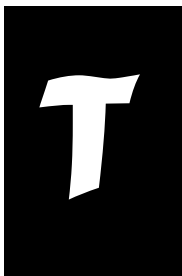




## Chapter 8

# *MANAGEMENT ISSUES AND INTERVENTIONS*



The management issues here are based on local consultation and from information gathered during meetings with the local communities. Issues are summarized in 3 perspectives namely: environmental, socioeconomic, and legal and institutional.

### **Environmental Issues**

Perhaps, the most common management issue among the 3 cities and 6 municipalities is coastal habitat destruction. Coastal habitat destruction is a result of many factors one of which is anthropogenic stress on the resources. Human terrestrial activities contribute to the degradation of the coastal resources. The increased dependence on the coastal resources prompts the resource users to use destructive means of resource utilization thus increasing degradation. Other environmental issues are presented in Table 8.1.

### **Socioeconomic Issues**

Among the socioeconomic issues in the profile are the lack of alternative livelihood to augment low income resource users and the lack of environmental education and information. Table 8.2 presents some of the issues reflecting the socioeconomic conditions of the profile area.

### **Legal and Institutional Issues**

Legal and institutional issues in the profile area center on governance and enforcement of coastal laws. The profile area and particularly the province of Negros Oriental is practicing an open access regime in resource utilization thus creating more stress and pressure on the coastal resources. Proper governance and enforcement of coastal laws may ensure the

**Table 8.1. Environmental issues and their causes.**

Issues	Causes
Destruction of habitat	<ul style="list-style-type: none"> <li>● Use of destructive fishing gear</li> <li>● Use of sodium cyanide and blast fishing and other destructive practices</li> <li>● Harvesting of corals</li> <li>● Conversion of mangroves into fishponds and human settlements</li> <li>● Port expansion</li> <li>● Lack of awareness of the people on the ecological and economic benefits from the different habitats (i.e., mangroves, corals, and seagrasses)</li> <li>● Poverty</li> <li>● Ineffective enforcement of fishery and environmental laws</li> <li>● Unplanned development in the coastal areas</li> <li>● Unregulated tourism activities</li> <li>● Sand extraction</li> <li>● Water pollution</li> <li>● Gathering of tropical aquarium fish for commercial purposes</li> <li>● Absence of coastal zoning of the municipal waters</li> </ul>
Overfishing	<ul style="list-style-type: none"> <li>● <i>De facto</i> open access regime</li> <li>● Unregulated use of fishing gear</li> <li>● Use of destructive fishing gear</li> <li>● Poverty</li> <li>● Limited livelihood activities</li> <li>● Lack of awareness of the people</li> <li>● Increase in number of resource users</li> <li>● Absence of regulatory mechanisms to limit access to the sea</li> <li>● Intrusion of commercial fishing vessels in the municipal waters</li> <li>● Ineffective enforcement of fishery laws</li> <li>● Absence of coastal zoning of the municipal waters</li> </ul>
Siltation	<ul style="list-style-type: none"> <li>● Degradation of watersheds</li> <li>● Slash and burn practices and improper agro-forestry practices</li> <li>● Construction of buildings and other infrastructure in the foreshore area</li> <li>● Quarrying activities</li> </ul>

**Table 8.2. Socioeconomic issues and their causes.**

Issues	Causes
Poverty	<ul style="list-style-type: none"> <li>● Low income of fishers</li> <li>● Declining fisheries</li> <li>● Limited livelihood options</li> <li>● Low education</li> </ul>
Population pressure	<ul style="list-style-type: none"> <li>● Population growth in the coastal area</li> <li>● Limited livelihood activities</li> </ul>
Conflicts with tourism	<ul style="list-style-type: none"> <li>● Absence of regulatory mechanisms on tourism development</li> </ul>
Poor infrastructure	<ul style="list-style-type: none"> <li>● Limited funds of the government</li> </ul>

protection and sustainability of the coastal resources. Legal and institutional issues existing in the profile area are enumerated in Table 8.3.

