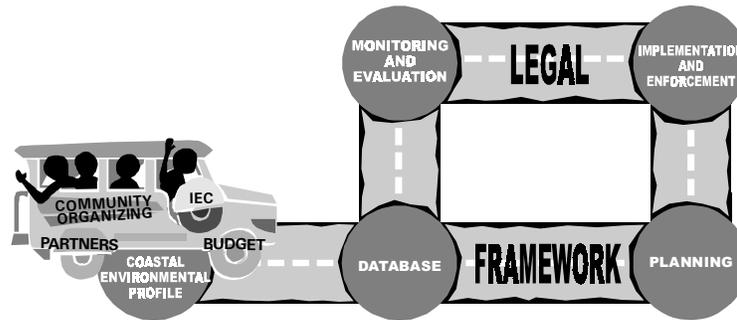# THE CRM PROCESS
## *Coastal Environmental Profile*
### *Participatory Coastal Resource Assessment*



**what?** Resource assessment, also known as resource analysis or appraisal, involves gathering and analyzing environmental, ecological, social and economic information about the management areas. Participatory coastal resource assessment, or PCRA, focuses on resource assessment from the point of view of local coastal resource users and integrates local wisdom and knowledge with the technical expertise of other people or groups – NGOs, universities, research institutions and local government staff – involved in the management process.

**why?** Resource assessment is accomplished primarily to facilitate the numerous decisions that must be made in planning and implementing a CRM program. It is most useful in CRM when the information collected and analyzed helps managers to understand the past, present and potential usefulness of coastal resources, and identifies limits and opportunities for coastal resources to contribute to environmentally sustainable economic development in coastal areas. The rationale for the participatory approach to resource assessment is simple: coastal communities, because of their dependence on coastal resources, can offer important perspectives on which resources are important, the changes in resource availability and harvesting success, and the problems and issues that can deny the community the benefits of resource use. Through PCRA, local coastal resource users are assisted to arrive at a common understanding of environmental and ecological information concerning the coastal environment to be managed and the natural resources found there.
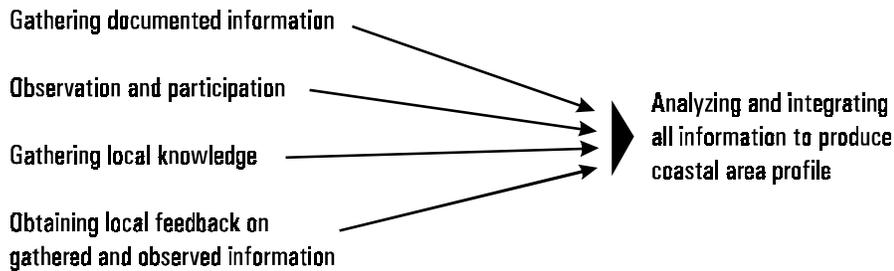
If done successfully, PCRA offers four beneficial outcomes:

