

- ♦ Establishment of environment-friendly, community-based coastal enterprises in 12 LGUs, involving selected activities such as ecotourism, seaweed farming, oyster culture, and other forms of mariculture, supported by ICM planning, management guidelines and market linkages, including the following examples:

- Assisted in the development and commercial operation of the “Olango Birds and Seascape Tour”, an ecotourism enterprise owned and operated by 55 households residing adjacent to the Olango Island Wildlife Sanctuary (OIWS), a Ramsar site (a wetland area recognized for its international importance). Over Php340,000 in gross revenues have been generated by the community-based venture from the conduct of 33 tours as well as financial contributions to the OIWS (some 45% of the tours were study tours, involving representatives from some 30 international institutions, 7 NGAs, 12 LGUs, 12 major media groups and numerous NGOs, academic and business organizations). Based on the experience gained, assisted the DENR to formulate and draft a new management plan and guidelines for the OIWS.

The Negros Oriental story

When CRMP began setting up its operations in Negros Oriental in 1996, many LGUs were not entirely sold on the idea of “technical assistance”. The kind of donor support they were used to involved direct commodity and financial assistance. “The concept of a purely technical assistance project was new to some municipal LGUs,” recalls CRMP Learning Area Coordinator (LAC) William Ablong. “There was some resistance, especially when we encouraged them to allocate a budget for CRM.”

But, even then, these LGUs had one advantage over others in many parts of the country: Negros Oriental already had at least two decades of experience in CRM. Its unique history of involvement in CRM provided a strong foundation from which to begin the CRM process, and ample hope that CRM would work well there.

Negros Oriental, about 620 kilometers southeast of Manila, shares with at least two other provinces the ecologically rich Tañon Strait, which is one of the top 10 richest municipal fishing grounds in the country. Despite impressive harvests, however, its marine resources are overexploited and marine habitats are rapidly being degraded. Additional sources of income for fishers are scarce (Vogt 1997), and poverty is a pressing issue. Destructive fishing practices, siltation and lack of wastewater treatment facilities are devastating marine habitats and depleting resources. As a result of ill-advised conversion to fishponds, for example, the mangrove area in Bais Bay, which is the largest mangrove area in the province, has shrunk from 812 hectares in 1979 to only about 250 hectares today (Calumpong and Luchavez 1997).

CRMP’s Learning Area in Negros Oriental covers nine LGUs with a combined shoreline of about 111 km (GEOPLAN, 1999), nearly half the provincial coastline. Full-time fishers make up 41% of the total population in these municipalities. They earn an average annual income of less than Php17,500 (US\$438) (Calumpong *et al.* 1999).

There was, without a doubt, a high level of interest in coastal management among LGUs, sparked by their early positive experience in CRM projects. Negros Oriental’s history of involvement in CRM began in 1984 with the Central Visayas Regional Project (CVRP) that was funded by the World Bank. This project, which ended in 1992, focused on addressing the issues of poverty and marine environmental destruction through a community-based resource management approach. The work begun during this project was continued through the efforts of then Governor (now Congressman) Emilio Macias, other local officials and the German Development Service, who established the Resources Management Division (now the Environment and Natural Resources Management Division or ENRMD) and the Centre for Establishment of Marine Reserves in Negros Oriental (CEMRINO), Inc. (Ablong 1995, Ablong and Waltermath 1996)

But LGU interest was tempered by the need to address “more urgent” socio-economic problems, and sometimes by less exigent but very real political concerns. In Bacong, for example, Mayor Lenin Alviola focused his government’s resources on providing a reliable water service to the municipality. In a couple of other municipalities, LGU support was secured only when officials were assured that CRMP was not a project of “the other party.”

Building on Negros Oriental’s high level of interest and past experiences, CRMP embarked on a new period of management beginning in July 1996, when it established an office within the Center of Excellence in Coastal Resource Management at Silliman University.

At the beginning of the Project, CRMP gathered together leaders from the public and private sectors and facilitated the identification of a common vision for Negros Oriental: “An agro-aqua province with a strong determination to preserve the natural beauty of the ecosystem through community involvement and enforcement of logging and fishery laws as well as the rehabilitation of denuded areas to conserve, protect and develop the environment geared towards a happy, healthy, clean and progressive Negros Oriental.”

The Project then took every opportunity to increase buy-ins for CRM among key sectors in the province. “We made sure that we were present in all meetings – any meeting – called by LGUs, and that CRM was included in the agenda, even if only under ‘Other Matters,’” says Mr. Ablong. It helped that, having worked with CVRP and other donor-funded



projects before CRMP, Mr. Ablong has established good personal and professional relationships with most of the people that he needs to work with.

Before the Revised Results Framework came out, the Project focused on social preparation, identifying issues and needs at the local level, resource assessment, and providing CRM services on demand. At the same time, the Project started building local capabilities for CRM. Two major LGU partners emerged at the municipal level: the planning and development office, which holds a key role in setting directions for development, and the agriculture office, which is responsible for fisheries development. At the provincial level, we cultivated our partnership with the ENRMD, the Provincial Agriculturist's Office (PAO) and the Provincial Planning and Development Office (PPDO).

Community members, resource users, LGUs, NGOs, Silliman University and CRMP are now working together to implement ICM. LGUs designate manpower and allocate a portion of their budget to ICM activities, while CRMP provides technical assistance and training for the various aspects of ICM. NGOs, such as the Rotarian Martin "Ting" Matiao Foundation, Inc. (TMF), the Young Men's Christian Association (YMCA), and St. Catherine's Family Helper Project, also contribute resources for ICM activities. Community members and resource users conduct resource assessment, formulate local ICM plans and engage in law enforcement through the *Bantay Dagat*, the local deputized sea watch group. To assist with coordination, there is a CRM advisory council at the provincial level. In addition, there are several organizations involved in the ICM process at the municipal and *barangay* levels.

TMF, CRMP's partner in implementing ICM and the community organizer for the Learning Area, conducts ICM planning workshops to train local *barangay* members to conduct PCRA. This arrangement has allowed the Project to form an organizational structure that is highly responsive to local needs for CRM. At the top of the structure is the LAC, who provides overall direction and supervision of Project activities. Reporting to him is TMF's Project Manager, who in turn oversees an enterprise development associate, a mangrove research associate, and area coordinators. The set-up is flexible, allowing the LAC to oversee directly the component and area coordinators.

The presence of an "outsider", preferably a NGO, to help capacitate the LGU is crucial, says Mr. Ablong. "The NGO serves as a catalyst. LGU staff can be trained directly to undertake community organizing and CRM activities. But, often, LGU staff assigned to CRM have other responsibilities. For purposes of establishing CRM as a development strategy for LGUs, we need dedicated staff who can start up the process and see it through at least one cycle of implementation."

The approach seems to be working. CRM appears to be taking hold within the Learning Area, with more LGUs allocating funds for CRM activities. Today, all nine LGUs in the CRMP Learning Area have funds for CRM. Between 1995 and 1998, the overall amount allocated for CRM increased more than 400%.