### **MANAGEMENT INTERVENTIONS**

To address the environmental, socioeconomic, and legal and institutional issues confronting the profile area, one concrete intervention is planning. Implementation of CRM at the LGUs

**Table 8.3. Legal and institutional issues and their causes.**

Issues	Causes
LGUs have not adjusted to their new responsibilities or do not have the capacity to address these responsibilities	<ul style="list-style-type: none"> <li>● Lack of trained personnel, financial resources, equipment, and political will</li> <li>● Lack of awareness on CRM</li> </ul>
Intrusion of commercial fishing vessels and continued exploitation of the seas	<ul style="list-style-type: none"> <li>● Absence of CRM plans and fisheries ordinance</li> <li>● Ineffective enforcement of laws</li> <li>● Absence of clear delineation of municipal water boundaries</li> </ul>
Illegal titling of lands within the mangrove areas	<ul style="list-style-type: none"> <li>● Ineffective enforcement of laws on mangrove protection</li> </ul>
Duplication of functions and unclear delineation of powers and tasks of DA-BFAR, DENR, PNP, DILG on program implementation and law enforcement Absence of comprehensive municipal fisheries ordinance	<ul style="list-style-type: none"> <li>● Absence of a national framework on CRM</li> <li>● Lack of a clear set of roles for each national agency</li> <li>● Lower level awareness of local government officials on fisheries legislation</li> </ul>

relies on a set of goals, objectives, and strategies. With the nature of issues and problems in the profile area, a comprehensive and multi-year CRM/ICM plan is needed.

Once CRM/ICM plans are formulated, LGUs will have a clear direction on how to manage their coastal areas. It will also facilitate resolution of conflict between resource users. Formulation of ordinances will also be easier if plans are already in place. The plan can also be used in leveraging funds for livelihood activities. However, to ensure effective planning activity, community participation is inevitable.

### **Integrated Coastal Management (ICM)**

ICM planning is a process of analyzing the interactions and needs of resources, economic activities, and society, including problems and opportunities in the designated planning area or zone and proposing future actions. It is a process of organizing ideas and resources to make things happen. Two questions are important to be answered in planning: (1) What do you want to happen? and (2) How do you want it to happen? The planning framework is illustrated in Figure 8.1.

An ICM plan for any area (*barangay*, municipality or city, multi-municipal wide) requires the following basic contents to be a good plan:

1. **Description of the area** provides background information. This can include geography, demography, important coastal resources and their condition, socioeconomic status of the people, institutions and laws, and other relevant information for management.
2. **Maps** of different scales are needed. Include a map of the entire area and detailed maps of the coastal area with resource locations and use patterns, existing management interventions, and other data.

