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Enabling Local Government Units to Exercise Their Regulatory Powers for Coastal Management

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Current and past coastal area management programs in the Philippines have pointed out that institutional weaknesses and unclear jurisdictional mandates are major problems in sustainable coastal resource management (CRM). The issue stems from the open access policy in Philippine fisheries and the sectoral and largely fragmented approaches of government agencies in addressing cross-cutting issues in sustainable development of the coastal area.

Institutional reform, mainly geared towards local autonomy over the management of coastal resources, started through the passage of the Local Government Code. Subsequently, the implementation of the Code should result in streamlining of development agency participation in local resources management programs which should now be jurisdictionally "owned" and holistically orchestrated by the local governments. Indeed, through the formulation and implementation of an integrated coastal resource management plan, a coastal municipality can take the lead role in improving national government agency (NGA) coordination and sharing in the conduct of sectoral work on resource management. In this case, a Local Government Unit (LGU) would serve like a conductor that cues in various musicians with his baton. Nevertheless, because the local government code is not "self-operating", an LGU needs to establish a strong legal framework from which local ordinances on resource management can be effectively legislated.

Unfortunately, experiences from past CRM projects revealed that majority of LGUs are unaware of their roles in CRM as much as they are about the roles of government institutions that have been tasked to assist them. The situation is exacerbated by the fact that jurisdictional directives and legal acts are historically issued on a sectoral focus.

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A. White

Village meeting in Palawan.

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editorial

TAMBULI—A Newsletter for Coastal Management Practitioners, is taking off. Our first issue received many supportive reviews and we have been inundated with requests for subscription. Most respondents have asked for more of the same which indicates you liked our first issue. In our efforts to bring a new focus and refreshing ideas to coastal management, you have an action packed and informative issue at hand.

In our first issue, you read about the declining status of coastal environments in the Philippines and gained some insights learned from past projects. Although lessons from the past are important guides, we must also be forward looking and creative in our thinking to solve the problems we are facing. CRMP would like to use this column to offer suggestions about how we might be more active in switching to a new paradigm for coastal management for the Philippines.

Several articles in this issue raise the question about how to encourage stewardship at the local level for managing resources. This question arises in relation to scale of fishing operations (small scale vs. commercial) and the use of space within municipal waters as discussed by Abad in the Fisheries Sector Program and McManus in Bolinao. Also, the review of laws by Francisco highlights the need for clarity in responsibility so that local resource managers can be effective. In our view:

- We should not wait any longer to ban commercial fishing boats from municipal waters (with a few exceptions) so that there is a clear incentive for LGUs to manage their own fishery resources; and,
- We should clarify national policies to minimize confusion (thinking globally) while supporting local field actions which are well articulated to make the difference in resource management (acting locally).

On a recent trip to Tubbataha Reefs (see page 26) with national media persons, it became obvious that more people should be encouraged to visit the reef so that appreciation and awareness of such a spectacular resource will be enhanced. This will certainly, in the long term, contribute to the protection of the park. Then, just recently, we heard a rumor that the Department of Tourism was thinking of banning all tourists from visiting Tubbataha. What is the logic to this proposed ban, if it is true, given that:

- Most of the damage to the reef at Tubbataha has been inflicted by destructive fishing methods. It is well known that the illegal fishers stay away from Tubbataha during the tourism season of March through May;
- The only sustainable source of revenue for managing the park is from tourism which is being shown to be a viable financing mechanism in many such parks around the world; and,
- The expense to protect these remote reefs is beyond what the national government can afford in the long term. Almost all financial assistance, to date, for the park has been from private (some tourism) sources.

Thus, in our planning with an eye for using sustainable mechanisms, why not let the international and national visitors to the park pay fees which will help defray the cost of park management. Some of the strongest supporters of coral reef conservation in the country and elsewhere are among this group.

This is what we mean by being forward looking in setting policies for coastal management in the Philippines which will achieve results. We need to use economic tools and allow private industry to help us pay for the cost of resource management. We must experiment with stewardship at a scale which makes a difference and is sustainable by removing the large scale fishing operations from municipal waters. We must clarify laws and policies in meaningful ways so that responsible agencies and individuals have a clear mandate to perform their duties.

These opinions may raise some questions. If so, we would love to hear from you, our readers, and get your ideas. The success of the newsletter and network depends solely upon your participation. As members, you can contribute by submitting:

√ Substantive articles on your experiences and research.

√ Examples of leadership in coastal management activities.

√ Short news articles on your field and work projects.

√ Publication which can be made known in the newsletter.

√ Letters or comments for publication.

√ Suggestions on how to make the newsletter and network more effective.

Finally, please note that if you receive this issue of TAMBULI, it does not mean you will continue to receive it without communicating with us. Please fill in the blank membership form (if you have not done so previously) to confirm your address and interest in the newsletter. This will ensure that you are current in the address database of the CRMP and that you will continue to receive the newsletter. We would also appreciate it if you would photocopy the membership form and share it with others.

Happy reading and we look forward to your contributions!

Editor

Enabling ***from page 1***

Recognizing the interrelationships between laws and conflicting resource use practices becomes even more difficult for LGUs in the absence of relative information. In view of this, the Coastal Resource Management Project (CRMP) made a compilation of all significant laws affecting CRM. It also consulted with the appropriate NGAs regarding their proper interpretation. Designed for use by local governments, the CRMP's Legal and Jurisdictional Guidebook for Coastal Resource Management in the Philippines will be an essential tool in shaping and reshaping local policies on CRM. Following are some of the more important legal and jurisdictional facts that would hopefully enable LGUs to more efficiently exercise their regulatory powers over the management of their coastal resources.

- Act 4003, enacted in 1935, already made unlawful the use of explosives and electricity in fishing, the catching of fish fry and gathering of fish eggs, and the pollution of waters by any substance deleterious to fish life. Under the same law, the establishment of closed seasons in fishing became the basic strategy for fisheries conservation (please see Box No. 1).
- In 1972, Presidential Decree (PD) No. 43, otherwise known as the Fishery Industry Development Decree, was promulgated to "accelerate the development of the fishing industry in order to achieve self-sufficiency in the supply of fish." Accordingly, investments in fisheries were classified as pioneering ventures under the Board of Investments. Three years after PD 43, PD 704 was issued to revise and consolidate all laws and decrees affecting fisheries and further reiterating the State's policy of integrated and accelerated development of the sector. In 1991, the Local Government Code expressly repealed Sections 2, 16 and 29 of PD 704. The Bureau of Fisheries and Aquatic Resources (BFAR) maintains, however, that the rest of the provisions of PD 704 which are not in conflict with the Code are still in effect and should be reflected in applicable LGU legislative agenda on fisheries management.
- Republic Act (RA) 7160 and Executive Order (EO) No. 116 effectively delimit the jurisdiction of BFAR to waters outside of the 15 km. municipal territorial boundary and to management of commercial fisheries and Fish-pond Lease Agreement (FLA) areas. Outside municipal waters,

BOX 1

The Transformation of Fisheries Management Policies: A Comparison of Act 4003 and PD 704

MANAGEMENT ASPECT	ACT 4003 (1932)	PD 704 (1974)
establishment of closed seasons	Secretary of Agriculture and Natural Resources **may establish closed seasons for not more than 5 years;** applicable to whole country or parts thereof	**"closed season" defined but not expressly provided;** PD 1015 (1976) revised Section 17 of PD 704 and provision for establishment of closed seasons was mentioned under commercial fishing boat license but not as detailed as that found in Act 4003
reserve fisheries and fish sanctuaries	under Act 4003, fisheries was divided into insular, municipal and **reserve fisheries**	under chapter V of PD 704, fish reserves and sanctuaries **may be established** by the Secretary upon recommendation of the BFAR Director through FAOs
prohibitive acts	use of explosives, poisonous substances, taking of fry and fish eggs, pollution of waters deleterious to fish life	renders unlawful both use and possession of explosives (as amended); use of poisonous substances; trawling in 7 or less fathoms deep; use of fine mesh nets; renders unlawful pollution of waters deleterious to fish life
protection of molluscs and sponges	provided penalties for unlawful taking of molluscs and sponges	provisions for marine molluscs and sponges were deleted
control of open access	not defined	not defined

BOX 2

Relevant Fishery Administrative Orders Still Enforceable Under the Local Government Code

FAO No. 3	1935	regulations for the conservation of *dalag* (Ophicephalus sp.), *kanduli* (Arius sp.) and *banak* (Mugil sp.)
FAO No. 11	1935	rules and regulations for the protection of marine mollusca
FAO No. 24	1949	regulations governing the scientific examination of fish caught or carried by fishing boats
FAO No. 60	1960	regulations governing issuance of fishpond permits or leases on public forest lands
FAO No. 110	1973	establishing the Laguna de Bay Fish Sanctuary
FAO No. 118	1975	establishing the Taal Lake Fish Sanctuary
FAO No. 122	1977	prohibiting the use of *pantukos* (tuck seine) under certain fishing conditions
FAO No. 125	1979	rules and regulations governing conversion of ordinary fishpond permits to 25-year FLAs
FAO No. 126	1979	prohibiting importation/possession of live piranha
FAO No. 127	1980	prohibiting the use of motorized push nets to catch *tabios/sinarapan* (family Gobiidae) in Lakes Buhi and Bato
FAO No. 128	1980	establishing a fish sanctuary in Oslob, Cebu to be known as Sumilon Island Fish Sanctuary
FAO No. 129	1980	ban on the catching, selling, possession of *Sabalo* (adult milkfish)
FAO No. 144	1983	rules and regulations on commercial fishing
FAO No. 151	1986	establishing the Manila Bay Fish Sanctuary
FAO No. 152	1986	establishing the Lake Buhi Fish Sanctuary
FAO No. 153	1986	establishing the Lake Bato Fish Sanctuary
FAO No. 155	1986	regulating the use of fine mesh nets in fishing
FAO No. 156	1986	guidelines for the effective implementation of Letter of Instruction 1328
FAO No. 157	1986	rules and regulations on the gathering, taking, removing, or collecting of *kapis* of the species *Placuna placenta* (window pane shells)
FAO No. 158	1986	prohibiting the gathering, taking, collecting, selling, transporting, possession of mollusks belonging to the genera *Triton* or *Charonia* and *Cassis*
FAO No. 159	1986	suspension of FAO Nos. 107 and 107-1 prohibiting the exportation of eel fry and fingerlings
FAO No. 162	1986	rules and regulations governing issuance of permits for exportation of live mud crabs *Scylla serrata*
FAO No. 163	1986	prohibiting the operation of *muro-ami* and *kayakas* (drive-in nets) in all Philippine waters
FAO No. 164	1987	rules and regulations governing operation of *hulbot-hulbot* (Danish seine) in Philippine waters
FAO No. 168	1990	rules and regulations governing the gathering, culture, and exportation of shelled mollusks (Phylum Mollusca)
FAO No. 170	1990	prohibiting the operation of *sudsod* (scissor net) in Panguil Bay
FAO No. 173	1991	banning the exportation of *bangus* (milkfish) fingerlings
FAO No. 176	1991	establishing the Tambulig Fish Sanctuary in Zamboanga del Sur
FAO No. 177	1991	establishing the Calauag Fish Sanctuary in Quezon
FAO No. 178	1991	establishing the Capoocan Fish Sanctuary in Leyte
FAO No. 179	1991	establishing the Batbangon Fish Sanctuary in Calangawan Island, Leyte
FAO No. 180	1991	establishing the Barugo Fish Sanctuary in Jalaba Point, Barugo, Leyte
FAO No. 181	1991	establishing the Perez Fish Sanctuary in Perez, Quezon
FAO No. 182	1991	establishing the Loculan Shoal Fish Sanctuary/Marine Reserve in Clarin, Misamis Occidental
FAO No. 184	1992	guidelines on the experimental collection of precious and semi-precious corals
FAO No. 185	1993	ban on the taking or catching, selling, purchasing, possessing, transporting and exporting of dolphins
FAO No. 188	1993	regulations governing the operation of commercial fishing boats using tuna purse seine nets
FAO No. 189	1994	prohibiting the importation of live shrimp and prawn of all stages
FAO No. 190	1994	regulations governing *pa-aling* (modified *muro-ami*) fishing operation in Philippine waters