Also, there are now several community organizations participating in the ICM process. Most *barangays* have established their *Bantay Dagat*, and federations of *Bantay Dagat* at the municipal level have been formed. CRMP and the LGUs are jointly establishing the FARMC in each municipality to assist in fishery resource management, policy formulation and implementation, as well as in law enforcement.

Our focus has now shifted to institutionalization and sustainability of CRM initiatives in the Learning Area, expanding our reach to other municipalities in Negros Oriental. We are assisting the LGUs in developing multi-year CRM plans that are more integrated and participatory. With DECS, we helped the provincial government develop a marine ecology course, which has been included in the official curriculum for Grades 5 and 6 in Negros Oriental.

A key strategy for institutionalization is the development and adoption of an ICM Framework for the province. "The advisory council is currently providing guidance to the implementation of CRM in Negros Oriental, but it is a temporary body," Mr. Ablong observes. "What we are really aiming for is the creation of a Provincial ICM Council, which will ensure the sustainability of CRM in the province."

The lesson that Negros Oriental has taught and will continue to teach us is this: LGU leadership is crucial to the success, spread and sustainability of CRM. Says Mr. Ablong, "Now more than ever, we must remember and emphasize the fact that while CRMP is a national government project with donor funding, CRM is and must be LGU-driven."



(adapted from *Murphy, et al, 1999*)

➤ Provided technical support and established market linkages for the Cambuhat (Bohol) oyster culture enterprise, the participants of which increased during 1999 from 17 to 42 households, excluding a still undetermined number of upstream adoptors. On the second eight-month cycle of cropping, oyster production tripled in volume (increasing to 53,000 seeded spat collectors) with aggregate sales volume projected to reach Php1.6 million by May 2000, which would provide an average household gross earning ranging from Php30,000 to Php60,000 per eight-month cycle. The oyster culture enterprise further proved to be a valuable tool in catalyzing community and LGU initiatives to better manage and protect water and environmental quality of the Cambuhat River which has developed into an attractive ecotour

➤ Technical assistance to several small enterprise projects in San Vicente, Palawan which includes the Port Barton Women's Integrated Small Enterprise which set up a cooperative store, Capsalay Island seaweed farms and the Panindigan Women's Association sardine processing plant

- Facilitated the processing and awarding of CBFMAs to 6 people's organizations benefiting 392 member households and covering over 3,352 ha of mangrove area in Bohol (Fig. 7.10)

IR 1.2 Increased Awareness of CRM Problems and Solutions

Widespread utilization of legal, jurisdictional, operational guides and training modules: CRMP guides and training modules are actively being utilized by 97 organizations, including 10 national government agencies, 48 LGUs, 7 donor agencies and donor-assisted projects, 21 NGOs and 11 academic institutions (Fig. 7.11). Representative activities supporting the utilization of CRMP products include:

- Facilitated 560 trainings, workshops and meetings, involving some 24,000 participants (composed of 13,343 male and 6,657 female participants)
- Organized and conducted 9 CRMP 10-day ICM training courses, involving 277 graduates from

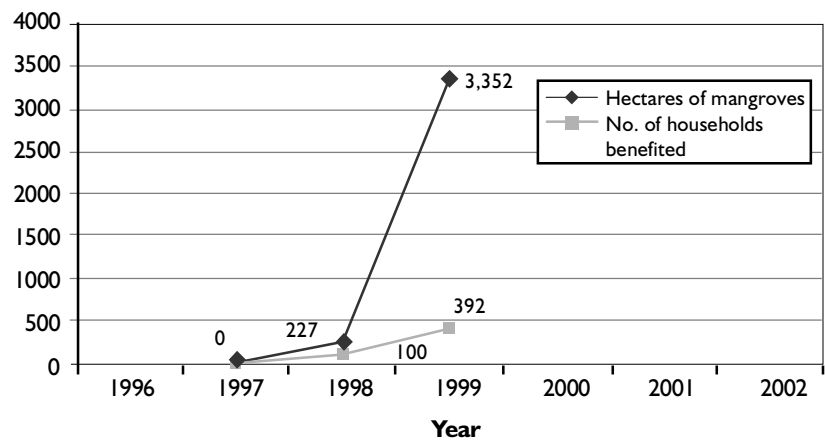


Fig. 7.10. Mangrove management under CBFMAs

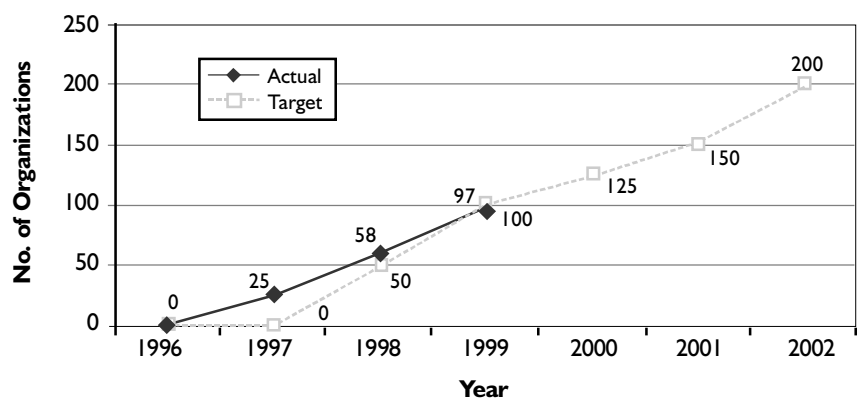


Fig. 7.11. Number of organizations utilizing CRMP materials

Cebu, Davao, and Palawan in partnership with DENR and BFAR's RFTC.

- Formal channels for national institutionalization of CRMP training materials were established with other donor-assisted projects, agencies and organizations, in particular the ADB-assisted FRMP, which involves 18 bays and some 100 coastal LGUs.

The Project's reef survey and marine sanctuary monitoring methods were packaged in cooperation with the UP-MSI and were adopted for use by the DENR and BFAR in Regions 7 and 11.

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

- Comprehensive, local community to national IEC program, including the celebration of the International Year of the Ocean 1998 and May as the national Month of the Ocean, in collaboration with national and local partners
- In partnership with the LMP and NGAs, supported the design and conduct of the first Conference of Coastal Municipalities of the Philippines attended by President Estrada, the Chief Justice of the Supreme Court, four department secretaries, a Presidential Adviser and a Presidential Assistant and 701 (90%) of coastal mayors. Launched the 2000 Search for Best CRM Programs with LMP and relevant national government agencies
- Partnerships with national and local mass media groups yielded over US\$400,000 in leveraged media values. Joint production efforts with both government and media companies, particularly the ABS-CBN Foundation and the government's PIA resulted in the nationwide airing of broadcast features and radio and television plugs during the prime-time showing of the country's highest

rating programs. Total free air time donated by the ABS-CBN network and the PIA amounted to approximately Php15 million (US\$ 375,000). Print media values generated at national and local level totaled approximately Php3.5 million (US\$87,500)

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

IR 1.3 Improved Policy and Legal Framework

Harmonization of national policy for CRM: The Project continued to contribute towards this indicator though

the number of adoptions of CRM guidance materials and training modules by key government agencies. During 1999, the PCRA guidebook, training modules, and methodology were adopted by both DENR and BFAR through the FRMP. FRMP will implement PCRA in all 18 bays and will re-print the PCRA Handbook. In addition, a mangrove management handbook was completed and adopted by DENR. CRMP is training DENR and FRMP staff in PCRA and Mangrove Management in all Regions of the country.