1. Important information that would otherwise not be obtained and considered using traditional scientific approaches is made available for CRM planning purposes.
2. Resource assessment is made more participatory as local fishers and resource users are more intimately involved in an essential first phase of CRM.
3. Local users are more likely to participate actively in subsequent phases of the CRM process and contribute to decisions that will be supported by the community. PCRA thus helps empower local fishers and other resource users to productively participate in – and more likely benefit from – CRM projects.
4. PCRA demonstrates the relevance of information provided by the resource users and shows how the information is used for management needs. Such information includes:
   - spatial details about the coastal area, such as locations of small but productive reefs that are not usually shown in maps or revealed in assessments conducted by outside experts.
   - temporal details about important events, changed status of resources, and emerging issues that are almost impossible for outside assessment experts to discover independently
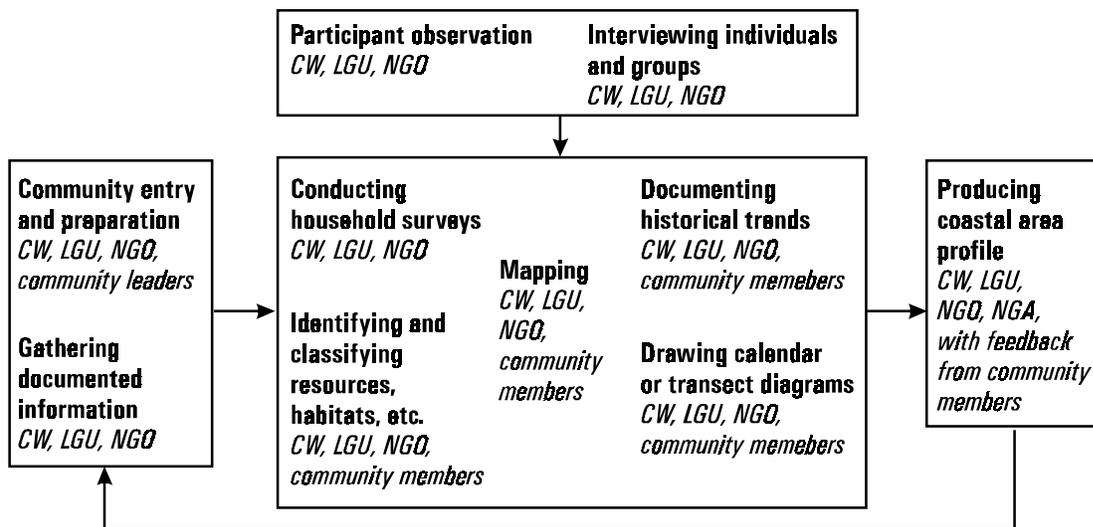
- specific details, such as information about the relative condition and cultural values of areas described by experts as only a single general category of mangrove
- gender-specific or age-class distinction in resource use, importance and other perceptions
- insights on trends in resource abundance and levels of exploitation that cannot be obtained from other sources

**how?** PCRA is a multifaceted process involving several interrelated components:

Gathering documented information

Observation and participation

Gathering local knowledge

Obtaining local feedback on gathered and observed information

→ Analyzing and integrating all information to produce coastal area profile

The interrelated methods of PCRA are shown in the diagram below (potential actors are shown in italics):



| | |
|---|---|
| **Participant observation** *CW, LGU, NGO* | **Interviewing individuals and groups** *CW, LGU, NGO* |

**Community entry and preparation** *CW, LGU, NGO, community leaders*

**Gathering documented information** *CW, LGU, NGO*

**Conducting household surveys** *CW, LGU, NGO*

**Identifying and classifying resources, habitats, etc.** *CW, LGU, NGO, community members*

**Mapping** *CW, LGU, NGO, community members*

**Documenting historical trends** *CW, LGU, NGO, community memebers*

**Drawing calendar or transect diagrams** *CW, LGU, NGO, community memebers*

**Producing coastal area profile** *CW, LGU, NGO, NGA, with feedback from community members*

(Adapted from: *Participatory Coastal Resource Assessment: A Handbook for Community Workers and Coastal Resource Managers, By J.S. Watlers, J. Maragos, S. Siar and A.T. White. CRMP, 1998)*

# THE CRM PROCESS
## *Coastal Environmental Profile*
## *Developing and Using Maps for CRM Planning*
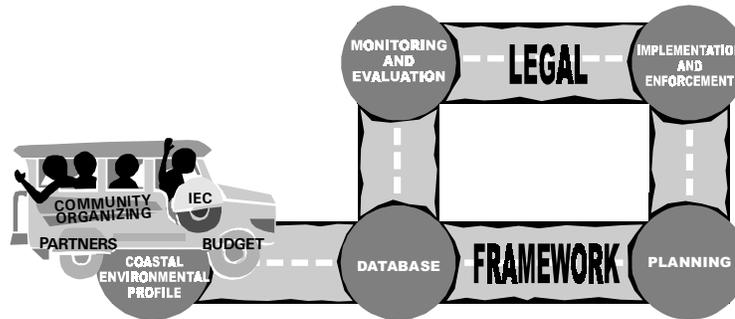


**what?** Mapping is a method for collating and plotting information on the geographical and other features of a specific area to produce a visual representation of the area. Two types of map are generally used for CRM planning. These are:

1.  Municipal boundary map, which shows the boundaries and extent of the area, both land and water, and delineation of areas or zones for specific uses, if any, under the jurisdiction of a municipality.
2.  Resource map, which shows the occurrence, distribution and use of, and access to resources and associated habitats within the economic and cultural domain of a specific community.

