

# INSTITUTIONAL FRAMEWORKS FOR COMMUNITY-BASED COASTAL RESOURCES MANAGEMENT AND MARINE CONSERVATION IN THE EASTERN VISAYAS REGION

Baybay, Leyte, Philippines

March 2002



Editors:  
Cesario Pagdilao  
Bernardita Germano  
Glenn Ricci  
Ester Zaragoza



## PROCEEDINGS

# Institutional Frameworks for Community-based Coastal Resources Management and Marine Conservation in the Eastern Visayas Region

Baybay, Leyte, Philippines  
March 2002

### Editors

Cesario R. Pagdilao  
Bernardita P. Germano  
Glenn M. Ricci  
Ester C. Zaragoza

*This undertaking was a collaborative effort between the Coastal Resources Center at the University of Rhode Island and the Philippine Council for Aquatic and Marine Research and Development of the Department of Science and Technology, in conjunction with the Institute of Tropical Ecology at Leyte State University.*

October 2002

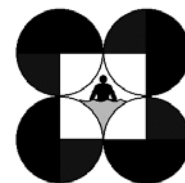
CRC Coastal Management Report #2237  
PCAMRD Book Series No. 36  
ISBN# 1-885454-46-5



COASTAL RESOURCES CENTER  
*University of Rhode Island*



Leyte State  
University



PCAMRD-DOST

# ACRONYMS

ADB	Asian Development Bank
AFMA	Agriculture and Fisheries Modernization Act
BFAR	Bureau of Fisheries and Aquatic Resources
BFARMC	Barangay Fisheries and Aquatic Resources Management Council
CAFC	City Agriculture and Fisheries Councils
CEP	Coastal Environment Program
CEMRINO	Center for the Establishment of Marine Resources in Negros Oriental
CBRMP	Community-Based Resource Management Project
CB-CRM	Community-Based Coastal Resource Management
CDA	Cooperative Development Authority
CMMO	Coastal and Marine Management Office
CRC/URI	Coastal Resources Center/University of Rhode Island
CRM	Coastal Resources Management
CRMP	Coastal Resources Management Project
CSU	Cagayan State University
CVRP	Central Visayas Regional Project
DA	Department of Agriculture
DA-BFAR	Department of Agriculture Bureau of Fisheries and Aquatic Resources
DED	German Development Service
DENR	Department of Environment and Natural Resources
DECS	Department of Education Culture and Sports
DILG	Department of Interior and Local Government
DMMMSU	Don Mariano Marcos Memorial State University
DND	Department of National Defense
DOF	Department of Finance
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOTC	Department of Transportation and Communication
DENR	Department of Environment and Natural Resources
DED	German Development Service
DTI	Department of Trade and Industry
EMB	Environment Management Bureau
ENRMD	Environment and Natural Resources Management Division
ENRO	Environment and Natural Resources Office
FARMC	Fisheries and Aquatic Resource Management Council
FCM	Fish Catch Monitoring Program
FRMP	Fisheries Research Management Program
FSP	Fishery Sector Program
GDFI	Guiuan Development Foundation, Inc.
GOP	Government of the Philippines
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
ICM	Integrated Coastal Management
ICOM	Integrated Community-Based Coastal Zone Management

IEC	Information, Education and Communication
IIRR	International Institute of Rural Reconstruction
IRA	Internal Revenue Allotment
JICA	Japan International Cooperation Agency
LEAP	Legal Environment Assistance Program
LGC	Local Government Code
LIP	Leyte Integrated Program on Sustainable Development of Natural Resources
LMB	Land Management Bureau
LGU	Local Government Unit
LSU	Leyte State University
MARINA	Maritime Industry Authority
MFARMC	Municipal Fisheries and Aquatic Resources Management Council
MMSU	Mariano Marcos State University
MPA	Marine Protected Area
MPDC	Municipal Planning and Development Council
NEDA	National Economic and Development Authority
NEGORMO	Negros Oriental Resource Management Office
NGA	National Government Agencies
NGO	Nongovernmental Organization
NIPAS	National Integrated Protected Areas System
PAMB	Protected Areas and Management Board
PAO or OPA	Provincial Agriculture Office
PFDA	Philippine Fisheries and Development Authority
PCAMRD	Philippine Council for Aquatic and Marine Research and Development
PCRA	Participatory Coastal Resource Assessment
PCG	Philippine Coast Guard
PENRO	Provincial Environment and Natural Resources Office
PERMO	Provincial Environment and Natural Resource Management Office
PIME	Planning, Information, Monitoring and Evaluation
PNP	Philippine National Police
PO	Public Organization
PPA	Philippine Ports Authority
PPDO	Provincial Planning and Development Office
PRMC	Provincial Resource Management Committee
SCUs	State Colleges and Universities
SUML	Silliman University Marine Laboratory
SYMCOR	Synergetic Management of Coastal Resources
TUDEM	Tacloban Urban Development and Environmental Management
UPMSI	University of the Philippines – Marine Science Institute
USAID	United States Agency for International Development
USC	University of San Carlos
VEAM	VISCA Environmental Awareness Movement
WESAMAR	Western Samar Agricultural Resource Program

# TABLE OF CONTENTS

<b>Acronyms</b>	ii
<b>Acknowledgements</b>	v
<b>Chapter 1 - Introduction</b>	<b>1</b>
Project Overview	1
Objectives of the Workshop	2
Background Paper – <i>Provincial and Regional Institutions in the Philippines: An Essential Element in Coastal Resource Management and Marine Conservation</i> , Miriam C. Balgos and Cesario R. Pagdilao	3
Group Discussion	23
<b>Chapter 2 - Coastal Overview of the Region</b>	<b>24</b>
Summary of Presentation – <i>Overview of the Current Coastal Resource Management Context in Region VIII</i> , Bernardita P. Germano	24
Group Discussion	35
Outcome of Small Group Sessions	36
Summary of Small Group Sessions	43
<b>Chapter 3 - Philippines and Indonesian Experience with Provincial Coastal Resources Management</b>	<b>44</b>
Summary of Presentation – <i>The Coastal Resources Management Program of Negros Oriental</i> , Mercy S. Teves	44
Group Discussion	49
Summary of Presentation – <i>Institutional Frameworks for CB-CRM in North Sulawesi</i> , Bernadetta Puspita Devi and J. Johannes Tulungen	50
Group Discussion	55
Outcome of Small Group Sessions	55
Summary of Small Group Sessions	56
<b>Chapter 4 - Developing a Provincial CRM Framework in the Eastern Visayas Region</b>	<b>57</b>
Outcome of Small Group Sessions	57
<b>Chapter 5 - Next Steps for Provinces and Local Government Units in the Eastern Visayas Region</b>	<b>63</b>
Recommendations for Immediate Action	63
Recommendations for Next Steps by Each Province	64
<b>Annex 1: References</b>	<b>66</b>
<b>Annex 2: Workshop Agenda</b>	<b>68</b>
<b>Annex 3: Directory of Participants</b>	<b>71</b>
<b>Annex 4: Regional Overview Data</b>	<b>77</b>
<b>Annex 5: Summary of Participant Evaluations of the Workshop</b>	<b>93</b>

## ACKNOWLEDGEMENTS

The editors of these proceedings would like to extend thanks and gratitude to those who contributed their services in organizing the workshop, namely the Philippine Council for Aquatic and Marine Research and Development (PCAMRD), Leyte State University (LSU), and the Coastal Resources Center at the University of Rhode Island (CRC/URI). We appreciate Director Pagdilao of PCAMRD for recognizing the accomplishments made on coastal resources management (CRM) in the region and the need for coordination, Brian Crawford and Tom Bayer of CRC for including the Eastern Visayas as part of a larger Western Pacific project, and LSU President Paciencia Milan for her full support and input on the integration of coastal resources management at the provincial and regional level.

We are also grateful for the assistance provided by the PCAMRD staff in organizing the workshop. Special mention goes to Mr. Eriberto P. Moreno and the other staff of PCAMRD including Mr. Jun Olandez, Ms. Precious Samonte, Ms. Eileen Redera, and Ms. Adela Corpuz for making the necessary arrangements.

Special thanks are also extended to LSU for providing the venue of the workshop, and to Ms. Roselle D. Escarez, Ms. Anna Samonte, Mr. Willy Ibarra, Ms. Haidee Capistrano, and Ms. Virna Salac of the LSU staff who supported the workshop as facilitators and members of the Secretariat. We acknowledge Dr. Pastor Garcia of the GIS Laboratory of LSU for the maps and to all the ITE staff, headed by Dr. Maria Juliet C. Ceniza, who accomplished their respective assignments contributing to a successful workshop. Our appreciation is also extended to Ms. Miriam Balgos for her invaluable contribution in the conceptualization of the workshop.

Within the region our appreciation goes out to the Provincial Agricultural Officers and Provincial Planning and Development Officers of the six component provinces for providing information on past and present CRM initiatives in their respective provinces. We thank BFAR8 and DENR8 offices for providing information on national CRM programs implemented at the regional level. We acknowledge the DA-BFAR-funded invertebrate project of the Marine Laboratory for travel assistance during the data gathering in different provinces.

Most of all we thank the participants (Annex 3 – Directory of Participants) who actively took part in the group sessions and shared their ideas and concerns for provincial integration so that this endeavor can move successfully forward. As the proceedings will show, we value and respect the advice and reflections offered by the participants.

Finally, we are truly grateful to The David and Lucile Packard Foundation for providing funding to make the workshop and proceedings possible.

The Editors





# CHAPTER 1

## INTRODUCTION

### PROJECT OVERVIEW

The workshop on institutional frameworks for coastal management is part of a larger project titled *Fostering Marine Conservation in the Western Pacific: Enabling People, Enabling Conservation*, implemented by the Coastal Resources Center at the University of Rhode Island (CRC/URI) with funding from The David and Lucile Packard Foundation. The workshop and proceedings were a collaborative effort by the Philippine Council for Aquatic and Marine Research and Development (PCAMRD), the Institute of Tropical Ecology at Leyte State University (LSU) and CRC/URI. The larger project is a combination of building the capacity of coastal managers and identifying institutional frameworks for assisting site-based marine conservation. Specifically, the project is working to:

- Initiate a Western Pacific capacity-building program that enhances the capability of individuals and institutions to advance coastal management programs at the local, national, and regional levels
- Review with key stakeholders and governments the lessons learned from site management in order to build support for launching integrated coastal management framework initiatives and to foster replication of local management programs

The project sites include Eastern Visayas (Region VIII) in the central Philippines and the nation of Fiji. This work complements an on-going, similar initiative in North Sulawesi, Indonesia. All three locations have successful local site projects, and all recognize the need for more government involvement in linking individual, site-based projects.

Within the Western Pacific, an encouraging proliferation of site-based programs has been initiated by a variety of organizations. In addition, there are both national and regional efforts to link sites and to learn from experience in order to improve performance. There is also a growing realization that site management alone is not sufficient for achieving sustained biological or socioeconomic improvements at significant scales. A “two track” approach to coastal management is advocated. Such an approach suggests that to achieve sustained progress, programs must simultaneously proceed with local-level geographically-oriented site management programs and engage in framework policy initiatives at the next higher level.

For the Philippine component, CRC/URI has partnered with PCAMRD and LSU to assess the utility of, and build a constituency for, coastal framework management plans to increase the long-term sustainability of site-based projects in the Eastern Visayas. Results from the workshop clearly express a strong interest on behalf of the participants for a provincial government role in coordinating and supporting municipal-level coastal management. This report discusses the next steps by the provincial government representatives for advancing the dialogue and coordination within the Eastern Visayas.

## **OBJECTIVES OF THE WORKSHOP**

The workshop, *Institutional Frameworks for Community-based Coastal Resources Management and Marine Conservation in the Eastern Visayas Region*, had the following objectives:

- Review the current situation in Eastern Visayas (Region VIII) concerning coastal resources management (CRM) and marine conservation activities, projects, and programs
- Discuss an emerging institutional framework at the provincial level, and the need for such a framework at the provincial and regional levels, to support community-based coastal resources management (CB-CRM) and marine conservation at the community level
- Identify institutional development needs and make recommendations concerning how to build institutional capacity in the region to support CB-CRM and marine conservation

## **BACKGROUND PAPER**

### **Provincial and Regional Institutions in the Philippines: An Essential Element in Coastal Resource Management and Marine Conservation**

*Miriam C. Balgos\* and Cesario R. Pagdilao\*\**

*\* Graduate College of Marine Studies, University of Delaware USA*

*\*\* Philippine Council for Aquatic and Marine Research and Development*

#### **I. Introduction**

##### **A. Historical Background and Perspective**

The Philippines has more than two decades of experience in CRM and marine conservation, particularly in community-based initiatives, from which other countries in the region are drawing. However, a reservoir of lessons learned has not been applied and translated neither into improved environmental status nor to an uplifted socioeconomic status of poor coastal communities. It has been reported that only 19 percent of CB-CRM programs and projects implemented between 1984 and 1994 were successful (Pomeroy and Carlos 1997). These findings lead to the question of what is causing this low rate of success. Is there a need for a shift in the CRM model being followed? Alternatively, do these projects and programs simply need more time to mature and produce tangible results?

A project implemented by the Coastal Resources Center at the University of Rhode Island (CRC/URI) looked at the contextual and intervention factors that affect the success of community-based marine protected areas (CB-MPAs) in the Philippines. CB-MPAs are a common or oftentimes the major intervention of coastal management programs. Six factors were identified to be the most important of those involved in the overall success of CB-MPAs, among which are successful alternative income projects, continuing advice from the implementing organization, and inputs from the municipal government (Pollnac and Crawford 2000). These factors could be influenced by other variables such as the presence of institutional mechanisms that can direct resources from higher levels of government that have the capability to generate substantial financial and technical resources to support local-level interventions.

The situation prompts another look at the current institutional framework to determine areas that could be strengthened to improve CRM implementation in the country. Recent initiatives by the Coastal Resources Management Project (CRMP) in developing local-level learning areas led to experiments in provincial-level CRM in three provinces (Bohol, Davao Oriental, and Masbate), picking up from the Negros Oriental example. The initial successes in these provinces point to the necessity of a paradigm shift incorporating a facilitation-coordination-replication role of provinces that will require adding personnel to the current bureaucratic framework. This may prove to be a significant link in strengthening municipalities and cities in carrying out the devolution of CRM.

##### **B. Purpose and Scope of the Paper**

This paper aimed to provide background information that would serve as a starting point of discussion for the workshop held at the Leyte State University (LSU), Baybay, Leyte, Philippines, on March 14-15, 2002. The workshop objectives are listed in the overview section of these proceedings (page 1).

The additional parts of this paper look at:

- The current institutional context at all levels of coastal management and governance along with the legislative framework (part II)

- How local-level CRM is focusing at the municipal and provincial levels (part III)
- The roles of nongovernmental organizations (NGOs), academic, and other research and extension institutions, and externally-funded resource management programs (part IV)
- The needs, prospects, and opportunities for replication of CRM implementation at the provincial level, including specific opportunities in Eastern Visayas (part V)
- Recommendations, suggest questions for the workshop, and offer some concluding statements (part VI).

## **II. Brief Overview of the Current Institutional and Legal Context at all Levels of Government**

### **A. Major Legislative Framework**

There are six pieces of legislation that collectively form the basis for coastal and marine resources management in the Philippines:

- The 1987 Philippine Constitution
- The Fisheries Decree of 1975 (Presidential Decree (PD 704)
- The Philippine Environmental Code (PD 1151 and 1152)
- The Local Government Code (LGC) of the Philippines (RA 7160)
- The National Integrated Protected Areas System (NIPAS) Act of 1991 (RA 7586)
- The Philippine Fisheries Code of 1998 (RA 8550).

The 1987 Philippines Constitution provides the basic legal framework for the protection and preservation of the country's marine wealth, with the ultimate control and ownership of its natural resources in its archipelagic waters, territorial sea, and exclusive economic zone. The revised constitution provides explicit recognition of the need for CRM, linking its application to optimum productivity, sustainability, and equity through democratic processes and distributive justice (Valle et al. 2000). It also recognizes the obligation of the state to "protect, develop and conserve marine resources" (Article XII, Section 7) and to "protect the rights of subsistence fishers, especially local communities" (Article II, Section 22). The revised constitution encourages "nongovernmental community-based or sectoral organizations to promote the welfare of the country" (Article II, Section 23).

The Fisheries Decree of 1975 (PD 704) revised and consolidated all laws and decrees pertaining to fishing and fisheries aimed at accelerating and promoting the integrated development of the fishery industry and keeping the fishery resources of the country in optimum productive condition through proper conservation and protection. It encouraged and promoted the export of fish and fishery/aquatic products to enable the fishery industry to contribute positively to the development and growth of the national economy. PD 704 granted the Department of Agriculture Bureau of Fisheries and Aquatic Resources (DA-BFAR) the jurisdiction and responsibility over the management, conservation, development, protection, and disposition of all fishery and aquatic resources of the country. This did not exclude municipal waters, which are under the municipal and city governments excluding fishpens and seaweed culture. PD 704 also provided DA-BFAR the authority to regulate and supervise the production, gathering, utilization, and disposition of fishery and aquatic resources.

In 1991, the Philippines passed a major piece of national legislation called the Local Government Code (LGC) (Republic Act No. 7160). This legislation, which took effect in January 1992, began a new era in local development and people's empowerment and paved the way to attaining local autonomy and self-reliance of local communities. The passage of the LGC resulted in a structural power shift that placed local coastal governments and cities at the forefront of sustainable resource management (DENR et al. 1997). It provided for the devolution or decentralization of authority from national agencies to provincial and municipal governments, including coastal and marine resources management. Municipalities benefited because their municipal waters were extended from 7 to 15 km from the shore. It provided for the optional creation of an Environment and Natural Resources Officer (ENRO) position in all municipalities, cities, and provinces (Section 484).

The National Integrated Protected Areas System (NIPAS) Law of 1992 mandated the Department of Environmental and Natural Resources (DENR) to implement a program for the protection, conservation, and management of natural habitats, including marine ecosystems and their biodiversity in protected areas in the Philippines. Under NIPAS, large MPAs were established; however, there are only a few small areas that were designated. Management strategies under the NIPAS program included those that target institutional strengthening and community participation and organization. In cases where the protected areas are located within municipal waters, the local government has representation in the Protected Area Management Board (PAMB).

The Philippine Fisheries Code of 1998 (PFC) (RA 8550) provides for the development, management, and conservation of fisheries and aquatic resources. The PFC integrates all laws relevant to fisheries. It recognizes the importance of ensuring rational and sustainable development, management, and conservation of fisheries and aquatic resources. This is to be consistent with the primary objectives of maintaining a sound ecological balance, and protecting and enhancing the quality of the environment. The PFC requires that at least 15 percent of municipal waters be set aside as MPAs. It specifies the application of integrated coastal area management and targets the provision of a sound policy and institutional framework for fisheries resources management and its long-term sustainability.

## **B. National Level**

Traditionally, coastal and marine resources management in the Philippines was under the jurisdiction of two national agencies, the DA-BFAR and the DENR. However, in an effort to rationalize the structure of existing government institutions and to strengthen the efforts of addressing the various issues and concerns of the country's coastal and marine resources, the government has increased the number of agencies/institutions involved.

At present, there are six government departments sharing unique responsibilities over the wise use and conservation of coastal and marine resources (see Table 1 for a summary of responsibilities), namely:

1. Agriculture through the DA-BFAR
2. Environment and natural resources
3. Interior and local government through the Philippine National Police - Maritime Group
4. Transportation and Communications through the Philippine Ports Authority (PPA), Maritime Industry Authority (MARINA) and the Philippine Coast Guard (PCG)
5. National Defense through the Philippine Navy
6. Science and Technology through the Philippine Council for Aquatic and Marine Research and Development (PCAMRD)

DA-BFAR and DENR both provide policy direction on the implementation of CRM programs in the country. Together with PCAMRD, they share a number of other major responsibilities including providing technical assistance, training and extension services, and assistance to local government units (LGUs) (e.g., establishing marine sanctuaries).

DA-BFAR is the principal agency concerned with fishery resources management and the lead agency in providing policy reforms/directions related to the sustainable use of fishery resources. It has sole responsibility in assisting local governments in enforcing Fisheries Administrative Orders (FAOs) and regulating fisheries outside of municipal jurisdiction. DA-BFAR also continues to provide technical assistance/services to LGUs in support of their CRM program implementation (e.g., in the development of CRM plans, organization of Fisheries and Aquatic Resource Management Councils (FARMCs), training and extension, and establishment of fish sanctuaries).

DENR has a mandate for the full exploration and development as well as the wise use, management, renewal, and conservation of the country's forests, minerals, lands, water, fisheries, wildlife, and other natural resources. It is responsible for the enforcement of rules, regulations, and guidelines on the issuance of licenses, permits, concessions, lease agreements, and other privileges concerning the development, exploration, and use of marine, freshwater, and brackish water resources of the country. It is not, however, involved in fisheries regulatory, licensing, research, and enforcement functions that are presently being exercised by DA-BFAR.

In DENR's implementation of the NIPAS (through Department Administrative Order 19 series of 1993), it launched the Coastal Environment Program (CEP). This program aims to improve the coastal population's socioeconomic condition through environmental protection and strategic interventions. These interventions include resource assessment, community organization, information and education campaigns, and identification and establishment of impact sites and seascapes. The implementation of CEP is being strengthened through the creation of Coastal and Marine Management Offices in all regional offices of DENR as provided for in Department Administrative Order (DAO 8).

The Department of Interior and Local Government (DILG), through its various bureaus and offices, is responsible for planning, implementing, monitoring, and evaluating plans, programs, and policies on local autonomy, decentralization, and local governance. In addition, it performs police functions through the Philippine national police (PNP) – the Maritime Group controlling the Philippine territorial waters, rivers, and coastal areas from the shoreline to one mile inland. It is the agency primarily responsible in assisting the LGUs with their new functions because of decentralization, including CRM.

The Department of Transportation and Communication (DOTC) through the MARINA sets policy direction in the development of the maritime industry and supervises the development and management of public ports. DOTC also regulates the development of private ports through the Philippine Ports Authority (PPA). The Philippine Coast Guard (PCG), previously under the Department of National Defense now under DOTC, is involved in the registration and inspection of commercial fishing boats. Both MARINA and PPA rely on the PCG to enforce regulations and ensure compliance with maritime safety requirements. The Philippine Navy under the Department of National Defense promotes safety at sea and maritime security, and protects marine resources and the marine environment as an armed force. It also assists in the implementation of laws in the high seas and waters under Philippine jurisdiction, including those on prevention, mitigation, and control of marine pollution.

PCAMRD monitors aquatic and marine research and development projects and formulates strategies, policies, plans, programs, and projects for aquatic and marine science technology. Additionally, it generates external funds and provides research and development direction for fisheries and aquatic resources.

There are other national agencies involved in CRM including the Department of Tourism through implementation of its National Tourism Master Plan; the Department of Finance through its Community-based Resource Management Project; and the National Economic and Development Authority through incorporation of regional CRM plans within regional development plans.

**Table 1. National agencies mainly responsible for coastal resources management in the Philippines and their functions relative to CRM.**

<b>Agency</b>	<b>Functions</b>
<i>Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR)</i>	<ul style="list-style-type: none"> <li>-provide policy direction on CRM implementation in the country</li> <li>-provide technical assistance to LGUs</li> <li>-provide training and extension services on CRM</li> <li>-assist LGUs in the establishment of marine sanctuaries</li> <li>-coordinate with LGUs in the enforcement of FAOs</li> <li>-regulate fishing activities outside municipal waters</li> </ul>
<i>Department of Environment and Natural Resources (DENR)</i>	<ul style="list-style-type: none"> <li>-exploration, development, and wise use, management, renewal, and conservation of the country's forest, mineral, land, water, fisheries, wildlife, and other natural resources</li> <li>-promulgation of rules, regulations, and guidelines on the issuance of permits, concessions, lease agreements, and other privileges concerning the development, exploration, and utilization of marine, freshwater and brackishwater, and overall aquatic resources of the country</li> </ul>
<i>Department of Interior and Local Government (DILG)</i>	<ul style="list-style-type: none"> <li>-planning, implementing, monitoring, and evaluating plans, programs, and policies pertaining to local autonomy, decentralization, and local governance, through the Bureau of Local Government Development, Bureau of Local Government Supervision, National Barangay Operations Office, and the Local Government Academy</li> <li>-PNP-Maritime Command under DILG has authority to perform police functions over Philippine territorial waters and rivers, coastal areas from the shoreline to one mile inland to include ports and harbors and small islands of two miles in length or diameter with less than 1,000 population; absorbed all police functions of the Philippine Coast Guard since June 1992</li> </ul>
<i>Department of Transportation and Communications (DOTC)</i>	<ul style="list-style-type: none"> <li>-undertakes policy formulation, infrastructure development, and regulatory functions; e.g., involved in the construction of fish ports, municipal ports, and improvement and maintenance of lighthouses</li> <li>-the Maritime Industry Authority (MARINA), an attached agency, is responsible for the promotion and development of the maritime industry, the regulation of shipping and maritime safety regulatory functions in collaboration with the PCG</li> <li>-the Philippine Ports Authority, an attached agency, is responsible for the development and the provision and supervision, control, operation, and maintenance of port facilities and services; PPA regulates the establishment of private ports</li> </ul>
<i>Department of National Defense-Philippine Navy (DND-PN)</i>	<ul style="list-style-type: none"> <li>-promotes safety at sea</li> <li>-promotes maritime security as an armed force</li> <li>-assists in the implementation of laws in the high seas and waters under Philippine jurisdiction, including those pertaining to the prevention, mitigation, and control of marine pollution</li> <li>-safeguards marine resources and environment</li> </ul>
<i>Department of Science and Technology-Philippine Council for Aquatic and Marine Research and Development (DOST-PCAMRD)</i>	<ul style="list-style-type: none"> <li>-monitors aquatic and marine research and development projects</li> <li>-formulates strategies, policies, plans, programs, and projects for aquatic and marine science technology</li> <li>-generates external funds</li> <li>-provides research and development directions for fisheries and aquatic resources through a network of research and development institutions, state colleges and universities, and regional research stations of DA and DENR</li> </ul>

### **C. Regional Level**

The DA-BFAR, DENR, DILG, and DOTC have regional and provincial offices through which they conduct their field operations. DA-BFAR operates in the regions through regional offices and has fully devolved functions at the provincial and municipal levels. DENR has provincial and community offices in addition to their regional offices, but its functions are not fully devolved to the LGUs. PCAMRD operates through the National Aquatic Resources Research and Development System (NARRDS) network of research and development institutions, state colleges and universities, and regional research stations of DA and DENR. The NARRDS network of institutions is composed of four national centers, five zonal centers, and about 40 research and development institutions.