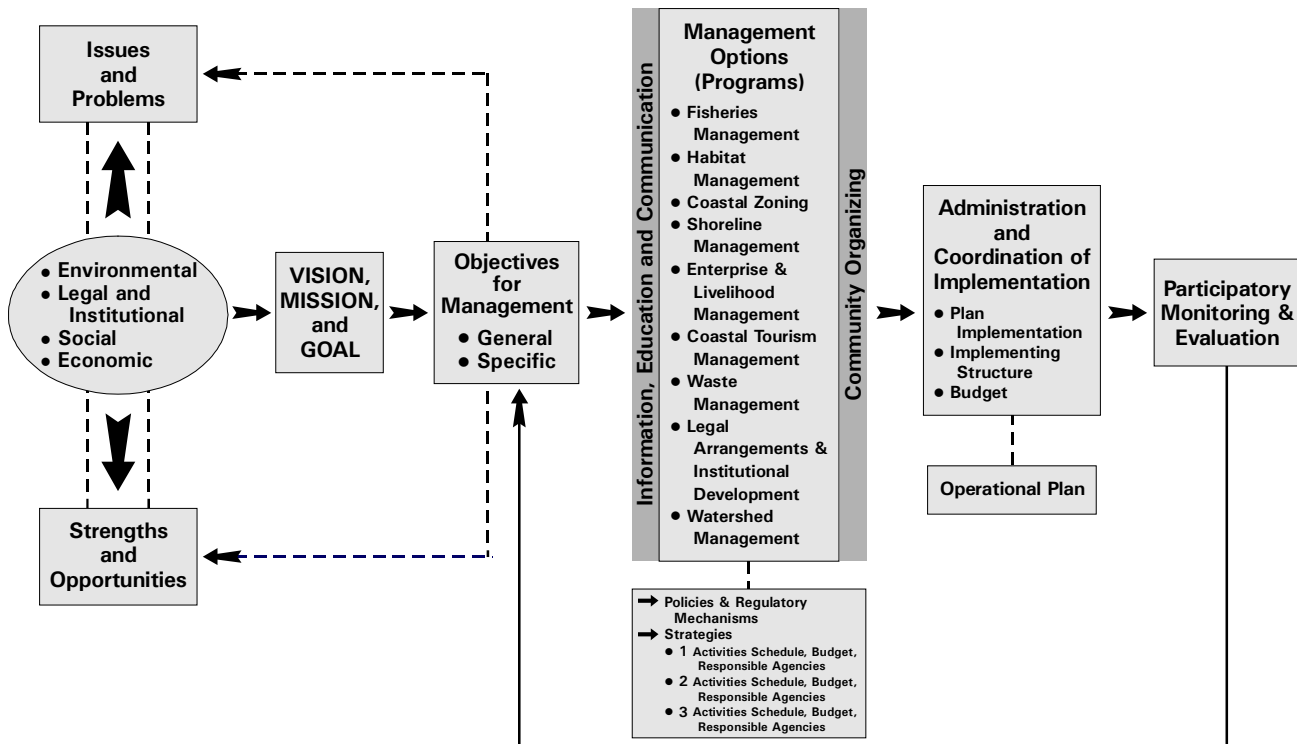


Figure 8.1. Strategic planning framework.

3. **Management issues** must be clearly stated along with their contributing causes and factors. Trends in decline of resources can be used to illustrate issues of concerns.
4. **Goals and objectives** should derive from the main issues. The goal is broad while each objective must be achievable and measurable within the 3-to-5-year life of the plan.
5. **Strategies and actions** are the heart of the plan. One strategy and several actions with assigned responsibilities should address each major issue. A strategy is a well-conceived means to solve a problem. The actions implement the strategy. Actions can be budgeted.
6. **Institutional and legal framework** is needed to support plan implementation. This section explains what institution is responsible and why as supported by law.
7. **Timeline** for implementation helps organize all responsible parties to implement the plan.
8. **Monitoring and evaluation** must be included as a set of activities to provide feedback on plan implementation and impact on environment.

Following are some of the basic programs and strategies on coastal management. A number of strategies have been proven technically feasible and are being implemented in some LGUs. However, aside from looking at the technical feasibility of each program and strategy, social acceptability is also important. Note that the success of program implementation lies in both technical feasibility and social acceptability.

Strategies are not exclusive to 1 program. There are strategies that can be used in 2 or more programs, such as the establishment of sanctuary - a strategy in fisheries management and in habitat management. There are also cross-cutting strategies, such as IEC and community organizing, that are applicable in all programs. The strategies can be operationalized through specific activities and actions.

In January 1999, the Negros Learning Area of the CRMP sponsored a 2-day Strategic Review and Planning Workshop attended by elected officials and technical personnel of CRMP-covered LGUs and representatives of national and provincial government offices. At the workshop, the participants recognized the need to integrate all their efforts and management programs into a CRM plan, and for a communal fishing ground bordered by 2 or more LGUs, a baywide CRM plan is inevitable. The participants also recognized that it will be easier to manage their municipal waters if they will delineate zones for specific uses.

In the profile area, CRM planning is now being undertaken by the LGUs in Manjuyod, Bais, Tanjay, Amlan, San Jose, and Bacong. The planning process started with the conduct of Participatory CRM Planning Workshop attended by representatives of different stakeholders in each of the LGU. During workshops, working drafts of the CRM plan in the 6 LGUs, including proposed zonation scheme of their respective municipal waters with broad regulatory mechanisms and policies, were prepared. The workshops provided the participants with a working knowledge of what strengths and opportunities they have with regard to the use and management of their resources. Multisectoral Technical Working Groups (TWGs), composed of representatives from the different coastal stakeholders were convened in each of the LGU. In Manjuyod, the TWG is headed by the *Sangguniang Bayan* Chair on Environment and Natural Resources, in Bais by the City Planning and Development Coordinator, in Tanjay by the Vice-Mayor, in Amlan by the Municipal Interior and Local Government Operations Officer (MILGOO), in San Jose by the Chair of the Association of *Barangay* Captains (ABC), and in Bacong by the Chair of the FARMC. The TWGs were tasked to conduct and facilitate community and sectoral consultations and draft their respective CRM plan.

All the LGUs, except Bais which opted to have a different process, went through the process of participatory planning by following the stages illustrated in Figure 8.2.

During the community consultation, the TWGs were guided by a set of questions to ensure smoothness of the flow and minimize unrelated discussions.