The significance of the adoption of various CRMP guidance documents by DENR and other relevant national government agencies is that it provides a mechanism for national government to harmonize and promote common policies, approaches, and methodologies for CRM. The total number of CRMP guidance documents adopted to date is 6 (Fig. 7.12). While this is below the 1999 target, 12 additional guidebooks are now in the final stages of being completed for adoption and publication.

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

- Developed a policy study and standard procedures for delineating municipal water boundaries in partnership with NAMRIA and FRMP. These procedures will be issued by NAMRIA as an Administrative Order by the first quarter of 2000 to standardize and expedite the completion of municipal water delineation in 832 coastal municipalities in the country. Utilizing the CRMP GIS, computer-generated municipal water boundary maps were drafted for all Learning Areas except Palawan and for the entire area of Region 7. (We understand these represent the

first draft municipal water boundary maps in the country to date.)

- Developed a policy study comparing areas of conflict and divergence between the Fisheries Code and the Agriculture and Fisheries Modernization Act. This policy study could serve to improve the implementing rules and regulations of these two laws to reduce current conflicts in field level implementation
- Completed the policy study and Draft JAO articulating the roles of DENR and BFAR in the implementation of the Fisheries Code for their review and approval. The JAO will serve to clarify the roles and responsibilities of DENR and BFAR as far as implementing the law is concerned
- Expanded the Project's scope of work to respond to DENR's request for additional technical assistance to support the institutional and human resource development needs of its CEP. This support is aimed to integrate the approaches and technologies developed by CRMP within CEP.

Promoting sustainability

Sustainability of the Project's interventions will be achieved by a variety of factors including empowering coastal communities with CRM responsibility, developing an information base for sound CRM planning, building constituency groups to support CRM initiatives, and developing a critical mass of leaders in CRM. CRMP has

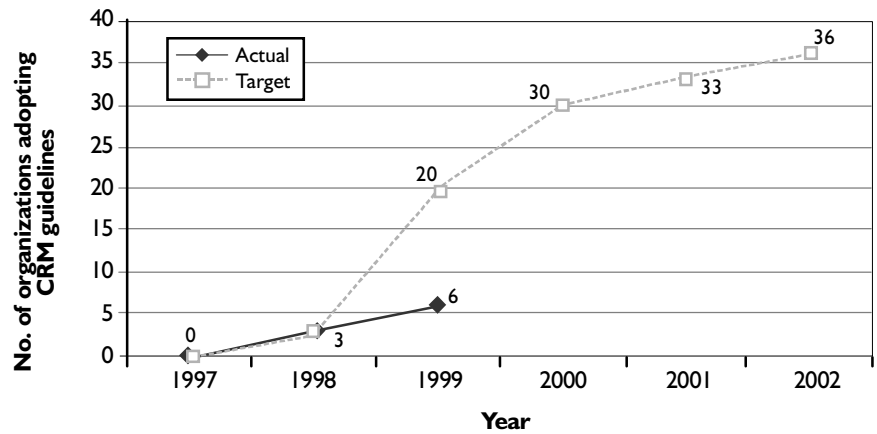


Fig. 7.12. Harmonization of national policy for CRM

made substantial progress in these areas over the last year as described below by a few selected examples.

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

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

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

CRMP has completed the design and development of the MCD software as a planning, diagnostic, and monitoring tool for coastal LGUs, with external evaluation (beta testing) by key national partners and other donor-assisted projects. As of year-end 1999, the MCD is in the process of being adopted and applied by the CER, FRMP, the province of Bohol and numerous other LGUs.

Presently, the MCD monitoring and evaluation system contains several levels of CRM-related information on over 250 LGUs throughout the country, or more than 30% of the country's coastal LGUs. In the year 2000, CRMP will work with interested provinces in preparing provincial reports on the state of the coastal environment and CRM trends based on the MCD.

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

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

CRMP's partnership with the LMP continues to generate nationwide support for CRM initiatives. The first Conference of Coastal Municipalities, conducted in partnership with the LMP and national government agencies, provided a high impact venue to build support for CRM initiatives among all coastal municipalities.

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

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

Developing a critical mass of LGU officials has progressed in partnership with the LMP since 1997. As an outcome of the first Conference of Coastal Municipalities, the 701 participating coastal mayors supported a resolution, addressed to the President, which articulated a 15-point agenda for empowering coastal LGUs for integrated coastal management.

As a result of the Conference, CRMP responded to requests for multi-media materials from 486 coastal municipalities, representing 58% of the national total. These requests were received from the coastal mayors themselves who wanted to implement CRM in their respective municipalities. The results of a survey of 252 or 30 % of all coastal municipalities conducted by CRMP

at the Conference (Fig. 6.1) revealed that annual budget allocations for CRM have significantly increased above the 1995 pre-project baseline level (survey data for CRMP municipalities will vary from those entered from the MCD because of the mode of data collection). Increased activities related to CRM can be inferred from increases in budget allocations as evidenced from the percentage of municipalities achieving planning and implementation benchmarks (Fig. 7.13) used by CRMP. The percentage of municipalities completing the full CRM cycle of planning and implementation, however, still needs improvement.

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

The road ahead

It has been a long, arduous journey from where we started, and we are still more than three-quarters of the road away from our strategic objective of 3,000 km of shoreline with improved CRM (Fig. 7.1). Even so, we have achieved a good momentum and, with the much increased interest in CRM among LGUs across the country, we can see ourselves picking up speed as we enter the final three years of CRMP's implementation, covering longer and longer distances as we approach the exit phase of the Project.

Make no mistake: the road ahead remains difficult. We have to continue to work within our Learning Areas to ensure that the mechanisms for sustainability are in place and working properly, and at the same time cover

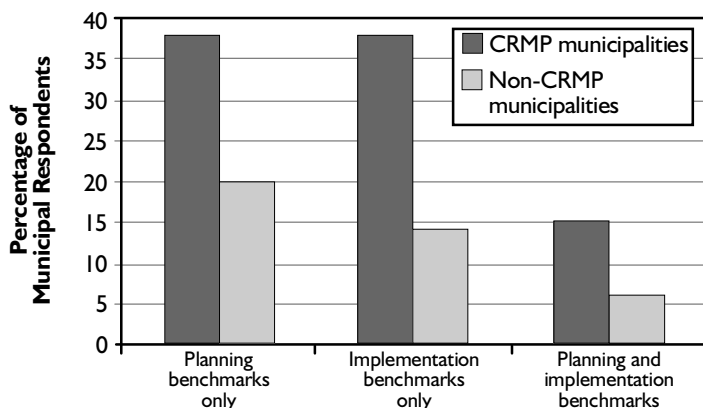


Fig. 7.13. Status of LGU CRM programs in 1999 based on respondent survey of 252 coastal municipalities

wider ground in order to meet our strategic objective. This translates to a greater demand for resources at a time when Project funding levels are tapering off (Fig. 7.15).

