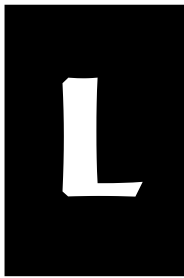


Chapter 6

INSTITUTIONAL AND LEGAL FRAMEWORK



aws concerning environmental protection were enforced in the Philippines as early as the pre-Spanish period. The Luwaran Code of Mindanao, the oldest known code of laws in the Philippines, and the Code of Kalantiao penalize improper waste disposal and unnecessary noise in the evening as acts of public nuisance. These may be considered as forerunners of the present regulations on environmental management.

During the Spanish colonial government, environmental laws were enacted dealing with resource extraction and industrial pollution. During the American colonial government, laws were passed governing mineral, forest resources, fisheries and aquatic resources, and land use and water rights.

The period following the Philippine independence can be divided into three eras: pre-martial law, martial law, and the period following the EDSA revolution. From 1945 to 1972, laws known as Republic Acts (RAs) were passed by the popularly elected members of the Congress of the Philippines. The Marcos administration from 1972 to 1986 produced much of the environmental legislation. During this time, law-making power was assumed by the President through the issuance of Presidential Decrees (PDs), Letters of Instruction (LOIs), and Executive Orders (EOs).

In 1987, the new Philippine Constitution took effect and Congress took over the function of legislation. The 1987 constitution embodies explicit provisions on the protection and enhancement of the environment. A fundamental statement of

The new constitution provides explicit recognition to management of coastal resources, linking its use to optimum productivity, sustainability, and equity through democratic process and distributive justice.

policy that “the state shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature” (Article II, Section 16) is embodied in the constitution. Recognizing the State’s obligation to protect and conserve the environment, the constitution instructs Congress to take “into account for requirements of conservation, ecology and development” (Article XII, Section 3) and insists that national parks or reserves (i.e., marine parks/reserve) shall be conserved.

The new constitution also recognizes the obligation of the State to “protect, develop and conserve marine resources (Article XII, Section 7) and protects “the rights of subsistence fishermen, especially of local communities” (Article II, Section 22) and encourages “non-governmental, community-based or sectoral organizations to promote the welfare of the country” (Article II, Section 23).

The new constitution provides explicit recognition to management of coastal resources, linking its use to optimum productivity, sustainability, and equity through democratic process and distributive justice.

The basic legislation governing natural resources and environment predating the new constitution remains in place.

PHILIPPINE COASTAL MANAGEMENT LAWS

There are several laws that pertain to coastal area management, which have been enacted through Presidential Decrees and Congressional approvals. Table 6.1 presents a brief overview of the history of coastal and environmental management laws and their scope.

COASTAL MANAGEMENT ORDINANCES IN THE MBA

The Local Government Code of 1991 (RA 7190) authorized provincial and city government units to enforce and implement laws on the protection of the environment, pursuant to national policies and subject to the supervision, control, and review of the DENR. It also authorized local governing councils (the *Sanggunians*) to enact and enforce local environmental ordinances.

The LGUs in the MBA have issued several ordinances for coastal environmental protection and management for their respective municipalities (Table 6.2). Common to LGUs are fishery ordinances.

Table 6.1. Summary of coastal and environmental management laws.

Law (date)	Area of concern
PD 600 (1974) - Coast Guard Law as amended by PD 601 and PD 979	Marine pollution. Authorized the Philippine Coast Guard (PCG) to enforce laws for marine environmental protection
PD 602 (1974)	Created the National Operations Center for Oil Pollution (NOCOP) in the PCG to respond to problems of oil spills and coordinate efforts for oil containment and recovery
PD 704 (1975) - Fisheries Decree	Pollution from aquaculture operations. Provided guidelines on the management, conservation, development, protection, utilization, and disposition of all fishery and aquatic resources of the country except municipal waters which are under the municipal or city government concerned
PD 705 (1975) - Forestry Code	Contained specific provisions on the classification and permitting system on the use of foreshore areas to include mangrove and <i>nipa</i> swamps and beach fronts
PD 785 (1975) - Revised Forestry Code	The only legal measure to prevent siltation. Provided guidelines on managing, regulating, and monitoring shifting cultivation
PD 825 (1975)	Garbage disposal. Provided penalties on improper waste disposal. Required that all garbage, filth, and waste be placed in proper receptacles
PD 856 (1975) - Sanitation Code of the Philippines	Solid wastes. Prescribed standards for sewage collection, refuse, and excreta disposal
PD 984 (1976)- Pollution Control Law	Abolished the National Water and Air Pollution Control Commission (NWPACC) and created the National Pollution Control Commission (NPCC) with broad powers which include setting standards and imposing penalties for violations
PD 1144 (1977)	Agricultural pollution. Provided guidelines on the proper use of fertilizers and pesticides to mitigate agricultural chemicals
PD 1151 (1977)- Philippine Environmental Policy	Comprehensive policy and program for environmental protection and management
PD 1152 (1977) - Philippine Environment Code	
PD 1251 (1977) - Mine Wastes and Tailing Fees	Imposed semi-annual mine wastes and tailings fees against all operating mining companies
PD 1160 (1977)	Authorized <i>barangay</i> captains to enforce pollution control laws
PD 1586 - Establishing the Environmental Impact Statement System (1978) and Proclamation 2146 (1981)	Required submission of environmental impact assessment for public and private development projects with potentially significant impact on the environment; limited coverage to prescribed environmentally critical projects and environmentally critical areas

continued

Table 6.1. (continued)

Law (date)	Area of concern
EO 192 (1987) - Reorganization of the Department of Environment and Natural Resources (1987)	Established the DENR as the primary agency for environmental protection and management, and created the Environmental Management Bureau and Pollution Adjudication Board, among others
RA 6969 (1990) - Toxic Substances and Hazardous Wastes Control Act	Regulated the manufacture, importation, processing, sale, distribution, use, and disposal of chemical substances and mixtures that present unreasonable risks and/or injury to health or the environment, and entry, even in transit, of hazardous and nuclear wastes
RA 6975 (1990) - Department of Interior and Local Government Act	Created a maritime police unit within the PNP, vested with authority to perform all 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"
RA 7160 (1991) - Local Government Code (1991)	Contained provision for pollution control by local authorities subject to supervision, control, and review by the DENR
RA 8550 (1998) - The Fisheries Code	An Act for the development, management, and conservation of the fisheries and aquatic resources, integrating all laws pertinent thereto, and for other purposes. The code recognizes the principles of ensuring sustainability of fisheries resource utilization within ecological limits and of social justice by providing preferential treatment for municipal fisherfolk and their organizations. The code also aims at providing a sound policy and institutional framework for fisheries resource management as well as long-term sustainable development in the sector.