#### **Possible Management Interventions for the Municipalities and Cities in the Profile Area**

The goal of CRM is to uplift the living condition of the coastal dwellers through the rehabilitation of coastal habitats and rejuvenation of fisheries resources and the proper management of different human activities that have direct and indirect impact on the

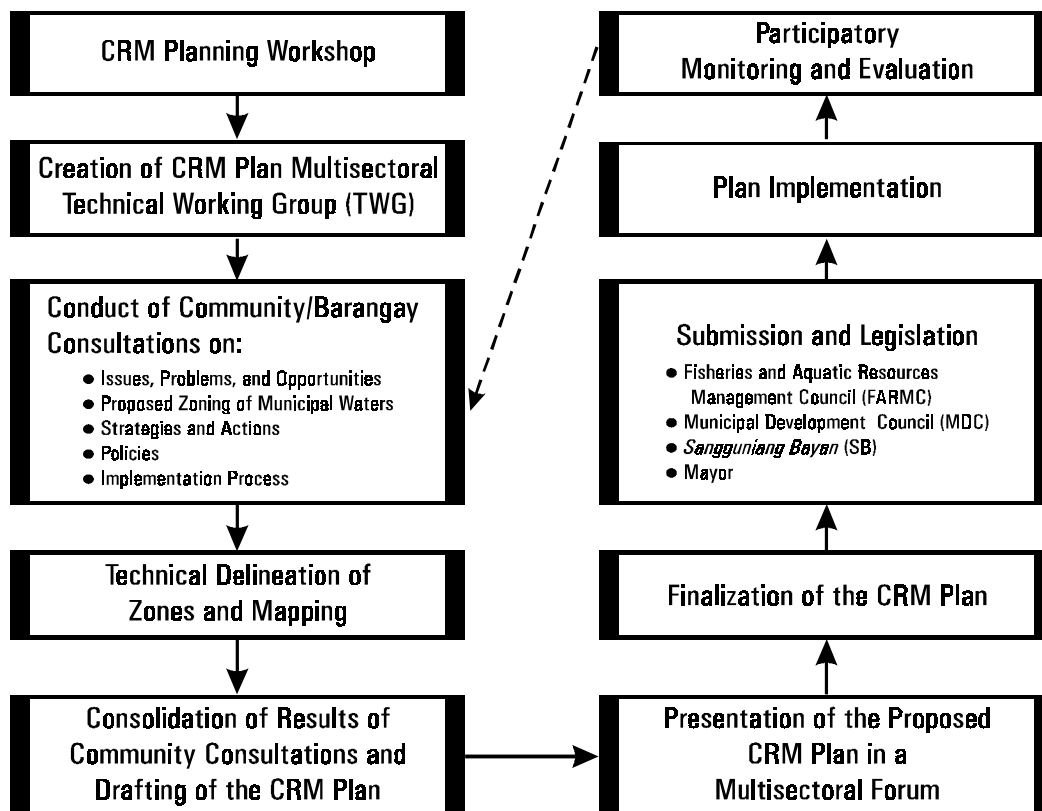


Figure 8.2. The participatory CRM planning process.

coastal area. Table 8.4 shows the common programs, objectives, and strategies, based on the draft CRM plans of the LGUs in the profile area that will be implemented to address the environmental, socioeconomic, and legal and institutional issues confronting their coastal environment.

The strategies are not exclusive to 1 program. There are strategies that are common to 2 or more programs. The establishment of a sanctuary, for example, is a strategy in both fisheries management and habitat management. There are also cross-cutting strategies, such as IEC and community organizing, that are necessary in all programs. The strategies are operationalized through specific activities and actions.

The programs and their constituent strategies make the greatest contribution to the long-term rehabilitation and development of the profile area's coastal resources. LGUs reinforce each other in addressing the issues and problems in the area, thus making management cost-effective.

Table 8.4. Common management programs, objectives, and strategies.