there are at least two other cabinet departments which have CRM in their mandates, the Department of Environment and Natural Resources (DENR), by virtue of EO 292, and the Department of Science and Technology-Philippine Council for Marine and Aquatic Research and Development (PCMARD) through EO 128. Both the Department of Agriculture (DA) and DENR are involved in the establishment of marine protected areas, community organizing and coastal rehabilitation. PCMARD is involved in similar activities. The seemingly plural efforts has now been sequestered under the local government code; apart from devolving all such functions to the LGUs, Section 1-c of the Code requires all NGAs to consult and seek approval of an LGU before any project can be implemented within its jurisdiction. A typical application of this provision is that an LGU can now establish a marine reserve or sanctuary within its territorial waters without

seeking approval from the DA Secretary. On the other hand, if the BFAR or the DENR wants to establish a protected area in municipal waters, it has to seek approval of the concerned local government.

- The Secretary of Agriculture, through the recommendation of the Director of BFAR, has issued some 190 Fisheries Administrative Orders (FAO) ever since it acquired the jurisdictional authority to promulgate administrative orders in 1935. These FAOs involved mostly gear regulation, protective measures for certain species of fish and marine mammals, and the establishment of closed seasons, reserves and sanctuaries for certain species of fish or for specified fishing grounds. With the passage of the Local Government Code, BFAR states that only 50 of these FAOs subsist at present (the more relevant FAOs still enforceable inspite of the passage of the Local Government Code is presented in Box No. 2). Parallel laws, mostly for the establishment of protected areas exist through various Presidential Proclamations and more recently, through the DENR's National Integrated Protected Areas System (NIPAS). These laws remain substantive and cannot be contradicted by local ordinances. For example, in issuing licenses for the harvesting of capiz shells, an LGU should impose the restrictions provided for in FAO 157 on the licensee's permit. In permitting the operation of set nets, the license should conform to the restrictions imposed by FAO 155 on the use of fine meshed nets.
- Accordingly, since it is now the function of the local governments to enforce fishery laws, it becomes incumbent that the LGU's law enforcement efforts shall encompass both local ordinances, subsisting FAOs, and related DENR orders.

Policy directives and instruments emanating from the DENR mainly deal with mangrove management, coastal land use and the management of protected areas under the NIPAS. These come in the form of DENR Administrative Orders (DAO) which are essentially the implementing rules for PD 705 (Forestry Code) and the Philippine Environment Code. Some of the more relevant orders which are often used to address many issues on mangroves and coastal land uses are:

- DAO 15 (1990) contain the bulk of administrative orders about mangrove resources management. Among others, it issued a moratorium on the issuance of timber licenses covering areas outside FLAs; banned the cutting of trees within FLA areas; and prohibited further conversion of thickly vegetated mangrove areas into other land uses.
- DAO 85 (1990) is a typical application of the "polluter pays principle" as it imposes fees on mine tailings and wastes to compensate for damage to lands, agricultural crops, forest products, marine life, aquatic resources and the destruction of infrastructure which are privately owned. The principal legislative acts that broadly regulate the mining industry are RA 7942 or the Philippine Mining Act of 1995 and RA 7076 which created a small-scale mining program.
- The NIPAS which is being administered by the DENR-Parks and Wildlife Bureau was promulgated after RA 7160 and has not been superseded by the provisions of the latter law. In this regard, protected seascapes declared under NIPAS will continue to be under the jurisdiction of the DENR and role of the LGUs in cases where the protected areas are located within a local government territory is limited to their representation in the Protected Area Management Board (PAMB).

The Philippine Environmental Impact Assessment system (EIA) was designed to serve as a forward-planning and precautionary mechanism in the implementation of development projects in any given area. The EIA was initiated through PD 1586 in 1978. Its implementing guidelines are found in DAO 21, s.1992 and a programmatic approach to EIA compliance was introduced through DAO 11, s. 1994. Under the system, projects requiring EIAs are classified as either environmentally critical or located in an environmentally critical area. The following are classified as environmentally critical projects:

- heavy industries; including non-ferrous metal industries, iron and steel mills, petroleum and petrochemical industries, smelting plants;
- resource extractive industries; including major mining and quarrying projects, forestry-based products (including extraction of mangrove products), fishpond development projects;
- infrastructure projects; including major dams, power plants, reclamation projects, major roads and bridges.

The following are classified as environmentally critical areas:

- all areas declared by laws as national parks, watershed reserves, wildlife reserves and sanctuaries;
- areas set aside for aesthetic purposes or as potential tourism areas;
- areas which constitute the habitat of any endangered species of flora and fauna;
- areas of unique historical, archeological or scientific interests;
- areas which are traditionally occupied by cultural minorities or indigenous tribes;
- areas frequently visited by and/or are hard-hit by natural calamities;

- areas with critical slopes or are classified as prime agricultural lands;
- recharged areas of aquifers;
- water bodies, mangrove areas, coral reefs.

All projects, whether government initiated or privately owned, that are classified either as environmentally critical or are to be located in an environmentally critical area shall be subjected to the EIA system.

The list of laws applicable to CRM are numerous and varied. There may be some ambiguities on some aspects but on the whole, they are potent tools for LGUs in the exercise of regulatory powers either directly or through the enactment of complementary ordinances. In short, there is at present, a sufficient policy framework for CRM legislation at the local level. Ironically, if we are to gauge from the present state of the fishery resources whether such a policy framework has been utilized successfully to sustain optimum productivity, there seems to be enough evidence that some very serious deficiencies exist either in the process of policy formulation or implementation, or both. In fact, the fisheries of the country has continued to lose its economic integrity, particularly during the last two decades. The difficult task of arresting degradation is the duty of LGUs as they are closest to resource use activities.

Many CRM practitioners argue, quite logically, that the sustainable management of the country's fisheries cannot be effectively addressed until the open access regime is reversed. The open access policy in both municipal and commercial fisheries was inherently applied in Act 4003 and continued to be the basic instrument for licensing of fishing effort in PD 704. In the Local Government Code, open access to municipal waters has not been expressly inhibited but by invoking preferential use rights for local fishermen, the Code essentially promotes a limited entry regime. The transformation of open access fisheries is being advanced actively under the CRMP where the concept of maximum sustainable yield is being promoted as the basis for fishing effort regulation in numerous fishing grounds in the country. The approaches to this shift in management is a complex process, in the face of the pervasive poverty in coastal communities and the lack of alternative sources of income for small fishermen who ironically continue to grow in number despite decreasing returns. Nevertheless, there appears to be little alternative to the option of changing the open access fishery into one that is controlled and managed according to sustainable yields. And while there is no provision in PD 704 that clearly supports this management strategy, the autonomy granted to LGUs to manage their municipal territorial waters under the Local Government Code has been considered a sufficient legal instrument to back up such a regime. Moreover, controlled-entry fisheries is espoused in the various bills now pending in both legislative houses of the country, although they vary in the scope and degree of effort regulation.

Experience points out that the mere promulgation of policies and other legal instruments to control resource use practices cannot readily lead to sustainable management of fishery resources unless these are combined with an equally effective institutional enforcement mechanism and popular education to shore up acceptance. In the context of Philippine local governments, many other socio-political variables affect policy formulation and moreso, implementation. The complexity of these variables, their effect on the legal framework for CRM, and the seeming lack of jurisdictional arrangements to carry out policy measures, presents a formidable task under CRMP's policy component. Although flaws in the process exist, there is a compelling need to find appropriate means to improve the policy climate.

CRMP began its policy related activities in November 1996 by collecting all laws relevant to coastal resources. Through workshops and technical working groups, laws were dissected to determine deficiencies and incongruities, either in terms of jurisdictional mandates or differences in legal interpretations. In less than three months, a substantial headway has been made in coming up with a set of jurisdictional guidelines for CRM that can be universally and confidently used by all practitioners of coastal resource management. CRMP recognizes, however, that the ultimate key to shoring up support to rules and regulations and ensuring compliance in the long run is CRM education. It is because of this important factor that the CRMP's policy component is building up its jurisdictional and legal approaches to CRM implementation in tandem with the project's information and education component.

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Community Organizing in the Fisheries Sector Program: Lessons Learned

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The Fisheries Sector Program (FSP), administered by the Department of Agriculture (DA) between 1990 and 1996 with loan funds from the Asian Development Bank, aimed to solve five most pressing problems of the fisheries sector in the Philippines, namely: (1) resource depletion in the coastal zone; (2) widespread environmental damage; (3) poverty among the fisherfolk; (4) low productivity of aquaculture; and (5) limited utilization of offshore and exclusive economic zone waters by Philippine commercial fishers. In line with this, one of its components, Coastal Resources Management (CRM), had the following socio-economic and environmental objectives: (1) alleviation of poverty in the coastal communities, particularly among sustenance fishers; (2) protection of the coastal environment; (3) rehabilitation of destroyed habitats; (3) regeneration of depleted resources; and (4) sustainable management of the coastal resources.

To support the FSP's CRM component, non-government organizations (NGO) such as the Economic Development Foundation (EDF) have been contracted by the DA. Their role was detailed in stated objectives, among which were: to assist the fishing communities and local government to develop the capability to plan and implement CRM that will rehabilitate the coastal fisheries; to conduct public education on CRM; to organize, train and institutionalize *barangay* (village) and municipal CRM committees; and to organize and train fisherfolk cooperatives.