The generalized functions of government agencies at the regional level include policymaking at the regional level; providing technical assistance to provincial and municipal governments; and accessing funds and other resources for local-level project implementation.

### **D. Local Levels (Provincial, Towns, Cities, and Barangays)**

The LGC, known as Republic Act 1760, provided local level control over coastal waters through a definition of municipal waters and establishment of jurisdictional entitlements to the province, municipality, city, and barangay (village). The province is responsible for settling disputes over the boundaries of municipal waters and has oversight functions of the governor and provincial council. The municipality has jurisdiction over: a) municipal waters of up to 15 km from the coastline; b) general powers provided in the LGC (e.g., legislation and ordinance-making); and c) specific fisheries and marine resource provisions (e.g., has exclusive authority to grant fishery privileges in the municipal waters and impose rentals, fees, or charges). The barangay is the basic political unit. It serves as the primary planning and implementation unit of government policies. This level provides a forum for amicable dispute resolution with the barangay captain (enforcement functions) and barangay council (legislative functions).

In addition to providing ample fishing grounds to small-scale fishers, the establishment of municipal waters was also intended to protect sustenance fishers from being put at a disadvantage by large-scale fishing operators and the long-term impacts of their operation. The municipal waters were designed for the exclusive use of municipal or small-scale fishers, defined as those who use small fishing craft not larger than three gross tons. The LGC mandates the LGUs to establish Municipal Fisheries and Aquatic Resources Management Councils (MFARMCs). The MFARMCs serve as advisory bodies to LGUs in:

- Determining priorities in municipal fishing activities
- Assisting LGUs in formulating mechanisms in the wise use of municipal waters
- Determining license fees, closed seasons, and fish sanctuaries
- Enacting appropriate ordinances

Furthermore, the Fisheries Code requires that at least 15 percent of municipal waters be set aside as MPAs.

The Fisheries Code strengthened the legal basis for CRM and encouraged the local communities and NGOs to participate in its implementation. However, this mandate is weakened by the code's provision that municipal waters exclude areas protected under the NIPAS. Thus, this provision complicates the jurisdiction and responsibility for CRM.

It is unfortunate that most LGUs in the Philippines do not know the actual extent of their legal jurisdiction because maps delineating the outer boundaries of municipal waters are not available. Maps showing municipal boundaries are critical in helping local governments manage coastal resources for sustainable use. As provided by the Fisheries Code, the delineation and mapping of municipal water boundaries is now taking



place with the National Mapping and Resources Information Authority of the DENR assisting LGUs. Guidelines outlined in the DENR Administrative Order (DAO) No. 17 are being followed.

### **E. Institutional Overlaps and Conflicts**

As evident in the functions of the major government organizations responsible for coastal management, there are institutional overlaps and conflicts that extend to other government agencies involved, as shown in Table 2. Because of the many needs in coastal management, these agencies managed to carry out their activities without too much conflict, albeit with sub-optimal efficiency. However, policy formulation concerning the management of mangrove areas, a function that is shared by DA-BFAR and DENR, has been problematic. It has become complicated with the involvement of local governments and the municipal fishery councils. DA-BFAR issues leasing permits for mangrove areas to be developed into fishponds, while DENR issues permits for forest lease agreements.

The LGC has added to the overlaps and conflicts in responsibilities between levels of government. These include overlaps in the areas of conservation or revenue generation, and levying of taxes, fees, and charges between province and subsidiary municipality, although the province has overriding powers. There is also incomplete devolution of certain powers leading to issues on seaweed farms and closed seasons, and a lack of explicit general policy statements on the management of municipal waters.

In view of these overlaps, a nested system of governance infused with checks and balances at various levels, with varying scales of support and responsibilities, seems to be an alternative institutional mechanism for the country. Such a system should be considered especially in the current efforts to develop legislation for a national CRM policy.

**Table 2. Institutional overlaps and conflicts in functions among major government agencies involved in CRM (DENR et al. 1997).**

<b>Function</b>	<b>Agency</b>
Policy formulation	LGU, FARMC, NGA, DENR
<b>Resource assessments:</b> Coastal Marine	DA-BFAR, DENR, PCAMRD DA-BFAR, DENR, PCAMRD
<b>Statistics gathering and compilation:</b> Fisheries Mangroves Fishponds	DA-BAS DENR DA-BFAR
Establishment of protected areas	LGU, DA-BFAR, DENR
Mangrove reforestation	LGU, DENR
<b>Fishery licensing:</b> Municipal waters Offshore waters	LGU DA-BFAR
Fishery law enforcement	LGU-PNP, PCG, DA-BFAR
Pollution law enforcement	LGU, PCG, DENR
Land use management	LGU, DENR
Tourism management	LGU, DOT
Reclamation	DENR (LMB and EMB), PEA
Pollution monitoring, including marine waters	LGU, DENR-EMB, PCG
Establishment of municipal/fishing ports	PFDA, PPA, LGU
Research	DA-BFAR, DA-BAR, DOST-PCAMRD, SCUs

### III. CRM Implementation at the Local Level

#### A. Municipal-level Coastal Resources Management

Municipal-level CRM initiatives started with marine research and conservation projects, particularly the establishment of marine sanctuaries. This was facilitated by Silliman University in Sumilon, Apo Island, and other municipalities in Central Visayas; the Central Visayas Regional Project in various municipalities in four Central Visayas provinces; and PCAMRD in Eastern Samar, Cebu, Quezon, Palawan, and Ilocos Norte. CRM planning and implementation at the municipal level became a priority with the passing of the LGC, with more academic institutions, NGOs, and government agencies targeting municipalities in their CRM initiatives. These include the Fisheries Sector Program of DA-BFAR and the Fisheries Resource Management Project (its second phase); the Coastal Environment Program of DENR; the United States Agency for International Development-funded CRMP, and the Community-based Resource Management Program of the Department of Finance (DOF). The CRMP established CRM learning areas in several municipalities, demonstrating CRM planning and implementation at the municipal level for other municipalities to replicate. The DOF program on community-based resource management projects directly grants funding to municipalities for use in natural resources management planning and implementation.

Replication of CRM in other municipalities is facilitated by the cross-visits and adoption of CRM by the League of Municipalities in the Philippines. In recent years, the successes of a number of municipalities in CRM are highlighted by a competition for the Best CRM Award sponsored by DENR and CRMP. The CRM Certification Program of DENR\* has started to encourage coastal municipalities to vigorously pursue CRM program planning and implementation. This is being done with the awarding of CRM Level 1 certification to two municipalities (Inabanga, Bohol and Hagonoy, Davao del Sur). The accomplishments of these municipalities include:

- Multi-year CRM plan drafted
- Municipal Fisheries and Aquatic Resources Management Council formed and active
- Baseline assessment conducted
- Annual CRM budget allocated
- Shoreline management planned
- Planned CRM interventions initiated (Anonymous 2002)

The institutional structure in municipal-level CRM commonly follows a co-management framework. In this case, authority is shared among the local governments (mainly the municipal government and barangay levels) and the community represented by peoples' organizations in the planning and implementation of CRM.

Technical assistance and/or funding are extended to municipalities by the above-mentioned programs through academic institutions, government organizations, and NGOs who have expertise in CRM. Because these institutions are unable to meet the present demand for such services, there is a pressing need to rationalize capability-building efforts in CRM in the country. There is an ongoing collaborative program among the International Center for Living Aquatic Resources Management (ICLARM), PCAMRD, Haribon Foundation, DENR, and DA-BFAR on training local government officials in integrated coastal management (ICM). This

---

\* This certification program is patterned after international standards for organizational and environmental management systems (ISO 9000 and ISO 14000). It is a voluntary process in which an independent third party provides a written certificate showing that a product, method or service satisfies certain predetermined requirements or criteria. Among the benefits of certification is the provision of a framework for prioritizing investments of local and national government and foreign donors to CRM-certified municipalities and cities (Courtney et al. 2001).

program trains trainers that can pass on the same training to local government officials. (Training provincial ICM trainers in this program may be another strategy).

## **B. Emerging Models for Provincial-level CRM**

The provinces, along with municipalities and cities, are mandated by the LGC to carry out program planning and implementation, legislation and enforcement, taxation and revenue generation, monitoring and evaluation, capability-building, and inter-agency and inter-LGU collaboration for the protection of coastal and marine resources (Yambao et al. 2001). The code, which established jurisdictional entitlements to provinces, municipalities and cities, and barangays, assigned the settling of disputes over the boundaries of municipal waters to provinces and provided oversight functions of the governor and provincial council (Abregana et al. 1996). Table 3 summarizes the specific roles and functions of the province in CRM.

To date, an increasing number of provinces have established CRM units within provincial environment and management offices or interim provincial CRM working groups, namely, Negros Oriental, Bohol, Masbate, and Davao del Sur (Green et al. 2000; Yambao et al. 2001), Davao Oriental, Davao del Norte, and Palawan. Through the League of Provinces of the Philippines, other provinces are starting to formulate their CRM programs and to establish their CRM units. Table 4 summarizes the motivation behind, the processes undertaken in, and the activities and achievements of, establishing provincial CRM units in the provinces assisted by CRMP.

A provincial CRM model (Figure 1) emerges out of the four provinces' experience in CRM implementation. A provincial CRM working group evolves into one that attains a legal stature with the formulation of a provincial environmental code. Its activities can be sustained by annual allocations from the Economic Development Fund, as long as funds are allocated to the provincial environment program with the blessings of provincial officials, particularly the governor and the provincial council. The facilitation role of the CRMP may be taken over by proactive academic institutions, NGOs, and government organizations in the province. Figure 2 shows the institutional diagram and CRM process adopted in Negros Oriental identifying essential elements that were put together under a provincial CRM framework.

**Table 3. Specific roles and functions of the province in CRM (taken from DENR et al. 2000 as cited in Yambao et al. 2001).**

<p><b>Planning</b></p> <ul style="list-style-type: none"> <li>• Formulate socioeconomic development plans, including CRM plan</li> </ul>
<p><b>Legislation</b></p> <ul style="list-style-type: none"> <li>• Approve ordinances which help ensure the efficient and effective delivery of CRM (including pollution control) as a basic service</li> <li>• Review ordinances enacted by municipality/city government</li> </ul>
<p><b>Regulatory</b></p> <ul style="list-style-type: none"> <li>• Issue permit and collect fees for guano collection</li> <li>• Issue permit to extract sand, gravel, and other quarry resources</li> </ul>
<p><b>Enforcement</b></p> <ul style="list-style-type: none"> <li>• Enforce all laws and ordinances relating to pollution and environmental protection</li> <li>• Protect the environment and impose appropriate penalties for the following acts: <ul style="list-style-type: none"> <li>- Dynamite fishing and other forms of destructive fishing</li> <li>- Illegal logging and smuggling of logs</li> <li>- Smuggling of natural resource products and endangered species</li> <li>- Slash-and-burn farming</li> <li>- Other activities which will result in pollution, acceleration of eutrophication of rivers and lakes, or ecological imbalance</li> </ul> </li> <li>• Prescribe criminal penalty prescribed under the Fisheries Code</li> <li>• Enforce forestry laws in community-based forestry areas</li> <li>• Enforce small-scale mining laws, subject to policies of the DENR</li> <li>• Verify and adjudicate conflicts on guano collection and on sand, gravel, and other quarry resources</li> </ul>
<p><b>Taxation</b></p> <ul style="list-style-type: none"> <li>• Impose taxes on sand, gravel, and other quarry resources</li> <li>• Define the geographic criteria for application of LGU taxes and levies based on the location of the transaction or the operation branch, outlet, or office</li> <li>• Formulate special levies on real property and the procedure for allocating proceeds</li> <li>• Receive share from the internal revenue allotment (IRA)</li> <li>• Receive share of proceeds for government agencies or government-owned and controlled corporations</li> </ul>
<p><b>Extension/Technical Assistance</b></p> <ul style="list-style-type: none"> <li>• Provide agricultural extension and on-site services and facilities, which include the organization of farmers and fishers cooperatives and the other collective organizations</li> <li>• Integrate cooperation for agricultural extension services and undertake annual evaluation of all municipal extension programs</li> </ul>
<p><b>Intergovernmental Relations</b></p> <ul style="list-style-type: none"> <li>• Group together, consolidate, or coordinate efforts, services, and resources for commonly beneficial purposes</li> <li>• Group together and coordinate with each other to achieve the objectives of integrated fishery resource management</li> <li>• Share with the national government responsibility in the management and maintenance of ecological balance within the territorial jurisdiction</li> </ul>
<p><b>Relations with People's Organization and Nongovernment Organizations</b></p> <ul style="list-style-type: none"> <li>• Promote the establishment and operation of POs and NGOs</li> <li>• Enter into joint ventures and other cooperative arrangements with POs and NGOs</li> <li>• Develop local enterprises and provide assistance to POs and NGOs</li> </ul>

**Table 4. Summary of the catalysts, the processes undertaken, and the activities and achievements of establishing provincial CRM units in the provinces assisted by CRMP (Murphy et al. 1999, Green et al. 2000, Yambao et al. 2001)**

	<b>Negros Oriental</b>	<b>Bohol</b>	<b>Masbate</b>	<b>Davao del Sur</b>
<b>Motivation/ Catalyst</b>	<ul style="list-style-type: none"> <li>-Resource over-exploitation and habitat degradation due to siltation, lack of waste water treatment and destructive fishing methods</li> <li>-Long history of involvement in CRM (establishment of marine reserves, mangrove reforestation and nurseries)</li> <li>-Nature tourism as an emerging industry of the province</li> </ul>	<ul style="list-style-type: none"> <li>-Pilot CRM projects and other development initiatives to address poverty and various coastal environmental issues</li> </ul>	<ul style="list-style-type: none"> <li>-Expansion of Marine Fishery Development Program to cover other aspects of CRM and environmental management with funding from the Economic Development Fund and support from the Governor, Vice Governor, and Provincial Council</li> </ul>	<ul style="list-style-type: none"> <li>-Decline in fisheries and degradation of coastal resource base, and related socioeconomic problems</li> <li>-New CRM initiatives in the province</li> </ul>
<b>Process</b>	<ul style="list-style-type: none"> <li>-Establishment of the Resources Management Division in the provincial government unit</li> <li>-Restructuring of the Environment and Natural Resources Management Division under the Office of the Governor</li> <li>-Creation of a Coastal Resources Management Advisory Council as an advisory body of the Provincial Development Council (PDC)</li> <li>-Through the CRMP and Ting Matiao Foundation, establishment of an Advisory Council that serves as a policymaking and coordinating body at the provincial level</li> <li>-Creation of a Provincial CRM Committee (with GO and NGO representation)</li> <li>-Creation of Multisectoral Technical Working Groups composed of representatives of major stakeholders in each LGU tasked with CRM planning</li> </ul>	<ul style="list-style-type: none"> <li>-DENR initiated the creation of a CRM task force based on EO 118, responsible for coordinating all CRM-related activities in the province, and extending technical assistance to LGUs</li> <li>-Training of Task Force members in PCRA, mangrove management, MPA establishment and management, and CRM planning</li> <li>-Formulation of Bohol Environment Code</li> <li>-Creation of Bohol Environment Management Office (with CRM staff of 7) based on Code</li> <li>-MOA between DA-BFAR, DENR and Bohol province defining their roles in CRM</li> </ul>	<ul style="list-style-type: none"> <li>-Creation of provincial CRM core group from various provincial government agencies, tasked to coordinate CRM activities in the province</li> <li>-Formulation of Masbate Environment Code through a participatory process</li> <li>-Creation of the Provincial Office on Environment and Natural Resource Management based on Code</li> </ul>	<ul style="list-style-type: none"> <li>-Creation of provincial CRM Technical Working Group and training members in ICM, PCRA, and mangrove management</li> <li>-Executive Order issued by the Governor designating the provincial office of DENR (PENRO) to coordinate CRM in Davao del Sur</li> </ul>

<p><b>Strategy for sustainability</b></p>	<p>-Clearly defined institutional arrangements for coordination</p> <p>-Provision of essential inputs (funding, information, technical support)</p> <p>-Planning and implementation of ICM plans and programs including management, education, law enforcement, sustainable enterprise</p> <p>-Identification of a common vision for Negros Oriental, and engaging various sectors and stakeholders to work together to implement ICM to achieve this vision</p>	<p>-Creation of District Coastal Law Enforcement Councils to enhance inter-LGU collaboration in coastal law enforcement</p>	<p>-Capability-building in CRM in 20 municipalities and 1 city</p> <p>-Inclusion in the CRM Core Group, of technical staff from the Provincial Planning and Development Office, which has the mandate to allocate funding for the implementation of the Masbate Environment Management Program</p>	<p>-Joint implementation of CRM activities, e.g., PCRA, development of CRM plans, and conducting training</p>
<p><b>Functions/ Activities/ Accomplishments</b></p>	<p>-Provide technical assistance in the conduct of PCRA and CRM planning at the municipal and barangay levels</p> <p>-Assist municipalities in monitoring and evaluation</p> <p>-Facilitate formulation of provincial CRM plan in consultation with municipalities</p> <p>-Develop a coordinating mechanism for CRM implementation</p> <p>-Conduct continuous environmental education, seminars, workshops and conferences for various target groups (e.g., Visayas fishers symposium 2000)</p> <p>-Implement Participatory Fish Catch Monitoring Program</p> <p>-Develop and produce Ecological Survey Manuals</p>	<p>-Extend technical assistance to LGUs in conducting PCRA, CRM planning and implementation, coastal law enforcement</p> <p>-Create CRM learning areas</p> <p>-Implement provincial environmental programs</p> <p>-Assist in the conduct of monitoring and evaluation of CRM plans and programs</p> <p>-Together with CRMP, reached over 70 percent of the Bohol coastal municipalities</p>	<p>-Assist in coordinating CRM activities conducted by NGOs and donor-projects</p> <p>-Facilitated the delineation of municipal water boundaries</p> <p>-Completed PCRA and CRM planning in 10 municipalities</p>	<p>-Provided technical assistance in the conduct of PCRA and CRM planning at the municipal and barangay levels</p> <p>-Assist municipalities in monitoring and evaluation</p> <p>-Formulation of provincial CRM plan in consultation with municipalities</p> <p>-Development of a coordinating mechanism for CRM implementation</p>

<p><b>Facilitation Role of CRMP</b></p>	<p>-Facilitated initial inter-agency meetings including identification of CRM trainers for the conduct of PCRA, pilot barangays for the PCRA -Provided training and mentoring in providing technical assistance to municipalities and in developing a provincial CRM plan</p>	<p>-Established CRM learning areas in five municipalities -Conducted PCRA, training in mangrove and sanctuary management, enterprise development, and ICM planning and implementation in the learning areas -Capacitating provincial staff in CRM</p>	<p>-Provided technical assistance to the province in the form of training and education materials -Developed a pool of technically competent personnel at the provincial level who will provide technical assistance to the municipalities</p>	<p>-Facilitated initial inter-agency meetings -Provided training and mentoring in providing technical assistance to municipalities and in developing a provincial CRM plan</p>
<p><b>Key lessons learned</b></p>	<p>-Strengthening of inter-agency collaboration, partnership and coordination which is important in ensuring effective CRM implementation at the provincial level, along with clear roles, a facilitating agent, official support and legal mandate -Sustained conduct of training and educational programs -Sustained resource allocation for CRM programs by LGUs</p>	<p>-Strengthening legal arrangements and institutional development at the provincial level are important in institutionalizing CRM</p>	<p>-Proactive provincial officials and committed provincial CRM core group are instrumental in moving the CRM agenda forward</p>	<p>-Strengthening inter-agency collaboration and coordination is important in ensuring effective CRM implementation at the provincial level, along with clear roles, a facilitating agent, official support and legal mandate.</p>



## **IV. Initiating and Collaborating Institutions in CRM**

### **A. Nongovernmental Organizations (NGOs)**

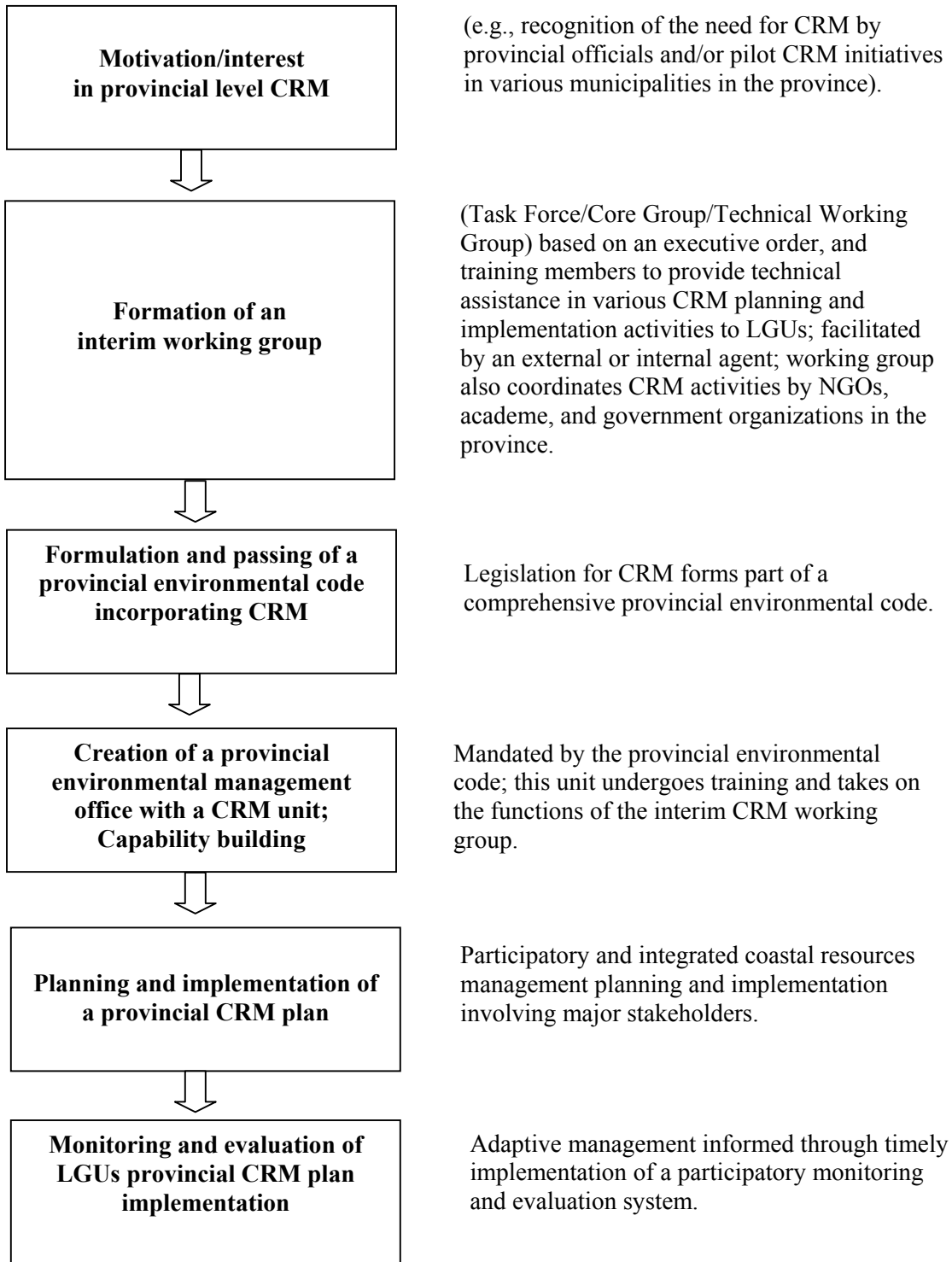
There are about 17,000 NGOs listed with the Philippine Securities and Exchange Commission that have special goals on social reforms, participatory management, community development for alternative livelihood and empowerment, and basic services delivery. NGOs have flourished in the Philippines at the termination of former Philippine President Ferdinand Marcos' term. This opened the door for greater freedom and opportunity for community organizing and other activities at the grassroots level. Most of the NGO operations were financed with external funds that were disbursed more easily because of the absence of bureaucratic procedures common to government agencies. There was an initial distrust between government agencies and NGOs working in CRM, but this has gradually been tempered with, and the trend and opportunities are moving towards collaborative initiatives. The move towards accreditation of NGOs has helped this process.

The NGOs' involvement with the Fisheries Sector Program showed that, among others, NGOs are most effective in CRM education, community organizing, and advocacy work. Furthermore, local NGOs have practical knowledge of local needs and capabilities valuable to CRM. However, the absence of a stable funding source to support operations beyond project terms, the absence or inadequacy of systems for monitoring and evaluation, and the lack of knowledge on database management are the NGOs' major handicaps.