**why?** Maps are some of the most important tools used in planning and implementing CRM projects. Without maps, it would be difficult to understand the many variables essential in planning. With maps, the extent and condition of resources and habitats can be represented and analyzed, zones for various uses can be plotted out, and infrastructure and other interventions can be spatially optimized and the localities for possible problems, issues and conflicts identified. Moreover, spatial patterns of settlement, income levels, and other social variables can reveal opportunities and obstacles for CRM. Participatory mapping, in particular, helps to point out spatial details and new information on features whose conditions vary over space and whose locations vary over time.

Maps showing municipal water boundaries are essential for enforcement. Maps are also important visual media, allowing more effective communication between the stakeholders involved in CRM. They often help when verbal communication is constrained by differences in language, background, education and worldview. Mapping, in fact, is one of the most appreciated and successful strategies for eliciting information from local resource users.

**how?** Three participatory methods are used in producing maps for a coastal environmental profile. These are:

1.  Sketch Mapping. Sketch maps are freehand drawings of the coastal environment. These maps start as a blank piece of paper and thus represent the least biased view of how fishers perceive their surroundings.
2.  Drawing on Base Maps. This method involves the addition of environmental elements to pre-drawn base maps. Base maps are maps showing selected features of an area, such as shorelines, roads and villages. They are often produced by government geological or

navigation agencies. If the precision and the scale used are adequate, these maps serve as the best medium for accurately representincg a variety of environmental elements such as habitats, uses, resources, issues and conflicts.

3. Field mapping and ground truthing. This method is useful after at least some drawing over base maps has been accomplished. The basic idea is to move around the management area to verify and refine the various maps produced in earlier exercises. A great deal of useful information can be generated by field checking or ground truthing maps prepared by fishers and professional cartographers.

Maps are most useful when they can be compared to maps of other areas and to maps of different scales. When their format is consistent, comparisons can show important similarities and differences between different management areas. Also, with a standardized mapping format, maps of small areas can be combined or joined together to produce maps of a larger management area, such as an entire bay. One format that has been used successfully divides the elements to be drawn on a map into five basic categories:

| Elements | Format |
|---|---|
| Habitats (estuaries and lagoons, coral reefs, mangroves, seagrass beds, beaches, etc.) | Various colors used to shade areas on maps when habitats are reported to exist |
| Resources (mammals, reptiles, finfish, invertebrates, seaweeds, etc.) | Arabic numerals (1,2,3…) placed over the location/s where the individual resources are reported to be found |
| Uses (gill net, spear fishing, reef gleaning, tourism and aquaculture, etc.) | Capital letter codes (T for traditional fishing, etc.) placed over the location/s where the specific uses are reported to take place |
| Issues (blast fishing, commercial fishing, pollution, mangrove clearing, etc.) | **IS** plus an Arabic numeral (1,2,3…) placed over the location/s where specific issues are reported to exist |
| Other features (boundaries of sanctuaries, use zones, municipal/barangay jurisdictional boundaries, roads, freshwater sources, river mouths, deep channels, etc.) | Various colors and line styles (dashed, dotted, solid, etc.) used to depict the location of other important features of the management area |

Mapping is best handled as a group exercise. Peer pressure and group consultation lead to a better understanding of terminology and more accurate location of map elements. When done, the maps can be compared with existing maps, such as National Mapping and Resource Information Authority (NAMRIA) maps. Since most fishers are good at mapping, comparing their maps to the NAMRIA maps is usually a positive experience as they see many similarities between their maps and the maps produced by experts. Much can also be gained from examining the difference between the local and expert maps. What usually result from this exercise are maps that are composites of expert and local perceptions and often more accurate and useful than either local or expert map considered separately. Expert maps can help with producing exact scales, overall distributions and consistent locations, while the locally drawn maps can add critical details and locally significant and relevant features that make them useful for CRM planning purposes.

For the purpose of producing a coastal environmental profile, it is often helpful to create new maps by combining and refining the various maps made by local resource users, and combining locally produced maps with maps produced by experts such as NAMRIA.