The municipality of Hagonoy passed its first Basic Fishery Ordinance (MO 76-006) on 24 October 1977. This was amended by MO 92-008 on 12 August 1992 to increase the annual fee of catching milkfish fry and to impose penalty with a fine of not less than PhP500 but not exceeding PhP2,500 for violating any provision of the ordinance. In 1983, the Municipal Council declared a portion of the sea along the shorelines of Leling as fish sanctuary.

The municipality of Malalag passed its Basic Fishery Ordinance (MO 81-040) on 14 May 1981. Malalag constituents amended the Municipal Fishery Ordinance on 11 March 1993 wherein Ordinance No. 40 was passed by the Municipal Council or *Sangguniang Bayan* (SB) for the banning of destructive and illegal fishing gear. These include all sorts of commercial fishing, trawls, purse seine (e.g., Danish purse seine), baby trawls, drive in nets, and fishing methods using compressors. Unfortunately, this ordinance was declared "null and void" by the Municipal Circuit Judge of Malalag after a group of fishermen were charged for their operation of *lampornas*. In 1993, the municipality of Malalag established a 50-ha fish sanctuary and in 1997 regulated

Table 6.2. Ordinances for coastal environmental protection and management in the MBA.

Municipality	Number	Title	Date
Hagonoy	92-008	An ordinance amending certain sections of Municipal Ordinance No. 6, series of 1976, regulating fishing and/or fisheries in Hagonoy, Davao del Sur	08/12/92
Hagonoy	83-002	An ordinance requiring all <i>barangay</i> officials of Hagonoy in coordination with government agencies as well as private organizations to implement the provisions of PD 1153 and LOI 1312, particularly on watershed areas and along the banks of rivers, streams, and brooks	
Hagonoy	83-001	An ordinance declaring a portion of the sea along the shorelines of Leling, this municipality as fish sanctuary and prohibiting non-members of the <i>Ilawng Buhay</i> movement to catch fish in the identified site	02/09/83
Hagonoy	76-006	An ordinance regulating fishing and/or fisheries in Hagonoy and for other purposes	10/24/77
Hagonoy	75-024	An ordinance prescribing rules and regulations on fisheries and aquatic resources and the granting of privileges therefor in the municipality	
Hagonoy	75-021	An ordinance requiring all fishing boats and/or <i>banca</i> owner/operators within the jurisdiction of Hagonoy to install plate numbers in their respective fishing boat and/or <i>bancas</i>	
Hagonoy	72-016	An ordinance requiring all operators of fishing nets (for shrimp) operating within the territorial area of Hagonoy to pay to the municipal government a municipal license fee in the amount of PhP200 for the whole year	08/15/72
Hagonoy	72-015	An ordinance requiring any person engaging in the operation of fish corral fishing to pay to the municipal treasurer the reduced rate of license fee in the amount of PhP5 regardless of capital per quarter	08/15/72
Malalag	97-099	Comprehensive Solid Waste Management Ordinance of Malalag	08/06/97
Malalag	97-098	An ordinance prohibiting any person by any means in wounding and killing of birds in Malalag	08/06/97
Malalag	97-097	An ordinance regulating the use of municipal waters for the establishment or operation of fish cages, fishpens, seaweed culture, and providing fees thereof	08/06/97
Malalag	97-095	An ordinance amending Ordinance No. 13, series of 1991, prohibiting the disposal of waste, garbage, molasses, and used lubricants from fishing boats, and industrial waste in Malalag	08/06/97
Malalag	97-094	An ordinance amending section 4 of Ordinance No. 20, series of 1993, otherwise known as "Anti-littering" ordinance	08/06/97

continued

Table 6.2. (continued)

Municipality	Number	Title	Date
Malalag	97-089	An ordinance regulating and controlling the discharge of industrial and other wastes into the atmosphere, air, or body of water and land within the territorial limits of Malalag for the purpose of abatement and prevention of pollution, providing penalties for its violation, and for other purposes	08/06/97
Malalag	93-027	Establishment of a fish sanctuary, its maintenance and protection	09/01/93
Malalag	93-021	Amending Section 15, 4.N of Ordinance No. 40 otherwise known as Municipal Fishery Ordinance, banning the operation of commercial fishing, trawls, purse seine, baby trawls, fishing methods using compressors and <i>hulbot-hulbot</i> , <i>lampornas</i> , <i>bira-bira</i> , and <i>muro-ami</i> in the municipal waters of Malalag	02/11/93
Malalag	93-020	Prohibiting the littering, dumping, and disposing of non-biodegradable garbage i.e., cigarette butts, plastic bags, or containers, tin cans, bottles, and domestic wastes, i.e., chemical solvent as from laundry soaps, and human and animal refuse, and all other forms of wastes in public places e.g., public market, school premises, parks and plazas, gymnasium and sports facilities, streets and roads, rivers, lakes, and waterways, Malalag Bay and its foreshore areas, among other public places within the municipality	02/18/93
Malalag	81-040	An ordinance regulating fishing and/or fisheries in Malalag and for other purposes	05/14/81
Padada	94-006	An ordinance regulating fishing and/or fisheries in Padada and for other purposes	08/10/94
Padada	93-012	An ordinance establishing a Padada fish sanctuary area in Padada	12/15/93
Sta. Maria	96-005	Regulating fishing and/or fisheries in Sta. Maria and for other purposes	06/20/96
Sta. Maria	1995	Municipal Penal Code, series of 1995. An ordinance enacting the revised Municipal Penal Code of Sta. Maria pursuant to Republic Act No. 7160 (Chapter VI - Environmental Protection, Chapter XI - Illegal Fishing)	1995
Sulop	97-011	Amending section 5 of Ordinance No. 92-006 (Basic Fishery Ordinance) and setting henceforth the rules and regulations in the establishment of fish sanctuary at the portion of zones 2, 3, and 4 in the municipal waters of Sulop	09/10/97
Sulop	97-010	Regulating the use of municipal waters for the establishment or operation of fish cages, fishpens, seaweed culture, and providing fees thereof	09/10/97
Sulop	92-006	An ordinance regulating fishing and/or fisheries in Sulop and for other purposes	1992

the use of municipal waters for the establishment or operation of fish cages, fishpens, seaweed culture, and providing fees thereof. Malalag has an ordinance on comprehensive solid waste management, and ordinance regulating and controlling the discharge of industrial and other waste in the atmosphere, air, or body of water and land within the territorial limits of the municipality of Malalag. The municipality of Malalag is serious in funding CRM related projects. It provides an annual operating fund for coastal resource management enforcement as shown in Table 6.3.