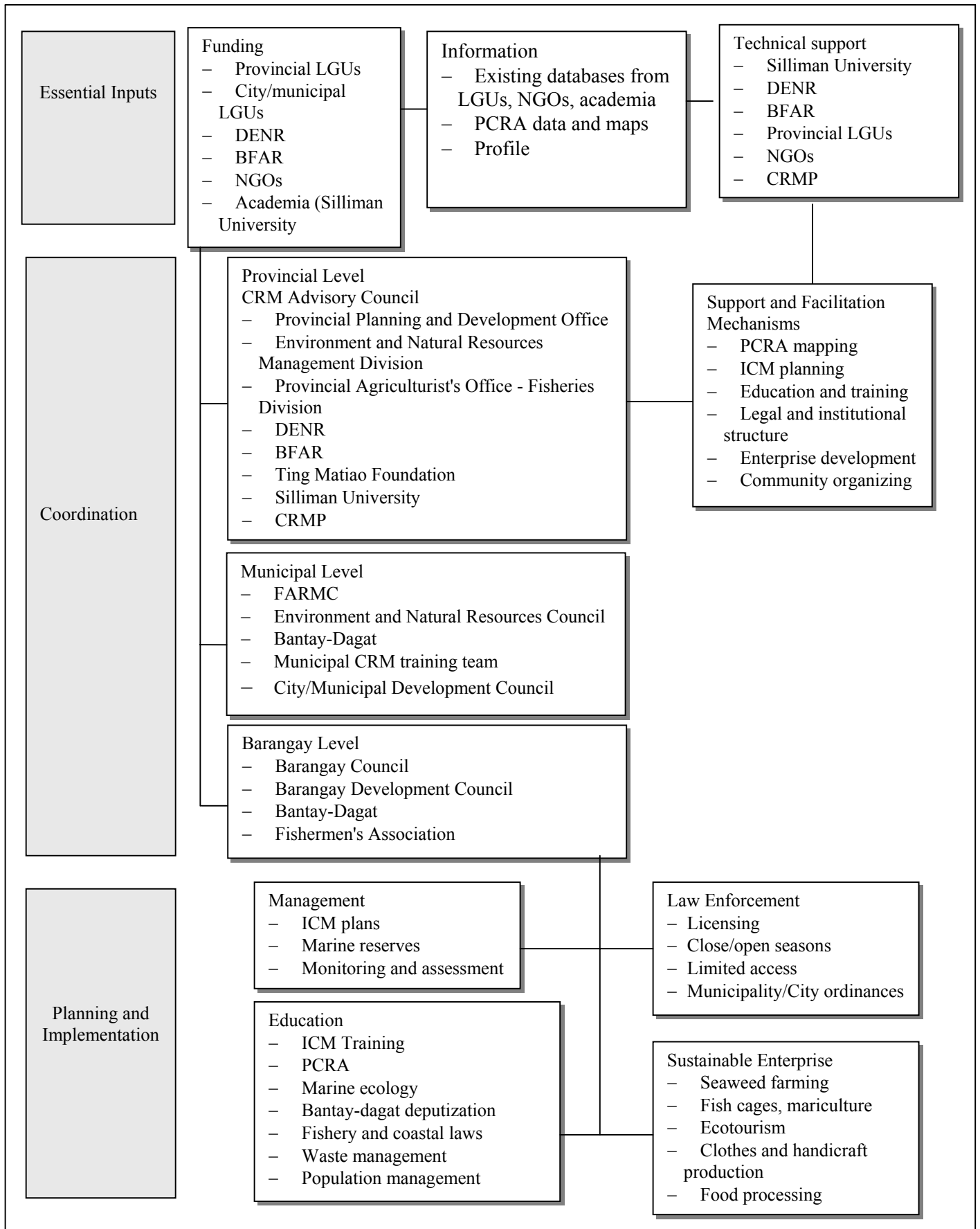
### **B. Academic Institutions**

Academic institutions have traditionally provided extension services to local governments in agriculture and fisheries. In particular, this is true in farming, fishing, and aquaculture practices where, through their research and scientific information, they have provided solutions to technical problems. This practice has extended to marine resources management by working with Silliman University in the Visayas and University of the Philippines - Marine Science Institute in Luzon. Since the 1970s, Silliman University, through its marine laboratory, has conducted marine resource management projects in various areas in and around Negros Oriental. It has played a key role in the establishment and management of the well-known marine sanctuaries of Sumilon and Apo Island. With more than two decades of experience, these sanctuaries have become models in the establishment of community-based marine sanctuaries in the Philippines. The University of the Philippines - Marine Science Institute led the landmark survey of coral reefs in the country in 1983. This led to the subsequent nationwide banning of coral gathering. The institute has since been a leader in generating and applying scientific information for marine resource management in the country. The need for scientific organizations to work with government, NGOs, and the community became very evident when there was a proposal to establish a cement plant close to the marine laboratory in Bolinao, Pangasinan northern Philippines. This plant would have caused considerable harm to the environment. With the combined efforts of the institute, the municipality, NGOs, and the communities, the cement plant was not built.

**Figure 1. A provincial CRM model based on the experiences of Negros Oriental, Bohol, Masbate, and Davao del Sur.**



**Figure 2. Institutional diagram of CRM process in Negros Oriental (Murphy et al. 1999).**



Following the lead of Silliman University and the Marine Science Institute, other academic institutions around the country became involved in coastal management. This was intensified during the implementation of the Fisheries Sector Program in 1992. In preparation for comprehensive bay-wide coastal management planning, this project contracted out resource and ecological assessments of seven priority bays to academic institutions. Today, a growing number of academic institutions render significant technical assistance to various programs and organizations in their vicinity and elsewhere in the country. These include Mariano Marcos State University, Pangasinan State University, Don Mariano Marcos State University; Cagayan State University; Bicol University College of Fisheries, University of the Philippines College of Fisheries and Ocean Sciences, University of San Carlos, Leyte State University, Xavier University, Mindanao State University, Ateneo de Davao University, and the Zamboanga State College of Marine Science and Technology.

Academic institutions have been effective in the development and standardization of methodologies for socioeconomic as well as resource and ecological assessments. The Marine Science Institute and Silliman University were instrumental in the standardization of resource and ecological assessment and monitoring methods. Instead of dealing with individual local governments, academic institutions can provide training in these methods to provincial staff who can subsequently transfer the same methods to municipal CRM personnel.

### **C. Peoples' Organizations (POs)**

Organizing and involving coastal communities in planning and implementation has become a standard procedure in CRM in the Philippines. However, there has not been any careful consideration of the resulting peoples' organizations (POs) formed and their resources, vis-à-vis the extent and effectiveness of their involvement. Here, the application of the principle of comparative advantage may be useful. Throughout any project or program hierarchy, identification of strengths of the organizations involved should lead to each organization taking actions that other organizations could not. In this case, it is unknown what POs could do in the decisionmaking process and implementation of CRM. It is recognized that labor is the greatest resource that these POs have, however this resource has not been well used. Where it is costly to reach the rural public because of the large number and great distance between community members, POs can help provide this group communication (Esman and Uphoff, 1984). POs can be provide education and training to their members, as well as to the general public by virtue of the large area of influence, e.g., farmer-to-farmer extension method (Uphoff et al., 1998). Fishers and their wives who are unable to leave their homes and livelihoods may attend training sessions via the umbrella influence of the POs.

## **V. Needs, Solutions, Prospects, and Opportunities at Various Institutional Levels**

### **A. Needs**

In the devolution process, there is a continuous redefinition of the relationship between and among national and local governments and their roles. With the redefined roles of various institutions, the capabilities at the provincial and regional levels need to be strengthened. This increased capability will assist the devolution at the municipal level. Furthermore, these middle-levels of government can help channel financial and technical resources from the national to the municipal treasuries.

Discussions at the provincial CRM festival held on February 20-21, 2002, in Cebu City, highlighted a number of best practices drawn from municipal and provincial CRM experience, including:

- Development of a provincial framework to guide the municipal and city LGUs in the implementation of CRM plans and programs

- Adoption of a strong legal framework to provide institutional mechanisms at the provincial level and provide strategic technical assistance to municipalities and cities in areas such as law enforcement, database management, planning, education, and training
- Demonstration of political will through the allocation of resources and prioritization of CRM at the provincial level
- Promotion of inter-agency collaboration and partnerships, with the province serving as a hub for CRM initiatives, technical assistance, and information management
- Adoption of policies and development strategies promoting economic activities such as ecotourism
- Integration of monitoring and evaluation in all program plans and implementation strategies, with the province being the facilitators (Del Rosario 2002).

In the same venue, provincial CRM practitioners raised problematic areas such as implementing their programs, lack of funding, and coordination among national government agencies and LGUs. There is a perception among these practitioners that externally assisted projects do not recognize the strategic role of provinces in directing technical assistance and other services to municipalities and cities (Anonymous 2002). Thus, there is a need to engage the provincial units in CRM and encourage the application of best management practices, especially in provinces that have not initiated CRM activities.

In Eastern Visayas, there is an existing CRM Master Plan that was developed in the late 1990s through the initiative of the National Economic Development Authority Regional Office and with the collaboration of other line agencies, academic institutions, and NGOs in the region. This master plan, which is awaiting funding for implementation, could be operationalized through the provinces and municipalities in phases in case funds cannot be found. For the region, it could be possible to review and consolidate information on achievements by past CRM projects including the Fisheries Sector Program, and various projects initiated by the Guiuan Development Foundation Inc., Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ), Western Samar Agricultural Resource Program (WESAMAR), Leyte State University, University of the Philippines in the Visayas, and other academic institutions; to review and update the Master Plan; and formulate and adopt a phased implementation scheme involving provinces as the lead implementers.

## **B. Existing Strategies and Opportunities for Effective CRM Implementation**

There are existing strategies and opportunities that have been or are being piloted by CRM programs including:

1. Use of administrative agreements between organizations to resolve overlaps and conflicts in functions and responsibilities. Examples include:
  - DA-DILG administrative agreement not specified to LGUs in the LGC to LGUs, including: issuance of permits for construction of fish cages, gathering of aquarium fishes, gathering of *kapis* shells, and gathering and culture of shelled molluscs; issuance of licenses to establish seaweed farms, culture pearls; and establishment of closed seasons within municipal waters
  - Joint DA-DENR Memorandum Order identifying/defining the areas of cooperation and collaboration between the two agencies in the implementation of RA 8550
  - Joint DENR-DA-DILG-Department of National Defense Memorandum Order providing guidelines in the establishment, management, and utilization of artificial reefs in municipal waters
  - Making project-driven administrative agreements (e.g., for community-based resources management project between DOF and partner agencies; among POs, LGUs, and DENR\*)

---

\* Agreements between LGUs and DENR, and between LGUs and POs are forged providing for sustained management of natural resources in project areas beyond the Project's lifetime. In such agreements, DENR has committed to maintain the areas that are being conserved under the Project.

- Placing marine conservation efforts such as MPAs and artificial reefs within the context of broad coastal management programs (e.g., Fishery Sector Program (FSP) and CRMP), thus emphasizing the need for an integrated approach to marine conservation.
  - Making a practice of cross-visits to promote the development of community-based marine sanctuaries to increase the potential of learning from previous marine conservation efforts and not repeating unsuccessful efforts and mistakes
2. Implementation of projects that operationalize direct decentralization of natural resources management including CRM, (e.g., Department of Finance's community-based resources management project) to local governments
  3. Development of a national policy for CRM. The DENR is working on a proposed National Coastal Resource Management Policy that provides an agenda for initiating local coastal management plans and programs and for establishing national support systems by various national government agencies, NGOs, and academic institutions
  4. Optimizing the extension capability of academic institutions, NGOs, and POs by using the province as the hub of technical assistance between the extension agent at one end and the municipalities and POs on the other end
  5. Vigorously reviewing, recording, consolidating, and applying lessons learned out of CRM and rural development projects implemented in the Philippines and elsewhere to the formulation and implementation of CRM projects in the country

## **VI. Conclusions and Recommendations**

There is a need for improvement in the way capability building is being undertaken in order to hasten CRM implementation in an effective manner in the country. The foregoing list of needs and opportunities, as well as existing strategies, can be augmented by focusing on what more can some levels of government do that others cannot. Also important is tapping underutilized resources from these government offices and other local organizations to assist in the CRM endeavor. As a start, the provincial and regional levels will be looked at in the workshop discussions.

## **GROUP DISCUSSION**

***Why do you focus on the provincial level? Is this a voluntary option or does the provincial government have authority? What is their legal basis and are there adequate funds? Are there so called provincial waters?***

The initial success of provincial-level CRM initiatives in the three provinces of Davao del Sur, Bohol and Masbate, which took their lead from the experiences of Negros Oriental provided insights for a new paradigm shift of looking at the LGU initiatives at the provincial level for possible replication in other areas. The LGC also provides authority to the province, although there is no such thing as provincial waters, in settling disputes over the boundaries of municipal waters and has the oversight functions of the governor and the provincial council.

***Why was PD 704 included in the background paper when this has been repealed by RA 8550?***

PD 704 is presented as part of historical development of RA 8550.

***Was a legal basis for provincial level CRM implementation created at the national level?***

The national government created a legal basis for the municipal level to implement CRM due to RA 8550 and the LGC. At the provincial level, it is not very clear unless the local chief executive (Provincial Governor) issues an executive order mandating or creating a particular office to undertake CRM. A question was raised at implementing CRM at the provincial level and what can be done at this level. There is a need to further discuss how the provincial level is implementing CRM programs in relation to the well-defined structure, roles and responsibilities at the municipal level. From these discussions, a more definite role for the provincial government pertaining to CRM can be developed.

***What is the conflict between the National Integrated Protected Areas System (NIPAS) and the LGC?***

The LGC provides local control over municipal waters. However when the area is declared under NIPAS, the mayor loses full authority of their municipal water declared under the NIPAS. The mayor then becomes a member of the Protected Area Management Board (PAMB).

## CHAPTER 2

# COASTAL OVERVIEW OF THE REGION

## Summary of Presentation

### Overview of the Current Coastal Resource Management Context in Region VIII

*Bernardita P. Germano*

*Associate Professor, Leyte State University, Visca, Baybay, Leyte*

#### Introduction

Region VIII, Eastern Visayas, is situated at the southern tip of the island of Luzon. It is bounded by the Visayan and Camotes seas on the western side, Bohol Sea on the south, and the Philippine Sea on the eastern and northern sides. It is composed of two major islands – Samar and Leyte – comprised of six provinces: Leyte, Southern Leyte, Biliran, Eastern Samar, Western Samar, and Northern Samar (Figures 3-7). Coastal features (coastal plains, coral plains, intertidal flats, rocky beaches, mangroves, fishponds, etc.) cover 104,362 hectares in Samar and 38,276 hectares in Leyte (Coastal Resource Management Plan, 1997-2007). Since the whole region is surrounded by sea, marine fishing is a main source of livelihood in the region (Ibon Philippines Profile 1996).

#### Historical Perspective

Although coastal management has been practiced in the Philippines for the last two decades (Balgos et al. 2000), a flurry of coastal resource management (CRM) initiatives started in the early 1990s. Leyte Province served as the forerunner and other provinces followed. Impetus for more intensified and extensive community-based coastal resources management (CB-CRM) activities came with the implementation of national programs like the Department of Agriculture (DA)-implemented Fishery Sector Program (FSP) and its successor, the Fisheries Resource Management Program (FRMP); the Department of Environment and Natural Resources (DENR)-implemented Coastal Environment Program (CEP); and the Department of Finance (DOF)-implemented Community-Based Resources Management Project (CB-RMP). CB-CRM was promoted as a strategy to enhance marine fisheries management in the Medium-term Fisheries Management and Development Program for 1993 to 1998 (DA 1994). This program identified 24 bays and gulfs throughout the Philippines as key fisheries development areas for CRM, five of which are in Region VIII. These bays are San Pedro, Carigara, Ormoc, Sogod, and Maqueda bays. The first four bays were funded under the FSP, while Maqueda Bay was funded through the DA's Western Samar Agricultural Resource Program with funding assistance from the European Union (Breeuwer and Serote 2000). Another bay (Silago) in Southern Leyte is also the recipient of a development grant under a bilateral agreement between the Philippines and the Federal Republic of Germany. The Silago Bay project called the Integrated Community-Based Coastal Zone Management (ICOM) is part of the Leyte Island Program on Sustainable Development of Natural Resources (LIP). This program includes the project Tacloban Urban Development and Environmental Management (TUDEM), which also incorporates urban CRM in its activities.

In 1996, the regional office of the National Economic Development Authority (NEDA) implemented a project on the preparation of the CRM Plan for Eastern Visayas, 1997-2007. Funding for the plan preparation was provided by the United States Agency for International Development (USAID). The completed Comprehensive CRM Plan for Eastern Visayas, 1997-2007 was endorsed by the Regional Development Council for adoption by the local government units (LGUs) and coastal communities in Region VIII on November 21, 1997.



## **Accomplishments through the Regional CRM Plan, 1997-2007**

The coastal zone management issues that were identified in the regional CRM plan are categorized into four issues as follows:

### Equity Issues

- Access to coastal resources
- Tenurial rights
- Access to health services
- Access to quality education
- Access to credit
- Low income

### Environmental Quality Issues

- Siltation
- Water pollution
- Industrial pollution
- Agricultural run-off
- Loss of habitat
- Soil erosion

### Resource Exploitation Issues

- Mangrove cutting
- Overfishing and destructive fishing
- Coral reef degradation
- Encroachment/poaching by commercial or foreign vessels
- Tourism

### Governance/Institutional Issues

- Weak enforcement
- Weak institutional arrangements
- Public participation

To address the various CRM issues, the following general management strategies were recommended:

- Community organizing
- Environmental rehabilitation
- Biodiversity conservation
- Sustainable economic development
- Hazard mitigation

The recommended approach to planning is holistic, community-based, highly participatory and involves promoting the development and empowerment of all sectors (men, women, children) of the community. To guide CB-CRM planning, specific action plans for human resource, land use, tourism, fisheries, and coastal resources development were drafted. Institutional arrangements for plan implementation and evaluation at various levels were also designed. The adoption of the Comprehensive CRM Plan for Eastern Visayas, 1997-2007 by the LGUs and coastal communities in Region VIII was endorsed through the Regional Development Council VIII Resolution No. 20 (s. 1997).

Judging from the data obtained from the OPAs, BFAR, DENR and PPDOs, substantial strides have been made to promote CRM and marine conservation in the region. MPAs and other resource enhancement projects probably exist in almost all coastal municipalities in both Leyte and Samar (Figures 3 and 4).

Enterprise development projects are also numerous (Figure 5) in both islands, while there seems to be more fishery law enforcement initiatives in Leyte than in Samar (Figure 6). The same trend can be noted for capability-building activities (including information, education, and communication), wherein more initiatives can be seen in Leyte than in Samar (Figures 7 and 8). However, this mapped data does not include data from Samar PPDO and most NGOs. With the recent implementation of FRMP and CB-RMP, more municipalities are adopting CB-CRM as a development and management strategy. Questions that need to be answered are whether the recent initiatives have taken/are taking into consideration the comprehensive CRM plan, and whether they have addressed the coastal zone management issues. Moreover, how these and previous initiatives fit into the comprehensive plan also needs to be examined if the provincial LGUs and the region are to align local-level activities with provincial and regional priorities to optimize allocation of limited resources. This alignment is also necessary if the intended impacts and goals of environmental protection/restoration and poverty alleviation are to be accomplished. More importantly, socioeconomic and ecological impact evaluation of previous undertakings should be initiated and sustained. As the comprehensive CRM plan recommended coastal resource valuation and analysis as a policy guideline, specific impact indicators need to be identified and baseline data gathered and/or collated. This is to ensure that future evaluations will not suffer from lack of baseline data for comparison and be abandoned.

### **The Need for Coordination**

The current situation in the region highlights the lack of clearly defined institutional arrangements for collaboration and coordination. There is no single unit/agency in the six provinces, nor in the region that collates and coordinates all matters pertaining to CRM. This is evidenced by the difficulty encountered and the paper chase needed when putting this paper together. Furthermore, there are many NGOs that have done/are doing CRM work in different provinces. Some of these NGOs simply report their existence and their activities to the provincial LGU without any active involvement from the provincial LGU, except when some form of assistance is sought. If all these initiatives were coordinated, it would improve the utilization of limited funds and increase sharing of data/information and experience. This in turn would strengthen provincial and regional planning and evaluation. The comprehensive CRM plan recommends that plan implementation at the provincial and regional levels be lead by the academic/research institution in the province that is involved in CRM projects and by the DA.

Fig. 3. Resource enhancement projects in Leyte Island.  
 Based only on data obtained from OPAs (Annex 4).

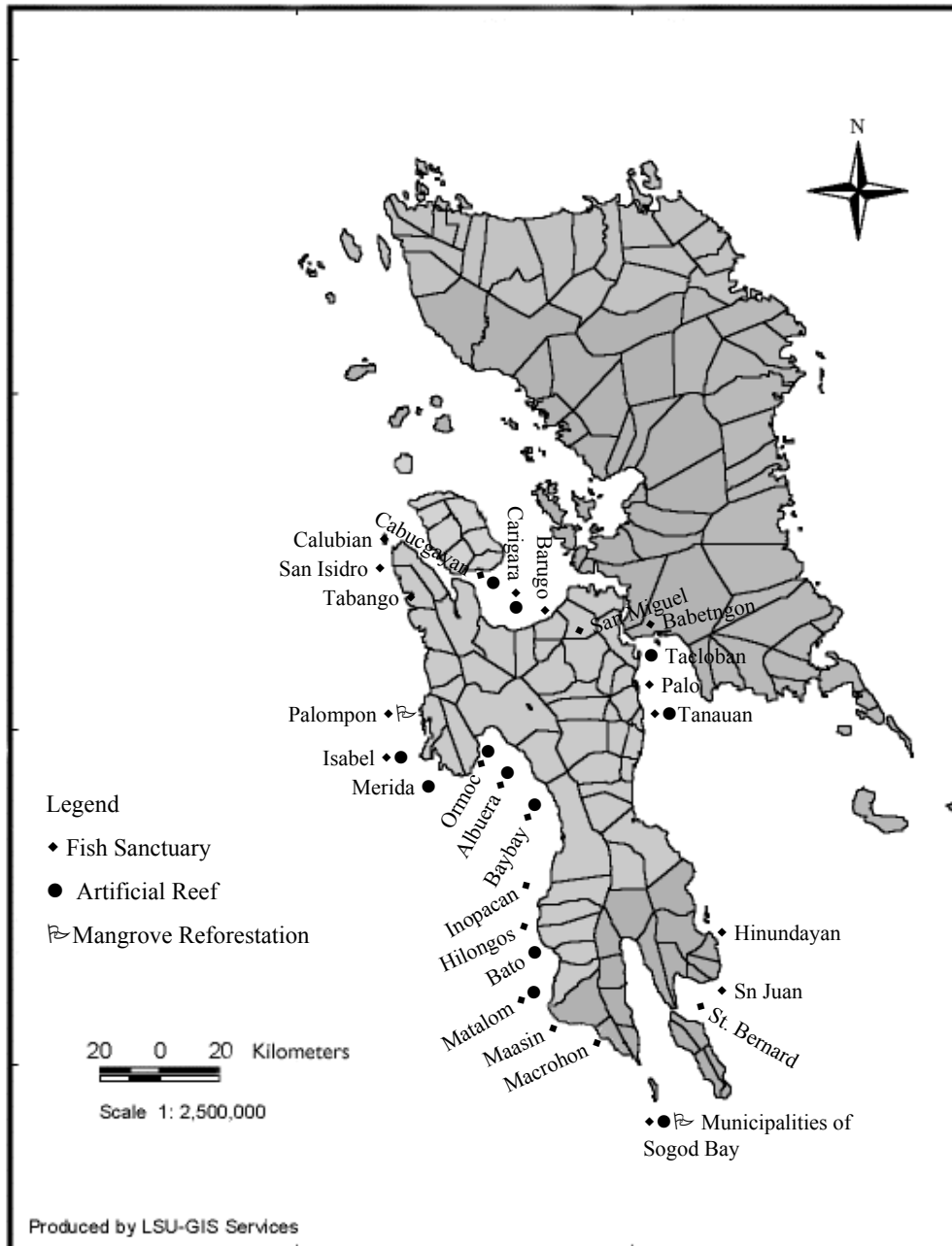


Fig. 4. Resource enhancement projects in Samar Island.

Based only on data obtained from OPAs (Annex 4).