Project expenditures reached a peak in 1998, when CRMP first embarked on its national agenda-setting and mainstreaming strategy. The high LGU interest in CRM that resulted from this high-profile effort will allow us to expand more cost-efficiently through strategic partnerships with other donor groups, as well as counterpart funding from the LGUs themselves.

In areas not served by donor-funded projects, our expansion will be channeled primarily through the provinces. This means strengthening capacity at the provincial level to provide technical assistance and training in CRM to municipalities, enhancing multi-sectoral collaboration at the provincial level through the establishment of CRM councils and technical working groups, and institutionalizing CRM at the provincial level. We have put together a package of CRM technology for transfer to clusters of municipalities in selected areas. This package includes:

- 1-day orientation to the Municipal Coastal Database
- 3-day trainers' training in PCRA
- 3-day ICM Training
- strategic technical assistance in CRM Planning
- strategic technical assistance in CRM Best Practices

Increasingly, our focus will be on institutionalizing CRM at all levels of government and putting in place the mechanisms that will ensure the continued spread and sustainability of the CRM programs we have initiated. These

mechanisms, most of which we have already employed in the past three years, are outlined below:

1. CRM institutionalized as a basic service of the municipality
 - MCD adopted as a benchmarking, planning and monitoring tool
 - CRM budget allocated, MFARMC active, CRM plan drafted, CRM best practices being implemented
2. CRM technical assistance and information management system established at provincial level

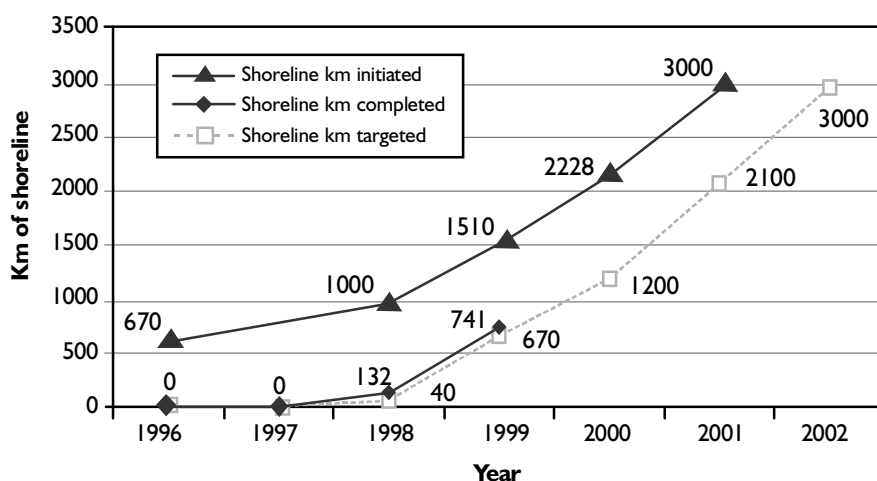


Fig. 7.14. Kilometers of shoreline with improved management of coastal resources (CRMP targets vs completed)

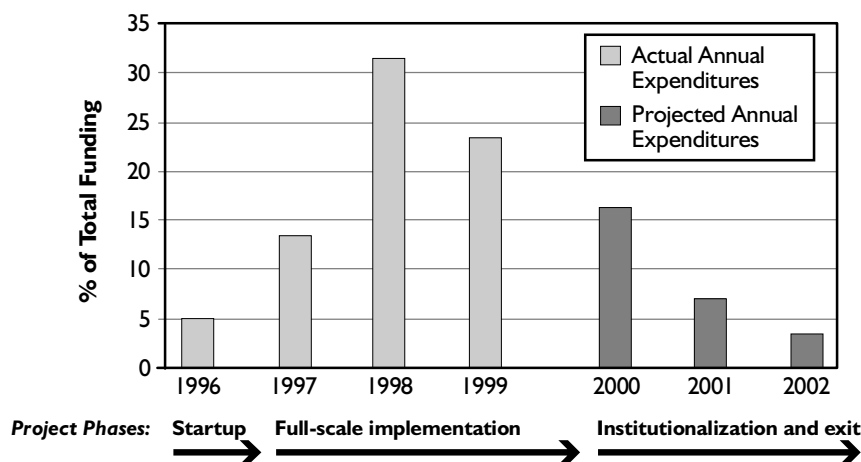


Fig. 7.15. Project funding levels and phases

- MCD expanded and maintained at provincial level
 - Expansion through strengthening provincial capacity and technology transfer of CRMP package to clusters of municipalities: MCD, PCRA, ICM training, CRM planning, CRM best practices
 - CRM budget allocated, MFARMC active, CRM plan drafted, CRM best practices being implemented
3. CRM spread through donor collaboration
 - Expansion through technology transfer of CRMP package: MCD, PCRA, ICM training, CRM planning, CRM best practices
 - CRM budget allocated, MFARMC active, CRM plan drafted, CRM best practices being implemented
 4. CRM policy and institutional framework established at national level
 - Joint Administrative Order (JAO)-DENR/DA-BFAR finalized and signed
 - Integrated National Coastal Policy developed and adopted by national government agencies

- ICM Guidebooks/ICM Training Modules adopted and replicated by national government
- CRM Certification System for LGUs developed and piloted

We still have so much ground to cover, and so little time with which to do it. But we have great expectations about the possibilities of CRM in the Philippines. In the past three years, we have seen the coming together of so many sectors at all levels of government and civil society in support of the CRM cause. By the end of the Project in 2002, we expect to see the achievement of our strategic objective of 3,000 km of shoreline with improved management of coastal resources. More than that, however, we expect to see the emergence of a critical mass of coastal leaders willing and able to take CRM further to the national government's goal of 6,000 km of shoreline, and much further beyond. Then we can say that we have truly reached sustained management of our coastal resources.

Joining hands for CRM *Achieving spread through donor collaboration*

Donor collaboration is a built-in strategy for CRMP to achieve a strategic spread and sustainability of CRM. As dictated by the Project design, we are to achieve 50% of our target kilometers of shoreline by working with other donor groups involved in CRM in the Philippines. With the Revised Results Framework, this means that, whether it is CRMP or some other project that is in the field, we will all be working toward the same end-goal, and using the same indicators to account for our results. This entails at least three must-do's:

1. Level off what all parties are trying to accomplish, then look for opportunities for synergy.
2. Turn opportunities into "win situations" for all concerned.
3. Be inclusive and willing to share ownership of our products, services and successes.

We are operationalizing this strategy through a number of approaches, sometimes with individual donors, at other times with multiple donors, and also with government programs. An important step is the adoption of our Revised Results Framework by other groups. In most cases, the delivery mechanism is borne by groups besides CRMP — groups who have the physical presence in the area but need help in terms of putting in place a systematic process, setting benchmarks, and identifying strategies for achieving those benchmarks which match CRMP's benchmarks.

So far, donor collaboration has turned out as we expected it to be: a quite fluid process. And rightly so. Different organizations have different orientations. Each organization will have to go through its own learning and experience curves, and each organization will have its own priorities. One unifying element that we see is the fact that, in the new Philippine Medium-Term Development Plan, a main target for the national government is "integrated coastal management adopted by 250 LGUs along 6,000 km of shoreline by 2004."