(Adapted from: *Participatory Coastal Resource Assessment: A Handbook for Community Workers and Coastal Resource Managers, By J.S. Walters, J. Maragos, S. Siar and A.T. White. CRMP, 1998*)

# THE CRM PROCESS
## *Database*
## *Overview*
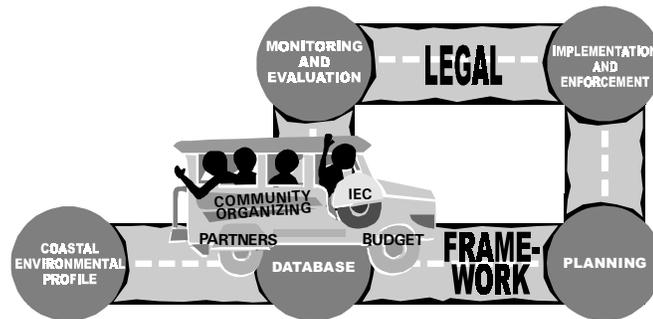


"Database" as used in this primer refers to the data management tools employed for CRM planning, monitoring and evaluation. A database is used to manage spatial and non-spatial data as well as time and non-time dependent variables. Two specific tools are described in this section: Geographic Information Systems (GIS) and the Municipal Coastal Database (MCD). The MCD is a set of information extracted from the coastal environmental profile and updated periodically to reflect changes in the indicators used and provide a measure to evaluate plan implementation and enforcement. The GIS, a computerized data management system, is a tool for analyzing geographically spatial data and their corresponding attribute information. Such data include some of the information contained in the MCD (extent of coral reefs, mangroves, etc.); analysis of spatial data using GIS can be used to provide information in the MCD.

Like any management decision, CRM decisions must be based on accurate and timely information. Given the wide range of often complex issues it covers, CRM generates and uses a large of volume of data. To be of any use to CRM planners, these data must be systematically managed for easy processing and retrieval. A well-maintained database and the ability to easily retrieve, efficiently update and effectively analyze information are key to making sound CRM decisions. Data management tools such as the GIS and MCD can also facilitate the exchange of information among the various players involved in the CRM process and thus provide a quick-response mechanism for addressing gaps in plan implementation and enforcement. In addition, they also serve to preserve or retain institutional CRM knowledge through any number of changes in administration.

Databases can only be truly useful if they are accurate and easy to retrieve, and if they are updated regularly. For CRM purposes, reports based on information contained in the database must be generated at least once a year so that the environmental impacts/outcomes of the program (e.g., changes in the state of the environment and socio-economic impacts) are sufficiently considered during the annual plan review and revision. Database systems must also include "data checks" to ensure an acceptable level of accuracy.

# THE CRM PROCESS
## *Database*
### *Geographic Information Systems*
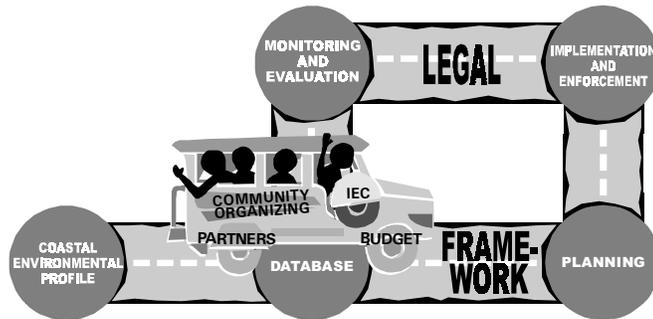


**what?** Geographic information systems (GIS) are computerized information storage, processing and retrieval systems with hardware and software specifically designed to cope with geographically referenced spatial data and the corresponding attribute information (tables, charts and statistics).

**why?** GIS has its limitations: the bewildering variety of hardware and software that are on sale in the market may hamper the development of a format and standards for the national data banks, and there's a lack of personnel trained in its use. But it provides many benefits in resource management and planning, including:

- Ability to integrate data of various types from a variety of sources
- Greatly enhanced capacity for data exchange among various disciplines and departments concerned
- Ability to process and analyze data more efficiently and effectively than can be achieved manually
- Ability to model, test and compare alternative scenarios before the proposed strategy is imposed on the real-world system
- Facility for efficient updating of data, especially graphic
- Ability to handle large data volumes

Establishing a GIS involves a large commitment of funds and resources. GIS service providers in the Philippines can be found in private companies, academic institutions and NGOs. It is advisable to explore the availability of a GIS service provider before committing resources and funding to developing a GIS system.