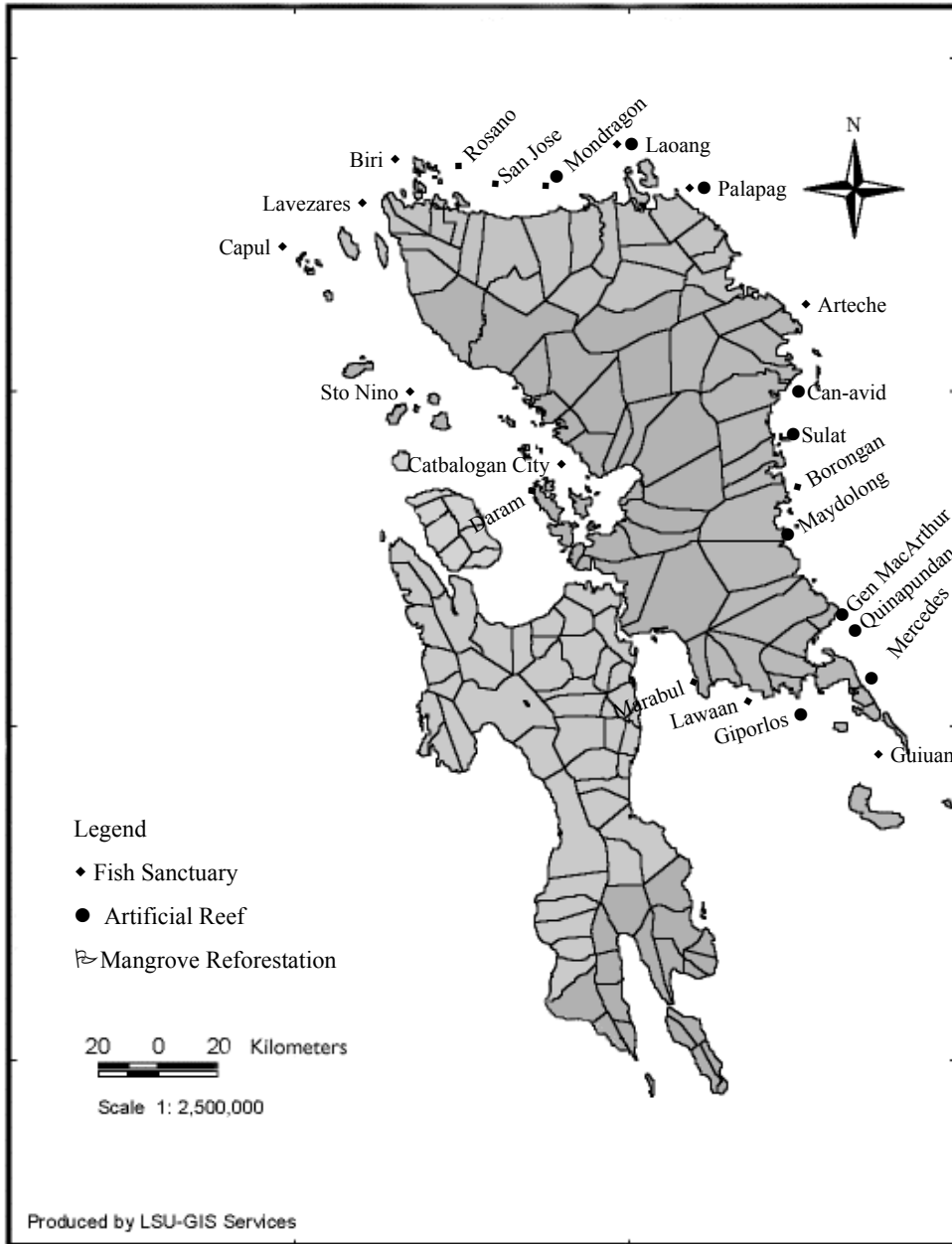


Fig. 5. Enterprise Development Projects in Region VIII.  
Based only on data obtained from OPAs (Annex 4).

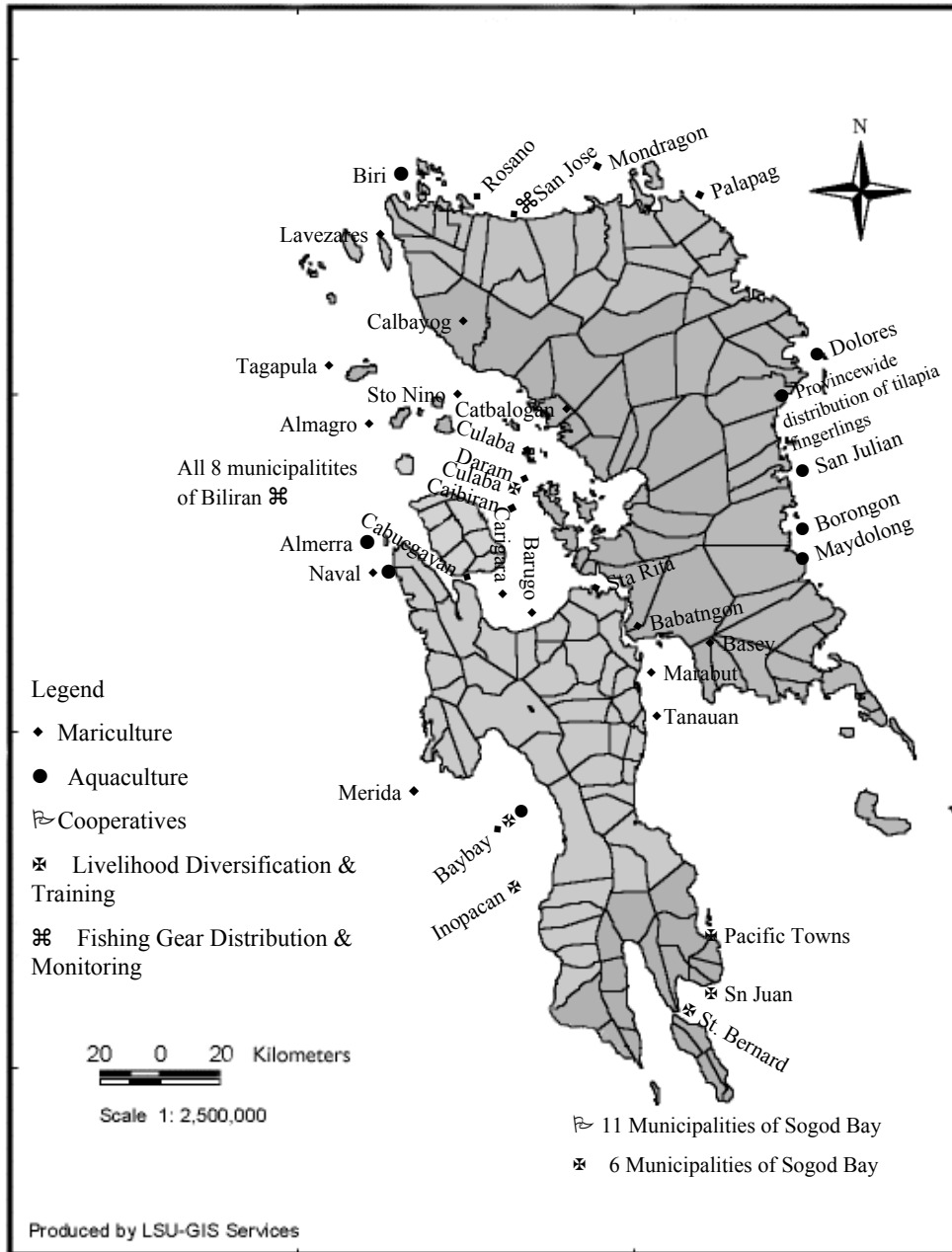


Fig. 6. Fishery law enforcement initiatives in Region VIII.  
 Based only on data obtained from OPAs (Annex 4).



Fig. 7. Capacity-building activities (including IEC) in Region VIII.

Based only on data obtained from OPAs (Annex 4). Data from Samar PPDO and most NGOs not incorporated.

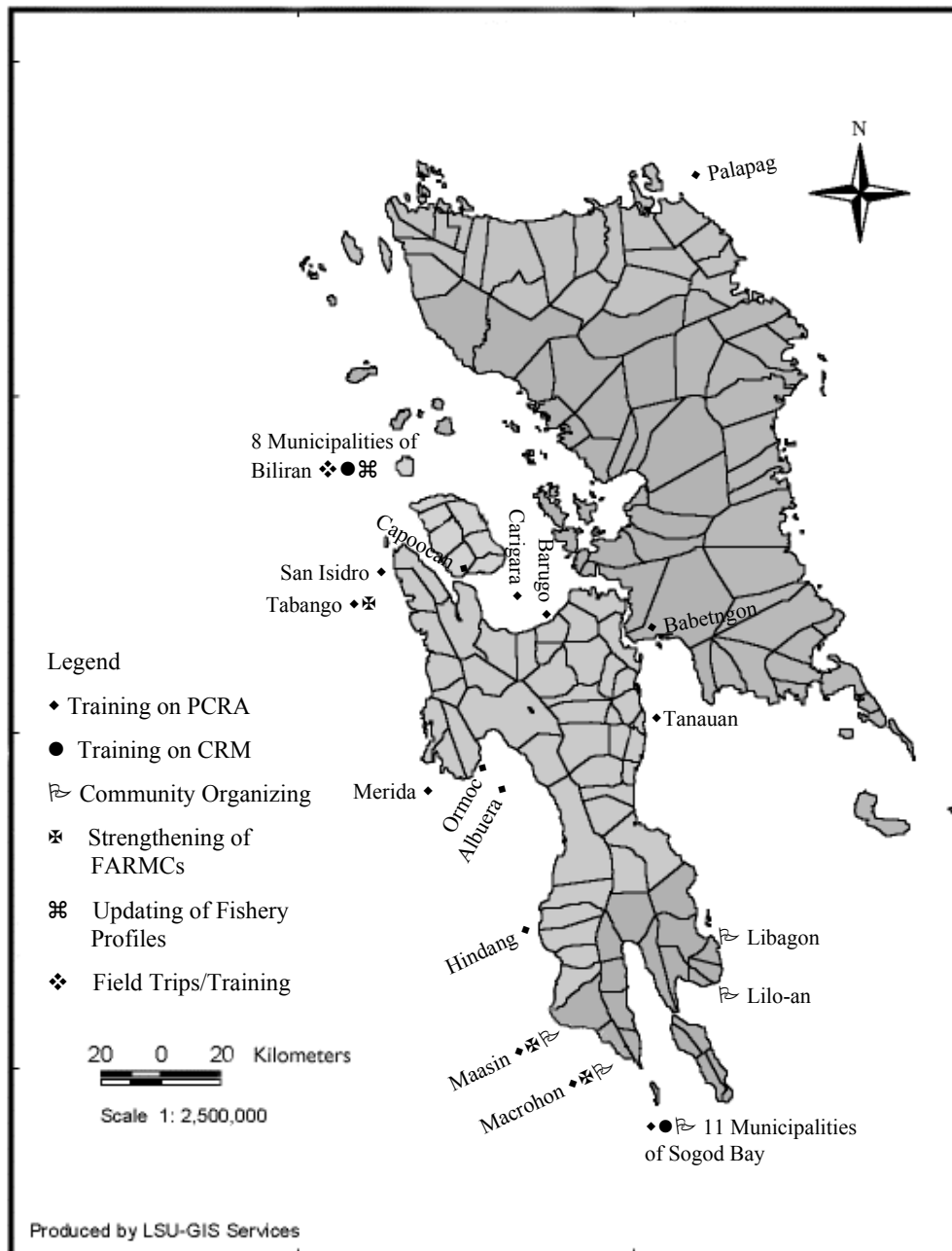
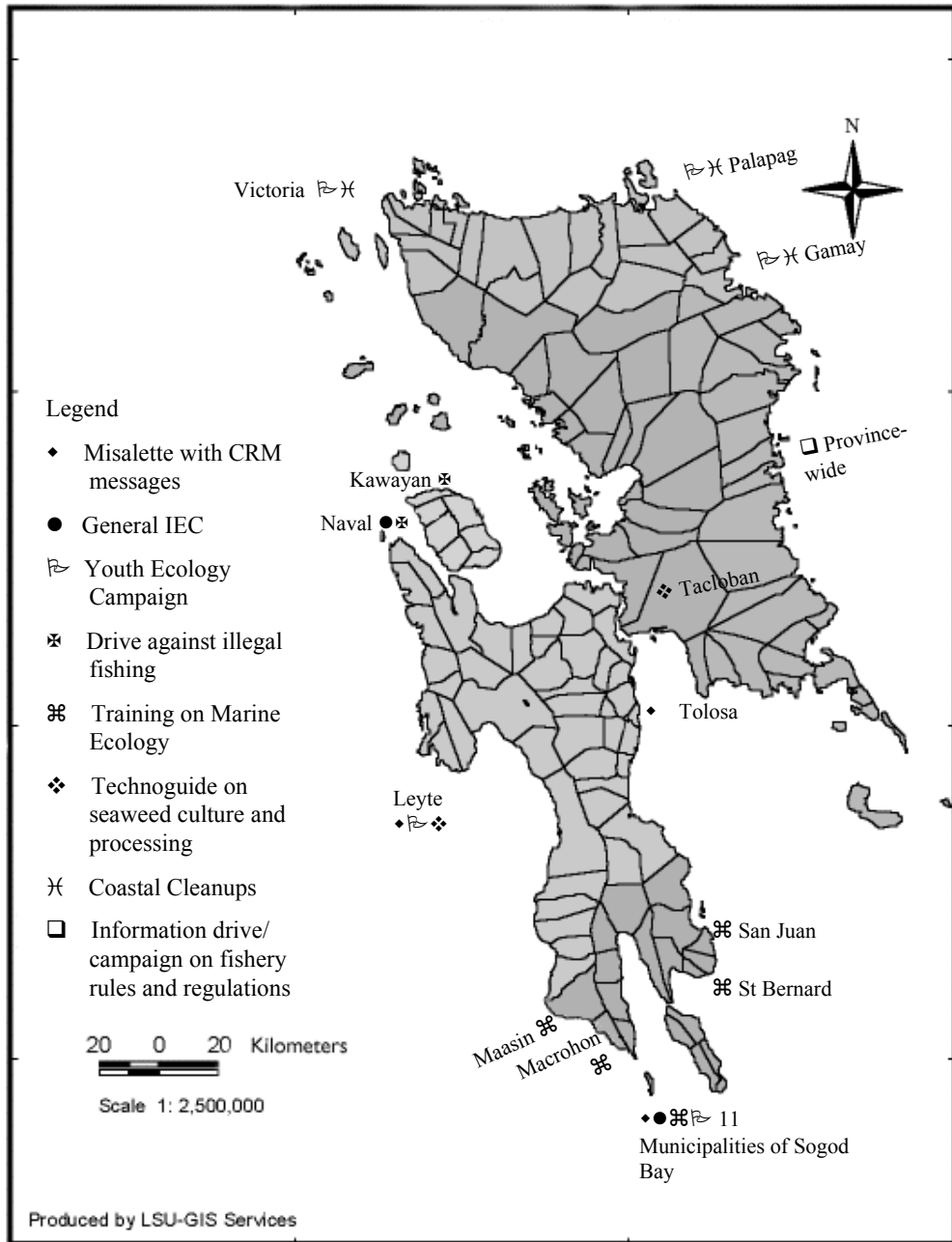


Fig. 8. Information, education and communication (IEC) initiatives in Region VIII. Based only on data obtained from OPAs (Annex 4). Data from Samar PPDO and most NGOs not incorporated.





## **Programs and Projects**

Information on programs and projects on CRM and marine conservation in the region were obtained mainly from the Office of the Provincial Agriculturist (OPAs) and the BFAR and DENR regional offices. Little or no information on CRM and marine conservation projects was obtained from the Provincial Planning and Development Offices (PPDOs) except for the PPDO in Western Samar.

The various CRM and marine conservation programs and projects in the region are either initiated by the provincial or municipal LGU, BFAR Regional Office, DENR Regional Office, academic institutions, or NGOs. These are categorized as resource enhancement projects, enterprise development projects, fishery law enforcement support, information, education and communication, capability building, and support services. The different activities and accomplishments are listed in Table 5.

Province and municipality-initiated projects are mostly in law enforcement and enterprise development, although the LGUs also provide other forms of assistance to site-level CRM (Annex 4). Because the extent of coverage of provincial LGUs is broad, and manpower is limited, site-level CRM projects are often implemented and managed by NGOs, bilaterally-funded initiatives, or in a few cases, academic institutions. Planning, implementation, coordination, and evaluation are done by project management who also link with the LGU, BFAR, DENR, academia, PNP, PCG, and/or other NGOs for certain project components. As a result of the implementation of the FSP and in efforts to bring together various stakeholders and adopt an integrated approach to CRM, a number of bay-wide management councils have been created in the region. These include the Carigara Bay, San Pedro Bay, San Bernardino Strait (LaBiRoSa), and Sogod Bay Management Councils. Management Councils for Ormoc Bay and Maqueda Bay are currently being created. A bay-wide management council is also envisioned for Silago Bay. Furthermore, there is an existing collaboration between various stakeholders seeking to promote the conservation and protection of the Camotes Sea, called the Camotes Sea Initiative. Information gathered from the BFAR Regional Office (Annex 4) indicated 17 municipalities are covered by FRMP, activities include fisheries resource management, income diversification, and capability building. Most of the FRMP municipalities are in Leyte. Conversely, most of the CB-RMP beneficiary municipalities are in Samar. There are 22 CB-RMP municipalities that have coastal subprojects. BFAR is also assisting nine municipalities in Leyte and six municipalities in Samar that have existing resource management projects. The CEP implemented by DENR has seven recipient municipalities, two in Leyte and five in Samar (Annex 4). Activities under the CEP include resource and ecological assessment; information, education, and communication; community organizing; research activities; livelihood development; rehabilitation of degraded areas; monitoring and protection; and capability building.

**Table 5. Activities and accomplishments of various CRM and marine conservation programs in Region VIII.**

Resource Enhancement Projects	Fish/marine sanctuaries Artificial Reefs Mangroves reforestation
Enterprise Development Projects	Mariculture (seaweed, mudcrab, oyster, etc.) Aquaculture (bangus, tilapia) Cooperatives Livelihood diversification and trainings Distribution and monitoring of fish nets/fishing gear
Fishery Law Enforcement Support	Provision of patrol boats and monitoring services Financial assistance for purchase of patrol boats Fish inspection and quarantine Bantay Dagat Training and deputation of fish wardens Formulation of municipal fishery ordinance Delineation of municipal waters Creation of bay-wide councils Operations against illegal fishing Scientific examination of fish samples for poisons/explosives Registration of fishers Price Monitoring
Information, Education and Communication (IEC)	Technoguides (seaweed culture and processing) Youth ecology campaign Training on Marine Ecology Information drive/campaign on fishery rules and regulations Drive against illegal fishing IEC on CRM Misalette (church guide) with CRM messages Coastal clean-up
Capability Building	Training on PCRA, CRM Community organizing Organization and strengthening of FARMCs Field trips/cross visits Updating of fishery profiles Miscellaneous trainings
Other Support Services	Daycare School meals

## GROUP DISCUSSION

### *Why was data collection focused on the Provincial Agricultural Offices (PAOs)? Could the reported data inadequacies be because the right offices, such as the PPDOs, were not contacted?*

Comprehensive regional data on CRM initiatives was difficult to locate; thus the data gathered was primarily from the provincial level. Also, since the adoption of the comprehensive CRM plan depends on the individual provinces, they were an important source of information on CRM initiatives. This methodology also served to highlight one of the workshop's objectives – to identify the capability building needs at the provincial level.

In most provinces, not much information was obtained from the PPDOs except for the PPDO of Western Samar. Moreover, data gathering from Samar provinces was difficult due to distance and communication problems.

The PPDO's CRM activities in Western Samar, as shared at the workshop, include the following:

- Creation of Maqueda Bay Management Council formulated by the 14 municipal mayors of the bay
- Creation of Maqueda Bay Development Council
- Existence of several NGOs which are allied partners
- Creation of an ad hoc committee to look into CRM matters after consultation with different sectors and stakeholders

The workshop poses a challenge for Region VIII to emulate and learn from the Negros experience. Ms. Teves, on the other hand, shared her experience in Negros Oriental, indicating that there was a lack of information shared between the NGOs and the provincial level. This is because NGOs or other implementing agencies are obligated to submit information update to the funding agency rather than the provincial government. This is especially true for those LGUs who do not show initiative to fund CRM undertaking, which they are actually mandated to do.

The participant from Northern Samar concurred that the data presented is incomplete, but understood the difficulty involved in data gathering based on the prevailing situation in the province. The seven municipalities in the area perceive that the major university in the province (University of Eastern Philippines) is not involved in the implementation of CRM projects. The initiative for coordination and collaboration must come from the PPDO. With the proper coordination, Region VIII is capable of duplicating the Negros achievements.

Dr. Hermes of PCAMRD agreed on the difficulty of collating data from all provinces, but reminded everybody that achieving that goal is the goal of this workshop. The listing of achievements by NGOs needs to be reviewed to highlight the contributions made by other government agencies such as the DA-BFAR, bilateral agencies, or foreign-funded projects.

The collaboration of law enforcement agencies, such as the Philippines National Police and the Philippines Coast Guard, in the implementation of CRM programs was also acknowledged.

The Babatngon representative expressed her dismay at the apparent lack of information even in Leyte. She mentioned several areas of potential achievements:

- The creation of Carigara Bay Management Council with Babatngon as a priority municipality
- The conceptualization of Carigara Bay surveillance being funded by contributing P200,000 annually for the next succeeding years. Those who could not come up with the amount may initially put up P50,000, while other agencies may give non-cash counterpart.
- The eagerness of the municipalities to be the center of such initiative, as in Capoocan and Carigara

Other agencies such as Care Philippines and LSU also work in the area. Leyte needs a pool of scientist from the region itself. At present, institutions such as Silliman University and UP-Cebu are undertaking coastal projects in the area.

The overall reaction was that there was a presence of several CRM and marine conservation activities in the region. Also noted was the great need to coordinate and integrate these activities to achieve a common goal. Participants were requested to actively participate in the workshop in order to create a realistic picture of CRM and marine conservation projects in the region.

## **OUTCOME OF SMALL GROUP SESSIONS**

***What are the past, on-going, and future CRM and marine conservation activities in the region (municipal and community-based activities, bay and sea planning and management initiatives, regional and/or provincial planning)?***

The Eastern Visayas region receives funding from both foreign donors (World Bank, ADB, GDS, GTZ, UNDP, OXFAM, etc.) and the national and local government for CRM programs. These are implemented by academia, national government agencies, LGUs, NGOs, and POs. These programs include CB-CRM programs, the FRMP, the CEP, and the Leyte Island Program, among others (Table 6). In the past, the region has implemented a number of CRM programs such as the FSP, the Western Samar Agricultural Resource Program, and the SMISLE. Future activities will include CB-CRM programs for other municipalities and the Camotes Sea initiative where different provinces within Camotes Sea (including Cebu) will be involved.

**Table 6. List of present/ongoing projects on CRM in Eastern Visayas.**

<b>Name of Project</b>	<b>Sites Covered</b>	<b>Implementor</b>	<b>Source of Funds</b>
<i>Present/On-going</i>			
1. Community-based Coastal Resources Management (CB-CRM)	<ul style="list-style-type: none"> <li>• Seven municipalities in Samar</li> <li>• Four municipalities in Southern Leyte</li> <li>• Four municipalities in Leyte</li> </ul>	<ul style="list-style-type: none"> <li>• NGO, PO LGU, Academia, Line Agency-PNP</li> </ul>	<ul style="list-style-type: none"> <li>• GDS, LGU, UNDP, FPE, Oxfam, GB Local &amp; Foreign Agency</li> </ul>
2. CB-RMP	<ul style="list-style-type: none"> <li>• Twenty-eight municipalities</li> </ul>	<ul style="list-style-type: none"> <li>• LGU, NGA, Academia, NGO</li> </ul>	<ul style="list-style-type: none"> <li>• World Bank, DOF, GOP</li> </ul>
3. Coastal Environmental Program (CEP)	<ul style="list-style-type: none"> <li>• Northern Samar (four municipalities)</li> <li>• Eastern Samar (one municipality)</li> <li>• Leyte (two municipalities)</li> </ul>	<ul style="list-style-type: none"> <li>• DENR, LGU, NGO, PO</li> </ul>	<ul style="list-style-type: none"> <li>• GOP (DENR)</li> </ul>
4. MPA under NIPAS	<ul style="list-style-type: none"> <li>• Guiuan, Inopacan, Hindang, Ormoc, South Leyte</li> </ul>	<ul style="list-style-type: none"> <li>• DENR, LGU, NGO PAMB</li> </ul>	<ul style="list-style-type: none"> <li>• GOP</li> </ul>
5. Leyte Island Program	<ul style="list-style-type: none"> <li>• Four South Leyte (Silago Bay)</li> <li>• Whole Leyte island</li> </ul>	<ul style="list-style-type: none"> <li>• LGUs w/ support of NGOs &amp; Academia</li> </ul>	<ul style="list-style-type: none"> <li>• German Government</li> </ul>
6. MPAs under LGU	<ul style="list-style-type: none"> <li>• LGU-MPAs all over Region VIII</li> </ul>	<ul style="list-style-type: none"> <li>• Lake Danao Ormoc</li> </ul>	<ul style="list-style-type: none"> <li>• LGUs</li> </ul>
7. Fisheries Resource Management Program	<ul style="list-style-type: none"> <li>• Post RSA (FRMP), Ormoc Bay, San Pedro Bay, Sogod Bay, Carigara Bay</li> </ul>	<ul style="list-style-type: none"> <li>• BFAR, Line Agencies, LGU, Academia, NGO, PO</li> </ul>	<ul style="list-style-type: none"> <li>• ADB</li> </ul>
8. GIS Network for Region VIII			
9. Small Island Rehabilitation Project	<ul style="list-style-type: none"> <li>• Cuatro Islas Islands</li> </ul>	<ul style="list-style-type: none"> <li>• LSU</li> </ul>	<ul style="list-style-type: none"> <li>• GDS</li> </ul>
10. Archipelagic Fisheries Resources	<ul style="list-style-type: none"> <li>• Leyte Gulf and</li> <li>• Dinagat Sound</li> </ul>	<ul style="list-style-type: none"> <li>• LSU</li> </ul>	<ul style="list-style-type: none"> <li>• GDS</li> </ul>

***What are some of the issues concerning coordination and support between institutions and projects in the region?***

The following are issues concerning coordination and support between institutions and projects in the region:

*Coordination*

- Lack of coordination between line agencies
  - Results to solve conflicts (information, data, implementation)
- Lack of coordination between donors/funding agencies
  - Overlapping approaches/activities
- Lack of mechanism for information sharing, communication
  - Many non-functional bay-wide management council
  - Short-term duration/support mostly project-based
  - LGC caused problems in implementation
  - LGU overburdened with legal framework

*Support*

- Non-functional PAMB
- Lack of comprehensive management plan for protected areas
- Lack of skilled manpower in some places/agencies
- Judiciary system – not very CRM oriented
- Conflicting laws/policies
- Lack of common understanding of CB-CRM as a framework/approach to area development

*Political*

- Lack of political will
- Changing leadership
- No congressional proclamation in NIPAS
  - No appropriation
  - All PAMBs are interim
- LGU/LCE
  - Lack of appreciation of CRM
  - Low priority for CRM

***What services do provincial and regional institutions (government, NGO, university) provide for CB-CRM and LGUs (municipal, city, barangay)?***

The provincial and regional institutions provide services to the LGUs such as training, facilitation, technical and legal assistance, legislation, manpower, facilities, and sharing of information, education, and education materials among others (Table 7).