CRMP has put in place a systematic process and series of benchmarks that can be used to achieve this target. Much of it has to do with information and our willingness and ability to share it. It means identifying issues and concerns that are very important and very real at the local government level, collating and consolidating information, and reporting national results. To do this, we are developing and promoting the use of the MCD, a database system that can facilitate information exchange, and help LGUs as well as NGAs plan and monitor CRM initiatives and set priorities for when and where to assist LGUs in achieving improved CRM. We are looking at how we can integrate what we have learned and the processes and package of services that we have developed, first with DENR's existing programs, and then with the other organizations'. We recognize that if we combined forces, we would see how we could accelerate achieving our targets.

We are working at two levels to bring about donor collaboration. At the first level, we link up and work with existing organizations and networks to forge strategic collaborations that will help us achieve our target spread of CRM. Some examples of this type of collaboration are our partnerships with the US Peace Corps-Philippines, the ADB-funded FRMP of DA-BEAR, the World Bank-funded CBRMP of the Department of Finance, DENR's CEP and the USAID-funded GOLD.



U.S. Peace Corps volunteers (Group 253) assigned to CRMP, with their supervisors

The second level involves working on new initiatives, such as the Bohol Islands Marine Triangle of the Foundation for the Philippine Environment, that are just coming on the drawing board. This way, we get the chance, at the very early stages, to say, "This is where we anticipate CRM will be when CRMP is over. Where does this go from here?" We can then draw lessons from our experience and work at ensuring an effective level of continuity and consistency of CRM efforts across the Philippines, building on what has been achieved, and building a critical mass—all the while looking at emerging trends and making a conscious effort to stay innovative and dynamic.

Devolution is an overriding trend that all donors recognize. Many donor-funded projects are now focusing on building LGU capability. In this, we have discovered countless areas of cooperation. FRMP will be using in their program a number of CRMP products, notably the PCRA methodology that the Project has developed. This arrangement will give FRMP access to ready CRM tools, while allowing us to expand our reach to municipalities outside our Learning Areas.

GOLD, a demand-driven project dedicated to strengthening LGU capacity, has begun responding to increased demand for technical assistance in CRM. For this, they will adopt CRMP's database system, Results Framework and package of services. This effectively means two USAID projects working on one Results Framework for CRM, which we hope will bring us closer to a universally accepted integrated CRM evaluation methodology.

Our partnership with the US Peace Corps-Philippines has allowed us to tap highly motivated volunteers with the appropriate background to assist us in our Learning Areas. As well, it is a positive arrangement for the volunteers as it gives them a definite area of involvement and administrative support from CRMP.

CBRMP, a DOF loan facility funded by the World Bank, is a project that is helping provide financial resources in a loan instrument to individual municipalities. Generally, municipal LGUs do not have adequate financial resources to start up their CRM programs. CBRMP is working with the national government to give municipalities the financial capacity required to set up and run a CRM program.

It would be difficult for donors to go municipality by municipality to deliver technical assistance and financial support. National and provincial governments are important players in helping to consolidate and systematize support – whether financial, technical or other types – to LGUs, especially the municipalities. Toward this end, we have also started assisting CEP with the intent of integrating our systems and realigning CEP's resources so that they are able to interact more closely with LGUs toward implementing individual municipal CRM programs, and thus achieving the national government's CRM targets under its Medium Term Development Plan.

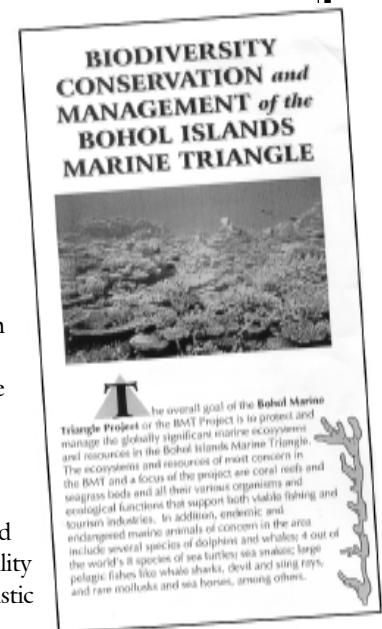
We are also tapping non-government initiatives as a delivery mechanism for our services. Together with the Foundation for the Philippine Environment and the Bohol Integrated Development Foundation (BIDEF), we are setting up a management scheme – led by the provincial government with private funding for five years – for the globally significant marine ecosystems of what is known as the Bohol Islands Marine Triangle, which is made up of Panglao, Balicasag and Pamilacan in Bohol. We are also working with World Wildlife Fund-Philippines in Batangas and the Tubbataha National Marine Park, where they are looking at adopting CRMP systems and materials, and in a conservation project in Sulu-Sulawesi, for which we are providing some technical guidance.

In all this we need to paint a clear picture of each group's role and contributions, as well as the bigger picture of where we are all headed, how far we have gone, and how much farther we need to go to get there. This way, even as we give full credit where such credit is due, we can put our accomplishments within a framework that tells us that, as partners for CRM, we are truly making real progress.

What matters is not so much the kilometers we are able to cover, which are only a symbolic way of measuring the countryside in a maritime country such as the Philippines. It is not so much a stamp approach that will leave its mark on the way coastal resources are used and managed in this country. What really matter are local governance systems. It is about putting in place those systems that allow innovation, and yet provide continuity and institutionalization so that we do not have to go back and make the same futile mistakes all over again.

We are looking at achieving bigger things from our collaboration with other donors. One of our policy items is a National Integrated Coastal Management Framework. If we could, at the end of the Project, formulate a National Integrated Coastal Management Framework which was built from a groundswell and bring together the two major national government players (DA and DENR) and other key players in CRM in the Philippines, that would be a good place and jumping-off point to continue to market that policy. Another project could then take that policy and bring it all the way down again, and then another project to filter it back up, and so on.

Such is the challenge of donor collaboration. In the end, our accomplishments will be sized up, not by the all too fleeting "footprints" we leave as we chase after our targets, but by our ability to join hands, complement each other's work, build on each other's achievements, and – simplistic though it may sound – secure a brighter future for coastal communities.



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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
- ♦ Local Coastal Law Enforcement
- ♦ Mangrove Management
- ♦ Strategic Planning for Coastal Management
- ♦ Coastal Tourism Planning and Management
- ♦ Seaweed Grower's Training

Integrated Coastal Management Training Course. This ten-day course is designed to meet the training requirements for individuals from national and local government, NGOs, and academic institutions who will be working in, and practicing, coastal resource management. The course is based on past experiences, but evolves to incorporate new coastal management practices and tools.

The course is primarily meant for use in local training efforts in the Philippines, and can help to standardize integrated coastal management trainings by making the training functions of local institutions more routine. The implementation of this course always strives to improve quality, add value and enhance knowledge about the practice of coastal management in the Philippines.

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 Management. This three-day course was developed to assist the integration of local coastal resource user knowledge with the understanding of scientists and planners for effective integrated coastal resource management. Much of the content is based on project work and research conducted in the Philippines and other countries in geography, human ecology and various coastal resource management efforts.