EDF was contracted between January 1993 and September 1997 to organize such committees and cooperatives in a total of 181 coastal barangays in 3 out of the 12 FSP-covered bays, Ormoc, San Pedro and Sogod Bays.

The **Barangay CRM Committee** (BCRMC) formulates a CRM plan based on the community profile. The barangay coastal resource profile was prepared by a research committee which consisted mainly of EDF's community development worker and barangay volunteer workers. After obtaining relevant data from secondary sources, surveys (socio-economic surveys of fishers, interviews of key barangay personnel and focus group interviews) were conducted to obtain primary data. Data were compiled, analyzed and presented to the barangay for validation. The coastal profile obtained through this process was used in the formulation of the CRM plan.

Included in the plan are suitable barangay and municipal ordinances (e.g., ban on various destructive fishing methods as well as the designation and protection of fish sanctuaries and marine reserves where appropriate) for promulgation by respective municipal councils and resource conservation and rehabilitation projects as recommendations to the Local

Government Units (LGU) for the protection and sustainable management of coastal resources. For habitat rehabilitation, the plan promotes mangrove reforestation and/or establishment of artificial reefs. The implementation of the plan is also monitored and evaluated by the BCRMC.

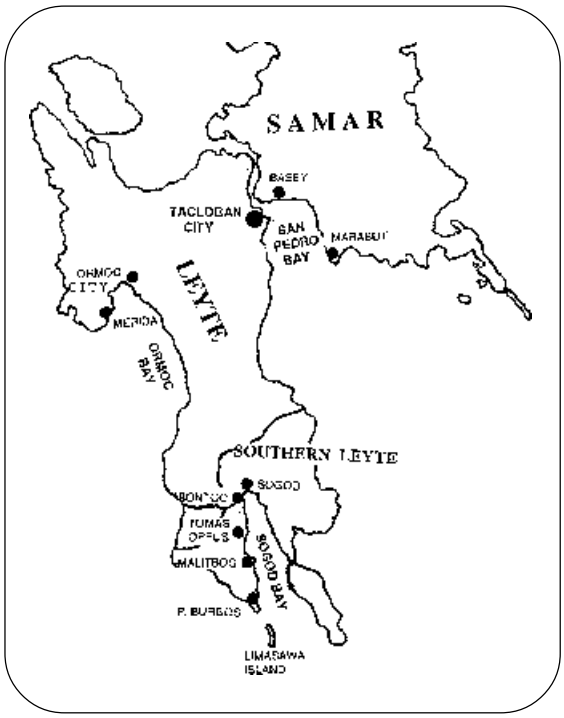
To become managers of coastal resources, fisherfolk in each barangay were guided to form an association which was eventually registered with the Cooperative Development Authority (CDA) as a **cooperative**. The process began with the formation of a core group which recruited more members and initiated the formulation of the association's articles of cooperation and by-laws. The expanded membership ratified the articles and by-laws and elected officers who, with EDF's assistance, prepared and submitted to CDA the required registration papers.

Training on the knowledge, skills and attitudes required for cooperative management included leadership, team-building and organizational skills; participatory development planning; simplified financial and accounting systems; project feasibility studies; and problem solving and decision making. Training in fisheries-related laws and ordinances and in the knowledge and skills for managing fish sanctuaries, mangroves and artificial reefs was also provided.

Self-help projects financed from the members' contributed funds were initiated by each association so members could experience cooperative benefits. Most barangay associations opted to establish a cooperative store. These stores provided on-the-job training and increased the fisherfolk's net incomes by reducing their expenditures on consumer items which they purchased from commercial centers at volume discounts. Alternative livelihood projects were encouraged by the new cooperatives, partly to alleviate poverty and partly to relieve the fishing pressure on the bay.

Water-based projects were explored since research showed that fishers had practically no agricultural land. Small-scale aquaculture projects made affordable to the low-income fisherfolk were designed, e.g., seaweed farming, fish culture, crab fattening in small cages and oyster and mussel culture. Where a project was found suitable, the concerned fisherfolk association, with financing from its own members or EDF, started a demonstration farm to test the project's technical feasibility. Most project types were found to be technically feasible and their produce marketable. The main problem however, was financing. Since the fisherfolk had a hard time raising even a little capital needed for registering their association with CDA, much less could they raise sufficient funds to put into livelihood projects of a scale larger than for demonstration. They also could not avail of bank loans which required collateral.

Land-based livelihood projects were also considered by the various cooperatives organized under EDF's guidance. Among the small projects selected were: hog fattening, poultry broiler or egg production, cattle fattening, vegetable production, rice trading, rice mill, and motorized sea or land transportation. The fisherfolk had difficulty obtaining bank loans for these projects as well.



EDF PROJECT SITES IN REGION VIII.

Lessons Learned

In the course of EDF's technical assistance in the three Eastern Visayas bays, the above objectives and outputs were generally achieved. The lessons learned in this development process follow:

1 A CRM committee at the barangay level is, indeed, useful.

A CRM committee was organized in each barangay, consisting of two Barangay Development Council members and three fisherfolk representatives. Each committee was responsible for formulating a CRM plan for its barangay.

Organized before Executive Order No. 240 on 28 April 1995, the CRM committees could have easily evolved into the Fisheries and Aquatic Resource Management Councils (FARMCs). The FARMCs—at least $^{3}/_{4}$ of whose regular members should be local

municipal fisherfolk—were to be created, "in all barangays, municipalities and cities abutting municipal waters" to "prepare and recommend fisheries and aquatic resources management policies and plans for integration into the Local Development Plan." They can also recommend "guidelines on the development and implementation of projects, and issuance of permits and licenses for the appropriate use of fisheries and aquatic resources" to the local government units. The FARMC members shall also "be deputized as fish wardens, and environment and natural resources officers." These functions are similar to those of the CRM committees.

A public information and education campaign on the FSP-CRM preceded the committees' establishment. However, this campaign continued throughout EDF's contract period through dialogues with community members, posters, billboards, T-shirt printing and song composition contests.

2 There is a need to form fisherfolk cooperatives and initiate livelihood projects.

The cooperative, organized by the fisherfolk, addresses the objectives of sustainable resource management and of poverty alleviation. A well-organized cooperative provides strong advocacy for fisheries ordinances and monitors their implementation. It can also develop livelihood projects to increase the net income of its members as well as reduce the fishing effort on the already depleted bays.

To learn cooperative management, each cooperative is encouraged to start a self-help project, often a store. EDF guided each cooperative to identify and study sources of credit for an alternative livelihood project so that the fisherfolk would not rely solely on fish capture as a source of income. These barangay-level cooperatives were then assisted to form a municipal federation to further strengthen and unify them.

3 Getting the right personnel is important.

Only the best available in the region were hired as community development workers and administrative staff. They underwent formal training as well as constant supervision and on-the-job coaching in the various aspects of organizing and training communities for CRM.

4 There is a need for networking with the LGUs.

EDF's community organizing strategy supports cooperative relations with LGUs. The project management team, when starting in a locality, pays courtesy calls to municipal mayors, barangay captains and respective councilors to inform them of the project and seek their support. The team periodically gives them updates on accomplishments. New cooperatives are also linked with their respective LGUs to build long term relationships between them to ensure sustainability of institutional support.

5 Delayed payments cause adverse impacts.

EDF submitted reports on schedule, but it took the DA several months to process payments. This resulted in the postponement of training activities and low morale, to the extent of resignation of trained staff in several cases.

6 The seeming inflexibility of lending policies may be a hindrance to project implementation.

A case in point was the hog fattening project of the Multi-purpose Development Cooperative in Padre Burgos (Southern Leyte). The cooperative applied for a loan at the Land Bank. Although, the loan amount needed—with the purchase price of piglets discounted at P1,500 per head and DA veterinary services provided free—had been evaluated, approved and endorsed by the Field Implementing Team as P2,500 per head, the Land Bank would not budge from its loan ceiling of only P2,000 per head. The cooperative therefore, opted not to avail of the loan.

Twenty-six other fisherfolk cooperatives from Basey and Marabut (Samar) and Merida (Leyte) submitted feasibility studies to the Land Bank, but as yet, have not received Land Bank's approval nor comments.

Loan ceilings determined for particular types of projects may not be applicable for certain areas or at a later time if inflation occurs. Yet, the Land Bank applies them universally despite well-researched feasibility studies.

Conclusions and Recommendations

Community organizing is a very effective strategy towards continued pursuit of project objectives and the sustainability of project effects. Towards this end in the FSP-CRM project, EDF endorses the organization of the Barangay CRM Councils and the fisherfolk cooperatives.

The *BCRMC*s (or FARMCs) were largely instrumental in assuring

the success of the FSP-CRM project as it focused on the responsibility of "thinking CRM" for a barangay, city or municipality. Although, it has no legislative nor executive authority, a BCRMC is a locality's think-tank, spark-plug as well as eyes-and-ears for CRM. It thinks of barangay or municipal ordinances to be recommended for the protection of coastal resources as well as conceives of projects for the rehabilitation of damaged or destroyed resources. It monitors compliance with ordinances as well as the implementation of projects. It is the forerunner or nucleus of the FARMC.

Fisherfolk cooperatives are a very good medium for making resource managers out of resource users. Cooperatives mobilize primary users to manage the coastal resources. Made aware of the ill effects of destructive fishing methods, for instance, fishers renounce the use of such methods as well as prevent others from using them. Fishers also try to rehabilitate fish habitats through the reforestation of mangrove areas and the installation of artificial reefs.

The LGUs' support is essential. During the NGO contract period, the LGU can either hinder achieving project objectives or give it full-hearted support. With support, the project can achieve results that are beyond expectations. More importantly, the LGU can sustain the positive impacts of the project.

Because of the importance of continued coordination with and support by the LGU, both at the barangay and municipal levels, EDF recently had an end-of-project evaluation after about 30 months of community organizing in 38 coastal barangays of 4 municipalities. Representatives, comprised mostly of municipal committee chairpersons for agriculture and cooperatives of the LGUs and the chairperson of the "federation" of cooperatives from each of the municipality, participated at an evaluation workshop.

Checking the growth of groupers (Lapulapu) (Marabut, Samar, December 1994).

At the workshop, each municipal team, composed of the two community representatives and EDF's community development workers and municipal coordinators, reviewed project accomplishments, especially the barangay CRM committee (BCRMC) and the fisherfolk cooperative; assessed their continued viability or sustainability after the expiration of the EDF contract; and formulated recommendations for future actions by respective LGUs and fisherfolk cooperatives. This evaluation workshop helped link the LGUs to the locally formed institutions for long term support and guidance.

The Land Bank's revision of policy guidelines for loans to subsistence income-earners is strongly recommended. Otherwise, municipal fisherfolk will forever be barred from credit, even from government financial institutions which are tasked to give them special assistance in credit.