The municipality of Padada passed its Basic Fishery Ordinance (MO 94-006) on 10 August 1994. The Municipal Council established a fish sanctuary area on 15 December 1993. This municipality passed two Executive Orders on 3 September 1996 and 3 February 1997: creating the task force for a clean and green Padada and

Table 6.3. Operating funds for CRM implementation in Malalag.

Year	Type	Specific	Amount (PhP)
1998	Maintenance	Registration/repair of patrol boat	10,000.00
	Transportation	Hauling and transport cost	3,000.00
	Equipment outlay	Purchase of handheld radio	12,000.00
	Fuel and oil	Gasoline	10,000.00
	Support services	Security for fish sanctuary area	28,333.33
Total			63,333.33
1997	Maintenance	Registration/repair of patrol boat	5,000.00
	Transportation	Hauling and transport cost	3,000.00
	Equipment outlay	Supplies and materials	6,016.00
	Fuel and oil	Gasoline	10,000.00
	Support services	Security for fish sanctuary area	30,000.00
Total			54,016.00
1996	Maintenance	Repair of pumpboat	3,560.00
	Fuel and oil	Gasoline	7,200.00
	Support services	Security for fish sanctuary area	29,280.00
Total			40,040.00
1995	Maintenance	Repair of pumpboat	6,453.00
	Fuel and oil	Gasoline	7,200.00
	Support services	Security for fish sanctuary area	23,660.00
Total			37,313.00

US\$1 = PhP 25 in 1995; PhP 26 in 1996; PhP 33 in 1997; and PhP 39 in 1998.

creating Municipal Environmental Units, respectively. The municipality has a resolution requesting the Davao Gulf Management Board (DGMB) to declare the municipality of Padada as the provincial fish sanctuary in the Province of Davao del Sur. Other resolutions include a coral reef project, seaweed projects, and construction of a municipal marine watch house.

The municipality of Sta. Maria passed its Basic Fishery Ordinance (MO 96-005) on 20 May 1996. In 1995, the municipality passed an ordinance enacting the revised Municipal Penal Code of Sta. Maria pursuant to RA No. 7160 for the banning of all kinds of trawl fishing and banning of *basnigan* and superlight fishing within the municipal waters of Sta. Maria. This ordinance also disallows outsiders from Sta. Maria to get mangrove seedlings within the municipality.

The municipality of Sulop passed its Basic Fishery Ordinance (MO 92-006) in 1992. This was amended on 9 September 1997 by setting rules and regulations in the establishment of fish sanctuary at the portion of zones 2, 3, and 4 in the municipal waters of Sulop. This municipality has also regulated the use of municipal waters for the establishment or operation of fish cages, fish pens, seaweed culture, and providing fees thereof.

INSTITUTIONS INVOLVED IN COASTAL MANAGEMENT

Environmental management and protection functions, including policy development, planning, monitoring, and enforcement are under the mandates of various national and local government units.

National Government

There are six agencies under the national government that have jurisdiction over coastal resource management: the National Economic and Development Authority (NEDA), the Department of Agriculture (DA), the Department of Environment and Natural Resources (DENR), the Department of the Interior and Local Government (DILG), the Department of Tourism (DOT), and the Department of Science and Technology (DOST).

The NEDA plans for development priorities such as tourism and fisheries to be used for the various areas throughout the Philippines and tries to ensure appropriate and complementary roles for the various areas.

The DA focuses on the sustained yield from the use of resources. It has four units involved in coastal management: the Bureau of Fisheries and Aquatic Resources (BFAR), the Fisheries Resource Management Project (FRMP), the Philippine Fisheries Development Authority (PFDA), and the Bureau of Agricultural Research (BAR).

The BFAR is the agency of the DA responsible for fisheries production. It has a Coastal Resource Management section to advise the DA on coastal management. The PFDA is tasked with the development of fisheries facilities such as fish landing ports, ice plants, and fish processing facilities. The BAR supports the research needs of the DA.

The DENR focuses on conservation and protection of resources. It has four units involved in coastal management: the Parks and Wildlife Bureau (PAWB), the Ecosystems Research and Development Bureau (ERDB), the Environmental Management Bureau (EMB), and the Coastal Environment Program (CEP). The PAWB is responsible for the conduct of protected areas and endangered species. The ERDB supports the various DENR units by conducting research and development activities. The EMB is responsible for water quality and environmental impact assessments. The CEP, established in 1993 through DENR DAO 19 s1993, focuses on the various coastal responsibilities of the various DENR units.

The Philippine National Police (PNP) division of the DILG is tasked with the enforcement of marine and fisheries laws in the coastal zone. It is complemented by deputized fish wardens and, in some areas, *Bantay-Dagat* programs.

The Philippine Tourism Authority (PTA) of the DOT develops policies for coastal protection with an eye to tourism revenues.

The Philippine Council for Aquatic and Marine Research and Development (PCAMRD) of the DOST attempts to coordinate Philippine coastal ecological research and development.

Local Government

The Local Government Code of 1991 (RA 7190) expressly provides for LGUs to share with the national government the responsibility for the management and maintenance of the ecological balance within their territorial jurisdiction. Environmental management and protection functions can now be assumed within the structure of provinces, municipalities, cities, *barangays*, and their respective development councils and *Sanggunians*. The following summarizes the authority vested in each body and the basic environment-related services it should provide, pursuant to the Local Government Code (RA 7160).

1. Province

- Pursuant to national policies and subject to supervision, control, and review of the DENR, enforcement of pollution control law and other laws on the protection of the environment [Section 17 (b)(3)(iii)]; and

- Infrastructure facilities intended to service the needs of the residents of the province and which are funded out of provincial funds including, but not limited to, inter-municipality waterworks, drainage and sewerage [Section 17 (b)(3)(vii)].