The course is designed primarily for use 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

Local Coastal Law Enforcement. This one-day course, which was developed by Silliman University's Legal Environmental Assistance Program, seeks to develop the community-based enforcement of coastal laws. It encourages the participation of the community in the enforcement process where such participation is sanctioned by law. To this end, trainers, coastal managers and enforcers should be equipped with a basic knowledge and understanding of the law.

Training Objectives:

- ♦ Make "instant lawyers" out of trainers from the LGUs, NGOs and POs involved in organizing coastal communities for effective coastal resource management
- ♦ Present fisheries and aquatic resource laws to lay persons and non-lawyers in a manner that is immediately understandable

- ♦ Empower local fishing communities, particularly the Bantay Dagat and fisherfolk organizations in the immediate and effective enforcement of coastal laws
- ♦ Complement the practical knowledge of trainers with the basic understanding of the law, especially at the enforcement stage
- ♦ Encourage the participation of the people in all stages of community-based enforcement of fisheries and aquatic resource laws

Mangrove Rehabilitation and Management. This three-day course is meant to enhance the capacity of trainers and implementors of the Community-Based Forest Management Program implemented through the DENR. This is a consolidation of technical information generated from scientific research, and the experiences of traditional mangrove farmers and mangrove reforestation managers. In addition, lessons gained from past local governance and mangrove advocacy projects are also considered in this training course.

Training Objectives:

- ♦ Educate coastal community resource managers on the processes necessary to secure a Community-Based Forestry Management Agreement
- ♦ Ensure an integrated and participatory approach for mangrove rehabilitation
- ♦ Ensure the future sustainability of mangroves

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 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

Seaweed Grower’s Training. This three-day course attempts to disseminate a “best CRM practice” through the grower-to-grower training center located in Gilutongan Island, Cordova municipality, Cebu. This is instituted with the end view that successful local seaweed growers can impart their technologies to fisherfolk who are currently undertaking, or are planning to venture, into similar enterprise(s).

The course consists of seven sessions covering the overall management of the whole production cycle of seaweed farming. It aims to develop and/or enhance participants’ skills and techniques in growing seaweed through a grower-to-grower methodology which emphasizes a personalized teaching approach.

Training Objectives:

- ♦ Compute simple economic analyses of seaweed farms
- ♦ Identify appropriate sites and farm layout
- ♦ Demonstrate at least one method of planting
- ♦ Describe and demonstrate the basic techniques in identifying planting materials
- ♦ Outline the basic management practices to successfully maintain farms
- ♦ Enumerate simple environmental management measures in seaweed farming

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 (bi-lingual).
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 bubay, 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 kuba gikan sa panagat*. A Cebuano variation of the Philippine *Fisheries in Decline* poster.

TECHNICAL/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 provided 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's 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.

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 which was 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 Barangoy 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 of this flyer were distributed during the “Our Seas, Our Life Exhibit” and other IEC activities.
10. *Lost Reefs*. This one-color, one-page leaflet has been distributed to more than 100,000 people during the “Our Seas, Our Life” Exhibit and other IEC activities. Produced in inexpensive craft paper, this leaflet discusses the sad state of Philippine coral reefs and carries specific recommendations for individual and collective action to rehabilitate and restore these important resources. Available in English, Pilipino and Cebuano versions.
11. *Mangroves Brochure*. A full-color “fold-out” bilingual (English and Cebuano) brochure that describes the importance of the mangrove ecosystem.
12. *Mangroves in Trouble*. This one-color, one-page leaflet has been distributed to more than 100,000 people during the “Our Seas, Our Life” Exhibit and other IEC activities. Produced in inexpensive craft paper, this leaflet discusses the sad state of Philippine mangroves and carries specific recommendations for individual and collective action to rehabilitate and restore these important resources. Available in English, Pilipino and Cebuano versions.
13. *Our Seas, Our Life Exhibit Guide*. To meet public demand for a more comprehensive popular literature on the importance of marine and coastal resources, CRMP produced this 80-page “Our Seas, Our Life Exhibit Guide” which describes the Exhibit in detail and provides additional information about marine and coastal resources. Completed in time for the Exhibit’s run in Metro Manila, the guide provides exhibit visitors with an overview of the various components of the exhibit, description of the displays and a resource book on the marine environment that they can take home.
14. *Olango Birds and Seascape Tour Brochure*. This is a highly visual promotional material and guide to an ecotour developed and managed by the Enterprise Development Component of CRMP.
15. “I Love the Ocean” Movement. A one page leaflet that describes the rationale and objectives of the movement emphasizing the need for individual and collective in protecting our seas and coastal resources.
16. *The Blue Tapestry: A Community Arts Project Celebrating the Philippine Centennial and the International Year of the Ocean*. This material describes the Blue Tapestry project and provides guidelines for its implementation as well as examples of how to get communities together to discuss their concerns and sentiments about their coastal environment. It is used to promote participation in the project, particularly of the different Girl Scouts councils in coastal municipalities.

EXHIBIT PANELS:

1. *Our Seas, Our Life Info Panels and Walls*. These large-scale, visually arresting and informative displays feature backlighted photos and interesting information on the Philippine coastal and marine environments, their importance, status, and ways by which people can help protect them. Display panels featuring general information on the “Ocean Planet, the beautiful but endangered Philippine seas and coasts showcase the natural beauty of the country’s marine and coastal environment. Because of its size, the display panels are ideal for shopping malls and large enclosed spaces. Initially developed for the International Year of the Ocean, the exhibit has toured 7 key destinations in the country generating over 1.3 million viewers and considerable mass media mileage and publicity.

2. *Coastal Resource Management Bamboo Panel Exhibit*. This exhibit which debuted at the National Convention of the League of Municipalities of the Philippines in November 1997 in Manila and re-staged at the SuperCat Terminal in Cebu continues to be on loan to various organizations and institutions. Comprising a total of 20 back to back bamboo panels and canvass flip charts, the exhibit also carries over 14 large photo graphs of marine life courtesy of Mr. Eduardo Cu-unjieng of Philippine Fuji Xerox.
3. *Protected Seascapes*. Floor-to-ceiling, full-color “info walls” that showcase the Philippines’ protected seascapes and includes the Olango Bird Sanctuary, Tubbataha Reefs and Turtle Islands.
4. *Ocean Depths Map*. Large scale computer generated map that depicts the range of deep and shallow waters of the Asia Pacific. The map points to the richness and productivity of the Philippine’s shallow waters and reefs.
5. *Exhibit panels for Bohol*. These panels were produced for the Bohol leg of the traveling *Our Seas, Our Life Exhibit*. They contain information on Bohol’s coastal environment, marine conservation and mangrove management initiatives. A section of the panel are dramatic black and white photographs of Bohol coastal life.
6. *Exhibit panels for Sarangani*. These panels were produced for the General Santos leg of the travelling “Our Seas, Our Life Exhibit”. They contain information on Sarangani Bay’s coastal environment and coastal resource management initiatives.
7. *Blue Backdrops*. Versatile 3 meters x 60 inches backdrops of appliqued material depicting the CRMP “coastal scene”, these backdrops serve as “stand-alone” exhibit materials in themselves. Four versions are currently available with the following messages: 1) “Bring Back our Future, Manage our Coastal Resources”; 2) “Coastal Resource Management for Food Security”; 3) “Have a Heart, Stop illegal fishing; Reduce Fishing Effort to Sustainable Levels; Protect and Manage Coastal Habitats; Municipal Waters for Municipal Fishers”; and 4) “Manage our Coastal Resources, Your Leadership can Make the Difference”.