Loan interest rates that are high and loan collateral requirements that are stringent are already tough barriers for marginal fisherfolk to hurdle in order to obtain a loan for a livelihood project. But loan amount ceilings that are unrealistic such as for the above-mentioned hog-fattening project are additional hurdles.

The Department of Agriculture's **prompt payment for services** provided and reported by NGOs according to contract stipulations **are important for the project's and program's success.** Delayed DA payments have two major negative ripple effects on project implementation, i.e., postponed training and delayed salary payments.

[The FSP has provided a magnitude of lessons on CRM, not the least of which is that meaningful community development is essential to engender resource stewardship. FSP also shows the critical need to develop local economies less dependent on coastal resources. Editor]

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A Common Vision for Sustainable Coastal Resource Management

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Introduction

Coastal resources and the habitats that nurture them provide the underlying foundation for human welfare and economic development in coastal communities in the Philippines. This inherent economic value leads to coastal resource utilization and exploitation. Fisheries are harvested with the most efficient methods to catch all that can be caught with the least effort. Development in coastal areas is promoted by the availability of coastal waters, which also serve as inexpensive discharge sites for "treating" industrial and urban wastes.

Coastal resource utilization leads to two paths (Figure 1), destruction: the state of being ruined, eradicated, or killed; or sustainability: the ability to maintain and keep in existence. The path of destruction or the path of sustainability are choices made by people. These choices arise daily resulting in decision points that lead down one path or another. In the case of Philippine upland forests, these resources were, over time, exploited and for the most part eradicated. The same path of destruction is occurring in coastal areas. Overexploitation of fisheries and degradation of coastal habitats and coastal water quality is destroying the ability to sustain the value of coastal resources. People must decide on the path of sustainability to change the course of destruction.

Resource Utilization Pathway

Choosing the path of sustainability hinges on many factors. One crucial factor is leadership. The path to sustainability is highly dependent on the right knowledge and skills and strong capability of leaders supported by political will to pursue sustainable development goals. Leadership is needed to mobilize people with diverse interests, cultures, and priorities to change direction from the current path of coastal resource destruction to one of sustainable resource use. Only through strong leadership and a vision shared and actively promoted by coastal communities, local and national governments, and other coastal stakeholders, can the long term goals of sustainable coastal resource use weather fluctuating political and socio-economic storms.

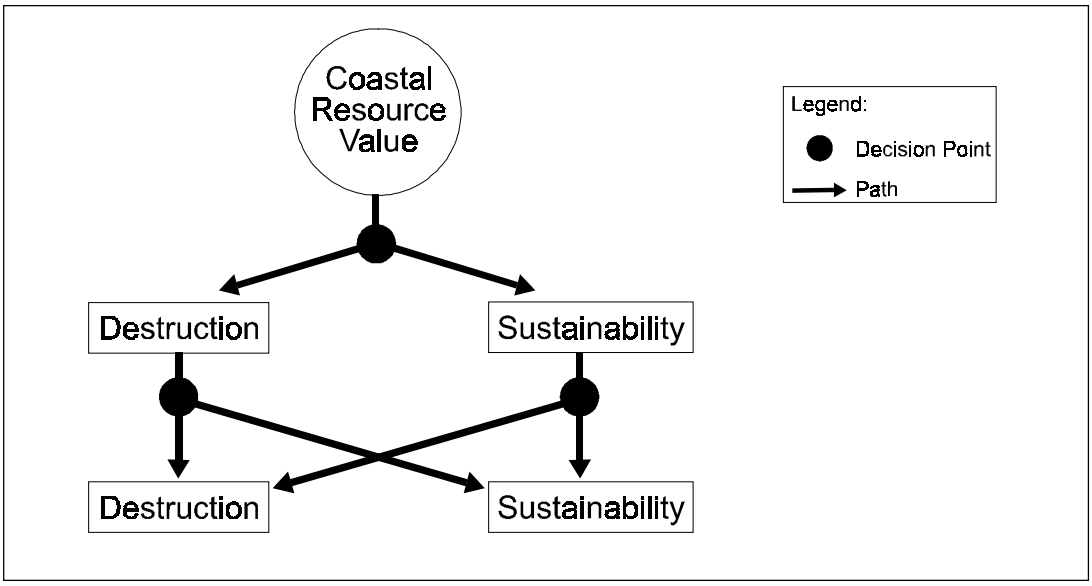


FIGURE 1. RESOURCE UTILIZATION PATHWAY.

Leadership has been described and defined in many ways; however, one essential ingredient is a vision that will enlist the support and commitment of others to effect change. A vision is an image of the future that conveys an ideal or desired condition, a purpose that represents the common good. Developing and communicating this vision and enlisting support from a large audience is a crucial step toward sustainable coastal resource use. A vision statement serves as a compass enabling people to make day-to-day decisions that are consistent with that vision and to stay on the path of sustainability.

"If we do not change the direction in which we are headed, we will certainly end up where we are going."
-Anonymous

Coastal Resource Leadership Challenge

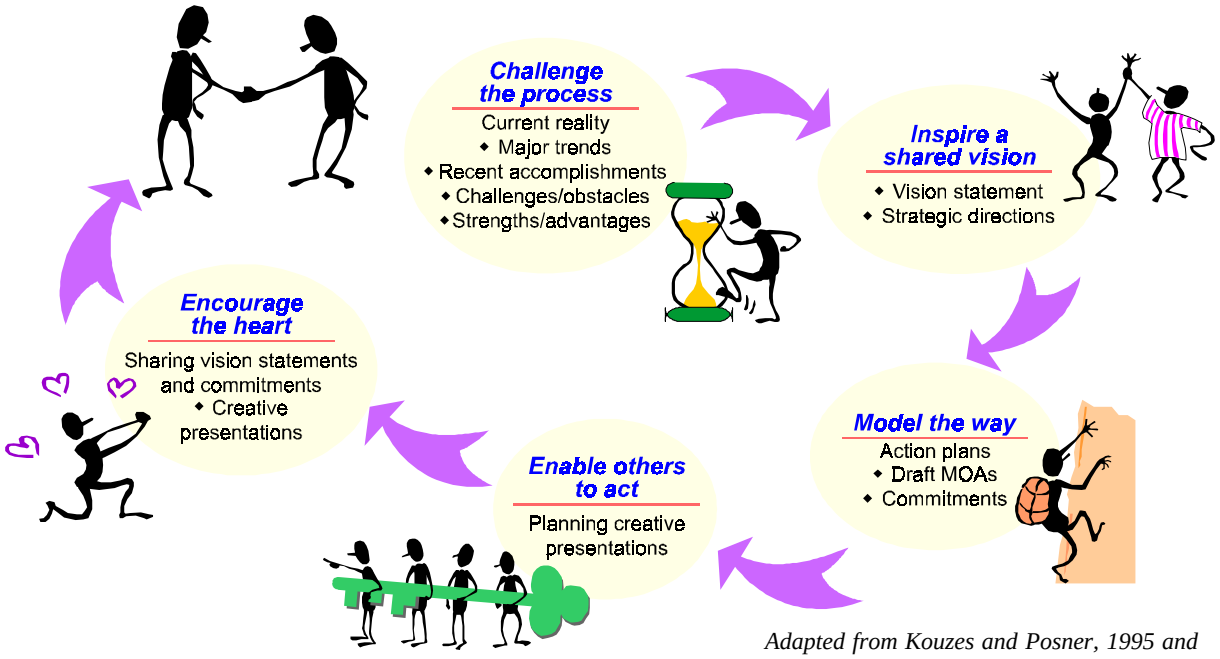
The Coastal Resource Management Project (CRMP) identified the need for an approach that combines leadership practices with technical skills on coastal resource management (CRM). This approach seeks current and future leaders and promotes informed decision making on sustainable coastal resource use to effect large-scale positive changes in human behavior in managing coastal resources. The Coastal Resource Leadership Challenge (CRLC) was developed to assist coastal communities identify leadership opportunities in CRM.

CRMP hosted three CRLCs in September through October 1996 in Regions 4, 7, and 11. The participants represented 29 coastal municipalities in 6 provinces including Palawan, Negros Oriental, Bohol, Cebu, Davao del Sur, and Sarangani. Over 300 participants representing local government units, community members, assisting organizations including, non-government organizations and academe, and national government agencies attended the CRLCs.

The CRLC process (Figure 2) was developed as a collaborative effort between two USAID-funded projects, CRMP and Governance and Local Democracy. The process integrates a leadership philosophy, based on the five practices of effective leaders described by Kouzes and Posner (1995), and a technology designed to maximize participation, the Technology of Participation (TOP), developed by the Institute for Cultural Affairs (1994). Kouzes and Posner (1995) promote the concept that leadership can be learned and practised. The five practices described by Kouzes and Posner (1995) are: *challenge the process, inspire a shared vision, model the way, enable others to act,* and *encourage the heart.*

"One doesn't discover new lands without consenting to lose sight of the shore for a very long time."
-Andre Gide

As a first step, participants, grouped by CRMP learning area, challenge the process by openly sharing their experiences and views on the current realities about coastal resources and uses in their



Adapted from Kouzes and Posner, 1995 and The Institute of Cultural Affairs, 1994

FIGURE 2. COASTAL RESOURCE LEADERSHIP CHALLENGE PROCESS FLOW.

areas. These realities are grouped into four categories: major trends, recent accomplishments, challenges and obstacles, and strengths and advantages. Participants summarize their thoughts into phrases which are posted and through a participatory process, grouped into common themes. Headings for each grouping are developed to summarize the key aspects of each group into categories.

Based on an assessment of the current reality the group develops a vision statement that embodies an ideal goal and common purpose. Action plans are developed from the vision statement with tangible and attainable goals and objectives for a 1- to 5-year planning horizon. The vision statement and action plans become the road maps for informed decision-making.

Action plans have been operationalized through Memoranda of Agreement (MOA) between CRMP and the municipality and province that commit tangible tools to implement the action plans through funding and providing other resources for CRM activities. Opportunities for communication and information exchange is facilitated throughout the CRLC process to foster collaboration and team work. Creative group presentations provide opportunities for groups of participants to practice working together as a team and to communicate a shared vision with participants from other coastal areas.

As a result of the CRLC process, major themes in the current reality of coastal resource management emerged from the responses of the participants. These responses were categorized into key areas and ranked according to frequency of responses (see Table on page 14).

Characterizing Major Trends

Increasing development and investment that would lead to unsustainable coastal resource use was identified by the participants as a major trend. Rapid industrialization in coastal communities is occurring without proper consideration of the environment and coastal resource management. The impact of the growing human population on limited marine resources exerting extreme pressure on coastal resources was also identified as a major trend. Urbanization resulting from population growth and migration to urban areas will increase pollution and stress on coastal habitats. The rapid rate of marine resource depletion and degradation in the Philippines was recognized as an ongoing trend resulting from worsening poverty and pollution resulting from rapid agro-industrialization. Key positive trends identified included the increasing community awareness and support for CRM and devolution of responsibility for municipal waters to the LGU.