2. Municipality

- Extension and on-site research services and facilities related to water and soil resource utilization and conservation projects [Section 17 (b)(2)(i)];
- Solid waste disposal system or environmental management systems and services or facilities related to general hygiene and sanitation [Section 17 (b)(2)(vi)]; and
- Infrastructure facilities intended primarily to service the needs of the residents of the municipality and which are funded out of municipal funds including ... water supply systems [Section 17 (b)(2)(viii)].

3. City

All the services and facilities of the municipality and province [Section 17 (b)(4)].

4. Barangay

Services and facilities related to general hygiene and sanitation, beautification, and solid waste collection [Section 17 (b)(1)(iii)].

5. Local Development Councils

Each level of local government is charged with establishing a local development council for planning purposes, the composition of which is prescribed in the Local Government Code. The development council assists the corresponding *Sanggunian* in setting the direction of economic development, and coordinating development efforts within its territorial jurisdiction [Section 106]. Representatives of NGOs operating within the LGUs are to constitute at least 25 percent of the members [Section 107 (a)(2), (b)(4) and (c)(4)]. Local development councils shall formulate and recommend local investment incentives to promote the inflow and direction of private investment capital [Section 109 (4)]. The local development councils may form sectoral or functional committees to assist them in the performance of their functions [Section 112]. This would include environment and natural resource committees.

6. Sanggunians (*Local Municipal, City, and Provincial Councils*)

The local governing councils (*Sangguniang Bayan, Sangguniang Panlungsod and Sangguniang Panlalawigan*) are the legislative bodies of local government. Their composition is prescribed in the Code, including the process for electing sectoral

representatives. The Code vests in the *Sanggunians* specific authorities to pass ordinances that will protect the environment, and enforce compliance through the issuance of fines and penalties.

7. Sangguniang Panlalawigan (*Provincial Council*)

- Approve ordinances and pass resolutions that will protect the environment and impose appropriate penalties for acts which endanger the environment and other acts which result in pollution, acceleration of eutrophication of rivers and lakes, or of ecological imbalance [Section 468 (a)(1)(vi)];
- Adopt measures and safeguards against pollution and for the preservation of the natural ecosystem in the province, in consonance with approved standards of human settlements and environmental sanitation [Section 468 (a)(4)(i)]; and
- Approve ordinances imposing a fine not exceeding PhP5,000 or imprisonment not exceeding one year, or both at the discretion of the court, for the violation of a provincial ordinance [Section 468 (1)(iii)].

8. Sangguniang Bayan (*Municipal Council*)

- Adopt measures to protect the inhabitants of the municipality from the harmful effects of man-made or natural disasters and calamities [Section 447 (1)(iv)];
- Approve ordinances and pass resolutions to protect the environment and impose appropriate penalties for acts which endanger the environment and other acts which result in pollution, acceleration of eutrophication of rivers and lakes, or of ecological imbalance [Section 447 (1)(vi)];
- Declare, prevent, or abate any nuisance [Section 447 (4)(i)];
- Regulate the disposal of clinical and other wastes from hospitals, clinics, and other similar establishments [Section 447 (4)(iii)];
- Protect the purity and quantity of water supply in the municipality [Section 447 (5)(vii)];
- Provide for the efficient and effective system of solid waste collection and disposal; prohibit littering and the placing or throwing of garbage, refuse, or other filth and wastes [Section 447 (5)(xiii)]; and
- Approve ordinances imposing a fine not exceeding PhP2,500 or imprisonment not exceeding six months, or both in the discretion of the court, for the violation of a municipal ordinance [Section 447 (1)(iii)].

9. *Environment and Natural Resources Officer*

The Local Government Code provides for the optional creation of a position of an Environment and Natural Resources Officer (ENRO) in all municipalities, cities, and provinces [Section 484]. The Code specifies that the individual must have a college degree preferably in environment, forestry, agriculture, or any related course; and a first grade civil service credential. In addition, the ENRO must have acquired experience in environmental and natural resources management, conservation, and utilization, of at least 5 years for province or city and 3 years for municipality.

The responsibilities of the ENRO are to:

- Formulate measures for the consideration of the *Sanggunian* and provide technical assistance and support to the governor or mayor, as the case may be, in carrying out measures to ensure the delivery of basic services and provisions of adequate facilities relative to environment and natural resources services;
- Develop plans and strategies and upon approval by the governor or mayor to implement environment and natural resources programs and projects;
- Establish and maintain, protect and preserve communal forests, watersheds, tree parks, mangroves, greenbelts, and similar forest projects and commercial forests, like industrial tree farms and agro-forestry projects;
- Provide extension services to beneficiaries of forest development projects and technical, financial, and infrastructure assistance;
- Manage and maintain seed banks and produce seedlings for forests and tree parks;
- Provide extension services to beneficiaries of forest development projects and render assistance to natural resources-related conservation and utilization activities consistent with ecological balance;
- Promote the small-scale mining and utilization of mineral resources, particularly mining of gold;
- Coordinate with government agencies and NGOs in the implementation of measures to prevent and control land, air, and water pollution with the assistance of the DENR;

- Facilitate the delivery of services concerning the environment and natural resources, particularly in the renewal and rehabilitation of the environment during and in the aftermath of man-made and natural calamities and disasters; and
- Recommend to the *Sanggunian* and advise the governor or mayor, as the case may be, on all matters relative to the protection, conservation, maximum utilization, application of appropriate technology, and other matters related to environment and natural resources.

Governor Rogelio E. Llanos of the province of Davao del Sur issued Executive Order No. 6 on 27 March 2000. EO 6 strengthened the mandate of the Environment and Natural Resources Office as the lead coordinating office, together with the Provincial Planning and Development Office and Office of the Provincial Agriculturist (OPAG)-Fishery Division, for the CRM activities. ENRO was vested with greater powers and functions for the protection, conservation, rehabilitation, and management of the marine and coastal resources of the province of Davao del Sur, as follows:

1. Develop programs, formulate plans and implement projects on CRM programs in the province;
2. Coordinate with PPDO, OPAG-Fishery Division, DENR, DA-BFAR, LGUs, NGOs, academe and other relevant agencies in the implementation of CRM programs and projects;
3. Update Provincial Coastal Resources Management Council (PCRMC) regarding CRM activities at the provincial level;
4. Develop and implement province-wide Information Education Campaign (IEC) trainings related to marine and coastal environment;
5. Coordinate PPDO and OPAG-Fishery Division in the gathering, updating, consolidating and establishment of province-wide database on the state of the coastal resources of the province; and
6. Formulate planning process anchored on watershed as the basic planning unit;
7. Coordinate with relevant agencies in the enforcement of environmental law and ordinances.