**how?** GIS can perform several functions: data collection, storage, manipulation, analysis and graphical presentation. There are essentially two types of data used in a GIS: one, the specific characteristics of a location (e.g., its slope, soil type, rainfall, etc.); and the other, attribute data (e.g., statistics or written text, tables and list of data). Many different types of software are available to process these databases, but, generally, GIS involves the following steps:

1. Maps are converted into a computer-compatible format
2. Selected information from the two kinds of data are combined and compared. It then becomes possible for the resource planner to examine the interrelationships between various data and get answers to many "what if" situations. Model building becomes scientific and realistic
3. Computer-aided mapping and database management support the data analysis of GIS

The most important feature of GIS is its analytic function. Various kinds of spatial analysis can be carried out in GIS. These include analyzing the areal extent of map classes; "point operation" type analysis through algebraic and topological overlays of multiple map layers; "neighborhood operation" type analysis relating the properties of points on a map surface with their immediate surroundings; and "network operation" type analysis using linkages and flows among linear features. The tools for spatial analysis available in many commercial GIS are varied. It is left to the ingenuity of the user to employ them, alone or in combination, to address specific problems. Many GIS software available come with macroprogramming languages which can be used to string all kinds of GIS operations together, thereby providing a tool kit with which the user can tailor-make application routines to meet specific needs.

The output of GIS could be in the form of maps (colored or in shades of gray), tables, graphs, statistical summaries and reports.

In evaluating the suitability of GIS for CRM planning purposes, one has to recognize the special features of the coastal zone which might place specific requirements on GIS, in terms of data model, structure and algorithms, and database management techniques. A complex and dynamic geographic entity, the coastal zone can be perceived as having four main characteristics:
1. *Breadth* refers to the width of the maritime influence on the land, and of the terrestrial influence on the sea.
2. *Depth* relates to the volume of water, with variable vertical distribution of currents and nutrients that influences fish and coral assemblages, and sediment dispersal
3. Coastal areas have "*fuzzy" boundaries*, i.e., the demarcation line between land and sea, and what is coastal and not at both the sea and land limits, are not well defined.
4. A wide array of spatial scales and resolutions is needed to represent *different processes and phenomena* in coastal areas. These range from the microscopic scale of chemical processes acting on sand and rocks of the intertidal zone, to those measured in tens, hundreds and thousands of kilometers (e.g., fishery licensing zones, shoreline retreat and accretion, areas of operation and fishing gear).

Ideally, selected GIS should be able to deal with these special features and complexities of the coastal zone.

(Adapted from:
*Integrated Framework and Methods for Coastal Area Management. Edited by Chua Thia-Eng and Louise Fallon Scura, Asean/US Coastal Resources Management Project Conference Proceedings 12, ASEAN, ICLARM, USAID. 1992*
*Training Manual on Integrated Coastal Management: Philippines, Vol. 1. Published by DA-BEAR, DENR-CEP, DOST-PCAMRD, HARIBON, ICLARM, and IIRR*)

# THE CRM PROCESS
## *Database*
### *Municipal Coastal Database*
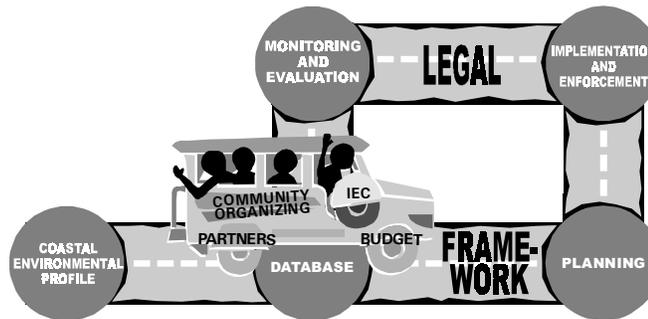


The Municipal Coastal Database (MCD) is a data management tool providing vital information for CRM planning, monitoring and evaluation. It was developed by the Department of Environment and Natural Resources (DENR) through its Coastal Resource Management Project (CRMP) which is funded by the United States Agency for International Development (USAID). The MCD is currently being implemented with assistance from CRMP in 40 municipalities and cities in Regions 4, 7 and 11.