**Table 7. List of services provided by the provincial and regional institutions to the LGUs.**

Services offered to LGUs	NGA	NGO	ACADEMIA
Training	**	**	*
Technical Assistance	*	*	**
Funds	*	*	*
Resource Accessing	*	**	*
Legislation Support	***	*	*
Facilities	*	*	*
Manpower	*	*	*
Materials (seedlings & fingerlings)	***	*	*
IEC Materials	**	*	*
Policy Reforms	*	**	*
Legal Assistance	*	***	*
Facilitation	*	**	*
Organizing	*	***	*

Legend: \* -partly provided  
 \*\* -more than half provided  
 \*\*\* -fully provided

***What type of services and support do LGUs and coastal communities (municipal, barangay, POs, etc.) need?***

All of the categories in the above table were highlighted by the participants as services and support that are needed by the LGUs in implementing CRM programs in the region.

*Law and Policy*

- Policy reforms
- Legal assistance
- Legislation support

*Materials*

- Seedlings and fingerlings
- Information, education, and communication materials

*Resources*

- Manpower
- Funds
- Facilities
- Resource Accessing

*Training and Implementation*

- Technical assistance
- Training
- Facilitating
- Organizing

***Do any provincial governments have natural resources and environmental units and/or units focusing on CRM and marine conservation?***

In Region VIII, there are four provincial offices with units that are responsible for CRM tasks at the provincial level. Three of these are at the provincial LGU level, and one NGA office is at the provincial level. The name of the units or offices varies (Table 8). In Northern Samar, CRM programs and activities are taken care of by the fisheries section of the OPA. In Western and Eastern Samar, CRM program implementation is carried out by the OPA and Provincial Environmental Resource Management Office (PERMO); in Biliran by OPA and Provincial Environment and Natural Resources Office (PENRO) of DENR; in Northern Leyte by OPA, PENRO, and the PPDO; and, in Southern Leyte by the Fisheries Division of OPA and the devolved Environment and Natural Resources Office (ENRO). CRM program implementation, however, is not the primary function of these offices or units. There is an absence of a central office or body to oversee CRM at the provincial level. The creation of a Natural Resources Management Office (NRMO) in the province that would take charge of CRM planning and implementation at the provincial level was suggested.

**Table 8. Provincial offices involved in CRM.**

Provinces	Office in Charge of CRM
Southern Leyte	Environment and Natural Resources Office (ENRO-devolved) Office of the Provincial Agriculturist (OPA)-Fisheries Division
Leyte	Office of the Provincial Agriculturist PPDO DENR-Provincial Environment and Natural Resources Office (PENRO)
Northern Samar	Office of the Provincial Agriculturist (OPA)
Samar	Provincial Environmental Resources Management Office (PERMO) Office of the Provincial Agriculturist (OPA)
Biliran	Office of the Provincial Agriculturist (OPA) DENR-Provincial Environment and Natural Resources Office (PENRO)

***Are there alliances at the municipal level?***

There are bay-wide alliances (either development or management councils) that cover a number of municipalities (Table 9). In Northern Samar, there is the LABIROSOSA Council that covers four municipalities; in Western Samar, the Maqueda Bay Management Council covers the 14 municipalities within the Maqueda Bay area, and the Maqueda Bay Development Council is proposed to include NGOs and other stakeholders; in Northern Leyte, the Carigara Bay Development Council covers six municipalities; and in Southern Leyte, the now defunct Sogod Bay Development Council.

A number of coastal municipalities in the region have already organized their Barangay Fisheries and Aquatic Resources Management Councils and Municipal Fisheries and Agricultural Resources Management Councils and the cities have City Agriculture and Fisheries Councils (CAFCs) in response to the provisions of the Philippine Fisheries Code (RA 8550) and the Agriculture and Fisheries Modernization Act (AFMA, RA 8435). In Region VIII alone, there are four councils that highlight alliances at the municipal level. These were specifically created for CRM planning and implementation. Others are mandated units to undertake agriculture and fisheries functions such as the Municipal Fisheries and Agricultural Resources Management Councils and CAFCs.



**Table 9. Provincial alliances at the municipal level.**

<b>Province</b>	<b>Municipal Alliance</b>
Leyte	Carigara Bay Development Council (covering six municipalities) Provincial Environment and Natural Resources Office–Mangrove reforestation projects in specific areas/sites and foreshore leases
Samar	Maqueda Bay Management Council (existing 14 municipalities within the bay) Maqueda Bay Development Council (proposed to include NGOs and other stakeholders)
Southern Leyte	Sogod Bay Development Council (now defunct) Fisheries Resources Management Program (FRMP) Municipal/Barangay/City Fisheries and Aquatic Resources Management Councils
Northern Samar	LABIROSA Council (composed of four municipalities)

*In general, how do you characterize CRM at the provincial level in the region in terms of legal basis and authority, structure, functions, human and financial resources, and political will and other types of support?*

1. Legal basis and authority

National laws are used as basis for the mandates to implement CRM projects at the municipal level, but not specifically at the provincial level. These laws are the Philippine Constitution of 1987, the LGC of 1997 (RA 7160), NIPAS Act (RA 7586), the FC of 1998 (RA 8550), and AFMA (RA 8435) especially the provisions on the Strategic Agriculture and Fisheries Development Zones (SAFDZ).

The implementation of some of these laws, particularly the FC (RA 8550), only provided provisions of the law mandating each municipality to oversee the development and management of its coastal resources in its municipal waters. However, there is no provision for provincial waters. Provincial water is not even specifically defined in the code. The provincial government then has no primary responsibility except to facilitate, coordinate, and act on the requests of its component municipalities for technical assistance on CRM.

In Southern Leyte, there seems to be a lack of knowledge or understanding of the code by the City Agriculturist Office, resulting in the agreement allowing commercial fishing within five kilometers of the shoreline. A representative from MARINA who knew about this case, commented that it was a problem on law enforcement. They lost in the case due to a technicality in the absence of the 15-km delineation for municipal waters in Maasin, Southern Leyte.

2. Structure

At the provincial level, there is no specific unit to undertake CRM activities at the three different offices. At the municipal level, the Office of the Municipal Agriculturist is implementing CRM activities, but has no specific unit to undertake CRM.

3. Functions

Offices undertaking CRM do not have CRM as their primary function. CRM is only one of many activities being implemented by the different offices at the provincial level.

4. Human resources

At the Office of the Provincial Agriculturist, there are most likely fisheries graduates; however, their expertise is not on CRM. They require retooling or further training on CRM.

#### 5. Financial resources

Funding for CRM is usually project-based. Funding of the project is cut off once the project terminates. Financial support to sustain the project is not institutionalized. In some provinces and municipalities, funding for CRM activities comes from the 20 percent development fund or internal revenue allotment fund of the LGU. This budget is inadequate, particularly to second- or third-class municipalities. Funds are often insufficient because CRM is usually not a priority project of the province or municipality.

#### 6. Political will and other types of support

Political will to implement CRM is usually weak. Political will is largely dependent on the local chief executive (LCE), and on the ability of CRM implementers at the municipal and provincial levels to articulate their plans to the LCE. Those who are good at convincing their LCE usually have their projects implemented. Political will diminishes or weakens greatly if a conflict of interest arises, such as when LCEs are also engaged in commercial fishing. In terms of legislative support for CRM projects, most often this follows the lead of the LCE.

## SUMMARY OF SMALL GROUP SESSIONS

Concerning existing units doing CRM work at the provincial level, the group identified three offices – the PENRO, the PPDO, and the OPA. The group felt it was necessary to bring to the plenary a discussion of which office was ideal to handle CRM activities (from planning to implementation). At the municipal level, the Municipal Agriculture Office does CRM activities, unless there are special projects within the municipality.

Offices undertaking CRM are doing it as part of a bigger function, not as its only function. Therefore, the office is not structured to work specifically on CRM. Rather, CRM is just one of its functions.

The following have been observed concerning CRM implementation at the provincial level throughout the region:

- Uncoordinated
- Often individual/separate group initiated
- Unsustained – erratic at times
- No common framework is followed by all implementers
- No complete or sustained financial support – most of those initiated and implemented by NGOs are project-based, and those that are implemented by the government are also fund-driven (like the FSP that existing for many years and then stopped, then there was nothing, then the FRMP was created).
- No legal basis other than the national laws – there is no mandate or instrument that says CRM should be in the development plan of a province because these are disjointed activities. Therefore, there is a need to address these issues because there is nothing that says all municipalities or provinces should adopt or include CRM in their development planning. Negros Province is unique in that it has an ENR that focuses mainly on CRM. There is no other province in the region set up this way.

## CHAPTER 3

# PHILIPPINES AND INDONESIAN EXPERIENCE WITH PROVINCIAL COASTAL RESOURCES MANAGEMENT

## SUMMARY OF PRESENTATION

### **The Coastal Resource Management Program of Negros Oriental**

*Mercy S. Teves*

*Provincial Development Officer, Environment and Natural Resources Office, Office of the Governor, Dumaguete City, Negros Oriental*

#### **Introduction**

The province of Negros Oriental is situated in Negros Island and is part of the Central Visayas Region. It shares land boundaries with Negros Occidental and maritime boundaries with Cebu and Siquijor. About 30 percent of its land area is flat, mainly located on the coast; and the rest is mountains, valleys, and plateaus.

The province is richly endowed with the following coastal resources:

- Some 5,030 hectares of productive mangrove forests which line a substantial portion of the shoreline
- Ten species of seagrasses of high ecological significance
- Some 2,650 hectares of fringing coral reefs and numerous offshore shoals that form the bases for 29 community-managed, legally established MPAs

There are 386,607 Oriental Negrones that live in the province's 17 coastal communities and four coastal cities, along a stretch of 348 kilometers of coastline.

The following coastal management issues were identified and are being addressed in Negros Oriental:

- Habitat destruction due to the use of destructive fishing gear, conversion of mangrove areas into fishponds, and human settlements
- Deforestation and erosion causing sedimentation
- Overfishing
- Poverty
- Population pressure
- Resource use conflicts, especially with tourism
- Intrusion of commercial fishing vessels in municipal waters and continued over-exploitation of the seas
- Some LGUs have not adjusted to their new responsibilities or do not have the capacity to carry out these responsibilities either because they lack trained personnel, have limited resources, or lack the political will
- Illegal titling of lands within the mangrove areas
- Duplication of functions and unclear delineation of jurisdiction, authority, and tasks of concerned national agencies on program implementation and law enforcement
- Conflicting administrative orders and policies in the office (e.g., livelihood types and requirements related to conservation and management, etc.)

Despite these issues and concerns, Negros Oriental officials and program staff are confident that they can move ahead because of the following opportunities:

- A harmonious relationship exists between the executive and legislative branches of the provincial government
- Local officials are very supportive of CRM endeavors
- Local communities are aware and actively involved in CRM
- Presence of competent scientific institution (Silliman University) and well-trained local scientists
- Able to avail of financial and technical support from funding agencies, both local and foreign
- The communities manage 29 MPAs which are also called marine reserves
- The provincial government structure includes a division that is responsible for CRM and other natural resource management concerns
- Able to establish a large number of large-scale mangrove reforestation projects around the province in cooperation with DENR, and several national and foreign development-oriented organizations
- Two mangrove nurseries were established within the project framework of the Synergetic Management of Coastal Resources (SYMCOR) to ensure a continued supply of mangrove seedlings for these undertakings

### **History of CRM in Negros Oriental**

The CRM initiative in Negros Oriental started in 1978, when the entire coral reef area of Apo Island, Dauin, was declared a marine reserve with a fish sanctuary. It was protected under a municipal ordinance and managed by the island community with support from Silliman University and the LGU of Dauin.

In 1988, the Community-Based Resource Management (CBRMP) Project was implemented by the Central Visayas Regional Project-1 (CVRP-1). It has a nearshore fisheries component, which was designed to raise the income and living standard of the small fishers and rehabilitate, conserve, and manage the coastal resources.

The Provincial Resource Management Committee (PRMC) started the provincial CBRMP program in 1989 within the scope of CVRP-1 provincialization. Its aim was to improve environmental conditions in the province, alleviate poverty, and increase the income of the artisanal fishers, marginal farmers, and forest dwellers.

The following innovations on CRM technologies were implemented by the provincial government to sustain the CVRP-1 initiatives:

- Artificial reefs were made of used tires instead of concrete
- Bakawan was still used for mangrove reforestation, but only in sites suitable for *Rhizophora*
- The vertical model of the fish attracting device was used instead of the horizontal model
- Mariculture projects using green mussel, *Eucheuma*, and *Siganid* culture
- Community organizing activities were intensified, with community organizers assigned in all project sites, coordinating program activities, and facilitating the implementation of the various project interventions

When the CVRP-1 was phased-out in 1992, its pilot sites and projects were turned over to the provincial government. The latter was sustained by PRMC, which evolved into the Negros Oriental Resource Management Office (NEGORMO).

The Nearshore Fisheries Project of the province was then sustained as the CRMP of the Resource Management Division, under the Provincial Planning and Development Office (PPDO).

In 1993, a fish catch monitoring program was initiated with technical assistance from the German Development Service (DED/GDS). In the same year the project, Establishment of Marine Reserves in Negros

Oriental (EMRINO), began with support from the European Union (EU), the DED/GSD, and the Center for Establishment of Marine Reserves in Negros Oriental (CEMRINO).

To further enhance the knowledge and awareness of fishers and coastal communities for their general commitment for protection, conservation, and management, marine ecology seminars were conducted for the coastal communities, members of fishers' association, and health and science teachers. As an offshoot of the seminars for teachers, an enriched curriculum in marine ecology for pupils in grades 5 and 6 was developed in cooperation with the department of education and sports.

In 1996, the USAID-funded CRMP was started. The project enhanced the CRM efforts and helped strengthen the community organizations, particularly in the enforcement of laws, rules, and regulations.

The project also helped local communities in coming up with much needed management tools that could improve management of their coastal resources. It also improved working relationships among concerned agencies and offices.

The Synergistic Management of Coastal Resources (SYMCOR) project framework was started in 1999. This project is based on the tripartite concept involving government organizations, nongovernmental organizations, and the target groups themselves. Its core proponents are the Environment and Natural Resources Management Division (ENRMD); the nongovernmental organization, Saint Catherine Family Helper Project, Inc.; the German government (through DED, GTZ), and MISEREOR.

### **Program Partners**

The successful implementation of CRM in the province is because of partners who have worked with us. All these years, at different times and frequency, the province enjoyed the cooperation and support of the following:

- DENR
- DA-BFAR
- DECS
- PNP- Philippine Coast Guard
- DED- German Development Service
- USAID through CRMP
- Silliman University Marine Laboratory
- St. Catherine Family Helper Project. Inc.
- Ting Matiao Foundation
- Local government units (LGUs) or other various municipalities and barangays

Various activities have been and are still being done together with the partners in assisting the municipalities and cities in the implementation of their CRM plans and programs:

- Facilitating the implementation of the following technical interventions:
  - Establishment of marine reserves (coral reef, lampirong, mangrove, etc.)
  - Mangrove reforestation
  - Coral transplantation
- Marine reserve management planning and CRM planning
- Conducting training and/or capability-building activities with financial and technical assistance from program partners and in close coordination with concerned agencies and/or offices
- Comprehensive presentation of results to the target groups in the case of fish catch monitoring and underwater surveys
- Facilitating the active involvement of LGU officials and the community in every step of the CRM process including the evaluation of their own accomplishments using their Municipal Coastal Data Base

- Providing technical information and assistance to FARMC projects and/or activities
- Assessing coastal ecosystems suitable for MPAs, and regular monitoring and community feedback on biophysical parameters affecting MPA management

The CB-CRM partners intensely contribute to environmental education and ensure public acceptance of project activities through public hearings, seminars, workshops, and advocacy. Participatory environmental education is provided to all members of the target groups, including women and children. TV and radio broadcasts further intensify the educational impact on the entire population of Negros Oriental. Additional seminars, workshops, and conferences, such as the annual Visayas Fisherfolk Symposium, ensure the exchange of information even beyond the borders of the province.

The Fish Catch Monitoring Program is a very intensive participatory program conducted to analyze the impact of the province activities on fish populations in Negros Oriental. The enormous amount of data (more than 73,000 individual catches) has been compiled and analyzed.

The province also assists in the development and production of the Ecological Survey Manuals for underwater surveys to analyze fauna and flora along the coastline. Continuous underwater visual fish censuses also provide additional monitoring information essential for a reliable assessment of our marine environment and resources. This visual fish monitoring tool is of particular importance at marine reserve sites, or close to them, where fishing is prohibited; therefore the Fish Catch Monitoring Program is not applicable.

Equally intensive mangrove ecosystem analyses complete the set of monitoring and evaluation tools. During the last two years, Negros Oriental has strongly intensified its mangrove reforestation efforts, particularly within the SYMCOR Project Framework. The approach is that all reforestations are “close-to-natural” which targets a long-term re-establishment of the natural ecological (botanical) composition of the mangrove ecosystem.

Stakeholders in project sites gather data for the mangrove ecosystem analyses. Intensive mangrove monitoring seminars as well as mangrove nursery management seminars enable them to participate in monitoring and mangrove management. The very active participation of the target groups is essential for the successful mangrove reforestation work because sites are large and very dispersed.

A key factor in the success of CRM in Negros Oriental has been the strong partnerships and a synergy among LGUs, line agencies, NGOs, academia, and the communities.

Other facilitating factors include:

- Active participation and support of municipal and city officials
- Very active participation by the community
- Continuing information/education campaigns (group discussions, feedback sessions with target groups, etc.)
- Sustained conduct of CRM-related trainings/workshops
- Continuous aquanaut reef surveys and monitoring of fish stock parallel to fish catch monitoring
- Resource allocation for CRM by LGUs, and financial assistance from both domestic and foreign funding program partners
- Technical interventions based on the need of communities (CRMP is currently assisting in MPA management planning workshops in selected sites to further develop the PO’s capability in resource appreciation and management)
- Growing support and improved coordination among institutions

## Lessons Learned

Through the years, the CB-CRM program of Negros Oriental continues to develop processes and methodologies based on lessons learned and to adapt to changing times and other developments. The following are the elements that must be present to sustain CRM efforts:

- Budget allocation for CRM
- Program structure manned by permanent employees
- Technical support from the scientific community and/or academia
- Support from and active involvement of local government officials
- Active participation of the community

CRM programs can work better when there is a provincial and municipal policy or ordinance adopting national laws, rules, and regulations. Regular monitoring and evaluation is essential as it helps to:

- Determine the degree to which planned interventions are being implemented and are working
- Identify areas for improvement in directions and strategies
- Build community support
- Assess impacts of CRM plans and programs on biophysical and socioeconomic conditions in the area

A continuing education and information campaign, including a presentation of monitoring and evaluation results, keeps the level of community awareness high and sustains participation of the community and other stakeholders.

The provincial government of Negros Oriental, in collaboration with its program partners, will continue to support the municipality/city LGUs by:

- Providing technical assistance in the practical application of CRM theories, research methodologies, and data analyses
- Conducting trainings and other capacity-building activities including participatory underwater monitoring in terms of equipment, technical skills, data collection, and finances
- Providing platforms for information exchange among LGUs, as well as with external groups like line agencies, NGOs, the scientific community, and LGUs outside the province
- Establishing a provincial information center
- Continuous monitoring and evaluation of CRM plans through close linkages between the provincial and municipal CRM technical working groups



## GROUP DISCUSSION

### ***Where does the provincial government get funding support for the provincial CRM project?***

In the case of Negros Oriental, the implementation of the CRMP started with the CVRP project. The office of CVRP and the provincial government made joint proposals on CRM and sent them to NEDA for endorsement by external funding agencies. GTZ was the initial funder, other foreign grants came later. The German government, through GTZ, provided a technical personnel volunteer who worked in the CRM project of the province. The presence of the German volunteer was an important factor that made the project implementation successful. The first step in obtaining funding is the formulation and submission of good project proposals for possible funding by either local or foreign agencies.

Establishing linkages and close relationships with partners such as line agencies of the government (called “partners”) is another key factor for funding support to the provincial CRM project. For example, the Province of Negros Oriental provided part of its development fund or internal revenue allotment (IRA) as financial support to the operation of the project. The Department of Education Culture and Sports (DECS), on the other hand, offered personnel and material support when the province requested that basic marine ecology courses be made part of the curriculum for grades 5 and 6. This served to ensure that youths would know the nature and importance of protecting and managing marine ecosystems. Selected teachers were trained in teaching and designing the curriculum for this course.

### ***What is the meaning of the phrase “platform of information exchange” cited in this chapter as one of the factors that helped sustain the provincial CRM project?***

The importance of establishing a Provincial CRM Information Center is to facilitate the exchange of information about CRM between the provincial office and the stakeholders, scientific community, academia, funding agencies, other provincial LGUs, NGOs, POs, etc. With funding from the GDS, such information centers started at the regional level in Region VII, and then subsequently became part of the national network of information centers through the assistance of PCAMRD.

### ***Citing all the accomplishments of the Negros Oriental Province, would this indicate that the CRM program is successful, or what is the measure of success?***

At this point, it cannot be said that the implementation of CRM in Negros Oriental Province is successful because the aim of improving the lives of fishers is a long process. However, at this stage, it can be shown that the following are the immediate success indicators for the successful implementation of CRM in the province:

- Budget support from the municipalities
- Different stakeholders/sectors in the province-academia, POs, and NGOs were able to work together as partners
- Legal support was getting less and less of a problem. Violators are getting apprehended with the help of Legal Environment Assistance Programs (LEAP).
- CRM is institutionalized at the provincial level
- Provincial CRM certification committees were formed
- LGUs have started tapping academia for training at their own initiative

### ***What is the impact of the CRM activities in Negros Oriental at the PO level?***

Provincialization of CRM in Negros Oriental started in 1991. At that time, it was difficult to bring the fishers together. Now, there are fishers groups that are growing. Livelihood project assistance was provided at no interest. Provincialization is a long-term process and involves different levels. The growth of organizations depends on so many factors. One of the measures of success is the smiles on the faces of the fishers indicating that they are happy with what they are doing as well as their participation in monitoring and other interventions.

## **Institutional Frameworks for CB-CRM in North Sulawesi**

*Bernadetta Puspita Devi\* and J. Johnnes Tulungen\*\**

*\*North Sulawesi Provincial Planning, Research and Development Board, Indonesia*

*\*\*Coastal Resources Management Project - CRMP Indonesia, North Sulawesi*

### **Introduction**

North Sulawesi is a province on the Indonesian Island of Sulawesi, which borders the Philippines waters to the south. The United States Agency for International Development (USAID) has been assisting the national government and the province of North Sulawesi to expand pilot CB-CRM projects across the province. This presentation highlights the similarities of coastal issues between Indonesia and the Philippines. It also reviews an institutional framework being developed in Indonesia to scale-up from local pilot projects to province-wide policies.

### **Characteristics of North Sulawesi:**

- Resources in good condition
- High marine biodiversity
- Over 7,000 species of tropical fish
- Over 2,000 species of reef fish
- Hilly coastline with fringing reefs
- Coastline length 1,965 km
- Mangrove area of 28,000 sq. km
- Coastal resource-dependent rural communities
- Diverse multi-ethnic immigrant communities
- Population 1,967,436

### **Common Issues in North Sulawesi Villages:**

- Reef degradation
- Bomb fishing
- Over-fishing
- Poison fishing
- Fish marketing
- Flooding
- Water supply
- Sanitation
- Forest degradation
- Sedimentation
- Mangrove cutting
- Agricultural practices
- Endangered species
- Student drop outs
- Coastal erosion
- Crown-of-thorn starfish

## **Coastal Management Issues in North Sulawesi:**

### **Administrative**

- Lack of coordination due to sectoral approaches by different agencies
- Lack of common vision
- Lack of integration of watershed management with coastal/island management
- Lack of public involvement in management
- Lack of transparency in decisionmaking

#### **Administrative issues of most importance**

### **Social**

- Conflicts due to unequal access to resources (e.g., fisheries)
- Poverty due to over-exploitation of resources, exclusion from new industries
- Health impacts on women and children (e.g., lack access to clean water)

#### **Overall trends pointing to growing social unrest**

### **Physical**

- Coral and sand loss due to mining, bomb and cyanide fishing, and other destructive fishing activities
- Flooding due to land reclamation and changed hydrology
- Erosion due to mangrove clearing
- Sedimentation due to upland clearing
- Pollution from agricultural and domestic sources

#### **Physical changes that cannot be 'fixed' by engineering solutions alone**

### **Ecological**

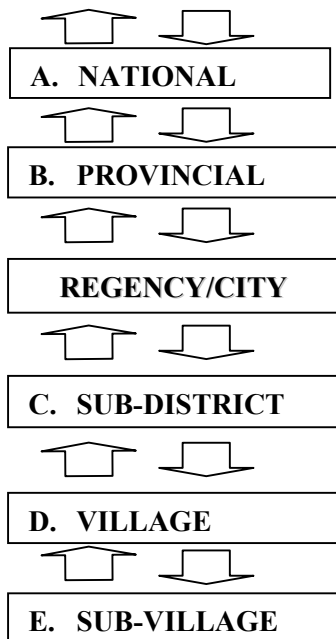
- Loss of species (e.g., fish, turtles)
- Changed chemistry (e.g., eutrophication)
- Decreased resilience (e.g., loss of breeding areas and populations)

#### **Overall – the trends are negative!**

## Decentralization in Indonesia

- Law 22/99 on Regional Autonomy Decentralized Management and Authority to Local Government (12 nautical miles for provincial and 4 nautical miles for regency)
- Law 25/99 Financial Allocation to Regional Government (percent of that allocation should be greater for local government)
- Government Regulation No. 25/2000 to clarify role and authority of the central and regional governments

### HIERARCHY OF INDONESIAN GOVERNMENT



The Decentralization and Regional Autonomy Law provides greater authority and responsibility to local governments. It is believed local governments are best fit to manage resources and accommodate community interest according to local needs and conditions.