WEB SITE

1. <http://www.oneocean.org>. Launched on January 26, CRMP’s official website serves as a source of information on coastal resource management in the Philippines and other developments in the Philippines and around the world related to the marine and coastal environment. The site incorporates, among other features, pages for CRMP, the International Year of the Ocean, and “Over Seas,” an electronic magazine on coastal resource management, nine issues of which have been completed and put on-line. It is designed to appeal to a wide audience but is especially targeted at media practitioners, policymakers, business and other key sectors with the wherewithal and influence to “make a difference” in the worldwide effort to promote the sustainability of our seas.
2. *Ocean Ambassadors homepage*. This new page on CRMP’s website at <http://www.oneocean.org> uses migratory animals such as sea turtles, dolphins, whales and others to highlight the message that the loss of one resource in one part of the sea can have repercussions globally. It features a turtle tracking project undertaken jointly by CRMP, Pawikan Conservation Project of the Department of Environment and Natural Resources, World Wildlife Fund-Philippines, and Smithsonian Institution.

VIDEO/AUDIO MATERIALS

1. *Ang Dagat ay Bubay* (Our Seas, Our Life). This song, created by leading Filipino composer Vehnee Saturno and performed by Cris Villonco, is the theme song of the I Love the Ocean Movement. It speaks about the importance of the ocean to human life and how it behooves us all to protect it.
2. *Kapitan Barongoy Radio Drama Series*. A radio drama series featuring a comedy/fantasy woven around the adventures of the lead character, a flying fish called Kapitan Barongoy, and three other characters, Dorica, Christian and Cordilla, who are humans. It paints a bleak picture of destruction under the sea from the point of view of sea creatures. While using entertainment story lines, the drama series is a valuable source of information on coastal resource management and provides practical lessons on ways to protect and conserve the marine and coastal environment. The series, a co-production of CRMP, DENR-CEP and GMA Network, was aired for six months (February-August) over GMA Network’s DYSS. It reached an estimated audience of 35,000 in Cebu, Bohol, Siquijor, Negros Oriental, Southern Leyte, Western and Northern Mindanao, Western Samar, Camiguin, Davao, Zamboanga, and General Santos City. This radio series was awarded as best radio drama in the provincial category by the Kapisanan ng mga Brodkaster sa Pilipinas, “1997 Golden Dove Award”.
3. *Karaniwang Tao MTV*. Based on the song “Karaniwang Tao” (Ordinary Citizen) by one of the Philippines’ foremost environmental artists (Joey Ayala), this three-minute MTV features CRM-relevant video clips and highlights the role and impact of ordinary human activities on the country’s natural resources. Developed for showing at the National Convention of the League of Municipalities of the Philippines in October, the video has found use as workshop icebreaker and takeoff point for discussion in ICM training activities at both the national and local levels.
4. *Sigaw ng Karagatan*. Adapted and re-edited from the *AgriSiyete* video series on CRM, this seven-minute video documentary was presented at the National Convention of the League of Municipalities of the Philippines in Manila on October 9. Produced in Filipino, this video documentary has done the rounds of schools and special audiences and serves a most effective discussion tool in CRMP’s training and information-education programs.
5. *Tungo sa Bagong Umaga*. This video documentary features the six winners of the 1998 Search for Best Coastal Resource Management Programs in the Philippines. A shorter version was produced as a promotional material for the Search.

6. *TV/Radio Plugs for Ocean Month*. Two TV plugs and one radio plug were produced in cooperation with the Philippine Information Agency, and two TV and two radio plugs with ABS CBN Foundation. These plugs focused on the need for marine conservation.
7. *Video Course on the Establishment of Community-Based Marine Sanctuary*. Produced (in Filipino) in cooperation with the Technology and Livelihood Resource Center, GMA Network and Silliman University, this seven-part video series describes the framework and process prescribed by experts for the establishment of community-based marine sanctuaries. The series covers the following topics: *Overview of CRM, Framework for the Establishment of Community-Based Marine Sanctuaries, Community Organizing, Community Education, Physical Establishment of a Marine Sanctuary, Legislation, and Sustainability*. The video was aired on GMA Network's educational TV program *AgriSiyete* from March 31 to April 8. Copies were distributed to local governments and non-governmental organizations and used as visual aid in ICM training and workshops.
7. *Video course on Coastal Resource Management*. Produced (in Filipino) in cooperation with the Technology and Livelihood Resource Center, GMA Network and GreenCom-Philippines, this 10-part video series is a comprehensive introduction to coastal resource management. It describes the status of coastal resources in the country, the importance of community participation and collaborative management in CRM and features various stories on communities that have successfully implemented CRM. This video series was awarded in 1997 as "Best Information Tool in the Television/Video Category by the Public Relations Organization of the Philippines.
8. *"Colors of the Sea" Children's Video Series (in Filipino)*. Six episodes are included in this series: "*Coastal Crossroads*", which speaks about the interconnectedness of land and marine ecosystems; "*A House for Hermie*" (about coral reefs); "*Sea of Trees*" (about mangroves); "*Treasures of the Sea*" (the importance of marine biodiversity); "*Don't Teach Your Trash to Swim*" and "*I Love the Ocean*". Produced in cooperation with ABS CBN Foundation, these episodes have merited frequent re-airing on the part of ABS-CBN.

OTHER PROMOTIONAL MATERIALS

1. *I Love the Ocean labels/bumper sticker*. Initially produced and distributed at the National Convention of the League of Municipalities, this sticker and its message have become a symbol of the fast-growing I Love the Ocean Movement. The sticker uses the heart symbol to express the word "love" and the heart is done in blue. Two flying fish hover above the word "ocean".
2. *I Love the Ocean Membership Card, Pin and Creed*. A specific objective of CRMP is to "mainstream" CRM issues and concerns in the national consciousness and foster a process that will lead to an coastal environmental movement in the Philippines. Translated into a rallying theme – "I love the ocean" – initiatives were undertaken to realize this movement through social marketing activities that would encourage public and community mobilization and advocacy on CRM issues. Each member was issued a blue heart pin and a membership card, at the back of which is printed the "I Love the Ocean Creed."
3. *I Love the Ocean T-shirts*. These T-shirts, courtesy of Islands Souvenirs (a successful retail chain selling T-shirts, caps, and other garment items), were distributed to the press and special guests during a press conference for the opening of the "Our Seas, Our Life" Exhibit at SM City-Cebu in February. The shirts carry the Movement's logo and the I Love the Ocean Creed.
4. *Islands Souvenirs I Love the Ocean line*. In support of CRMP's IEC activities, Islands Souvenirs introduced a sub-line called "I Love the Ocean" consisting of T-shirts, caps and bags. The company donated part of the proceeds from the sale of these products to the I Love the Ocean Movement.
5. *oneocean.org postcard*. Features the opening page of oneocean.org, the CRMP website, this postcard was a most convenient and effective way to promote the website to the project's various target groups and audiences.