The MCD was designed to help simplify and standardize the monitoring and evaluation of CRM activities at the LGU level for eventual widespread adoption by all municipalities and cities implementing CRM projects and activities. The overall purpose of the MCD is to:

1. Provide a common framework for LGU-based project monitoring and evaluation that can be jointly used by the LGU as well as assisting organizations and projects to monitor the status and evaluate the success of CRM-related interventions
2. Identify current status of CRM-related activities, including any information gaps
3. Facilitate the collection of information for use in CRM planning by LGUs and assisting organizations and projects

The MCD provides a measure to evaluate the progress and success of a CRM program based on "indicators" of key ingredients of successful and sustainable CRM programs. These indicators are summarized below

1. LGU budget allocated for CRM
2. CRM organizations formed and active
3. Best CRM practices (interventions) being implemented such as:
   a. CRM plans adopted
   b. Fisheries and coastal management ordinances implemented
   c. Environment-friendly enterprises established for coastal community members
   d. Coastal law enforcement units operational
   e. Marine sanctuaries functional
   f. Mangroves under community-based forest management agreements (CBFMA)
   g. Municipal water boundaries enforced
   h. Other habitat measures and open access restrictions in place

The MCD can be used by the LGU as a guide to implementing CRM programs as well as to report on progress made in managing municipal waters. It can also be used by assisting organizations and projects to plan, monitor, and evaluate technical assistance and training in CRM provided to an LGU.

*General data collection and validation procedures.* The information provided on the MCD form will be:

1. Completed and updated on an annual basis by the designated LGU Representative, assisted as needed by an assisting organization, project or national government agency site representatives. To the extent possible, available data will be collected for each year starting from at least one year prior to initiation of CRM-related project activities to establish "baseline" of pre-project conditions where applicable. This information packet contains a computer software that municipalities can use to make data management easier and faster.
2. Noted and submitted at the end of each year by the respective Municipal or City Mayor.
3. Validated by LGU offices (Municipal Agriculture Office or MAO) and Fisheries and Aquatic Resource Management Councils (FARMCs) and assisting organization or project staff.
4. Compiled and filed in an "LGU Blue Book," a reference file for the municipalities' CRM programs.

Please submit to CRMP for data processing and analysis a copy of the MCD, preferably the electronic file generated by the software provided in this packet, or, if this is not available, the original copy of the accomplished MCD form provided in this section. A copy should also be furnished to the municipality. Please send CD to:

The Coastal Resource Management Project-Philippines
5/F CIFC Towers
J Luna cor. Humabon Sts., North Reclamation Area
Cebu City 6000, Philippines
Tel. (032) 232 1821 to 22; 412 0487 to 89
Fax (032) 232 1825
E-mail: prccebu@usc.edu.ph
Website: http://www.oneocean.org

# THE CRM PROCESS
## *CRM Planning*
### *Overview*
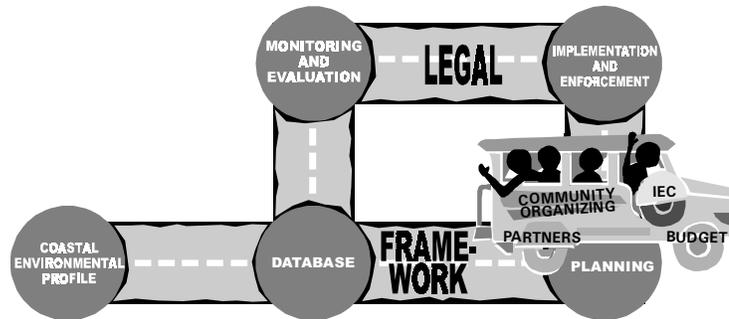


Planning is the process of organizing ideas and resources to make things happen and achieve an objective. It involves arranging actions so that they add up to a desired result. A plan expresses a detailed program of action designed according to existing policies and using a set of strategies. It spells out programs for meeting goals and objectives, indicating what actions will be carried out, when they will be carried out and who will ensure that they are carried out. A plan is a prerequisite to any form of management.

CRM planning is an activity to effect changes in human behavior, the state of the coastal environment or other results. In other words, CRM does not necessarily mean managing fish and reefs directly, but rather managing the activities of people affecting those coastal resources. Plans for CRM are inherently variable depending on their overall intended purpose. A CRM plan can arrange actions to solve very specific problems such as the degradation of a small mangrove forest. Or it may organize all the required actions to manage the coastal resources in one municipality covering 100 kilometers or more of coastline. It can lay out a work schedule for a project team for 3 months. Or, it can set out a series of goals, objectives, policies, strategies and actions which involve hundreds of people and their work for over five years.