Program	Objectives	Strategies
Fisheries and Habitat Management	<ul style="list-style-type: none"> <li>● To increase productivity of fishery resources in order to achieve food security</li> <li>● To protect, conserve, and rehabilitate existing habitats</li> <li>● To improve productivity and biodiversity of corals, seagrasses, mangroves and estuaries</li> <li>● To regulate access to the municipal waters and reserve its resources for the benefit of the municipal fishers</li> <li>● To regulate the exploitation of fisheries resources and limit fishing efforts to sustainable levels</li> <li>● To ensure the rational and sustainable development and management of the fishery resources</li> <li>● To develop monitoring, control, and surveillance mechanisms and strengthen law enforcement units</li> <li>● To ensure equity in fisheries exploitation</li> </ul>	<ul style="list-style-type: none"> <li>● Establishment and management of marine protected areas or fish/marine sanctuaries</li> <li>● Management of mangroves under the Community-Based Forest Management (CBFM) framework</li> <li>● Designation of closed season in harvesting siganids during their spawning season</li> <li>● Protection of seagrass beds by regulating fishing activities destructive to the habitat</li> <li>● Licensing and permitting of fishers, fishing gear, and fishing boats</li> <li>● Sustainable management of coastal aquaculture</li> <li>● Regulation on the deployment, use of, and access to artificial reefs</li> <li>● Regulation of the construction and operation of fish corrals</li> <li>● Restriction of commercial fishing vessels in the municipal waters</li> <li>● Enforcement of environmental and fisheries laws</li> </ul>
Coastal Zoning	<ul style="list-style-type: none"> <li>● To delineate zones for specific uses or activities in the municipal waters</li> <li>● To eliminate use conflict in the utilization of the municipal waters</li> <li>● To regulate activities in the different zones</li> </ul>	<ul style="list-style-type: none"> <li>● Delineation of municipal waters boundaries</li> <li>● Designation of zones for specific uses such as for strict protection, rehabilitation, sustainable capture fisheries, sustainable aquaculture, tourism, trade and navigation, etc.</li> </ul>
Shoreline Management	<ul style="list-style-type: none"> <li>● To protect the shoreline from further degradation due to destructive activities</li> <li>● To maintain access of the people to foreshore area</li> <li>● To regulate activities in the foreshore area that would affect the condition of the shore</li> <li>● To minimize erosion and loss of beach to natural and human induced forces</li> </ul>	<ul style="list-style-type: none"> <li>● Setting up and maintenance of coastal setbacks for all development</li> <li>● Construction and maintenance of seawalls</li> <li>● Watershed management</li> </ul>
Coastal Tourism Management	<ul style="list-style-type: none"> <li>● To provide economic incentives for the municipality and the coastal communities by optimizing the tourism potential of certain areas</li> <li>● To develop local capability in ecotourism projects that contribute to better coastal management and community development</li> <li>● To develop incentives for resource conservation</li> </ul>	<ul style="list-style-type: none"> <li>● Regulation on the number of tourism facilities and activities</li> <li>● Maintenance of waste disposal facilities</li> <li>● Ecotourism product development</li> <li>● Visitor education and management</li> <li>● User fees and appropriate business development</li> </ul>

continued



Table 8.4. continued

Enterprise and Livelihood Management	<ul style="list-style-type: none"> <li>● To develop alternative and supplement employment of fishers in order to reduce fishing effort and pressure on the sea</li> <li>● To diversify income source of the fishers to reduce dependence on fishing</li> <li>● To develop environment-friendly enterprise and livelihood projects</li> </ul>	<ul style="list-style-type: none"> <li>● Identification and implementation of environment-friendly and economically-feasible projects</li> <li>● Identification of beneficiaries</li> </ul>
Waste Management	<ul style="list-style-type: none"> <li>● To eliminate or minimize the potential adverse impact of wastes on human and environmental health</li> </ul>	<ul style="list-style-type: none"> <li>● Conduct of water quality monitoring</li> <li>● Domestic waste segregation</li> <li>● Sewage waste treatment, especially for tourism and industrial facilities</li> </ul>
Legal Arrangements and Institutional Development	<ul style="list-style-type: none"> <li>● To improve mechanisms and arrangements for local governance on coastal management</li> <li>● To enhance community participation in coastal management planning, legislation, implementation, monitoring and evaluation</li> <li>● To strengthen environmental and fishery law enforcement</li> <li>● To improve the delivery of coastal management-related services</li> <li>● To strengthen network and linkage with other LGUs, national government, international and local organizations, and community and people's organizations</li> </ul>	<ul style="list-style-type: none"> <li>● Legislation of comprehensive CRM ordinance</li> <li>● Formation and strengthening of people's organizations</li> <li>● Strengthening of FARMC and <i>Bantay Dagat</i>, and training of fish wardens</li> <li>● Monitoring, control and surveillance</li> <li>● Training and staff development on CRM</li> </ul>

## SUMMARY

Although much remains to be done, the Negros Oriental profile area has accomplished a great deal in its efforts to bring the natural resources of the profile area under integrated, sustainable management for the benefit of the people who rely on those resources. In essence, the successes achieved in Negros Oriental are the result of a sound management process and the participation of the stakeholders. Negros Oriental can provide a model, lessons, and encouragement to other areas of the Philippines wishing to undertake co-management of their coastal resources for their own benefit and that of future generations.