### History of Coastal Management in North Sulawesi

- 1988 – Marine Science Education Project (ADB) included six universities
- 1993 – National guidance calls for marine resources management
- 1992 – 1997 NRMP 1, Bunaken National Park Management (USAID) continued to 2002, broadened to watershed and forest protected area
- 1994 – 1998 MREP, Marine database and capacity building (ADB)
- 1994 – 1997 Mangrove Management Project (ADB)
- 1995 – Now marine and fisheries management incorporated into regional leading sectors, regional policy
- 1996 – 1999 COREMAP, two village-level pilot project (National Funds)
- 1997 – 2003 CRMP, CB-CRM and integrated coastal management (USAID)
- 2000 – 2002 InteCoReef, Coral Reef Master Plan (JICA)
- 2002 – 2006 MCRMP, CRM Plan (ADB) Planned
- 2002 – ??? Small Island Management Project (National Funds)
- Long history, but mostly from loan and grant funding, sustainability
- Institutionalization of program into local government program and institution

## Developing an Integrated Approach

USAID has been assisting the local and provincial governments in North Sulawesi through the CRMP, locally called Proyek Pesisir.

### *Objective*

*“...decentralized and strengthened coastal resources management in Indonesia ...”*

### *Goals in North Sulawesi*

- Develop models of community-based CRM
- Scale-up models into a CRM extension program

### *Models Developed*

- Community-based marine sanctuaries
- Village-level ordinances
- Village-level integrated management plans

### *Project Concept*

- Field Experiments/Action Research
  - Documentation
    - Lesson Drawing
      - Dissemination
        - Replication/Adaptation/Scaling-Up
          - Improved CRM

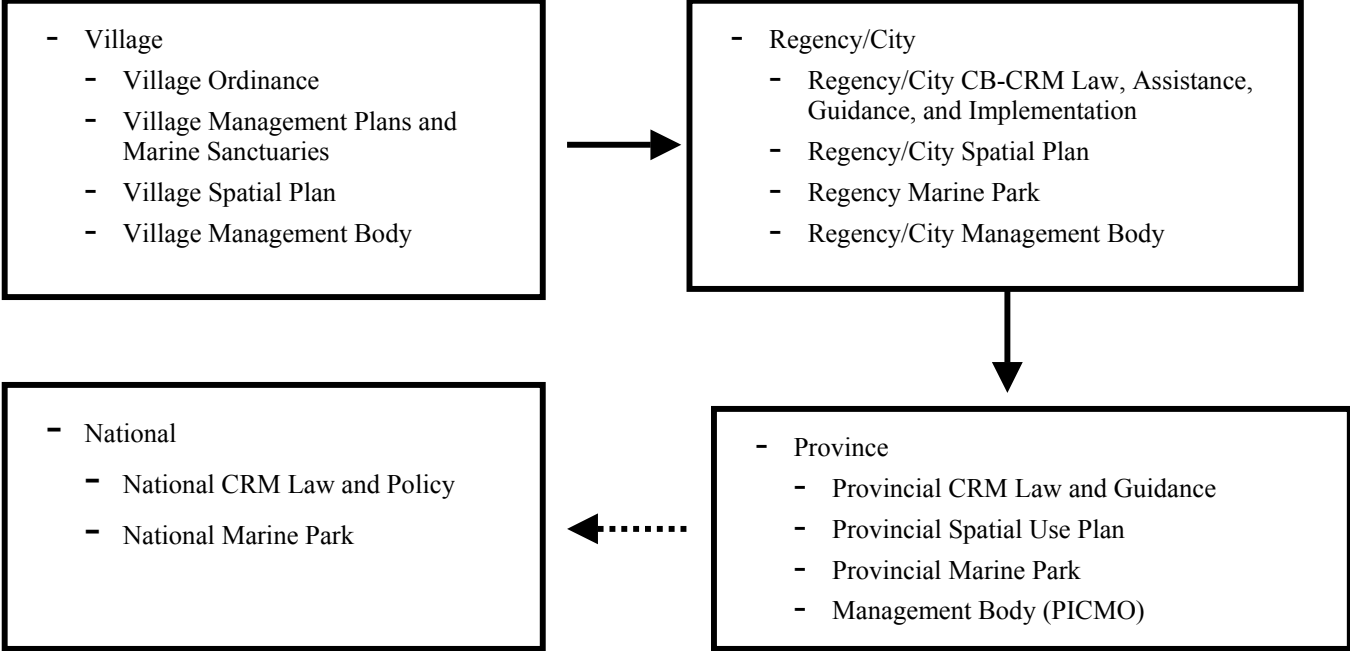
### *Scaling-up*

- Replication from one community-based marine sanctuaries to three CRMP sites and two by Japan International Cooperation Agency (JICA)
- Scaling-up of pilot sites (village-level plans) to ecosystem based (Likupang areas, two sub-district, 23 coastal villages), the theme is CB-CRM
- Plan to develop regency or provincial marine park for Lembeh and Belang-Kotabunan
- From village ordinances to regency and provincial law
- Minahasa regency law on CB-CRM as umbrella for village ordinance, plan, and marine sanctuary

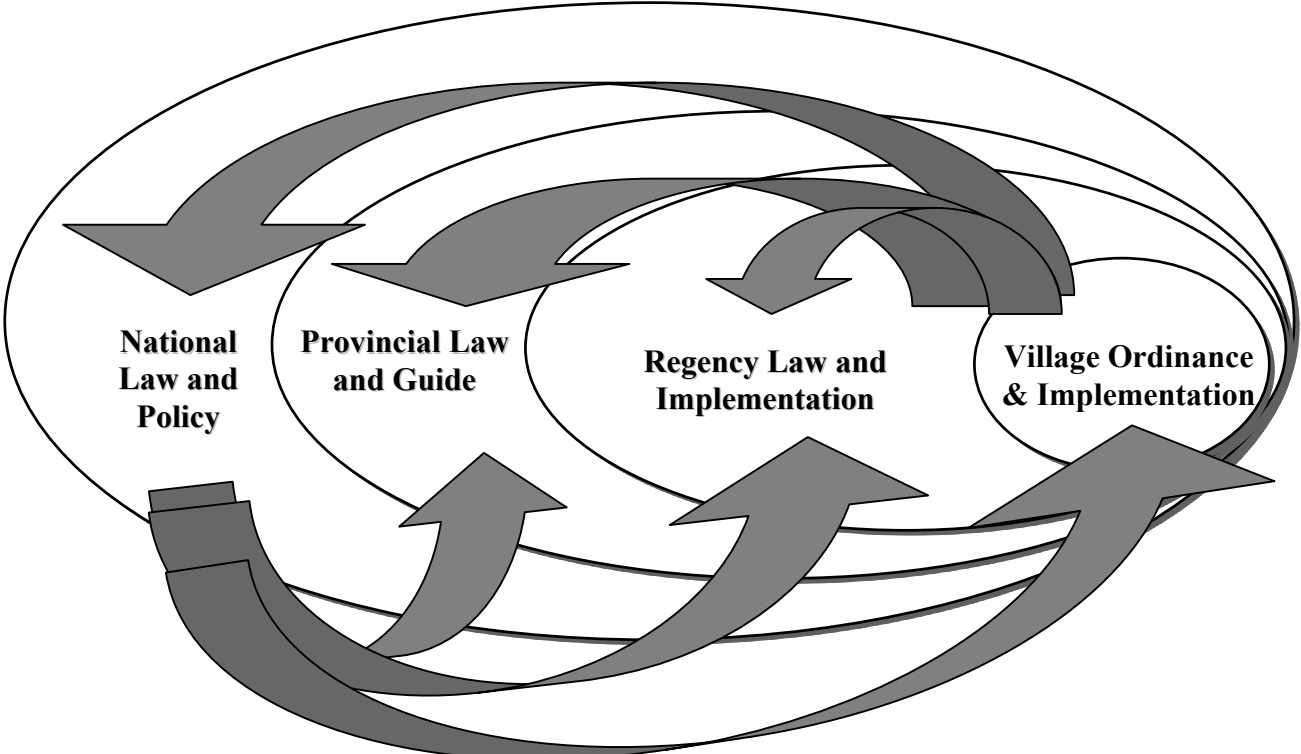
### *Minahasa Regency Law on CB-CRM*

- Establish CRM principles such as participation, integration, and sustainability
- Prioritize CRM programs
- Establish institution for CRM coordination
- Establish process for CRM
- Develop general guides for specific programs such as village CRM plan, marine sanctuary, spatial planning, and public education
- Funding for implementation the end result of working to advance CRM and governance at multiple scales is a coordinated and supportive framework

# PROJECT SCALING-UP AND SUSTAINABILITY



From Local Ordinances to National Laws: A Nested System



The end result of working to advance integrated coastal management and governance at multiple scales is a coordinated and supportive framework.

## GROUP DISCUSSION

*Are the fisheries boundaries in Indonesia for fisheries management or for taxation and revenue purposes?*

In Indonesia, fisheries is defined as an open-access system. Municipal boundaries are not yet defined. There is an on-going conflict between the local and the central governments.

## OUTCOME OF SMALL GROUP SESSIONS

*Looking at the experiences in Negros Oriental, what are the achievements of CRM in this province so far, and what are the lessons learned?*

The achievements of Negros Oriental in implementing CRM include:

- The institutionalization of CRM in the LGUs
- Establishment of strong partnerships
- Empowered communities and stakeholders
- Enterprise development

The following are the key elements in the province's achievements:

- Institutionalization of CRM in the LGUs
  - Supportive political leaders
  - Creation of a CRM division
  - CRM budget allocation for the 17 municipalities and four cities of the province
  - Operational resource database system
- Establishment of strong partnerships
  - Linkages with funding organizations, academia, government agencies, individuals, and NGOs
  - Active participation of all stakeholders
- Empowered communities and stakeholders
  - Enforcement of fisheries and environmental laws
  - Participatory monitoring and evaluation
  - Resource rehabilitation
  - Effective IEC
- Enterprise development

The following are the lessons learned by the implementation of CRM programs in the province:

- Strong political will; if they pass budget legislation then others will follow
- Enlisting community participation for sustainability
- Understanding development is a long-term process
- Setting/realization of priorities
- Establishment of project monitoring and evaluation system and standards

*How did the Negros Oriental CRM unit help with municipal and barangay-level CRM implementation?*

The Negros Oriental CRM unit provided the following assistance to municipalities and barangays:

- Adoption/implementation of national/regional initiatives (i.e., CEP, CBRMP, PCAMRD, CRMP, etc.)
- Collaboration/cooperation with concerned national/regional agencies in project implementation
- Information dissemination on national laws, rules, and regulations
- Adoption of national laws in the provincial level (marine, fisheries, and ENR laws)
- Enforcement of laws, rules, and regulations

- Provision of CRM budget allocation

***How did the Negros Oriental CRM unit help in implementing national/regional CRM initiatives, and what kind of support did they receive from national and regional government organizations in order to do this?***

With support from regional government organizations, the Negros Oriental CRM unit advanced national/regional CRM initiatives by:

- Technical assistance (surveys, public hearings, technical description, boundaries)
- Trainings (PCRA, CRM, mangrove production, management and rehabilitation, para-legal, etc.)
- Livelihood/enterprise development
- Information materials
- Financial assistance for CRM
- Scholarship grants
- Travel abroad

## **SUMMARY OF SMALL GROUP SESSIONS**

The provincial CRM projects and activities in Eastern Visayas are disjointed and uncoordinated. There is no point person in the province that coordinates the various CRM activities. Likewise, activities are sometimes erratic and are generally not sustained. CRM projects are more likely to be initiated by academia or NGOs than by LGUs. Financial support to the project is usually not stable. When CRM projects are included in LGU workplans, they often have a low priority for implementation. Finally, there is no specific legal basis to undertake CRM at the provincial level. This is because there is no clear delineation for provincial waters, nor is there a mandate or instrument that says CRM should be in the development plan of a province or LGU. The province of Negros Oriental is unique in that it has an ENR office that focuses mainly on CRM. There is no province in Region VIII with that kind of set up. The group felt that it was necessary to bring to the plenary the issue of which unit is ideal to handle CRM activities (from planning to implementation).

At the provincial level, there is already a framework and a plan to implement CRM projects at the provincial and municipal levels based on the Regional Development Plan prepared by NEDA Region VIII. However, the implementation of these projects was made voluntary on the part of the provincial or municipal LGUs. Hence, there are only a few municipalities that have adopted CRM projects. Therefore, it was suggested that NEDA Region VIII should provide communication to each province directing each one to implement CRM in the province and in their respective municipalities. Some participants recommended that the province must also lobby to have the municipal or provincial ENRO be given the primary responsibility to undertake CRM. Overall, the workshop participants agreed that each province would need to determine the appropriate office for coordinating CRM projects.



## CHAPTER 4

# DEVELOPING A PROVINCIAL CRM FRAMEWORK IN THE EASTERN VISAYAS REGION

### OUTCOME OF GROUP SESSIONS

#### *How can CRM at the provincial level evolve/develop?*

In Eastern Visayas, there are on-going CRM initiatives at the provincial and municipal levels through the offices in charge of CRM program implementation. However, these uncoordinated initiatives should be linked to somehow develop a comprehensive provincial initiative. The province can pass legislation that would require municipalities to develop their respective CRM programs.

The existing activities and the potential for an enhanced role for provinces include the following:

- Facilitating
  - Planning
  - Integrating CRM into the provincial development plan
  - Assisting municipalities in resource accessing
- Coordinating
  - Initiatives of various groups (government organizations, NGOs, LGUs)
  - With other offices/agencies (regional, provincial level)
- Database establishment and management
- Information, education and communication (IEC) material production and distribution
- Monitoring and evaluation – assistance

While the above scenario will entail a lengthy process, the expeditious way to do this is to set up a CRM unit in the provincial government to coordinate all activities. It would be beneficial to consider shielding the new unit from political cycles by assigning staff with permanent positions that do not terminate with the term of office of elected officials.

The provincial initiatives can be vigorously pursued. The process needs to evolve from the needs and desires of the local and provincial stakeholders and not from outside forces. The activities can be sustained by the following processes/steps:

- Create awareness
  - Come up with facts, information, and experiences in the province as the selling point to the governor or provincial board. Through research, the results should be presented to the provincial leaders (Sangguniang Panlalawigan, governor, to show that the on-going initiatives are important and for them to realize that, if these initiatives are sustained, these would be to the benefit of the province.
  - To be able to sustain these initiatives, there is a need to have a program at the provincial level and a unit that will take care of this program – not just an added function to an already overburdened staff.
- Generate commitment
  - There is need to generate commitment from the municipal government in the form of a legislation creating a CRM unit with staff and budget appropriation so that the unit can function effectively. The creation of that unit may only entail the retooling and detailing of staff from different sections.

- Building capability
  - Train the staff of the CRM unit to be a ‘real’ CRM unit coordinating with all the different initiatives in the different municipalities
  - Have the CRM unit evolve together with all the other stakeholders in different municipalities so they can come up with a provincial program

***What are the elements that would catalyze provincial CRM programs?***

- External funding – would start the program but is not the only method to initiate
- Technical assistance
- Presence of active NGOs in environmental conservation
- Government CRM projects
- Organized communities

***How can the Baybay Workshop Group initiate this?***

Possible entry points are the existing CRM initiatives such as the FRMP implemented in the region. It could start with small projects, then later spread to the remaining LGUs in the province. In LSU’s experience, CRM began without funds, but the program is now in place because there are supports from outside. CRM was part of the ViSCA Environmental Awareness Movement which started in 1989. The marine component began in 1992 under the ViSCA-GTZ Applied Tropical Ecology Project. Then municipalities started small initiatives that resulted in a CRM plan for the municipalities of Baybay. However, these successful coastal activities are limited by a lack of coordination and funding.

***Is there an existing municipal-level CRM initiative and province-wide demand that can motivate the process?***

The demand for a province-wide CRM initiative is motivated by the issues and problems in the coastal areas such as depletion of resources, habitat degradation, increasing poverty (~ 49.4% in Region VIII), and the need for coordinated efforts to vigorously pursue CRM program implementation.

***How can provincial institutions coordinate delivery of services to coastal communities, and what type of services and support need to be provided?***

Provincial institutions can coordinate the delivery of services to coastal communities through the following:

- Services to LGUs
- Functional CRM units
- Regular meetings/conferences
- Information systems
- Capacity building

***What are the important elements that can ensure the sustainability of CRM implementation at the provincial level?***

***Local Role***

- Province-wide PO Federation
- Active local leadership and community participation
- Inter-LGU cooperation
- Participation of local stakeholders in planning and decisionmaking
- Supportive communities
- Institutionalization of CRM in the LGUs at all levels
- CRM as a basic service of LGUs (prioritization of CRM)
- Accountability to M/BLGUS and vice-versa
- Adoption of CRM plan by the LGUs

### *Political*

- Commitment and support of leaders and community
- Political will/funding support
- Supportive political leaders
- Legal support from the provincial government

### *Institutional*

- Established strong partnership
- Multi-sectoral involvement
- Existence of a provincial CRM unit
- Coordination of all government, externally-funded and NGO-funded CRM activities
- Clear mission and definition of roles
- Committed workers
- Organized structure and trained personnel
- Have regular staff
- Regular conduct of capability building
- Ordinances on CRM
- Enforcement of laws

### *Monetary*

- Financial assistance
- Fund support
- Long-term funding
- Support for socioeconomic initiatives of fishers and POs in the province
- Strong livelihood-program capability building

### *Technical*

- Strong technical support
- Presence of academic institution involved in fisheries and marine sciences
- Continuing IEC
- Media (print and radio) involvement
- Conduct regular project monitoring and evaluation
- Feedback mechanism/progress report
- Information/knowledge management databases

### ***What roles can NGOs, academia, other research and extension institutions, and externally-assisted resource management program play in effectively promoting CRM at the provincial level?***

#### *NGOs:*

- Provide organizing support
- Provide additional funding support
- Provide capability building
- Provide participatory planning, information, monitoring, and evaluation (PIME)
- Assist in law enforcement
- Community organizing
- Monitoring and Evaluation
- IEC
- Assistance at the community level to organize
- Provide information and education services
- IEC/policy advocacy
- Directly motivate coastal community to actively participate in CRM activities

*Media/Department of Education, Culture and Sports/Public Information Agency/ Kapisanan ng mga Broadcasters sa Pilipinas/church:*

- Advocacy, monitoring, and evaluation
- IEC support

*Academia:*

- Assessment and evaluation of IEC materials
- Assessment and evaluation of training designs
- Assessment and evaluation of policy advice
- New technologies
- Analysis of data
- Innovations
- CRM extension services
- Monitoring and evaluation
- Information dissemination (print materials: brochures, leaflets, etc.)
- Capability building
- Policy advocacy
- Legal assistance (advice, representations)
- Technical support (resource assessments and monitoring)
- Research
- Advocacy building

*LGUs:*

- Financial, legislative, and other support
- Formal adoption of CRM plans
- Building capacities of Barangay and municipal FARMCs

*Business Organizations:*

- Funding support
- External agencies with technical and financial assistance
- Advocacy on marine conservation
- Monitoring (data gathering on marine resources)
- Financial support to CRM projects
- Livelihood support (marketing)

*POs/NGOs:*

- Participate in various stages of CRM implementation
- Help facilitate participatory approaches in research
- Active participation
- Participate in all CRM planning sessions at all levels
- Provide local & traditional knowledge and experience in resource management
- Building sustainable structure where POs can actively participate in the management of the coastal resources
- Training/capability building
- Involvement in CRM activities, IEC, others

*Department of Trade and Industry/banks/Cooperative Development Authority/ Department of Labor and Employment:*

- Loans on livelihood projects
- Tap technical expertise

- Capacity building
- Information dissemination
- Enforcement of laws

*Philippine National Police-Maritime Command/ Philippine Coast Guard and other law enforcement groups:*

- Boundary delineation
- Enforcement of laws

***What are the prospects and opportunities for replicating provincial-level CRM in Eastern Visayas and the rest of the Philippines? Should other provinces develop provincial CRM units? What are the needs for replication?***

- Creation of a permanent office providing regular staff and necessary logistics
- Enterprise development
- External funding support (bilateral agreements, foreign assistance, etc.)
- Cross visits
- Exposure/observation trips for all would-be actors
- Amendment of LG Code, enhancing provincial functions and responsibilities
- Scanning of the situation in the province
- Political will of the LGUs to implement the project

***Once CRM projects are on-going, what are the other roles that external funding agencies can play?***

Foreign funding agencies could help much in the implementation of CRM projects by providing technical personnel or volunteers who are knowledgeable about CRM and/or community organizing. Their expertise is needed to jumpstart the project.

CRM projects must be started at the local level first by the stakeholders themselves. Once initiated, foreign funding may be sought to expand and maintain the projects for a certain period of time. A case in point is the Baybay CRM project. LSU initiated the project as an offshoot of the activities of the ViSCA Environmental Awareness Movement. GTZ support came in later and the project was made municipal-wide. After the termination of funding support, financial support and management were taken care of by the municipal LGU with LSU providing minimal funds to sustain technical assistance.

Other roles for external funding agencies include:

- Financial support for small- to medium-scale facilities and/or infrastructure development in CRM project sites
- Establishment of livelihood projects
- Development and production of training modules and IEC materials for CRM

These agencies could also help establish linkage between the LGU and other funding agencies.

***How can CRM projects be sustained both at the municipal and provincial levels?***

Both levels must have a vision for their coastal resources. They must know what they would like to see happen in coastal areas under their jurisdiction when these projects get implemented. The ultimate goal would, of course, be the education of the coastal populace concerning exploitation and conservation of coastal resources in their locality and the improvement of their socioeconomic conditions.

Financial support is a major factor for project sustainability. The province and municipality must provide a regular budget for these projects. A certain percentage of their IRA fund may also be allocated in addition to the regular budget.

Participatory involvement of the provincial staff and local stakeholders in monitoring, evaluation, and management of CRM projects is another factor for success and sustainability. Hence, selected locals should be trained on these aspects so that the management of these projects will become their responsibility.

***Are there other agencies that are willing to provide funds for CRM projects?***

The Department of Energy (DOE) also provides grants to LGUs for CRM projects through its development and environmental funds. A proposal is needed to receive funding consideration.

**CHAPTER 5**  
**NEXT STEPS FOR PROVINCES AND LGUs IN THE**  
**EASTERN VISAYAS REGION**

**RECOMMENDATIONS FOR IMMEDIATE ACTION**

**Identify immediate or short-term action to address issues/needs identified previously and prioritize your list.**

<b>Objectives</b>	<b>Activities</b>	<b>Responsible Units for Both Objectives</b>
Institutionalization of CRM in the province	<ul style="list-style-type: none"> <li>• Creation of a secretariat</li> <li>• Formation of TWG</li> <li>• Prepare framework plan</li> <li>• Orient/advocate political leaders to initiate support for CRM</li> <li>• Regional coordination meeting (convened by NEDA)</li> <li>• Consultative conference in each province</li> </ul>	<ul style="list-style-type: none"> <li>- Southern Leyte LIP-Provincial Government</li> <li>- Leyte LSU, Provincial Government</li> <li>- Western Samar TWG</li> <li>- Eastern Samar</li> <li>- Biliran</li> </ul>
Formulation of CRM plan at the provincial level	<ul style="list-style-type: none"> <li>• Lobbying to LGU advocacy</li> <li>• Gather data by conducting orientation seminar at barangay level in specific sites</li> <li>• Scanning of past and present ICM activities</li> <li>• Information caravans</li> <li>• Fund sourcing (local/external)</li> </ul>	<ul style="list-style-type: none"> <li>- Northern Samar PPDO</li> <li>- UEP</li> <li>- NEDA</li> </ul>

## RECOMMENDATIONS FOR NEXT STEPS BY EACH PROVINCE

### *What are the next steps or action plans to pursue CRM at the provincial level?*

A consultative conference between NGOs, NGAs, line agencies, and LGUs on a provincial scale is necessary. The following are the next steps/action plans of the different provinces in Eastern Visayas.

#### *Northern Samar*

- Discussion with the chief executive (PPDO)
- Consultative meeting (sectoral meeting)
- Creation of council or committee on CRM
- Validation of existing CRM initiatives
- Technical capability building

#### *Samar*

- Formal presentation to the ad hoc committee
  - Audience with the governor, two congressmen, and other concerned groups
  - Five person ad hoc wherein the committee, PPDO, and ENRO will be represented
  - First week of April 2002
- Research reconnaissance, compilation of existing data, validation and analysis considering gaps/problems
  - Ad hoc committee, PPDO, DA, DENR, POs and NGOs
  - April-June 2002
- Management plan preparation
  - Ad hoc together with major stakeholders
  - July-September 2002
- Presentation of management plan to local chief executive, two congressmen, and major stakeholders
  - Ad hoc committee
  - September 2002



### ***Eastern Samar & Southern Leyte***

- Consultative meeting/workshop
  - Status of CRM in the province
  - Gaps/needs identified
  - Mechanism to address gaps/needs and sustain CRM identified/developed/established
- Participants/stakeholders
  - NGOs in CRM
  - MPDCs, PPDO, PAO, MAO, ENRO
  - LGU officials
  - BFAR, DENR
  - PAMB
  - FARMCs
  - Invited resource persons

The responsible agencies are the Guiuan Development Foundation Inc. and the LGU (province) in Eastern Samar. For Southern Leyte the LIP and LGU are responsible.