Because CRM includes many, often complex activities, it requires careful planning. Without good plans, CRM cannot easily move ahead. A good plan represents experience, testing and ongoing actions which are working in the field. It makes implementation easy. Without a plan, implementation may not be effective, even when the objectives are firmly set and laid out. Objectives must translate into actions, and actions, once decided, requires people, money, time, organization, communication – and more – to implement. Careful planning will identify these needs and determine the best strategies with which to address them.

CRM plans are implemented to accomplish a broad range of objectives and strategies:
1. Maintain a high quality coastal environment – The coast is a major national resource, providing commerce, food, recreation, spiritual refreshment, and security. These values will not last forever without conservation.
2. Protect valuable species – Many coastal species need special protection. CRM can preserve their breeding and feeding areas through protected reserves and the use of regulations.
3. Conserve fisheries and critical coastal habitats – Habitats of special importance to species and the functioning of coastal ecosystems – mangroves, seagrass meadows, coral reefs, beaches, lagoons, and certain tidal flats – would be protected in CRM programs.

4.  Conserve critical ecological processes – Certain ecological processes are critical – supply of nutrients, penetration of light through the water, and water circulation – and need protection through regulation.
5.  Control pollution – Pollution from point sources and from land runoff as well as accidental spills of pollutants which foul coastal waters (human health problems and ecological disruption) would be addressed by CRM programs.
6.  Provide development guidance – Much of the ecological and scenic disruption of the coast is from inadvertent side effects of coastal development. A CRM program can provide advisory services to development entities to help reduce impacts.
7.  Identify critical lands – Certain areas of the coast have coastal habitats for recreation, housing, nature protection, economic development, etc. The CRM program can identify lands optimum for development and for nature.
8.  Restore damaged ecosystems – Many otherwise productive coastal habitats have been damaged but are restorable. CRM offers opportunities to identify and restore such habitats.
9.  Public Awareness – CRM can play an important role in creating public awareness of coastal values and needs for conservation.

CRM planning is ideally community-based and participatory. Communities as direct users are involved in the daily management of coastal resources. Their participation in planning and program implementation will lead to a stronger commitment during implementation, sustainable resource use and a higher degree of compliance. It will also develop the community's capacity to improve their quality of life and overcome the problems confronting them through their own efforts. Moreover, the top-down approach has been proven ineffective, primarily because of lack of participation of the beneficiaries in the planning process.

The planning process is not simply a sequential process. It can follow a variable path and where some things can come before others. Moreover, it is not a linear process but rather a cycle; the basic planning cycle continues to formulate plans once good information is available. Nevertheless, it is helpful to present the cycle in "phases", not only for discussion purposes but for the reason that, for any first-time plan, certain pieces are essential, otherwise it is not a plan! Done right, the planning process will help coastal managers sort out the actions needed, their timing, their level of support and who will implement them.

Every phase in the planning cycle consists of a number of activities, as shown below:
1. Plan Formulation
   a.  Necessary information and data on the physical, economic and social characteristics of the coastal zone are put together in a coastal environmental profile
   b.  A plan for public participation in the CRM process is prepared
   c.  Management problems (causes, effects and solutions) are analyzed and assessed
   d.  Priorities to tackle problems are set according to technical, financial and manpower feasibility
   e.  Feasibility of new economic development opportunities are analyzed
   f.  Coastal zone management boundaries and formulation of recommendations are considered
   g.  Institutional capacities are analyzed and assessed, and options for the interagency coordinating mechanism are developed
   h.  Recommendations for policies, goals, and projects are developed
   i.  Appropriate monitoring and evaluation systems are designed
   j.  Timetable, approach and division of labor are established

2. **Plan Adoption**
   a. Policies, goals, new management measures and initial projects are adopted
   b. The interagency coordinating mechanism is established. Typically a Technical Working Group (TWG) is convened to conduct community consultations and finalize the plan
   c. Staffing and organizational changes that may be required are approved
   d. Funding allocation for the CRM program is approved