Figures 6.1 to 6.3 show the organizational structures of the ENRO, OPAG, and PPDO.

The local government executives and the *Sanggunians* are directly responsible for the proper use and protection of environmental resources in their locality, following the concept of representative democracy that they are chosen by the people to govern and make decisions for them. Part of that governance is the capacity to plan and implement programs that will protect rivers, coastal areas, air, groundwater, wildlife, forests, and other environmental resources that are vital to keeping public health within an acceptable level.

The DENR retains the overall authority for environment and natural resource matters. The current framework provides a system where the DENR establishes national policies and programs, and delegates to the LGUs the implementation and enforcement of the same. This, however, does not preclude the LGUs and local development councils from formulating plans and policies and the *Sanggunians* from adopting and enforcing local ordinances, provided that such acts are consistent with national programs. This provides for a comprehensive, coordinated, and consistent approach to environmental management in the Philippines.

10. Other Government Organizations

The most significant development in the administration of the Davao Gulf in which Malalag Bay is a part is the creation of the Davao Gulf Management Program (DGMP) in June 1995. The primary goal is to ensure food security and improve the quality of life and sustainable development and management of the Gulf resources.

The Davao Gulf Management Board (DGMB) was organized as a coordinating body to provide general direction in the planning and implementation of the DGMP. The Board is composed of 11 members elected from among the incumbent mayors/ deputy mayors of the Gulf towns/city districts. Figure 6.4 shows the DGMB organizational structure.

The Provincial/City and Municipal/District Coordinating Board was created to carry out its plans and programs in the provincial/city and municipal/district levels. It is composed of the incumbent mayors/deputy mayors and selected NGOs, incumbent *Barangay* Captains and selected NGOs, respectively.

The Technical Secretariat was created to provide professional support in coordinating, planning, implementation, monitoring, and evaluation of DGMP projects. It is composed of line agencies with mandates related to the protection and management of Davao Gulf's resources. These agencies include the DA, DENR, DILG, PNP, PCG, NEDA, and other concerned instrumentalities.

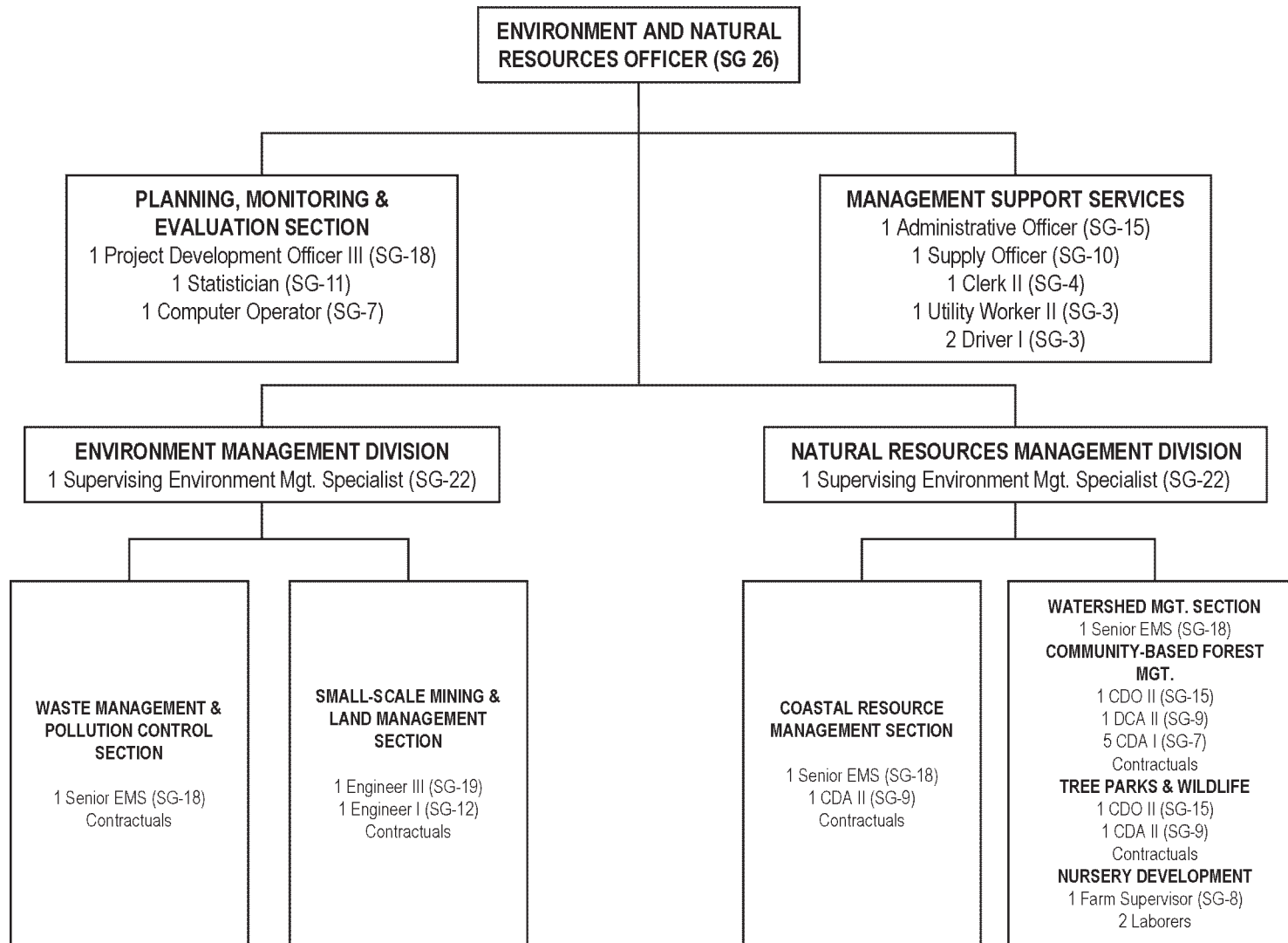


Figure 6.1. Environment and Natural Resources Office (ENRO) organizational structure.