Documenting Recent Accomplishments

Key areas documented by the participants as recent accomplishments included: increased institutional capacity, better multisectoral coordination, more effective coastal law enforcement, development of better planning and monitoring information, improved CRM laws and policies, and implementation of certain CRM interventions.

Identifying Challenges And Obstacles

Jurisdictional issues between local government units (LGU) and national government agencies present obstacles in implementing CRM. These obstacles are rooted in confusion over the level of devolvement of responsibilities for CRM to LGUs and the need to enact local legislation to resolve these jurisdictional issues.

The overall lack of funds, resources, logistical support, and equipment for coastal resource management was identified as a major obstacle to CRM implementation at the municipal level.

A recurring obstacle identified by the participants is the lack of political will or leadership for sustainable CRM. Conflict of interest, lack of political support, and political opposition represent the key elements contributing to the lack of political will.

Recognizing Strengths And Advantages

Participants recognized strengths and advantages that could be used to achieve the pursuit of sustainable value of coastal resources. The current high degree of community organization and participation was viewed as an important aspect in forwarding CRM goals. Empowering the day-to-day resource users in coastal resource management was viewed as an essential ingredient to sustainability and grass root support.

Heightened interest from foreign donors in coastal resource issues helps provide needed technical assistance to increase the capacity of LGUs to implement coastal resource management.

Participants recognized the value of strong political leadership in affecting change in current coastal resource use. In some areas, individual political leadership has been a key driving force toward sustainable CRM, testimony to the fact that one individual can make a difference.

The value of the remaining marine resources was recognized as an advantage that cannot be lost. A general optimism prevailed in that it is not too late to act.

Sharing A Common Vision

Based on the current realities, participants developed a practical vision for each learning area. Vision statements were shared by the participants (see text box) grouped by learning area. A pervasive theme in all the vision statements highlights the importance of active community participation and empowerment and of balance and harmony of that community with its coastal resources.

Committing to Action

As a final step in the CRLC process, commitments were made toward achieving the vision based on the vision statement and action plans developed by the participants. Committing real effort, resources,

CURRENT REALITY OF COASTAL RESOURCE MANAGEMENT: MAJOR THEMES

Challenges/Obstacles	Rank	Strengths/Advantages	Rank
• Institutional capacity of LGUs to implement CRM	1	• Technical assistance from foreign donors	1
• Legal and jurisdictional issues over coastal resource management	2	• Community organization/participation	1
		• Institutional support	2
• Political issues and conflicts	2	• Political leadership	2
Number or responses = 116		Number or responses = 77	
Recent Accomplishments	**Rank**	**Major Trends**	**Rank**
• CRM laws and policies	1	• Development/industrialization	1
• CRM interventions	2	• Marine resource depletion/ degradation	2
• Institutional capacity/support	3		
• Coastal law enforcement	4	• Population growth	2
• Planning and monitoring data collection and compilation	4		
• Multi-sectoral coordination	5		
Number of responses = 86		Number of responses = 89	

A Common Vision for Sustainable Coastal Resource Management

"Towards a unified directed effort for total coastal community empowerment for a sustainable coastal resource management" - *Bohol Learning Area*

"To attain a quality future with an ecologically conscious and active community towards prosperity in harmony with environment" - *Cebu Learning Area*

"A sustained, restored and productive marine resources of Malalag Bay capable of uplifting the socio-economic condition of coastal communities through people's participation" - *Davao del Sur Learning Area*

"An agro-aqua province with a strong determination to preserve the natural beauty of the ecosystem through community involvement and enforcement of logging and fishery laws as well as the rehabilitation of denuded areas to conserve, protect, and develop the environment geared towards a happy, healthy, clean, and progressive Negros Oriental" - *Negros Oriental Learning Area*

"Towards sustainable coastal management and utilization of resources with the involvement of empowered stakeholders" - *Palawan Learning Area*

"Sarangani Bay towards effective and participatory coastal resources management for the preservation of well-balanced ecology through sustainable and efficient resource utilization by the year 2002" - *Sarangani Learning Area*

Output from CRLC Workshops involving 300 participants from 29 municipalities and 6 provinces

and funding toward coastal resource management is required to realize a return on that investment. Small investments can reap large gains in terms of improved fish catch, physical protection from improved coastal habitats, and other values of coastal resources. As a starting point, the participants identified activities that would enhance community participation and empowerment. Suggested activities which may need resource allocation on the part of the LGUs and the *barangays* (villages) could include: coastal profile preparation and the participatory coastal resource assessment (see article on page 23). These efforts signify a commitment to action toward the common vision of sustainable coastal resource management.

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Symbiosis Between Fish and Fishers

[This article first appeared in The Providence Journal (Rhode Island, USA) on June 18, 1996.]

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You don't harvest your garden with a bulldozer. Destructive forms of fishing must be eliminated…. Replace predation with symbiosis, mining with husbandry.... Stephen Olsen describes what happened to fisheries in New England, USA—an account that is very relevant to fisheries in the Philippines.

Many of us who work in fisheries also plant gardens. Any gardener knows that success lies in a symbiotic (not a predatory) relationship between a gardener and his garden. A symbiotic relationship has many feedback loops. The gardener harvests the flowers and the vegetables, but only when they are ready to harvest, and the harvest comes only after a long sequence of weeding, thinning, watering and keeping pests at bay.

There are many demands and many rewards for both the gardener and the garden. If there is no feedback and the gardener only takes—or mines—his bit of land, we all know what the result will be. After a season or two, a luxuriant and beautiful garden becomes patches of bare earth interspersed with clumps of weeds.

We see a marine equivalent in New England's fishing grounds, which are among the most productive on the planet. Here, the desirable species, the cod family and the flounder family, have never been scarcer. Once-abundant species such as the mighty and delicious halibut disappeared long ago. It is the weed species, the skates, dogfish and sand eels, that today are wonderfully abundant.

As a result, many fishers are bankrupt and a way of life once central to New England's culture and economy is as endangered as the fish stocks that supported them for generations.

This sad progression of overfishing and collapse is being repeated around the world. Yet, New England's fisheries are once again in crisis. But this is only another downward tread on a staircase that began many hundreds of years ago, when European fishers discovered and began to mine the extraordinary bounty of fish off New England's shores and northwards to the Grand Banks. Each step in this sustained decline has been marked by more intensive mining of (or predation on) a diverse and beautiful form of wildlife with an extraordinary ability to regenerate itself.

Each increment in the mining has usually been triggered by a more efficient technology. It began with the single hook and line and progressed though multiple hooks on ever longer "long lines" and set nets, and beginning in the 1930s, ever more efficient trawls and electronic fish-finding equipment. Now the most productive sea floor is being scraped over several times a year by heavy gear that sweeps up everything in its path.

I have been a bit player in this massive failure. I began going out on commercial boats before I was in high school. By the time I reached my mid-20s, I had fished in the Mediterranean, the North Sea and off Rhode Island. I loved the people, the work, the spells of boredom in a wide ocean, that particular camaraderie and interdependence that exists only on a fishing boat. Sometimes, I am humbled by my incompetence and my seasickness. In some countries, I shoveled "trash fish" overboard by the ton; in others, the "trash" was what we ate.

Twenty years ago, new England fisheries were in another crisis. Foreign fleets had vacuumed up our stocks. After a long struggle, the United States declared a 200-mile Exclusive Economic Zone and we all believed that the time had finally come to do it right and to see our fishing fleets prosper. As the 200-mile limit approached, a colleague and I prepared a report that documented the evolution of Rhode Island's fisheries and suggested how this state could respond to the promise of a well-managed, rich and self-renewing resource.

One recommendation called for a Rhode Island Fisheries Council that would put the regulators, scientists and fishers on a single body with broad powers to regulate fishing and conserve the stocks within our three-mile limit. Soon thereafter, the Federal Fisheries Management and Conservation Act of 1976 set up regional councils to manage stocks offshore.

Both councils have failed in their fundamental mission, and today we must say that the high hopes of the mid-1970s have been dashed. Distrust between fishers, scientists and conservationists has never been greater. We missed a great opportunity, and are now paying a great price.

What went wrong? This is the time to rethink the relationship between fishers and fish. We must get back to basic principles and the first step is to examine the goal. In the past, the goal was—in essence—to take as much as possible economically and biologically; a mining, and therefore predatory, approach.

We would proceed differently if the goal was to balance among (1) sustaining the quality of life of the fishers and (2) sustaining the qualities of the resources upon which they depend. The principle would be to replace predation with symbiosis, mining with husbandry. The challenge becomes making a stewardship ethic operational for the benefit of both the fishers and the fish. If we chose to follow such an approach, we would find that the guideposts to making this operational are fairly clear and well known.

We would recognize that approaching the goal can occur only through a series of strategic actions over many years. We will need clear, unambiguous objectives for each step back up the staircase that has led us down to the weedy garden that now confronts us offshore. We will have to learn because we will continue to make mistakes. Who is the "we"? It must be the scientists, the regulators and the fishers working together toward a common goal. We have learned time and again that stewardship—or any other attempt to modify human behavior—succeeds only when the people involved (or most of them) believe in the goal. We also know

that fishing effort must be in balance with a sustainable yield. You don't harvest your garden with a bulldozer.

Destructive forms of fishing must be eliminated. That may mean replacing most trawling with less damaging and wasteful technologies. Perhaps, most important is to worry about feedback loops between the fishers and the fish. The lobster trap fishery is the only fishery that is doing well off New England. Could the reason be the abundance of positive feedback? Everyday, hundreds of tons of lobster food—in the form of bait—are taken offshore. Undersized lobsters and lobsters with eggs are thrown back and most survive the trip to the surface. Lobster fishers believe in the regulations and enforce them by common consent. Quality of life for most lobstering families is pretty good. Here the goal is in sight.

Currently, the most popular definition of "the fisheries problem" is quite different from the one suggested here, and so is the proposed solution. Most believe that the problem lies not in the goal but simply in the fact that fish are common property. The prescription is to "privatize," and hand over ownership and responsibility for the fish to a smaller number of fishers who, driven by the desire to maximize their profits, will stop mining what they own and become stewards.

I am skeptical. I think the problem lies in the paucity of positive feedback between the fishers and the fish. Meaningful stewardship calls for close attention to goals and a lot of hard work. But fishers—certainly the ones I know—are not afraid of work and care passionately about their way of life. It is hard to imagine this today, but perhaps, New England's fishers could become a model for how human society can learn to prosper in balance with nature rather than offering us parables for our failures as stewards.

The traditional fishers, independent-minded and unruly as they are, just might embrace such a goal.