### ***Leyte***

- Presentation of workshop outcomes
- Consolidate CRM information
- Briefing with LGU (Province) CRM unit
- Planning workshop
- Plan implementation

### ***Biliran***

- Report to the governor and the Sangguniang Panlalawigan, particularly on the Committee on Agriculture and Fisheries
- Inventories and validation of CRM activities (LGU initiative)
- Consultation and revalidation with POs, NGOs
- Creation of a CRM unit
- Capability building
- Planning
- Implementation and strengthening of CRM activities
- Monitoring and evaluation

## ANNEX 1

### REFERENCES

- Anonymous. 2002. "Provinces take lead in coastal management". *Overseas The Online Magazine for Sustainable Seas* 4(2):4-5. Available: [http://www.oneocean.org/overseas/200202/coastal\\_alert.html](http://www.oneocean.org/overseas/200202/coastal_alert.html)
- Balgos, M., T. Bayer, B. Crawford, C. Pagdilao, J. Tulungen, and A. White (eds). 2000. *Proceedings: Philippines-Indonesia Workshop on community-Based Marine Sanctuaries*. Coastal Resources Center, University of Rhode Island. Narragansett RI. 106 pp.
- Breeuwer, T. and E.M. Serote. 2000. *Toward a bay-wide management structure for Maqueda Bay*. SNV/VNG (Vereniging van Nederlandse Gemeenten) Misson Report. 32 p.
- Coastal Resource Management Plan, 1997-2007. 1996. *Coastal Resource Management Plan, 1997-2007*. Eastern Visayas Coastal Resource Management. Region VIII Project. Philippine National Economic Development Authority and United States Agency for International Development. 141pp.
- Courtney, C.A., R. Cruz, E. Deguit, R. Fuentes, C. Gestopa, S. Green, R. de Leon, E. Leung, E. Melana, W. Jatulan, P. Sayson, A.White, and A.Yambao. 2001. *Guidelines for annual monitoring and evaluation of municipal/city coastal resource management plans and programs for certification*. Coastal Resource Management Program. Document No. 46-CRM.
- DENR, DILG, DA-BFAR and CRMP. 1997. *Legal and jurisdictional guidebook for coastal resource management in the Philippines*. Department of Environment and Natural Resources; Department of Interior and Local Government; Department of Agriculture-Bureau of Fisheries and Aquatic Resources; and Coastal Resources Management Project (CRMP), Philippines.
- Esman, M.J. and N.T. Uphoff. 1984. *Local organizations: Intermediaries in rural development*. Cornell University Press, Ithaca, New York.
- Green, S.J., R.P. Monreal, D.A.D. Diamante-Fabunan and T.G. Bayer. 2000. "Developing integrated coastal management into a natural response: The story of Bohol." *Tambuli A Publication for Coastal Management Practitioners* (6):1,3-9.
- Ibon Philippines Profile. 1996. *Ibon Philippines Profile Region VIII Eastern Visayas*. (1st ed.) Ibon Philippines. Manila, Philippines.125pp.
- Murphy, J.M.,W.E. Ablong and A.T.White. 1999. "Integrated Coastal Management in Negros Oriental: Building on Experience." *Tambuli A Publication for Coastal Management Practitioners* (5):1,3-9.
- Pollnac, R.B. and B.R. Crawford. 2000. *Discovering factors that influence the success of community-based marine protected areas in the Visayas, Philippines*. Coastal Management Report # 2229. PCAMRD Book Series No. 33. Coastal Resources Center University of Rhode Island, Narragansett, RI, USA, and Philippine Council for Aquatic and Marine Research and Development, Los Baños, Laguna, Philippines.

- Pomeroy, R.S. and M.B. Carlos. 1997. "Community-based coastal resources management in the Philippines: a review and evaluation of programs and projects, 1984-1994". *Marine Policy*. Vol. 21. No. 5. pp. 445-464.
- Uphoff, N., M.J. Esman and A. Krishna. 1998. *Reasons for success: Learning from instructive experiences in rural development*. Kumarian Press, West Hartford, Connecticut.
- Valle, I.A., M.C.B. Cristobal, A. T. White and E.T. Deguit. 2000. *Coastal Environmental Profile of the Malalag Area Davao del Sur, Philippines*. Department of Agriculture-Bureau of Fisheries and Aquatic Resources; and Coastal Resources Management Project (CRMP), Philippines.
- Yambao, A.C., E.T. Deguit and A.T. White. 2001. "Philippine Coastal Resource Management: Bohol, Masbate and Davao del Sur forge ahead." *Overseas The Online Magazine for Sustainable Seas* 4(10):19.

## ANNEX 2 WORKSHOP AGENDA

*Workshop on:*  
**Institutional Frameworks for CB-CRM and Marine Conservation  
in the Eastern Visayas Region  
March 14 – 15, 2002  
Leyte State University**

*Sponsored by:*  
**Philippine Council for Aquatic and Marine Research and Development  
Leyte State University  
Coastal Resources Center, University of Rhode Island**

*Funding Support Provided by:*  
**The David and Lucile Packard Foundation**

### WORKSHOP OBJECTIVES

1. Review the current situation in Region VIII (Eastern Visayas) concerning CRM and marine conservation activities, projects, and programs.
2. Discuss the need for institutional frameworks at the provincial and regional level to support CB-CRM and marine conservation at the local level.
3. Identify institutional development needs and make recommendations concerning how to build institutional capacity in the region to support CB-CRM and marine conservation.

### WORKSHOP AGENDA

#### March 14 (Thursday)

- 8-10 AM      Registration  
                  Coffee and snacks
- 10:00 AM     Welcome and Workshop Opening  
                  LSU, PCAMRD, CRC/URI
- 10:20 AM     Workshop Objectives and Overview (PCAMRD)  
                  Administrative and Logistical Arrangements (LSU)
- 10:45 AM     Current Context:  
                  Presentation of the background paper followed by discussion:  
                  *Provincial and regional institutions in the Philippines: an overlooked element in coastal  
resources management and marine conservation. (PCAMRD)*

11:30 AM Presentation followed by discussion: *The example of Negros Oriental and Bohol Province: Environmental and Natural Resources Management Units – Delivering services to LGUs and coastal communities* (Resource Persons to be determined).

12:00 PM Presentation followed by discussion: *An overview of the current context in Region VIII* (LSU)

12:30 PM Lunch

1:30 PM Discussion Groups:  
(Facilitators: Center for Strategic Planning and Studies) (Rappateur: to be assigned)

#### **GROUP 1**

- What are the past, on-going and future CRM and marine conservation activities in the region (municipal and community-based activities, bay and sea planning and management initiatives, regional and/or provincial planning).
- What are some of the issues concerning coordination and support among institutions and projects in the region?
- What services do provincial and regional institutions (government, NGO, university) provide for community based CRM and LGUs (municipal, city, barangay)?
- What type of services and support do LGUs and coastal communities (municipal, barangay, people's organizations, etc.) need?

#### **GROUP 2**

- In general, how do you characterize CRM at the provincial level in the region in terms of legal basis and authority, structure, functions, human and financial resources, and political and other types of support?
- Do any provincial governments have natural resources and environmental units and/or units focusing on coastal resources management and marine conservation?

#### **GROUP 3**

- Looking at the experiences in Negros Oriental, Negros Occidental, Bohol, Davao del Sur and Masbate, what are the achievements of CRM in these provinces so far and what are the lessons learned?
- How did CRM units in these provinces help municipal-and barangay-level CRM implementation? How did these CRM units help in implementing national/regional CRM initiatives and what kind of support did they receive from national and regional GOs in order to do this?

3:00 PM Coffee Break

3:15 PM Group reports followed by discussion:  
(Facilitators: Center for Strategic Planning and Studies) (Rappateur: to be assigned)

5:30 PM Adjourn & Dinner

## March 15 (Friday)

7:00 AM Breakfast  
8:00 AM Administrative Announcements  
Review of the schedule

8:30 AM Looking Forward:

Group Discussions:

*(Facilitators: Center for Strategic Planning and Studies)(Rappateur: to be assigned)*

### GROUP 1

- How can CRM at the provincial level evolve/develop? What are the elements that can catalyze and promote such a development? Is there an existing municipal-level CRM initiative and province-wide demand for CRM that can motivate the process?
- How can provincial institutions coordinate delivery of services to coastal communities and what type of services and support need to be provided?

### GROUP 2

- What are the important elements that can ensure the sustainability of CRM implementation at the provincial level?
- What roles can NGOs, academic and other research and extension institutions, and externally assisted resource management programs play in effectively promoting CRM at the provincial level?
- What are the prospects and opportunities for replicating provincial-level CRM in eastern Visayas and the rest of the Philippines? Should other provinces develop provincial CRM units? What are the needs and requirements for replication?

### BOTH GROUPS:

- Action Plan: Identify immediate or short-term actions to address the issues/needs identified previously and prioritize your list.

10:15 AM Coffee Break

10:30 AM Group reports followed by discussion  
*(Facilitators: Center for Strategic Planning and Studies)*  
*(Rappateur: to be assigned)*

12:00 PM Workshop Closing  
Workshop evaluation (written and verbal feedback)  
Closing remarks by workshop sponsors:  
CRC/URI, PCAMRD & LSU

12:30 PM Adjourn for Lunch

**ANNEX 3**  
**DIRECTORY OF PARTICIPANTS**

<b>NAME/POSITION</b>	<b>AGENCY AFFILIATION</b>	<b>TEL/FAX</b>	<b>E-MAIL ADDRESS</b>
Eva P. Abad Agriculturist II (Fisheries)	Office of the Provincial Agriculturist Provincial Capitol, Maasin City	Tel. (053) 381 2360 Fax (053) 381 2274	
Atanacio T. Almocera, Jr. Faculty	University of the Philippine in the Visayas (UPV) Cebu College, UPV-CEIS	Tel. (032) 233 8396 Fax (032) 293 8396	aalmocerac@yahoo.com
Danilo P. Alura Assistant Professor	Eastern Samar State College Borongan, Eastern Samar	Tel. (055) 261 2728 Fax (055) 261 2725	
Arvin C. Balala Marine Biologist	Leyte Island Program Maasin City, Southern Leyte	Cel. 0919 327 9728	arvin215@eudoramail.com
Veronica B. Balbin Agricultural Technologist	Department of Agriculture (DA-LGU) Borongan , Eastern Samar	Cel. 0918 778 3894	
Maria Myrna M. Ballera Sr. Science Research Specialist	Department of Environment and Natural Resources Sto. Niño Ext., Tacloban City	Tel. (053) 325 7268 Fax (053) 327 2591	mmballera@yahoo.com
Alejandro C. Caliente Associate Professor	Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 3846	
Beverly C. Capeña Executive Director	South Pacific Integrated Area Development Foundation (SPIADFI), Hinundayan, Southern Leyte		

Senona A. Cesar Assistant Professor/ Researcher	Marine Laboratory Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2651 or (053) 335 4007 Fax (053) 335 2651	zeny-cesar@philwebinc.com
Ma. Juliet C. Ceniza Director	Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2652 Fax (053) 335 2651	mjjceniza@yahoo.com mjcceniza@philwebinc.com
Scott L. Clark Peace Corps Volunteer	Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2651 Fax (053) 335 2651	scottclark101@yahoo.com
Leilani O. Comadizo Agricultural Center Chief I	Office of Provincial Agricultural Services Naval, Biliran Province	Tel. (053) 500 9570 Cel. 0917 306 1041	
Margarita J. de la Cruz Director, Executive Director	Leyte-Samar Heritage Center University of the Philippines (UPV) Tacloban College Tacloban City & Guiuan Development Foundation, Inc., Tacloban City	Tel. (053) 325 8425 Fax (053) 325 5108	uptclshc@mozcom.com
Victoriano C. Dauag Regional Officer	8 Regional Maritime Office Tacloban City Res. Address: Block 54 lot 29, Soldiers Hills, Muntinlupa City 8098413	Cel. 0916 456 8941	
Bernadetta Puspita Devi Technical Staff	North Sulawesi Provincial Planning, Research & Development Board JL 17 Agustus Teling Manado 95117, North Sulawesi- Indonesia	Tel. (62) 431 863204	puspitadevi@hotmail.com



Alicia C. Diaz Forester-CEP Site Coordinator Cuatro Islas	Department of Environment and Natural Resources (DENR) Sub-Community Environment and Natural Resources Office Baybay, Leyte	Tel. (053) 335 3644	
Annie G. Diola Faculty	University of San Carlos (USC) Biology Department Talamban, Cebu City	Tel. (032) 346 1128 Fax (032) 419 8764	usc-biology@yahoo.com
Marlon M. Dumagsa Sr. Econ. Dev. Specialist	National Economic and Development Authority (NEDA) Region VIII Government Center, Palo, Leyte	Tel. (053) 323 2147 Fax (053) 323 3093	edd8@evis.net.ph
Rose-Liza V. Eisma Lawyer/Researcher	Silliman University SU Marine Laboratory Bantagan, Dumaguete City	Tel. (035) 225 6711 Fax (035) 225 6711	icm-proj@dgte.mozcom.com
Eliza D. Espinosa Researcher	Marine Laboratory Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2651 or (053) 335 4007 Fax (053) 335 2651	
Francisco G. Gabunada, Jr. Assistant Professor	Farm and Resource Management Institute Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2630 Fax (053) 335 3950	f.gabunada@philwebbinc.com
Golda-Mae Galdo Project Leader	Organization for Training Research and Development (OTRADEV Foundation) Brgy. Asuncion, Maasin City Southern Leyte	Tel. (053) 570 8480	goldamae@eudoramail.com
Bernardita P. Germano Associate Professor Head, Aquatic Ecosystems Division	Marine Laboratory Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 4007 Fax (053) 335 2651	bpgermano@philwebbinc.com

Rudolf Hermes Research Fellow	PCAMRD-DOST Los Baños, Laguna 4030	Tel. (049) 536 1566	mrd@laguna.net
Antonieta D. Israel Clerk	Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2652 Fax (053) 335 2378 Cel. 0919 468 4712	acdiaz@philwebinc.com
Wilson C. Jerez Community Organizer	ELAC-EV Penthouse, LF & V Fatima Bldg., Real St., Tacloban City	Tel. (053) 325 8996	elac-tac@mozcom.com
Gemma S. Lim Clerk	Marine Laboratory Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2651 Fax (053) 335 2651	
Calixto O. Kudera B.O.D.	KASAMMAKA Inopacan, Leyte		
Nimfa U. Machate Municipal Agriculturist/ CBRMP-Sub Project Coordinator	Local Government Unit Babatngon, Leyte	Tel. (053) 327 2067	
Analyn M. Mazo Instructor/Researcher	Marine Laboratory Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2651 or (053) 335 4007 Fax (053) 335 2651	inverts@philwebinc.com
Paciencia P. Milan President	Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2600 Fax (053) 335 2601	opvisca@mozcom.com
Humberto R. Montes, Jr. Associate Professor	Marine Laboratory Institute of Tropical Ecology Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2603 Cel. 0918 787 7520	

Eriberto P. Moreno Science Research Spec.	PCAMRD-DOST Los Baños, Laguna 4030	Tel. (049) 536 1566 Fax (049) 536 1566	mrd@laguna.net
Marc Nolting GTZ Advisor	Leyte Island Program on Sustainable Management of Natural Resources GTZ Maasin City Silago Bay, Southern Leyte	Tel. (053) 570 8487 Fax (053) 570 8487	mnolting@mozcom.com
Teofredo P. Olaso FMS II, CBFM Unit Chief	Department of Environment and Natural Resources – Provincial Environment and Natural Resources Office (DENR- PENRO) Leyte Nipa Hut Compound Jones St., Taclobn City	Tel. (053) 325 7485	
Josephine T. Omang Community Organizer	South Pacific Integrated Area Development Foundation Inc (SPIADFI) Calle Nueva, Hinungangan, Southern Leyte		
Jorge B. Omolon, Jr. AT/MFD Coordinator Chairman MFARMC	Local Government Units – Municipal Fisheries and Aquatic Resources Management Council (LGU-MFARMC) Baybay, Leyte	Tel. (053) 335 3755	
Cesario R. Pagdilao Deputy Executive Director	PCAMRD-DOST Los Baños, Laguna 4030	Tel. (049) 536 5578 Fax (049) 536 1582	dedo@laguna.net
Marlene L. Parane Planning Officer IV	Provincial Planning & Development Office Capitol, Catarman, Northern Samar	Tel. (055) 354 1233	
Glenn Ricci Marine Research Associate	Coastal Resources Center University of Rhode Island Narragansett, Rhode Island	Tel. (401) 874 6419 Fax (401) 789 4670	gricci@gso.uri.edu

Adriano A. Salvador Assistant Professor	University of Eastern Philippines (UEP) Cataraman, Northern Samar	Cel. 0917 387 2784	
Efren B. Saz Associate Professor	Institute of Strategic Research and Development Studies Leyte State University, Visca, Baybay, Leyte	Tel. (053) 335 2621	csr@mozcom.com
Arnel B. Seco Project Officer	Plan International Sogod, South Leyte	Tel. (053) 382 2373 Fax (053) 382 2370	
Hilary Stevens US Peace Corps Volunteer	Palompon, Leyte Municipal Hall, Palompon, Leyte	Tel. 0916 853 8163 Fax (053) 338 2299	hjstev@yahoo.com
Ma. Aurora Teresita W. Tabada Assistant Professor	Institute for Strategic Research & Development Studies Leyte State University Visca, Baybay, Leyte	Tel. (053) 335 2621	csr@mozcom.com
Rodrigo F. Tabudlong Detachment Commander	Philippine Coast Guard Coast Guard Station Ormoc City	Tel. (053) 561 4213	
Consolacion B. Terado Project Eval Officer II	Provincial Planning & Development Office Capitol Bldg., Catbalogan, Samar	Tel. (055) 356 1393	chuterado@hotmail.com
Mercy S. Teves Proj. Dev't. Officer IV Division Chief-ENRO	Environment & Natural Resources Division, Office of the Governor, Capitol Area, Dumaguete City	Tel. (035) 225 5563	
J. Johnnes Tulungen Program Manager	Coastal Resource Management Project (CRMP) Ji.w. Mongisidi 4, Manado, North Sulawesi, Indonesia	Tel. (62) 431 841671 Fax /841672	tulungen@manado.wasantara .net.id
Ester C. Zaragoza OIC Marine Res. Div.	PCAMRD-DOST Los Banos, Laguna 4030	Tel (049) 536 1566 Fax (049) 536 1566	mrd@laguna.net

**ANNEX 4**  
**REGIONAL OVERVIEW DATA**  
**LIST OF CRM RELATED ACTIVITIES**  
**Leyte Province**

Program/ Project Title	Description of Project/Activities	Project Location	Implemented	Agencies Concerned	Remarks
Resource Enhance- ment Projects	a. Technical Assistance in the establishment of fish sanctuaries (FS) such as: - Preliminary consultation of fisherfolks and Brgy. officials to discuss concept of FS - Assessment of proposed FS site to gather data on flora and fauna - Subsequent public consultation/meeting to present survey results and to conform acceptability and viability - Preparation of technical proposal and presentation to fishfolks and LGU officials for validation - Advocacy for enactment of FS ordinance for the creation and protection of FS and fishery reserve - Capability trainings for FS Mgt. Committee - Continues information campaign	a. Fish Sanctuaries - Balud, Barugo, Leyte - Calangawan, Babatngon - Culasian, Capoocan - Mawodpaowod, San Miguel - Basud/Maanda, Leyte - Macabog/Danaug, Ormoc - Benolho, Abuera - Baras, Palo - San Roque, Tanauan - Canigao Is. Matalom - Baras, Matungao, San Miguel - Taglawin, San Isidro - Biasong, San Isidro - Sta. Rosa, Tabango - Caruyucan, Calubian - Tabuk Is. Palompon - Apali-Tolingon Marine Park, Isabel - Naval, Hilongos	1991 1991 1991  1993 1994 1993 1994 1994 1995 1993 1995  1995 2001 1996 1997 1996 2000 2001	LGU-Prov. Municipal & BFAR  -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto-	Weak FS Mgt. Since 1996 Active FS Mgt. Pos. enhancement per latest survey Active FS Mgt. Committee Active management Weak management Maintained, no city ordinance Maintained Inactive management Inactive management Maintained Active FS Mgt. positive enhancement Active FS Mgt. Pos. enhancement Newly established Active FS Mgt. Pos. enhancement Active FS Mgt. Pos. enhancement Active FS Mgt. Pos. enhancement per latest survey Newly established
	b. Monitoring of existing FS and ARs - Surface - Underwater	b. Artificial Reefs - Nauguisan, Carigara	1993	-ditto-	46 tire modules
	c. Maintenance of FS - Provision of buoy markers, guard house				

Program/ Project Title	Description of Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
Enterprise Development Projects	<p>a. Establishment of environmental friendly mariculture projects</p> <ul style="list-style-type: none"> <li>- Technical assistance and monitoring</li> <li>- Seaweed projects</li> <li>- Mudcrab in pen</li> <li>- Mudcrab fattening in cages</li> <li>- Oyster culture</li> <li>- Mussel culture</li> </ul>	<ul style="list-style-type: none"> <li>- Guindapunan, Carigara</li> <li>- Balud, Capoocan</li> <li>- Guinadiongan, Capoocan</li> <li>- Tolibao, Capoocan</li> <li>- Pob. I, Capoocan</li> <li>- Pob. II, Capoocan</li> <li>- Ipil, Ormoc City</li> <li>- Casilda, Merida</li> <li>- Macario, Merida</li> <li>- Can-unzo, Merida</li> <li>- Poblacion, Albuera</li> <li>- Sta. Cruz, Tanauan</li> <li>- San Jose, Tacloban City</li> <li>- Old Cawayan, Tacloban</li> <li>- Baras, Palo</li> <li>- Poblacion, Matalom</li> <li>- Poblacion, Bato, Leyte</li> <li>- Libjo, Merida, Leyte</li> <li>- Mahaliit, Merida, Leyte</li> <li>- Macario, Merida, Leyte</li> <li>- Bachazo, Leyte, Leyte</li> <li>- Culasi, Leyte, Leyte</li> <li>- Basud, Leyte, Leyte</li> <li>- Babatngon, Leyte</li> <li>- Palhi, Baybay, Leyte</li> <li>- Parina, Carigara, Leyte</li> <li>- Canomantag, Barugo</li> <li>- Sta. Cruz, Tanauan</li> <li>- Babatngon, Leyte</li> </ul>	<p>1993 1993 1994 1994 1994 1994 1994 1992 1996 1995 1995 1996 1994 1994 1995 1995 1995 1995 1996</p> <p>2000 2000 2001 2001 2001 2001 2000 1999 1998 1999</p> <p>2000 2000</p>	<p>LGU-Prov. Municipal BFAR -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- -ditto- FOBI, LGU -ditto-</p> <p>LGU Prov. -ditto- Private BFAR, LGU BFAR, LGU BFAR, LGU BFAR, LGU LGU Province -ditto-</p> <p>-ditto- -ditto-</p>	<p>54 tire modules 124 -ditto- 30 -ditto- 30 -ditto- 38 -ditto- 30 -ditto- 15 -ditto- 15 -ditto- 10 -ditto- 7 -ditto- 6 -ditto- 14 tire &amp; concrete 20 -ditto- 4 tire modules 30 -ditto- 50 tire &amp; concrete 25 -ditto-</p> <p>for rehabilitation due to ice-ice -ditto- -ditto- -ditto- -ditto- -ditto- for termination switched to bangus culture switched to prawn culture</p> <p>operational for transfer to another</p>



	<p>b. Conduct CRM Training</p> <p>c. Production/distribution of IEC materials</p> <ul style="list-style-type: none"> <li>- Missalette (mass guide) with CRM messages</li> <li>- Techno guides (seaweed culture and processing)</li> <li>- Youth Ecology Camp</li> </ul>	<p>Tabango National High School Tolosa, Leyte (Pop. &amp; Coastal brgys.)</p> <p>Distributed during Sanayan at Talakayan, Tolosa, Tacloban, City Leyte, Leyte (4 Coastal Barangays)</p>	<p>1997</p> <p>2001</p> <p>2001</p> <p>1999 &amp; 2000</p>	<p>LGU- Province &amp; Municipal</p> <p>LGU- Province</p> <p>-ditto-</p> <p>-ditto-</p>	
--	---	---	--	---	--



**LIST OF CRM RELATED ACTIVITIES  
Southern Leyte**

Program/ Project Title	Description of Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
Fisheries Sector Program	Fish Sanctuaries, Artificial Reefs, Coops, Mangrove reforestation, Trainings, IEC., CO	11 Municipalities Sogod Bay	1994-97	DA-BFAR Eco. Development Foundation (NGO) For re- contracting	
Fisheries Resource Mgt. Project	Fisheries Resource Mgt. Fisheries Data Mgt. Livelihood Diversification, Trainings	6 Municipalities Sogod Bay	2002-2004		
CB-CRM	CO, PCRA, Fish Sanctuary Establishment, Daycare Feeding, Trainings and IEC	3 Coastal Brgys. Maasin City and Macrohon	1999 to date	OTRADEV	
Coastal Resource Mgt.	Mangrove Reforestation Fish Sanctuaries CO Trainings and IEC	Libagon-Brgy Nahulid, Lilo-an-Brgy, Tabugon	1999 to date	PLAN International	
Coastal Resource Mgt.	CO Livelihood, Fish Sanctuaries, Trainings, IEC	Pacific Towns St. Bernard – 3 Brgys San Juan – 6 Brgys	1988 to date	SPIADFI	