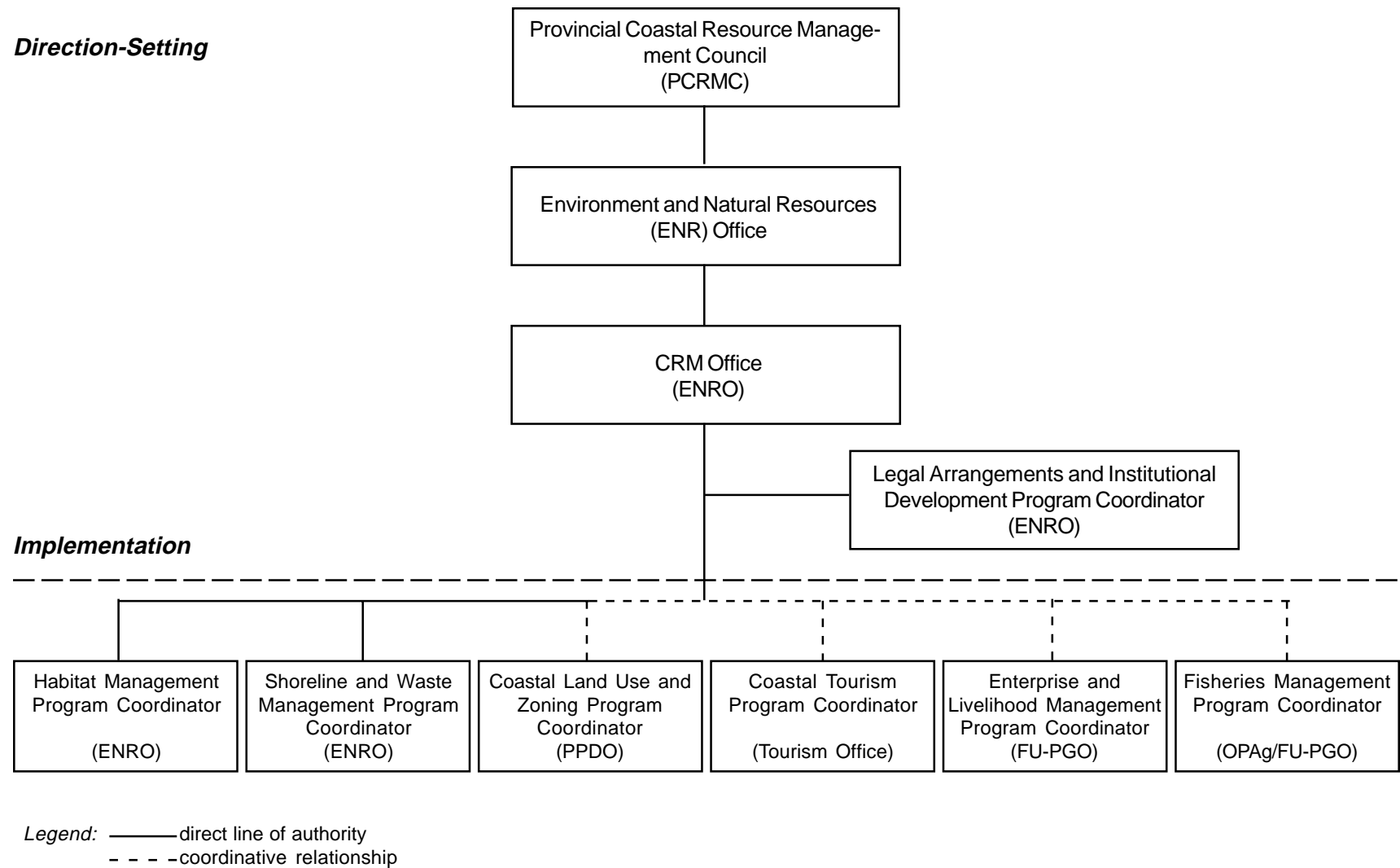


Figure 6.2. Proposed Provincial Coastal Resource Management Implementing Structure.