[A rather straightforward comparison to the fishing situation in the Philippines can be made. Similar linkages and feedback loops must be formed before destructive fishing will stop! Editor]

NACFAR and the Fisheries Resource Management Councils

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In its inception in 1990, the National Coalition for Fisheries and Aquatic Reform (NACFAR) embarked on the formidable task of establishing the recognition of fisherfolk in our national psyche. We know much about the toiling farmers and laborers, but little about marginalized fisherfolk.

Coupled with this objective is the need to generate widespread awareness of their problems, and alternatives that organized fisherfolk have worked on and which they would also want the public to support. With environmental consciousness permeating our bureaucracies and business establishments throughout the world, the battlecry to save our remaining natural resources especially marine and aquatic resources, had never reverberated more strongly. In this setting, fisherfolk found themselves confronted with a new challenge—how to become effective stewards of the resources that they depend upon. Their answer to this challenge was the Fisheries Resource Management Councils (FRMC).

FRMC is the implementing framework for the fisherfolk-drafted Unity Bill which is their alternative to the existing fisheries law—the 21-year old Presidential Decree (PD) 704. PD 704 has become the bone of contention of

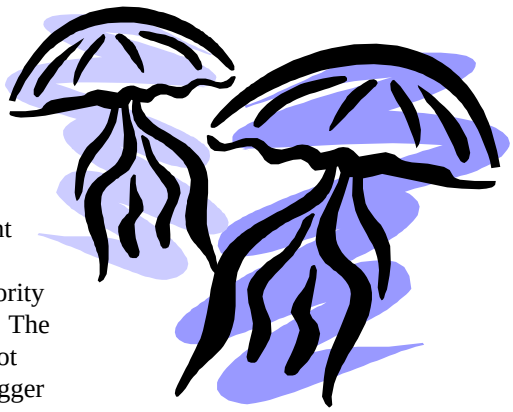
small fishers, believing that it serves only the business interests in the fishing industry and propels traditional fishing grounds to a state of degradation. This also caused continuing poverty among the majority of fisherfolk in the industry. A bleak scenario for an archipelagic country, blessed with a multitude of fish and other marine and freshwater flora and fauna.

As an organization, the FRMC is envisioned to be formed from the local (*barangay*) to the national levels. The members of the council will be fisherfolk representatives, government officials and non-government organizations (NGO). The fisherfolk will be given majority representation in the set-up. The formation of FRMCs does not preclude the formation of bigger groups such as community Resource Management Councils (RMC) wherein the bigger problems of the environment such as forest, aquatic and other ecosystems will be tackled. The FRMCs can join this wider expression of concern for the environment.

The FRMC is based on "user-manager principles." This points out that the direct users or those who directly depend upon the natural resources should be given the chance to become managers of the resources—protecting, conserving and managing the resource base for their benefits and that of the larger community. The experience in Apo Island, Negros Oriental, as well as in other countries like Japan attest to the soundness of this principle.

The second principle is sustainable development which has been interpreted and used in many ways. For the fisherfolk, it not only means ensuring that the present and future generations will continue to reap benefits from the environment, but also development that equates socio-economic and political equality in terms of the use of and benefits from the resources.

Democratization is another principle of the FRMC. In the present setting, the Philippine fishing industry benefits only a few



business interests at the local and national levels. The FRMC is seen as a means of leading the way to democratization of the industry starting from the bottom. Cooperativism and the employment of micro-finance instruments and supplementary livelihood would provide greater access to the local markets. Another important part of democratization is the institutionalization of the exclusive use of the 15-kilometer municipal waters by small-scale fishers.

Limited access is a principle that is based on the reality that our aquatic resources are finite. Management principles to guide us must be based on these limits. The FRMC will become a tool to propagate this principle and encourage cooperation among fishers and the community to help in limiting access and level of exploitation.

The business of conserving and managing the natural resources should not be given to a few. Communities and fisherfolk especially, should be given the opportunity to spearhead this undertaking, paving the way for the empowerment of the sector.

Fruits of the Struggle

NACFAR's ideal of an empowered fisherfolk sector leading resource management initiatives at the local levels, first gained recognition among NGOs and people's organizations. NACFAR then ventured to model its FRMC concept in Bicol. In 1994, the government took notice of the concept and patterned from it the creation of the Fisheries and Aquatic Resource Management Councils (FARMC) through Executive Order No. 240, s. 1996. At the start of the 10th Congress, majority of the bills submitted to the committees bore the imprint of the FRMC concept.

These developments show that novel ideas, if advocated with much vigor and resolve, especially by the marginalized sectors of the society, can be popularized and may gain support from influential sectors. It is this vision that could lead us to true human and social development that we are striving for.

[It is worth noting the similarities and differences between the view of S. Olsen in Rhode Island and NACFAR in the Philippines relating to localized management. The lesson may relate to "positive feedback between fishers and fish" mentioned by Olsen. Editor]

May 1997 is the National Coral Reef Month

Community-based Coastal Resources Management, Bolinao, Philippines: An Evolving Partnership Among Academe, NGOs, and Local Communities

[This article first appeared in Coastal Management in Tropical Asia: A Newsletter for Practitioners in September 1995.]

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In 1995, three institutions renewed their collaborative efforts to pursue appropriate management of coastal resources in close partnership with the local fishing communities of Bolinao, Philippines. A joint project proposal of the University of the Philippines Marine Science Institute, the College of Social Work and Community Development, and the Haribon Foundation was approved by the International Development Research Center (IDRC)-Canada in February 1995 to implement a community-based coastal resources management (CB-CRM) program. As part of a collaborative effort with the coastal community to develop pragmatic and effective management, the program designers hope to ensure sustainable use and protection of resources in the town's coastal zone.

With a grant of CAD$450,000 from IDRC to execute the three-year project, a team consisting of community organizers, marine science and social science researchers was formed. Community work that was initiated in1993 under a previous IDRC-sponsored project was continued. The team currently works in four barangays including Arnedo and Balingasay on the mainland, and Binabalian and Dewey on the islands. Besides village-level community work, the team liaised with the municipal, provincial and regional government bodies to determine the best options for sustainable use of coastal resources, not only of Bolinao but also those of Lingayen Gulf.

The development research framework of the CB-CRM project team has one goal: to develop an integrated program of approaches, strategies and action plans with the local community which will enable them to evolve into a self-determining collective steward of their coastal resources. A major thesis is that a community must be at the forefront of the research process, so that the community can emerge as the lead partner in resource management. A local community, at the

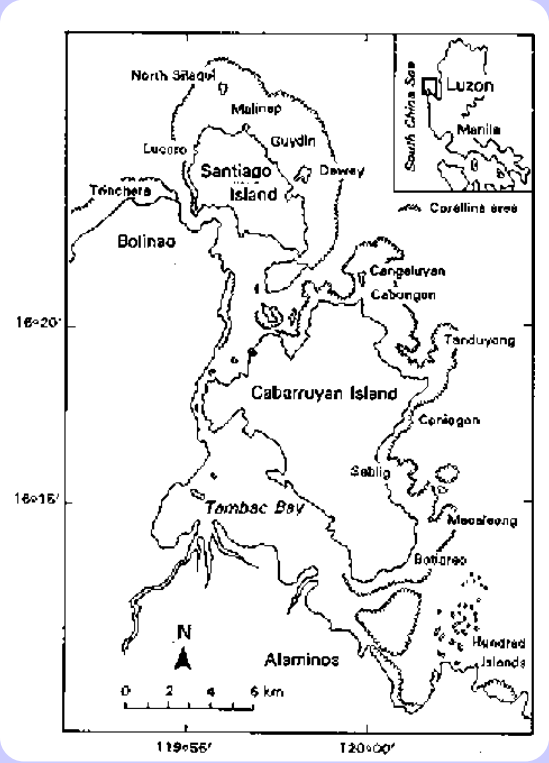

FIGURE 1. THE WESTERN COAST OF LINGAYEN GULF.

barangay (village) or municipal level, interacts with the project staff in conceptualizing problems and solutions, in implementing action programs, in documenting and evaluating management steps, all in an iterative fashion. The interaction allows for the community and the project staff to learn and further refine management strategies so that the capability of the community to act as a collective resource manager is strengthened. The role of the project staff throughout the process is that of a facilitator. The local community's role is that of an emergent resource manager.

To achieve this goal, local communities and the project team address six components of the research framework:

(1-3) Community organization, environmental education, and institutionalization are focused on empowering local communities to be able to function effectively as collective stewards of their coastal resources. Through community organization, core groups (e.g. seaweed farmers, processing groups, fishers, women, youth) are identified, formed and later consolidated into people's organizations. Using the concepts and tools of environmental education, the communities are empowered to think about their economic and social needs and problems within the environmental management framework. Thus, throughout the process of organizing and enhancing people's environmental consciousness, a community grows in capability and strength in forming and institutionalizing people's organizations, in deepening its understanding of the natural environment, in attempting sustainable use of its living resources, in utilizing environment-friendly and economically viable livelihood systems, and in linking up with other communities and groups to share its experience.

(4) Resource management, includes the development and evaluation of resource use and management options which are identified through participatory research. These options include (but are not limited to) marine reserves, aquaculture technology, land-based production systems, land and coastal development plans, and rehabilitation. This component works closely with the livelihood development and networking and advocacy components in the evaluation of options and their implementation. It is crucial to note that the success of the resource management hinges on the economic viability of complementary and environmentally sustainable entrepreneurial systems. In short, relief from fishing pressure through the provision of non-capture fisheries-based livelihood can result in consequent recovery of natural resource bases and enhancement of both food and cash security.

(5) Livelihood development refers to production, marketing and trading activities undertaken individually or collectively for people to increase their level of food production and to generate income which enhances their economic and social life.

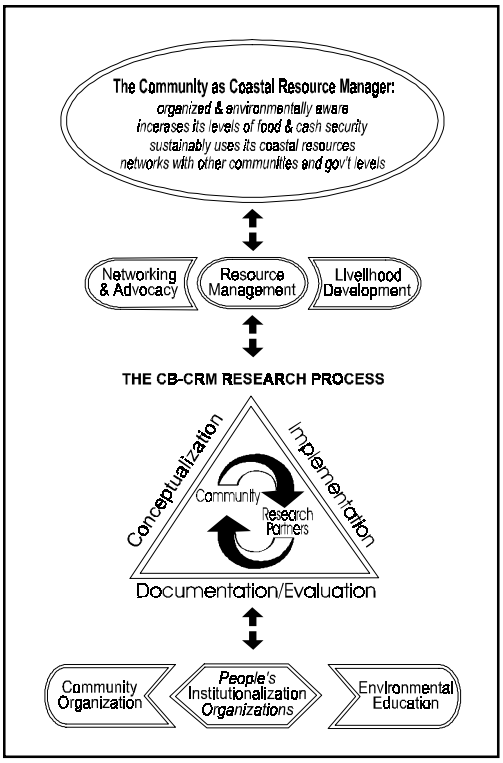

FIGURE 2. THE CB-CRM RESEARCH PROCESS.