**LIST OF CRM RELATED ACTIVITIES  
Biliran Province**

Program/ Project Title	Description of the Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
Aquaculture Development Project	<p>a. Bangus Production Supervised on:</p> <ul style="list-style-type: none"> <li>- Continue repair of dikes</li> <li>- Uprooted grasses in &amp; outside the mudcrab pen</li> <li>- Apply fertilizer in pond</li> <li>- Change water &amp; feeding of bangus</li> <li>- Harvesting of bangus</li> </ul> <p>a. Fish Cage (Bangus) Monitored the projects</p> <p>b. Seaweeds Culture Supervised on:</p> <ul style="list-style-type: none"> <li>- Splitting/thinning and replanting seaweed</li> </ul> <p>c. Tilapia Production and Dispersal Conducted monitoring of the project:</p> <ul style="list-style-type: none"> <li>- No. of fingerlings collected</li> <li>- No. of fingerlings dispersed</li> <li>- No. of beneficiaries</li> <li>- Area of fishpond (sq. m.)</li> <li>- Bagging of Tilapia fingerlings</li> <li>- No. of backyard fishponds monitored</li> </ul>	<p>Prov'l Demo Fish Farm Busali, Biliran</p> <p>San Pablo River, Brgy San Pablo, Naval</p> <p>Higatangan Island, Naval</p> <p>Freshwater Fish hatchery Lucso-on, Naval</p> <p>Brgys Balacson, Masagaosao, Kawayan and Bohol</p>	<p>1992-present</p> <p>2001-present</p> <p>2001-date</p> <p>1985-date</p>	<p>Prov'l Govt of Biliran/BFAR</p> <p>-ditto-</p> <p>-ditto-</p> <p>-ditto</p>	<p>Harvested 180 kls at P70/kl</p> <p>6,200 pcs 2,500 pcs 7 250 sq. m. 10 bags 4</p> <p>Dispersed seaweeds seedlings to 4-H = 153 kgs fisherfolks = 119 kgs</p>
Training	<p>a. Training Conducted hands-on training on seaweeds farming to</p> <ul style="list-style-type: none"> <li>- No. of 4-H Club Asso. – 3</li> <li>- No. of members (4-H) – 30</li> <li>- No. of Fisherfolks Asso. – 2</li> </ul>				

Program/ Project Title	Description of the Project/Activities	Project Location	Year	Agencies Concerned	Remarks
Quarantine and Regulatory Services	b. Fisherfolks Meeting - Conducted information drive to fisherfolks in the availment of micro-livelihood project extended by the Gov't. of Biliran and livelihood projects under LEAD 2000 Phase II of MAFC	Catmon Entrepreneurial Fishermen's Association, Brgy. Catmon, Naval			Fisherfolks were interested to avail of the loan
	c. Prawn Fry - Supervised the delivery of prawn fry - No. of stocks	Prov'l Demo Fish Farm Busali, Biliran			Stock from Ormoc City 25,000 pcs
	d. Livelihood Project - Conducted monitoring of the Micro-livelihood projects in motorboat with accessories	Brgy. Pinamihagan, Culaba			Project is in operation
	a. Law Enforcement - Conduct Regular Sea Borne Patrol - No. of apprehension conducted - No. of violators caught - No. of collected	Province wide			1
	b. Fish Inspection and Quarantine Services - Conducted inspection of fishery products in and out shipment - No. of inspection conducted - No. of auxiliary invoice issued	Province wide	1992		1 1
	c. Bantay Dagat Monitoring - No. of Bantay Dagat monitored - Out of order - Operational	Province wide			3 units in Biliran, Caibiran & Maripipi
	d. "Operation Tanggal Illegal" Assisted information drive of Gov. Espina program in "Operation Tanggal Illegal" thru the creation of Task Force to control illegal fishing	-ditto-			5 (Naval, almeria, Cabucgayan, Culaba, Kawayan)
	a. Price Monitoring Conducted price monitoring of fish & other fishery products	Public Market of Naval & Almeria			Mrs. Comadizo, all Mun. Agriculturist & Fishery Council (MAFC) chairmen are members of the task force created by Hon. Gov. Espina.
	Other Services				

**LIST OF CRM RELATED ACTIVITIES  
Northern Samar**

Program/Project Title	Description of Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
Resource Enhancement Project	a. Technical assistance in the establishment of fish sanctuaries	Biri, San Jose, Rosario, Lavezares, Capul, Laoang, Palapag, Mondragon  Biri  Palapag, Mondragon and Laoang  Brgy. San Roque, Kanawayon Is. and San Isidro    Villa, Lavezares. San Agustin, Lav. Brgy. North & Dao, San Jose, Ligaya, Buenavista, Rosario	2000	BFAR, LGU Prov'l, Municipal	Biri FS was pending upon approval of Ordinance.
	- Environmental scanning of proposed sites for establishment of fish sanctuaries				
	- Ordinance passed declaring Biri as FS				
	- Monitoring of FS/ARS				
	- Validation of MRA/MPA				
Enterprise Development Project	a. Establishment of environmentally friendly mariculture projects	1999	1999	BFAR/LGU Municipal	For CBRMP project implementation
	- Financial and technical assistance and monitoring				
	- Mud crab fattening in cages		1999	LGU/Prov'l	Dao project switched to milkfish cage culture

Program/Project Title	Description of Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
	<ul style="list-style-type: none"> <li>- Milkfish cage culture</li> <li>- Seaweeds culture</li> <li>- Technical assistance to friendly fishing technology</li> <li>- Fish trap</li> </ul>	<p>Sto. Nino, Biri</p> <p>Makiwalo, Mondragon, Mapno, Binay, Palapag</p> <p>Aguadahan, San Jose</p> <p>Biri, Lavezares, Rosario &amp; San Jose</p>	<p>1999</p> <p>1998</p> <p>2000</p> <p>2000</p>	<p>LGU/Prov'l</p> <p>BFAR/LGU Municipal</p> <p>BFAR/LGU Mun. &amp; Prov'l</p> <p>LGU Prov'l</p>	<p>Mondragon</p> <p>Pilot area but damaged by typhoon</p> <p>Activities of the council are pending due to change of leadership</p>
Fishery Laws Enforcement Support	<p>a. Law Enforcement Support Services</p> <ul style="list-style-type: none"> <li>- Creation of LaBiRoSa wide council, a venue for resolving issues on law enforcement.</li> <li>- Passed resolution to BFAR for the provision of Patrol Boat to be utilized in the 4 municipalities.</li> <li>- Passed resolution to DENR to turn over confiscated boats to the council to be utilized as Patrol Boat for the 4 areas.</li> </ul>				
CRM Information Education Campaign	<p>d. Conduct Participatory Coastal Resource Assessment (PCRA)</p> <ul style="list-style-type: none"> <li>- Resource Appraisal</li> <li>- Conduct CRM/Information Campaign, Information dissemination</li> <li>- IEC to primary grade/secondary schools</li> <li>- Coastal Clean-up</li> </ul>	<p>Palapag</p> <p>Allen</p> <p>Palapag</p> <p>Victoria, Gamay</p>	<p>1999</p> <p>1999</p> <p>2000</p> <p>1999</p>	<p>BFAR/LGU Municipal</p> <p>LGU/Mun.</p> <p>LGU/Mun.</p> <p>LGU/Mun.</p>	<p>For CBRMP project implementation</p>

**LIST OF CRM RELATED ACTIVITIES**  
**Province of Eastern Samar**

Program/Project Title	Description of Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
Fishery Sector Program	Conduct of fishermen's education through trainings, seminars and symposium including the organization of FARMERS	Lawa-an, Balangiga, Giporlos, Quinapondan, Gen. MacArthur, Salcedo, Taft, Can-avid, Borongan, Sulat	1997	Office of the Prov'l Agric'l (OPAS) LGU	Completed
Coastal Resource Management	Construction of concrete module of artificial reefs	Sulat, Can-avid, Gen. MacArthur, Mercedes, Giporlos, Lawa-an, Maydolong Quinapondan	1996	OPAS/LGU	Implemented
	Construction of Bantay Dagat patrol boat	Gen. MacArthur, Taft	1995	OPAS	Completed
	Establishment of marine sanctuaries	Arteche, Borongan & Guiuan	1997	OPAS	Only in the municipality of Borongan was sustained
Inland Fishery Project	Distribution of tilapia fingerlings to interested fish farmers	Province wide	1992	OPAS	Sustained
	Establishment of Eel pilot farms	Dolores, San Julian, Borongan, Maydolong	2000	OPAS	Sustained
Bantay Dagat Program	Information drive/campaign/advocacy on fishery rules and regulations	Province wide	1996	OPAS/Prov'l Governor's Off.	Sustained

**LIST OF CRM RELATED ACTIVITIES**  
**Province of Western Samar**

Program/ Project Title	Description of Project/Activities	Project Location	Year Implemented	Agencies Concerned	Remarks
RA 8550 Orientation/Deputation Training	Conduct Deputation/Orientation Training of fisherfolks as deputy fish wardens pursuant to Section 124 of RA 8550	Marabut, Basey Motiong, Jiabong Cathalogan Calbayog, Sto Nino Taalora, Tagapul-an San Sebastian	1999-2000 2001	OPA RFTC LGU	Requested by the LGU for the fishery law enforcement team of the municipalities
Formulation of Municipal Fishery Ordinance	Assist in the formulation of Municipal Fishery Ordinance of the different Municipalities and already approved by the provincial governor	Marabut, Basey San Sebastian Jiabong, Daram Calbayog City	2000-2001	OPA-LGU	MFO in conformity with RA 8550
Fish Sanctuary	Project assessment/establishment, Underwater monitoring and replacement of markers/bouys	Marabut, Daram, Cathalogan, Sto. Nino	1999-2001	OPA LGU BFAR	FS were approved by the LGU through SMFO
Seaweeds Production and Development	Conduct hands-on training on seaweeds production and development	Marabut, Basey Cathalogan, Sta. Rita Calbayog, Almagro Sto. Nino, Tagapul-an	1999-2001	OPA LGU BFAR	Test planting to develop As a livelihood in mentioned areas
Mussel Farming Development	This project involves test planting of this commodity in identified sites	Marabut, Basey, Daram	1999-2001	OPA, BFAR, LGU	This activity is being undertaken by the province to provide alternative livelihood for the sustenance fisherfolks
Delineation of Municipal Waters	Activities in this project involve the technical assistance in the preparation/drafting of the Municipal water boundaries	Province wide	2001-2002	OPA, BFAR, LGU	Output of this activity shall be part of the basic fishery ordinance of each municipality, which is accepted after consulting the LGUs

**SAMAR NGOs INVOLVED IN CB-CRM INITIATIVES**  
Western Samar

<b>Name of NGO</b>	<b>Point Person</b>
1. CARITAS	Fr. Cesar Acula
2. Initiative for participatory Governance in Samar (IPGS)	Mr. Leonardo Sison
3. GUGMA Han Maqueda Bay Iguian-Undang Han Organisasyon Samarnon (GIOS)	Mr. Gerardo Malinao
4. Kongreso Han Mga Organisasyon han manguiguista han Samar (KOMPAS)	Mr. Raul Torrechiva
5. TANDAYA	Mr. Don Mabulay

**Activities of NGOs on CB-CRM**

- Formal creation of ad hoc committee (Maqueda Bay Eco-system Council)
- Information and Education Campaign on Environmental Protection and Conservation (Marine, Coastal Ecosystem)
- Preparation of project proposal
- CO work
- Research reconnaissance
  - Compilation of existing data, validation, analysis, considering papers and issues
- Capability-building, trainings and seminars
- Assist in the zoning of mangroves areas
- Lobby for MPA ordinance



**CRM INITIATIVES IN REGION VIII**  
**DA-BFAR REGION VIII**

**A. Under the Fisheries Resource Management Project (FRMP)**

Municipalities Covered	Year of Implementation
Carigara Bay:	
1 Babatngon, Leyte	1998-2003
2 Carigara, Leyte	-ditto-
3 Capoocan, Leyte	-ditto-
4 Leyte, Leyte	-ditto-
5 Barugo, Leyte	-ditto-
San Pedro Bay:	
6 Basey, Samar	-ditto-
7 Marabut, Samar	-ditto-
8 Tanauan, Leyte	-ditto-
Ormoc Bay:	
9 Albuera, Leyte	-ditto-
10 Ormoc City	-ditto-
11 Merida, Leyte	-ditto-
Sogod Bay:	
12 Malitbog, So. Leyte	-ditto-
13 Tomas Oppus, So. Leyte	-ditto-
14 Sogod	-ditto-
15 Lilo-an, So. Leyte	-ditto-
16 San Francisco, So. Leyte	-ditto-
17 Pintuyan, So. Leyte	-ditto-

**B. Community-based Resource Management Project (CBRMP)**

1 Maydolong, Eastern Samar	until 2003
2 Palapag, Northern Samar	-ditto-
3 Sto. Nino, Samar	-ditto-
4 San Isidro, Northern Samar	-ditto-
5 San Roque, Northern Samar	-ditto-
6 Babatngon, Leyte	-ditto-
7 Pinabacdao, Leyte	-ditto-
8 Villaroel, Samar	until 2003
9 Basey, Samar	-ditto-
10 Borongan, Eastern Samar	-ditto-
11 Mapanas, Northern Samar	-ditto-
12 Matalom, Leyte	-ditto-
13 Palompon, Leyte	-ditto-
14 Gen. MacArthur, Eastern Samar	-ditto-
15 Laoang, Northern Samar	-ditto-

16	Calbiga, Samar	-ditto-
17	Daram, Samar	-ditto-
18	Hinabangan, Samar	-ditto-
19	Pagsanghan, Samar	-ditto-
20	Sta. Rita, Samar	-ditto-
21	Lawaan, Eastern Samar	-ditto-
22	Biri, Northern Samar	-ditto-

Other upland/interior municipalities covered by CBRMP which have upland NRM projects:

- 23 Dagami, Leyte
- 24 Javier, Leyte
- 25 La Paz, Leyte
- 26 Mahaplag, Leyte
- 27 Jipapad, Eastern Samar
- 28 San Jorge, Samar

Other Municipalities with existing NRM projects assisted by BFAR:

- 1 Calbayog City
- 2 San Isidro, Leyte
- 3 Tabango, Leyte
- 4 Calubian, Leyte
- 5 Salcedo, Eastern Samar
- 6 Quinapondan, Eastern Samar
- 7 Pambujan, Northern Samar
- 8 San Antonio, Northern Samar
- 9 San Vicente, Northern Samar
- 10 San Miquel, Leyte
- 11 Tolosa, Leyte
- 12 Hilongos, Leyte
- 13 Naval, Biliran
- 14 Culaba, Biliran
- 15 Calibian, Leyte

## **FRMP Activites**

### **Fisheries Resource Management**

- a) CRM Planning and Implementation
- b) IEC
- c) Fisheries Legislation and Regulation
- d) Monitoring, Control and Surveillance (MCS) Pilot: Carigara
- e) Community-Based Law Enforcement
- f) FLET (Fisheries Law Enforcement Teams) Training
- g) Past Resource and Social Assessment
  - San Pedro Bay           -UPV Tacloban
  - Ormoc Bay               -UPV Cebu
  - Sogod Bay               -Silliman University
  - Carigara Bay            -under negotiation with Silliman University

### **Income Diversification**

- a) Community Organizing
- b) Micro-Enterprise Development
- c) Mariculture Development

### **Capacity Building**

- a) Training
- b) Institutional Development (Equipment)
- c) FARMC

**LIST OF CRM ACTIVITIES**  
**DENR Region VIII**

<b>Program/ Project Title</b>	<b>Description of Project/Activities</b>	<b>Project Location</b>	<b>Year Implemented</b>	<b>Agencies Concerned</b>	<b>Remarks</b>
Coastal Environment Program (CEP)	<ul style="list-style-type: none"> <li>- Resource and Ecological Assessment</li> <li>- Information, Education &amp; Communication</li> <li>- Community Organizing</li> <li>- Research Activities</li> <li>- Livelihood Development</li> <li>- Rehabilitation of Degraded Areas</li> <li>- Monitoring and Protection</li> <li>- Capability Building/HRD</li> </ul>	CEP Guiuan, Eastern Samar	October 14, 1993		Proclaimed as Protected Landscape/Seascape under NIPAS per Presidential Proclamation No. 469 dated September 26, 1994
		CEP Biri-Larosa Biri, Lavesares Rosario & San Jose, Northern Samar	May 25, 1996		Proclaimed as National Tourism Reserve pursuant to Presidential Proclamation No. 1801  To be turned over to the PAMB 2 <sup>nd</sup> Quarter, CY 2002
		CEP Cuatro Islas Inopacan and Hindang, Leyte	November 29, 1996		Proclaimed as Protected Landscape/Seascape under NIPAS per Presidential Proclamation No. 291 dated April 23, 2000  To be turned over to the PAMB 4 <sup>th</sup> Quarter, CY 2002

## ANNEX 5

### SUMMARY OF PARTICIPANT EVALUATIONS OF THE WORKSHOP

The participants of the workshop were asked to give their feedback on the conduct of the workshop by answering the following questions. Thirty-five percent of workshop participants responded to the survey.

**1) *How well did we accomplish the workshop objectives?***

Most of the respondents considered that workshop objectives were successfully accomplished by giving a rating of either well or very well.

**2) *How useful were the following activities in accomplishing the workshop objectives?***

The background paper, provincial experiences, Indonesia paper, plenary discussions, and small group discussions were considered to be either useful or very useful by the participants.

The following were the comments on why each activity was not useful, somewhat useful, useful, or very useful.

a. Background Paper

- Well presented
- Very informative
- Good input
- Maybe too much detail in presentation
- Points discussed were limited to some extent
- Other experience in other province might also be of help

b. Provincial Experiences

b.1. Negros Oriental

- Very useful
- Good input
- Very good. Received plenty of reaction from the participants
- They have many resources and funding agency to have their program successful
- Only the good things were presented without the problems encountered and the solutions applied
- I have not seen the negative side during their implementation

b.2. Current CRM context in Region 8

- Need more time and effort
- Data from different provinces should be complete
- Data presented were so limited due to time constraint. CRM initiatives are fragmented, and often times without the knowledge of the provincial office(s).
- Not well organized, CRM focused only on FRMP beneficiaries
- Very good! Despite the limitations
- Very limited information

- More time for gathering accurate information and identifying respondents
- Data gathering should be given ample time to arrive at a very realistic information

#### b.3. Indonesia

- Good for contrast
- The resources are still so rich, needs immediate attention
- Very good! There should be more of this sharing of experiences from other CRM practitioners.
- Good input
- The framework was not clarified/formulated
- Need to know what are the negative sides encountered during the project implementation and what are their solutions to this
- We have the same problem

#### b.4. Small Group Discussion

- Open and productive
- Okay, everyone's ideas were all taken and entertained
- Brainstorming flows from all directions, not every aspect were given enough time for discussions
- Provinces/government's are not well represented
- Needs participation of people outside the region
- Gave insights to the discussion
- Good method
- To allot more time for discussion
- Facilitators delayed workshop by injecting their own ideas
- Facilitators need to limit participation in discussion and focus energies in "really facilitating" the discussion by drawing out reactions, opinions and/ or inputs from discussion participants
- Really help to get important information beforehand

### ***3) Were the "right" individuals or institutions represented in the workshop? If not, whom would you recommend to be included in future activities?***

- Yes, however, representation from municipalities should be improved
- More representations from other provinces, e.g., Biliran
- SRSF (RIFT) Samar, CBRMP, FRMP Regional Advisor/BFAR Provincial Office, PPDO, Provincial Environment Officer, Sanggunian Bayan, Chairman of the Fisheries and Agriculture Sector
- Good group
- More effort needed in looking for the right person. Individuals who are really working in CRM related activities
- To do actual sharing of CRM experiences, Bohol, Davao del Sur & Masbate should be included
- NGOs of the LGUs who are active partner in CRM
- Right, but not the number
- Yes, but still lacking
- Representative LGUs with best CRM practices

**4) What type of activities would you like to see/happen after this workshop?**

- Improvement of CRM programs in different provinces
- Provinces initiate the process of institutionalization
- Follow-up with recommended “action units”
- Creation of TWG
- Implementation of action plan
- Technical workshop and capability building
- Meeting between participants and provincial administrations
- Well coordinated implementation
- A cross-visit to CRM learning areas
- Institutionalization of CRM framework
- Involvement of specific communities
- Council, committee to operationalize CB-CRM
- Cross-visit to witness what is actually happening to facilitate planning
- Tangible results, follow-up from the organizers
- Establishment and operation of Provincial CRM Unit/Division
- The convergence of stakeholders and purging of commitment
- Create CRM awareness to local officials and executives
- CRM training at provincial, municipal, barangay levels
- Actors at the provincial level start considering specific administrative structures should be improved
- More active CRM implementation in Region VIII, with province taking a lead role
- A unified master plan for CRM for the whole province which will serve as the framework plan of the municipal LGUs

**5) Based on the activity plan designed at this workshop, what actions will you most likely take when you return to your office?**

- Provide continuous advice to the LGU
- Talk with provincial governor on provincial CRM
- Inform the governor about the things that happened in this workshop
- Discuss CRM issues with municipal officials and work to maintain contacts
- Formation of TWG and multi-sectoral involvement using participatory approach
- Facilitate the forming of a regional secretariat/TWG on CRM
- Cooperate with the LGU in the creation of TWG
- Report all things to PENRO for instruction
- Vigorous enforcement of all pertinent laws relative to the success of CB-CRM
- Presentation of workshop to local executives
- Conduct re-planning – refocus CRM setting
- Prepare CRM proposal for implementation
- Assessment of people, capabilities and needs on CRM
- Echo the output to chief executive/vice governor and to my constituents
- Organize a Provincial Consultative Planning Workshop
- Discuss and convince the executives to put-up CRM unit and adopt initiatives
- Create a multi-agency municipal CRM unit involving the participation of NGOs and the private sector that has something to do with the coastal resources both directly and indirectly

**6) Please state the three most important ideas/concepts that you learned from the workshop?**

- Provinces in Region VIII have not fully evolved in their CRM programs
- Lack of coordination between LGUs and stakeholders
- Role of academia & private sectors in CRM advocacy is important!
- Institutionalizing CRM at the provincial level
- Involvement of provincial government in CRM initiatives
- Consolidation of fragmented CRM effort
- Success story of Negros Oriental & a global concern
- Grasp some technical ideas
- Handling issues at the appropriate scale
- Role of NGOs and academic institutions
- Current division of CRM issues among government departments
- Involvement of stakeholders in problem and issues identification
- Proper coordination among the project implementers and NGOs
- Training for justices/lawyers on environmental laws
- Orienting LGUs and Chief Executives on CRM and other related matters
- Providing training/scholarships here and abroad to active partners on CRM. These can be given as incentives to workers whose been doing the initiatives.
- Coastal and marine resources should be given due attention for conservation
- The time to act is now in unison
- Institutionalization of province wide CB-CRM
- Political will of LGUs
- Funding support encompassing all future plans and activities
- Inter-agency linkages/participation/duplication of CRM projects
- Advocacy/concept of extension in delivery system
- Wholistic approach in program implementation
- Coordination & facilitation
- Effective coordination among agencies, NGOs, other institutions on CRM province wide
- Vital role of external agencies (local and foreign) as catalyst on provincial CRM
- Point of convergence for all the initiatives
- Institutionalization of the CRM initiatives
- How to plan activities including database management
- Prioritizing the needs
- CRM (unit) program is vital in all coastal provinces
- CRM is a modest way of development
- Political will at the municipality level/provincial level influence CRM initiatives
- External funds/support is necessary to jump start CRM activity
- Institutionalization of CRM initiatives is important for sustainability
- There is a need now to refocus attention to the depletion of coastal resources
- People's involvement in the protection and management of such resources is very important.
- There must be somebody to initiate the activity on CRM now

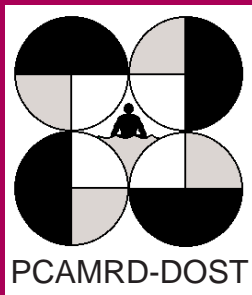


**7) Please give us your overall comments on the organization of the workshop or any other comments you may have?**

- It is high time that provincial government should initiate CRM efforts in the different provinces in Region VIII
- Time/logistics all OK, Good choice of venue
- The workshop is very useful especially for LGUs (Biliran), and we still need more training and capability building and cross-visits to provinces/regions
- The facilitation needs to be tighter. Smaller groups for discussions
- From LGUs there must be representatives to attend a workshop like this
- Let not this be the last. Continue involving us so we will be updated of new developments and initiatives in other areas which we can partner after. Above all, bring us there and let us see and interact with the stakeholders in areas which has attained some degree of “success”
- Conduct provincial workshops more often to propel CRM awareness
- The workshop is well organized; however, we lack time for leveling off. Workshop should focus on how projects become sustainable
- The workshop was well organized. Inputs were relevant to our situation. Thank you very much for this wonderful and fruitful undertaking
- A setting or leveling off of expectations at the start of workshop activities could be helpful







Philippine Council for Aquatic and Marine  
Research and Development-Department of Science  
and Technology  
Eusebio Bldg., BPI Economic Garden,  
Los Baños, Laguna, Philippines 4030  
Tel: (63) (49) 536-1574/ 536-5577 to 80  
Fax: (63) (49) 536-1566/536-1582/536-5580  
Website: <http://www.laguna.net/pcamrd/>



Marine Laboratory  
Institute of Tropical Ecology  
Leyte State University  
Visca, Baybay, Leyte 6521-A  
Philippines  
Tel: 0063 053 335 4007  
Telefax: 0063 053 335 2651 or 2652



Coastal Resources Center  
University of Rhode Island  
Narragansett Bay Campus  
Narragansett, Rhode Island 02882 USA  
Tel: (401) 874-6224  
Fax: (401) 789-4670  
Website: <http://crc.uri.edu>