Source: Draft Provincial CRM Plan, June 2000

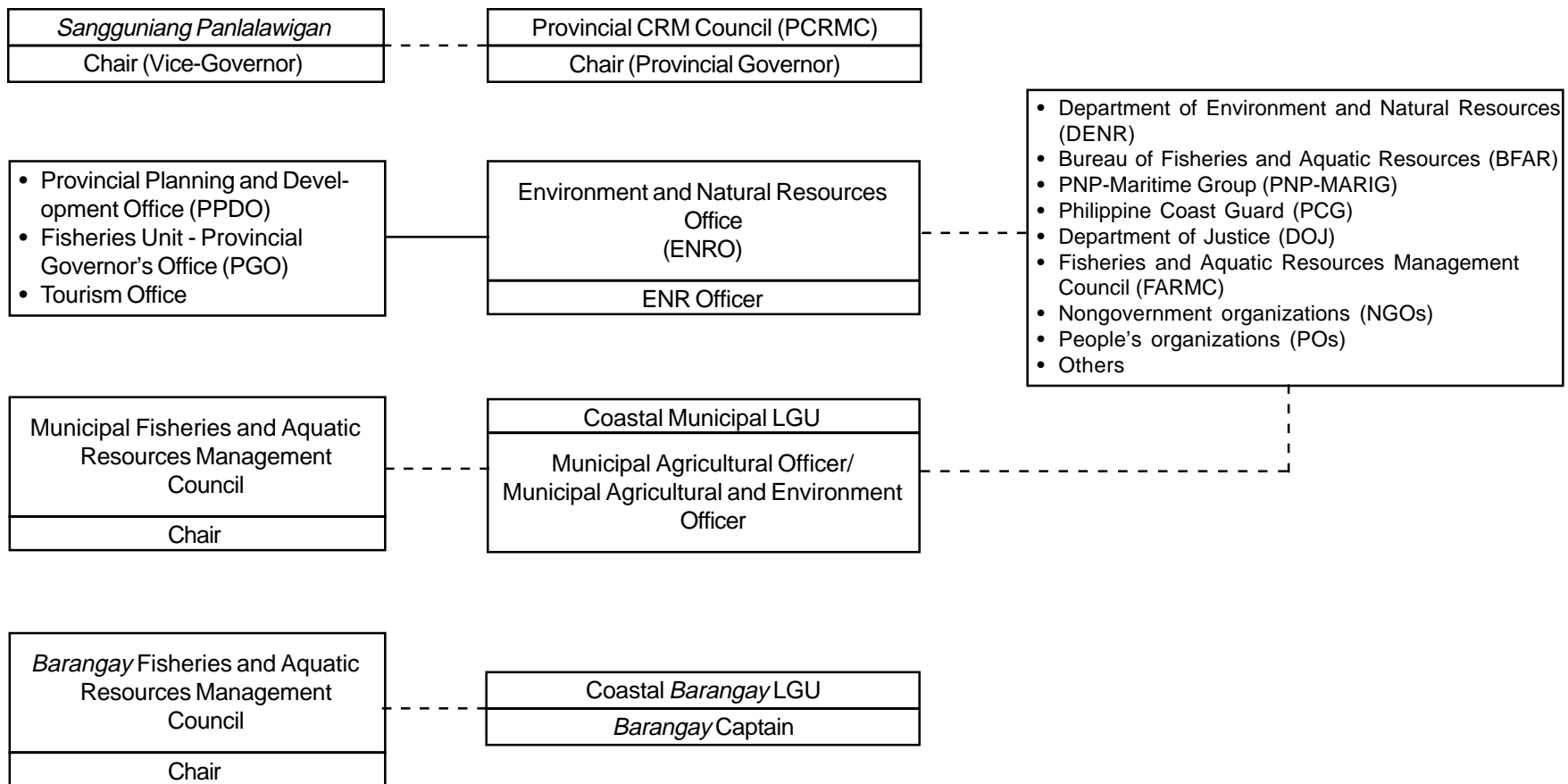


Figure 6.3. Proposed Inter-Agency Coordinating Structure for Coastal Resource Management.

Source: Draft Provincial CRM Plan, June 2000

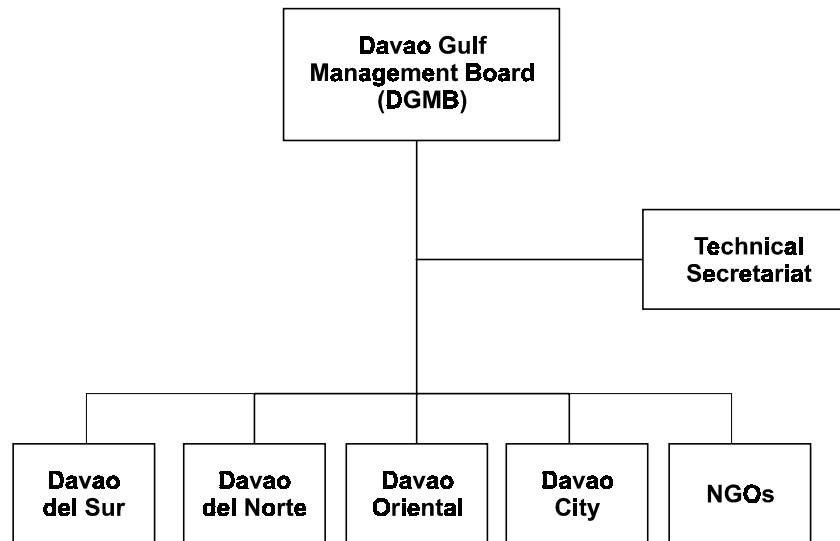


Figure 6.4. Davao Gulf Management Board (DGMB) organizational structure.

Nongovernment Organizations (NGOs) and People's Organizations (POs)

At present, there are established nongovernment organizations (NGOs) operating in the MBA in the pursuit of various projects which complement the efforts of the local government. The Kapwa Upliftment Foundation, Institute of Small Farms and Industries (ISFI) and the Local Development Assistance Program (LDAP) are the NGOs at present helping the LGU in rallying and carrying out environmental concerns in the uplands.

Table 6.4 is a partial listing of organizations in the MBA. A majority of these started out as associations, which eventually developed and evolved to cooperatives. Most are operating cooperative stores while there are a few which expanded either into marketing or credit services and have also entered into livelihood financing schemes in partnership with the Land Bank of the Philippines. The cooperative as a movement has taken off, and a lot of farmers are now encouraged to join as they witness discernible changes from the emerging support of the cooperatives.

The NGO-PO-LGU relationship is faring quite well, but it cannot be denied that there is an apparent lack of capability on both parties with regard to strengthening and institutionalizing people's mechanism. Their complementary roles have to be elevated such that it will support and sustain the development and decentralization effort.

Similar to *barangays*, most of the emerging people's organizations are still in the infancy stage. They need training and capacity support for development of their respective organizations for them to be transformed into self-propelling and self-managing entities.

Community Organizations

In 1997, CRMP began assisting in the formation of Fisheries and Aquatic Resources Management Councils (FARMCs) in the MBA. At present, all coastal *barangays* in the MBA have a FARMC. The formation of FARMCs in all municipalities and cities abutting municipal waters and of integrated FARMCs in bays, gulfs, lakes, rivers, and dams bounded by two or more *barangays* or municipalities was mandated by EO 240, on 28 April 1995, and governed by the Implementing Rules and Regulations issued jointly by the DA and DILG on 25 April 1996. Their creation has also been mandated by the Fisheries Code of 1998 which, in addition to the municipal/city and integrated FARMCs, also call for the establishment of a national FARMC which will be an advisory body assisting the DA/BFAR in the formulation of national policies for the protection, sustainable development, and management of fishery and aquatic resources.

The FARMCs are intended to institutionalize the major role of local fisherfolk and other resource users in the community-based planning and implementation of policies and programs for the management, conservation, development, and protection of fisheries and aquatic resources in municipal waters. Their primary functions include:

- Preparation of the Municipal/City Integrated Development Plan for submission to and approval by the Municipal/City/Provincial Development Council;
- Formulation of recommendation to the Municipal or Provincial Council regarding the enactment of municipal fishery ordinances;
- Enforcement of fishery laws and rules and regulations in the municipal waters; and
- Provision of advice to the Municipality/City or Provincial Council on fishery matters through the Committee on Fisheries, if such has been organized.

The FARMCs are to be provided with technical assistance from the DA, DENR, DILG, Department of Justice (DOJ), and other government agencies, as necessary, to ensure that they are able to contribute knowledge and meaning to the development of fisheries management plans and the guidelines for their implementation.