Livelihood development also involves institutionalizing production and marketing mechanisms for self-reliance. Within a CB-CRM framework, alternate entrepreneurial systems become the major economic incentive for organized and environmentally conscious communities to decrease fishing pressure and to promote sustainable forms of coastal resource use. At the initial stage of CB-CRM, supplemental alternative technology and management are the main forms of livelihood development. As income generating activities evolve into viable business enterprises, they may be transformed into alternative rather than simply supplemental income sources. The business viability of such systems will have to be ensured both by the technical aspects of production and the social, economic and legal support structures. The ultimate gauge of the success of livelihood systems is the significant increase in food and cash security, as well as the enhancement of the productivity and health of coastal ecosystems.

(6) Networking and advocacy. Networking establishes linkages with other groups and agencies working for a common goal such as coastal resources management. Advocacy is a mechanism through which organized groups and communities institutionalize their goals; in policies and laws of other groups and higher levels of governance, such as the national government. Networking is therefore a prerequisite of advocacy. In both cases, an organized community reaches beyond its confines to help, to learn from other communities and groups and together effect significant policy changes as an ultimate expression of a collective evolution toward self-determination. In the case of CRM, the Local Government Code in the Philippines already provides for the legal rights of municipalities, to manage their coastal resources, and recognizes the role of people's and non-governmental organizations as key partners in the development of local communities. However, a major lack of policies with respect to conflicts between national development initiatives and natural resource-based economies on the matter of pollutive industries, among other policy gaps, remains an important target of networking and advocacy.

Very recently, a core project of the International Geosphere-Biosphere Programme, the Land-Ocean Interactions in the Coastal Zone (LOICZ) with financial support from WOTRO and management support from the Southeast Asian Research Center (SARCS), has approved a four-year (1996-1999) project proposal to complement the IDRC-sponsored CB-CRM Project. Specifically, the LOICZ project will provide funds for the development of biophysical and economic models, upon which management decisions can be based.

The impact of a CB-CRM program can only be judged by the level of maturity a community will achieve as a resource manager and the extent to which it can sustain the iterative process of conceptualization, implementation and evaluation on its own. For the project team, the degree to which it will have facilitated the community's attainment of self-reliance becomes the major index of its success.

A. White

Seaweed is one of the reef resources requiring management through the CB-CRM program in Bolinao.

Participatory Coastal Resource Assessment: San Vicente, Palawan and Sarangani Take the Lead

Alan T. White
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and

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PCRA: PALAWAN

The Participatory Coastal Resource Assessment (PCRA) of the Coastal Resource Management Project was completed in the 10 *barangays* (villages) of San Vicente, Palawan in mid-April 1997. A two-day PCRA training for barangay and fisherfolk leaders was followed by the systematic implementation of the PCRA in the barangays during February and March. The PCRA process, although done in various forms in the past in other parts of the country, is being refined and tested as an essential first step in the broader coastal resource management (CRM) process.

Two teams assisted in the PCRA in San Vicente, one from February 10 through March 30 and the other during the training period of February 10 to 20, 1997. The long term team was composed of representatives from CRMP, the University of Hawaii, Bandillo ng Palawan, the Resource Management Center (RMC) of San Vicente, and the Peace Corps. The second team had staff from the Coastal Ocean, Reef, and Island Advisors, Ltd. (CORIAL); CRMP;

Resource mapping in Capsalay Island, Port Barton (March 1997).

Silliman University; Palawan Council for Sustainable Development (PCSD); Governance and Local Democracy Project; and GreenCom.

The PCRA training went exceptionally well with 30 participants representing each of the 10 barangays in San Vicente, the municipal office staff, the RMC and the PCSD. The training covered the following topics:

1. Introduction to CRM in the Philippines and San Vicente
2. Benefits from CRM and primary issues of concern
3. Review of existing information for CRM in San Vicente including the research of Silliman University and past surveys of the RMC
4. Overview of mapping techniques using local knowledge and participation
5. Introduction and practice of interview techniques through groups and individuals
6. Practice of mapping through the generation of a map for the whole municipality which included:
   a. general features
   b. habitats
   c. resources by use of gear and resource types
   d. management issues
7. Formulation of a coastal transect
8. How to determine the status of coastal habitats
9. Overview of an environmental profile
10. Practice field survey of beach, mangrove and coral habitats

The mapping exercise was popular and fun. A detailed map of San Vicente Bay with all features, habitats, resources, uses and issues was completed. This map was then used as base map for the PCRAs at the barangay level.

The final outputs of the PCRA in San Vicente include:

- Detailed maps of each barangay generated by the local residents.
- Detailed map of San Vicente generated by all concerned.
- The participation of more than 300 local residents in the mapping and survey activities in 27 *sitios* of the 10 barangays.
- The development of an environment profile for the bay which reflects past research conducted by the Silliman University and the results of the PCRA.
- The active engagement of the RMC together with the barangay officials and community leaders, the PCSD, the Bandillo ng Palawan, and the CRMP.

PCRA: SARANGANI

Utilizing the same topics and capitalizing on the experience in San Vicente, the CRMP held the PCRA training course in Sarangani from February 24-26, 1997. Participants were chiefly municipal planners and agricultural technologists from seven of Sarangani's municipalities (including General Santos City) and five municipalities along Malalag Bay in Davao del Sur. Five of the CRMP Learning Area Coordinators also participated. Unlike in San Vicente, the course was envisioned to be a trainers' training wherein the participants would implement the PCRA in their respective barangays upon their return to their municipalities.

The most popular part of the course was the mapping exercise. Three maps were produced, that of Sarangani Bay, Malalag Bay and Olango Island, Cebu. The field trip to Kawas Beach and Ladol Beach, the latter representing a damaged area, proved not only educational but fun as well.

Highlighting the course, apart from the mapping and field exercises were the active discussions during the class sessions. Many of the participants were trainers in their own right and thus, were able to share their experiences, provide suggestions, and pose valid queries particularly on the implementation of the PCRA at the barangay level.

Comprising the training team were Dr. James Maragos from CORIAL and five CRMP staff from Sarangani and Cebu.

LESSONS LEARNED

1 The active mapping of features, habitats, resources, uses and issues by local residents is indeed popular and productive both for the local communities concerned and objectives of CRM planning.

2 The knowledge of local fishers on resources and their uses is sufficient to detail an accurate map without excessive field checking.

3 The preliminary research of the sites by Silliman University assisted to set the stage for the PCRA and helped to focus the PCRA work. Nevertheless, it would have been more helpful if that study focused more on mapping and general habitat qualification than a few detailed sample sites.

4 The information gathered through PCRA not only serves to produce maps but also stimulates much interest in the CRM process and the condition of coastal resources in the area of concern.

5 PCRA requires sufficient facilitation and use of tested techniques. A municipal planning staff need training, guidance and practice to be able to conduct a PCRA.

6 It is necessary to ensure the participation of women in the PCRA process.

7 Although, the interviews of community members would ideally be conducted by trained community members in a participatory manner, in practice, focus group discussions and group interviews facilitated by the community organizer is the most practical means to engage community members.

Profiling exercise during the PCRA in General Santos City.

Interviewing fishers in Capsalay Island, Port Barton (March 1997).

8 Although, useful to digitize the maps produced through PCRA, this will create a need for another participant in the process and add to the cost. Thus, digitizing for GIS should be considered for appropriate situations only.

9 PCRA is an excellent lead activity into the CRM planning and implementation process with the immediate product of a coastal area profile.

10 PCRA is only one step in an ongoing process which needs guidance and practice to achieve long term CRM planning and implementation.

11 If time is limited, it is best not to try to cover an entire barangay with a PCRA. A certain level of involvement and time commitment is a prerequisite to a successful PCRA in any given community and a rush job will only produce superficial results.

CONCLUSION

The PCRA process has much to offer as a start in the CRM process. All important stakeholders must be part of the PCRA and subsequent planning and implementation activities. PCRA helps to set the tone whereby the focus of responsibility and action is on the local community and government officials. PCRA needs skilled facilitators both for technical and process guidance. It is hoped that these facilitators will more frequently come from the areas of management concern and their institutions. Municipal and Provincial Governments, local non-government organizations, DENR staff, community leaders and barangay officials can all play important roles and help to replace the need for outsider assistance in the PCRA.

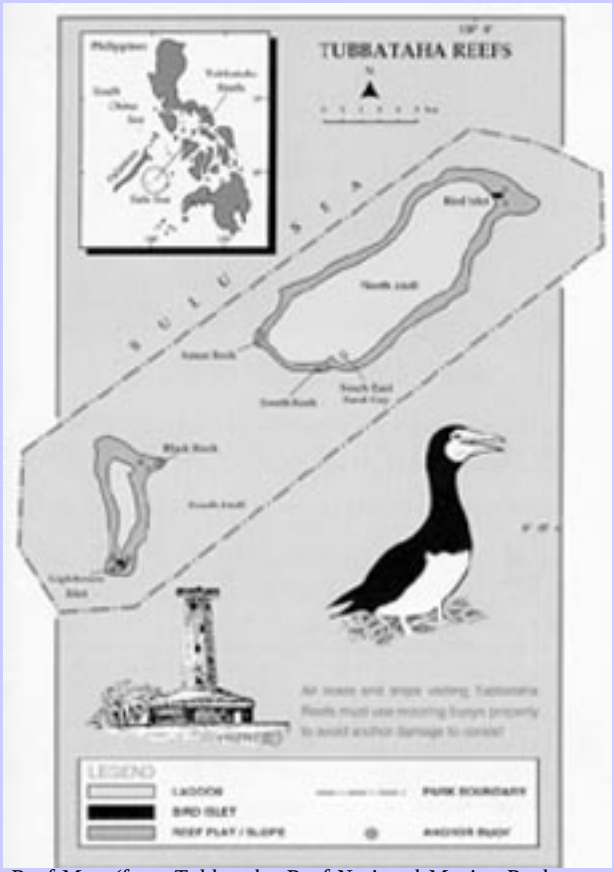
Tubbataha Reef National Marine Park: Media and Management Collaborate

Alan T. White
CRM Coordinator
CRMP

Tubbataha Reef has become a recent media feature in the Philippines because of increasing efforts by the Department of Environment and Natural Resources (DENR), the Palawan Council for Sustainable Development (PCSD) and several non-government organizations (NGO) to make park management a reality. In late March 1997, a group of more than 20 persons from the Philippine and international media participated in a tour of the park for two days. The well organized event stimulated concern about the completion and adoption of the Tubbataha Park management plan. The history and resource value of the park highlighted during the tour (see Box 1), generated a high level of interest among the media guests and resulted in numerous newspaper articles and several videos shown on national television.