All plans and management evolve from an information base. The better quality the information, the more realistic the plan. Obtaining reliable information is thus the first step in planning. Information and data of the following types are needed:
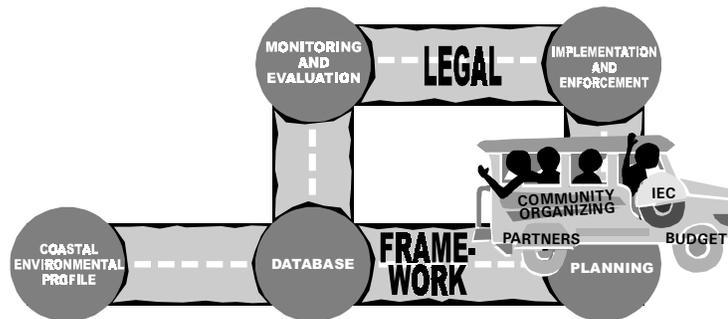1. Coastal resource base
2. Social organization in the coastal zone
3. Existing environment and resource-related programs
4. Insitutional, legal and financial capacity

The coastal environmental profile and municipal coastal database are important inputs to planning.

# THE CRM PROCESS
## *CRM Planning*
### *Forming CRM Organizations*



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

CRM organizations must represent the direct stakeholders of coastal resources, and, ideally, the different sectors affected by or can contribute to the CRM process as well. These include:
1. government agencies, both national and local
2. non-government organizations (NGOs)
3. government-owned and controlled corporations
4. academic institutions
5. private sector (business and industry)
6. people's organizations
7. community

For example, as provided by law (RA 8550 or the Philippine Fisheries Code), the MFARMC is composed of:
a. Municipal Planning and Development Coordinator
b. Chairperson, Agriculture/Fishery Committee of the SB
c. representative from the accredited non-governmental organization
d. representative from the private sector
e. representative from the Department of Agriculture
f. at least 11 fisherfolk representatives – 7 municipal fishers, 1 fish worker, and 3 commercial fishers – including representatives from the youth and women sector.

The formation of CRM organizations is part of the institutional arrangements that define the decision-making processes and bodies and the responsibility and accountability of individuals and organizations in implementing the CRM plan. Such institutional arrangements also provide the mechanism for CRM implementation.

As has already been said, CRM must be participatory and multi-disciplinary, and this is largely a function of the complex nature of the coastal environment itself. Functionally, the coastal zone is a broad interface between land and water where production, consumption and exchange processes occur at high rates of intensity. The varied economic activities in the coastal area makes managing coastal resources difficult. Also, management of economic activities is often sectoral in nature, so a host of institutions have jurisdiction over coastal resources and no single entity manages the coastal zone in an integrated and holistic manner.

Institutional arrangements for CRM, including the FARMCs, are therefore designed to integrate development among sectors, anticipate and avoid negative impacts, establish cooperative working relationships among the sectors, promote equitable sharing of resources and create implementable policies, plans and projects.

The following guide questions should be considered in designing institutional arrangements and, in particular, forming CRM organizations:
1. Who are the players and what are their roles?
2. Are the priority issues, main objectives and key strategies and techniques clear? Do the players have a consensus on these points and are they committed to plan?
3. How will the plan be implemented?
4. What will the composition of the highest decision-making body be? What are its powers and limitations of those powers? What are its responsibilities and accountability?
5. Who will be the lead organization and what are its competencies and responsibilities?
6. What are the competencies and responsibilities of other participating organizations?
7. What are the mechanisms for monitoring, enforcement and what are the sanctions?
8. Who will undertake the identified functions?
9. Who is accountable to whom?
10. What implementing structure will best suit the community's CRM requirements?

Other factors to consider are:
1. Implementability of the chosen strategies as these relate to the proposed implementing structure
2. moral, legal and administrative authority of the participating sectors or organizations to manage the program
3. representation of the primary players in the area
4. decision-making powers of representatives of the sector or agency; size and manageability of the structure
5. customs and traditions of the affected community; past lessons in effectiveness of implementing structures
6. commitment and capabilities of the sectors or groups involved
7. past local experiences that may impair the effectiveness of the structure.

Theoretically, anyone can initiate a multi-sectoral CRM organization. A memorandum of agreement by all interested parties formalizes its establishment. What is important is that the organization:
1. includes all agencies which have jurisdictional responsibilities over the resources, resource users which produce impacts on the resources, and others who are legitimately concerned with protecting coastal resources;
2. a consensus is reached about the use of resources, so conflicts can be resolved;

3. there is coordination, information-sharing and participation in planning (both sectoral and cross-sectoral), environmental impact assessment review of proposed development projects, construction permit review, and legislative hearings.

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