In 1996, Malalag Bay was selected as one of the six learning areas of the Coastal Resource Management Project (CRMP). Among the primary outputs of the project was the facilitation of the CRM process and conduct of PCRA in all coastal *barangays* resulting in the development and production of resource maps which served as the basis for the *barangay* CRM planning activities currently being conducted.

Table 6.4. Partial listing of NGOs and POs in the MBA.

Municipality	Organizations
Hagonoy	ECJ & Sons Development Employees Cooperative Hagonoy Secondary Teachers and Employees MP Cooperative Sunrise Development Cooperative
Malalag	<p>Bagumbayan Fishermen Consumer Cooperative Inc. Baybay Multi-Purpose Cooperative Bolton Coco-Farmers Multi-Purpose Cooperative Bulacan Coco-Farmers Multi-Purpose Cooperative Caputian Multi-Purpose Cooperative Inc. Ibo Coconut Farmers Multi-Purpose Cooperative Institute of Primary Health Care Institute of Small Farms and Industries Kabalikat sa Kaunlaran ng mga Kababaihan ng Malalag KAMATA Pagkasumbukan Kapit-Bisig ng Mahihirap ng Pilipinas Kapwa Upliftment Foundation Inc. Kumintang Seaside Neighborhood Association Inc. Malalag Christian Cooperatives Inc. Malalag Community Health Volunteers Development Association Malalag Integrated Livelihood Cooperative Inc. Malalag People's Economic Council Malalag Senior Citizens Association Nagkahi-usang Pundok sa Gagmay'ng Mananagat sa Malalag Baybay New Baclayon Coco-Farmers Consumers Cooperative Tagansule Development Cooperative Inc.</p>
Padada	<p>4-H Club of Don Sergio Osmeña 4-H Club of Harada Butai Bagong Silang Women's Multi-Purpose Cooperative Don Sergio Osmeña Multi-Purpose Cooperative Future Leaders Incorporated-Anak sa Padada Harada Butal Farmers Association Kasakit Organization Kiblawan Rural Development Foundation, Inc. Knights of Columbus Knights of Rizal L. Katipunan Women's Club Malinao Widows Association Northern Paligue Women's Club Padada Achievers Arts Foundation, Inc. Padada Chamber of Commerce Padada Community Multi-Purpose Cooperative Padada Farmers and Carpenters Multi-Purpose Cooperative Padada Fishermen's Multi-Purpose Cooperative Padada General Service Multi-Purpose Cooperative Padada Irrigation Association Padada Officials, Farmers & Employees Multi-Purpose Cooperative Padada Operators Drivers Multi-Purpose Cooperative Padada Senior Citizens Association Palili Women's Club</p>

continued

Table 6.4. (continued)

Municipality	Organizations
	Perpetual Charity Christian Association of the Philippines Philippine Coconut Authority Piape Mortuary Aid Organization RECON Phoenix Roscom Village Women's Multi-Purpose Cooperative Rural Improvement Club San Isidro Bayanihan Mangrove Multi-Purpose Cooperative San Isidro Catholic Organization Southern Paligue Catholic Association Santa Catalina Organization Southern Paligue Multi-Purpose Cooperative Tulogan Multi-Purpose Cooperative Upper Limonzo Multi-Purpose Cooperative Upper Malinao Marketing Cooperative
Sta. Maria	Basiawan National High School Teachers Commoners Multi-Purpose Cooperative PKEARBI Multi-Purpose Cooperative UNICARBAI Multi-Purpose Cooperative

Note: NGOs/POs in bold letters are relevant to CRM

The project also assisted the Agriculture Office of the LGU in organizing the FARMC and supported a study on the carrying capacity of Malalag Bay specifically on the effects of fish cages and fish pens in the bay. The CRMP through its partner NGO, the ISFI, has facilitated community organizing activities in *barangays* around the bay.

CRM projects such as milkfish production in cages, mangrove rehabilitation, and fish sanctuaries are now evident on the coast of Malalag. Coastal law enforcement has been strengthened as the local government acquired handheld radios and motor-boats for use in monitoring fishing activities within and outside the fish sanctuaries. The *Sangguniang Bayans* have formulated and enacted a number of ordinances to reinforce non-regulatory measures related to CRM. These include a fishery ordinance and an ordinance prohibiting the use of trawls, *lampornas*, and other destructive fishing gear in municipal waters.

The approach is integrated. Aside from projects that directly impact the coastal environment, there are also projects to rehabilitate and develop upland as well as lowland areas. In the uplands, these include agroforestry, community reforestation, watershed rehabilitation, and organization and training of farmers in the production of cash crops and livestock. In the lowlands, major projects involve road greening, stream bank stabilization, and a clean-and-green program. A municipal tree park has been established to serve as buffer in the urbanizing *barangays*.

The effort is multisectoral. NGOs help organize and train farmers and provide them credit for the production of cash crops and livestock, as well as leguminous

seeds, which are used in establishing hedgerows. Even the business sector has been involved. The Malalag Ventures Plantation, Inc. (MVPI), for example, planted bamboo along the river bank that runs through the company's plantation to prevent soil erosion. MVPI, along with the Rural Bank of Malalag, also donated trash cans to schools, the local government, and the public market under the clean-and-green program.

SUMMARY

There are six agencies under the national government that have jurisdiction over CRM in the Malalag Bay Area: NEDA, DA, DENR, DILG, DOT, and DOST. The Local Government Code of 1991 expressly provides for LGUs to take the lead and to share with the national government the responsibility for the management and maintenance of the ecological balance within their territorial jurisdiction. At present, there are established NGOs operating in the MBA in the pursuit of various projects which complement the efforts of the local government. CRMP assisted the Agriculture Office of the LGU in organizing the FARMC and supported a study on the carrying capacity of Malalag Bay.

Numerous policies affecting CRM exist in national laws and municipal ordinances. PD 704 in 1975 is a very comprehensive law affecting fisheries management throughout the Philippines while RA 8550 in 1998 is an act for the development, management, and conservation of fisheries and aquatic resources, integrating all laws pertinent thereto, and for other purposes. The Local Government Code of 1991 authorizes LGUs to enact and enforce local environmental ordinances. LGUs in the MBA have issued various ordinances for coastal environmental protection and management for their respective municipalities. Common to LGUs is the fishery ordinance. Not all municipalities have the same regulations, which makes consistent management and enforcement for the entire bay difficult.