BRIEFING MATERIALS (Transparencies)

1. *Participatory Coastal Resource Assessment (PCRA) and CRMP Briefing Kit in Cebuano*. Produced as overhead transparencies and flipcharts and distributed to Learning Area coordinators during the December quarterly meeting, these Cebuano briefing materials serve as training, communication and education tools at the barangay level.
2. *Briefing Package on CRMP*
3. *Introduction to Coastal Resource Management*
4. *Economic Valuation of Coastal Resources*
5. *Food Security and Coastal Resources*
6. *Into the Mainstream: Promoting Coastal Resource Management in the Philippine National Social Agenda*
7. *Integrated Coastal Management*
8. *Mangrove Management*
9. *Earthwath Research Results*
10. *Revised Results Framework*
11. *Philippine Situational Analysis of coastal resources*
12. *Eco-Tourism Framework*
13. *Enterprise Development Framework*
14. *Information, Education, Communication (IEC) Framework*

ACRONYMS

ACES	Alternative Commodities Exchange	ISFI	Institute for Small Farms and Industries, Inc.
ADB	Asian Development Bank	JAO	Joint Administrative Order
AFMA	Agriculture and Fisheries Modernization Act	JICA	Japan International Cooperation Agency
AGILE	Accelerating Growth, Development, and Liberalize with Equity	KKP-WWF	Kabang Kalikasang Pilipinas-World Wildlife Fund-Philippines
AIJC	Asian Institute for Journalism and Communication, Inc.	LAC	Learning Area Coordinator
BIDEF	Bohol Integrated Development Foundation	LEAP	Legal Environment Assistance Program
BFAR	Bureau of Fisheries and Aquatic Resources	LLDA	Laguna Lake Development Authority
BMT	Bohol Islands Marine Triangle	LGC	Local Government Code
CBFM	Community-Based Forest Management	LGU	local government unit
CBFMA	Community-Based Forest Management Agreement	LMP	League of Municipalities of the Philippines
CBRMP	Community-Based Resource Management Project	LOI	Letter of Instruction
CEMRINO	Center for the Establishment of Marine Reserves in Negros Oriental	MCD	municipal coastal database
CENRO	Community Environment and Natural Resources Office	MESI	Mote Environmental Services, Inc.
CEP	Coastal Environment Program	MFARMC	Municipal Fisheries and Aquatic Resources Management Council
CIDA	Canadian International Development Agency	MOA	Memorandum of Agreement
COE-CRM	Center of Excellence for Coastal Resource Management	MOU	Memorandum of Understanding
CORIAL	Coastal, Ocean, Reef and Island Advisors Ltd.	MPA	marine protected area
CRLC	Coastal Resource Leadership Challenge	MSU	Mindanao State University
CRM	coastal resource management	MTDP	Medium-Term Development Plan
CRMP	Coastal Resource Management Project	NAPC	National Anti-Poverty Commission
CVRP	Central Visayas Regional Project	NCMS	National Committee on Marine Sciences
DA	Department of Agriculture	NGA	national government agency
DECS	Department of Education, Culture and Sports	NGO	non-governmental organization
DENR	Department of Environment and Natural Resources	NIPAS	National Integrated Protected Area System
DOF	Department of Finance	OBST	Olango Birds and Seascape Tour
DOH	Department of Health	OECF	Overseas Economic Cooperation Fund
DOJ	Department of Justice	OIWS	Olango Island Wildlife Sanctuary
DOT	Department of Tourism	PACMAR	Pacific Management Resources, Inc.
EDF	Economic Development Foundation	PAO	Provincial Agriculturist's Office
EMPAS	Environmental Management and Protected Areas Service	PAWB	Protected Areas and Wildlife Bureau
ENRMD	Environment and Natural Resources Management Division	PAWD	Protected Areas and Wildlife Division
EO	Executive Order	PCRA	participatory coastal resource assessment
FAO	Fisheries Administrative Order	PCSD	Palawan Council for Sustainable Development
FARMC	Fisheries and Aquatic Resource Management Council	PD	Presidential Decree
FPE	Foundation for the Philippine Environment	PENRO	Provincial Environmental Natural Resources Office
FRMP	Fisheries Resource Management Project	PFDA	Philippine Fisheries Development Authority
FSP	Fisheries Sector Program	PIA	Philippine Information Agency
FSSI	Foundation for Sustainable Society, Inc.	PO	people's organization
GEF	Global Environment Fund	PPA	Philippine Ports Authority
GESAMP	Group of Experts on the Scientific Aspects of Marine Environmental Protection	PPDO	Provincial Planning and Development Office
GIS	geographic information system	PRIMEX	Pacific Rim Innovation and Exponents, Inc.
Glovis	Global Vision	PRSP	Public Relations Society of the Philippines
GOLD	Governance and Local Democracy	RA	Republic Act
ICM	integrated coastal management	RFTC	Regional Fisheries Training Center
IEC	information, education and communication	SB	Sangguniang Bayan (Municipal Council)
IESSC	Institute of Environmental Service for Social Change	SEP	Strategic Environmental Plan for Palawan
ILOM	I Love the Ocean Movement	SO4	SNS - Save Nature Society
IMA	International Marinelife Alliance	SP	Strategic Objective4
IRA	Internal Revenue Allotment	SUML	Sangguniang Panlalawigan (Provincial Board)
IRR	implementing rules and regulations	SV-SEP	Silliman University Marine Laboratory
		TLRC	San Vicente Strategic Environmental Plan
		TWG	Technology and Livelihood Resource Center
		UNDP	Technical Working Group
		UP-MSI	United Nations Development Programme
		USC	University of the Philippines-Marine Science Institute
		USAID	University of San Carlos
		VICTO-VCF	United States Agency for International Development
		WWF	Visayas Central Fund
		YMCA	Woodward-Clyde Philippines
			Young Men's Christian Association

PROJECT INFORMATION

The Coastal Resource Management Project - Philippines is a seven-year (1996-2002) technical assistance project of the Department of Environment and Natural Resources funded by the United States Agency for International Development. It operates in six "Learning Areas" in Olango, Cebu; Negros Oriental; Northwest Bohol; San Vicente, Palawan; Malalag, Davao del Sur; and Sarangani in partnership with the Department of Agriculture- Bureau of Fisheries and Aquatic Resources, Department of Interior and Local Government, Department of Tourism, local government units, non-governmental organizations, academe, private sectors, and people's organizations.

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Tetra Tech EM Inc.

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Global Vision Inc.
 Coastal, Ocean, Reef and Island Advisors Ltd.
 Helber, Hasters and Fee Planners
 Mote Environmental Services Inc.
 Oceanic Institute
 Pacific Management Resources Inc.
 Plan Pacific
 University of Hawaii
 Economic Development Foundation
 Pacific Rim Innovation and Management Exponents Inc.
 Woodward-Clyde Philippines

NGO/ACADEME PARTNERS

Asian Institute of Journalism and Communication, Inc.
 First Consolidated Bank Foundation, Inc.
 Haribon Foundation, Inc.
 Institute of Environmental Science for Social Change
 Institute for Small Farms and Industries, Inc.
 Rtn. Martin "Ting" Matiao Foundation, Inc.
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