Despite its remoteness and the many efforts to protect the reef (see Box 2), Tubbataha and its underwater gardens and diverse wildlife are not free from intrusion and destruction. Illegal fishing methods using dynamite, sodium cyanide and other means have destroyed large areas of the reef. Anchor damage, inadvertent coral breakage from careless and inexperienced divers, collection of marine life and political conflicts also contribute to the deterioration of these jewels in the Sulu Sea.

Discussions with the Western Command, Palawan (Captain Garcia), Undersecretary of DENR, Delfin Ganapin, the former Secretary of Education, Lourdes Quisimbing and Dr. Miguel Fortes, both of UNESCO, during the media tour, highlighted the need for coordination in park management among the academe, NGOs, the PCSD and the military. Also mentioned was the problem of



Reef Map (from Tubbataha Reef National Marine Park Brochure).

BOX 1

Tubbataha Reef History, Location and Value

The name Tubbataha comes from two Samal words and means a long reef exposed at low tide. It is the largest coral reef atoll and the only national marine park in the Philippines.

Tubbataha Reef consists of two coral atolls located right in the center of the Sulu Sea, about 150 kilometers southeast of Puerto Princesa City, Palawan. The pair of atolls point southwest and northeast, and are separated by a channel eight kilometers wide. The reef complex stretches over an area of 10,000 hectares within the island municipality of Cagayancillo, some 80 kilometers northeast of Tubbataha. The larger north reef is about 16 kilometers long and 4.5 km wide. The south reef is about 5 kilometers long and 3 kilometers wide.

The reef harbors a diversity of marine life equal to or greater than any such area in the world. In one survey alone, 46 coral genera and more than 300 coral species, and at least 40 families and 379 species of fish were recorded. Large marine life such as manta rays, sea turtles, sharks, tuna, dolphins, and jackfish are often seen on or near the reef.

The ecological, economic and heritage benefits of Tubbataha Reef, if managed sustainably with complete maintenance of the reef habitats, are very significant.

- Planktonic larvae from the spawning fish and invertebrate animals is very prolific in Tubbataha and serves as a primary source of recruitment for coral reefs surrounding the Sulu Sea. This larvae supplies many times more fish life outside of the Marine Park area to other Sulu Sea coral reefs, than marine life that resides at the Tubbataha Reef.
- Fish and other marine production from healthy and diverse reefs such as Tubbataha ranges from 20 to 35 tons per square kilometer per year.
- Tourism to Tubbataha is increasing yearly and contributes more than $US2 million to the local and national economy.
- The biodiversity represented in Tubbataha compares favorably with the richest and most abundant marine areas in the tropical world. The preservation of this contributes immensely to the long term maintenance of the marine species and their genetic diversity in this part of the world.
- As a World Heritage Site, Tubbataha Reef is valued by the people everywhere knowing that it exists and is being maintained for the enjoyment of future generations.

having the military work alone in the park without NGO counterparts to help guide their actions. Problems are already occurring at the newly constructed ranger station with personnel feeling isolated in their remote Sulu Sea assignment.

With the acceptance of the Tubbataha National Marine Park Management Plan by a multisectoral body, a management board will be created to supervise the plan implementation. Under the management board a park manager will be responsible for the daily operations of an action team in the park. This field team can educate park users and enforce laws and regulations in Tubbataha. One or more patrol teams will rotate on a regular basis to ensure effective park management.

Several observations and lessons gleaned from this trip relevant for work with the media and providing information to government personnel and the public on coastal management are:

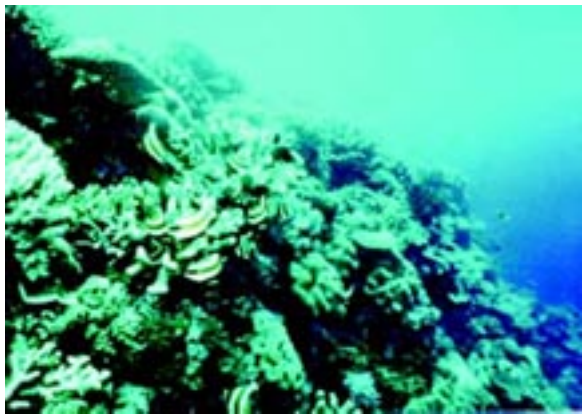
a. The media is hungry for good quality information which explains why we need conservation and what the tangible benefits from resource management are.

b. The media is really interested in data which showed both the ecological and the economic importance of the Tubbataha reefs in the local and national perspective.

c. There is a need for basic ecology information on the marine environment which explains the role of reefs in fisheries, plankton growth and dispersal, the dependency of endangered species on certain habitats, and the role of exploitation in the degradation of habitats.

d. The concept of an environmental youth volunteer corps such as “Sea Scouts” to assist with park management is appealing to all concerned.

This media tour, which was followed by a one-day symposium in Manila, highlights the need to finalize the management plan for the park. A general consensus on the contents of the plan and the mechanism for implementation exists. However, it is ironic that the only thing lacking is an approved and official statement by the members of the Presidential Task Force for Tubbataha. When this is forthcoming the more routine work of implementing the plan can proceed with the required financial assistance from the various interest groups. Attention to how user fees and donations can provide a large portion of the operating cost for the park is being explored. Since the National Integrated Protected Areas law provides for a trust fund mechanism for park management, all that is necessary is to put this into effect as part of the park management plan.



Reef life in Tubbataha is highly diverse.

The mood of these recent discussions was positive but with a note of frustration on why the legal impediments cannot be ironed out. Nevertheless, action is the common theme of the future.

Reference

Arquiza, Y. and A.T. White. 1994. **Tales from Tubbataha: Natural History, Resource Use, and Conservation of Tubbataha Reefs, Palawan, Philippines**. Bandillo ng Palawan, 73 p.

Tubbataha Reef National Marine Park (Brochure). Department of Environment and Natural Resources. 8 p.

BOX 2

Conservation Efforts

Tubbataha Reef was declared a national marine park through Presidential Proclamation No. 306 on August 1, 1988. The park area includes the surrounding waters of the two atolls and covers 33,200 hectares. On December 11, 1993, the United Nations Educational, Scientific and Cultural Organization (UNESCO) designated Tubbataha as a World Heritage Site. On July 20, 1995, President Fidel V. Ramos issued a memorandum circular creating the Task Force for Tubbataha Reef National Marine Park. The task force developed an action plan to forestall and reverse environmental degradation in Tubbataha, treating it as an integrated management unit.

Important recent events and supporters in the protection of Tubbataha include:

- Initiation of limited patrolling operations with support from the Dutch Government and the Foundation for Philippine Environment through the Tubbataha Foundation in 1990 and beyond under a Memorandum of Agreement with the Department of Environment and Natural Resources (DENR)
- Removal of an illegal seaweed farm in May 1991 with the assistance of the Province of Palawan, DENR, the Philippine Coast Guard and the Tubbataha Foundation
- Research and monitoring activities with support from the Foundation for Philippine Environment and Earthwatch Inc. by Silliman University researchers and other individual scientists
- Development of the Tubbataha National Marine Park Management Plan with assistance of the Marine Parks Center of Japan
- Construction and installation of eight mooring buoys for diving boats to anchor on with the assistance of the Government of Japan through *Sagipin ang Gubat at Dagat* (SAGUDA) Palawan
- Continuation of patrolling operations and the construction of a small field station with support of the Government of the Philippines, DENR and SAGUDA Palawan

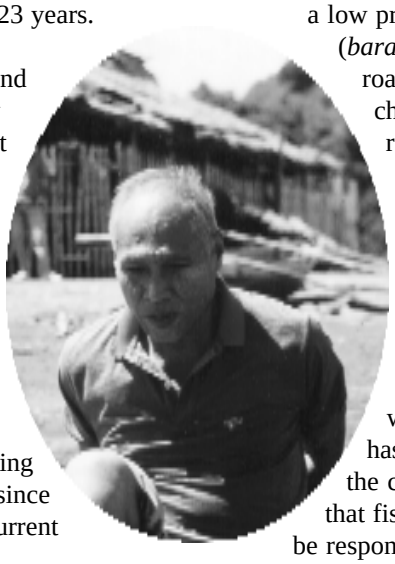
Members of the present Presidential Task Force for Tubbataha and the proposed Tubbataha National Marine Park Management Board of the management plan:

Secretary, Department of Environment and Natural Resources
Chairman, Palawan Council for Sustainable Development
Commander, Naval District IV
Secretary, Department of Tourism
Secretary, Department of Budget and Management
SAGUDA Foundation
Governor of Palawan
Mayor of Cagayancillo
Tubbataha Foundation
Binunsalian Foundation
Conservation International

leadership models

Mayor of Malalag, Davao del Sur Brings to Fruition 23 Years of Resource Management Efforts

Andres Bracero Montejo, Sr. has remained a very simple person. Yet he has served as Local Chief Executive of Malalag, Davao del Sur for 23 years. With his governance characterized as "enabling and empowering," he is liked by his constituents so much that he never lost an election. The only time his term was ever interrupted was in April 1986 when mayors were replaced by Officers-in-Charge of Corazon Aquino's government, after the EDSA Revolution. However, the Malalagnons reinstated him as Mayor during the 1987 local election and since re-elected him twice. His current term is now his last.



Mayor Montejo finished Bachelor of Laws at Manuel L. Quezon University in 1958. He first entered into government service as a Clerk of Court in the Municipality of Sta. Maria, Davao del Sur; then served Malalag initially as patrolman which soon earned him popularity for his service and integrity. Friends then encouraged him to run for Municipal Councilor. That was his first stint as an elective government official. His exemplary performance in the Municipal Council and charisma gained him more admiration and popularity. In 1971, groomed for mayorship by local politicians, he easily won the race. To date, Mayor Montejo's string of successful initiatives continues to flourish making the small town of Malalag known throughout the country for being a two-time winner of the **Galing Pook Award,** a coveted prize for local government innovation awarded by the Local Government Academy.

Community folk and municipal employees describe their mayor as "down to earth." He never demands special treatment, assuming a low profile, visiting the villages (*barangays*) without bodyguards. He roams freely around the community, chatting and mingling with people, regardless of their political leaning, social status, and age group.

Also a good farmer, Mayor Montejo has affiliated himself with regional and national networks of peasant organizations. Currently, he is chairman of the board of directors of a Mindanao-wide peasants' federation. Still, he has not neglected the fisherfolk and the coastal environment. He believes that fisherfolk and other bay users should be responsible for the protection, conservation and rehabilitation of coastal resources.

Long before the arrival of the Philippine Council for Aquatic and Marine Research and Development (PCAMRD) in Malalag in 1991, Mayor Montejo was undertaking coastal resource management (CRM) activities. Practising a participatory leadership approach, he often goes to the barangays to feel the people's pulse and determine their stand on a certain issue or problem.

Mayor Montejo was an early advocate of Presidential Decree (PD) 704 and other fishery laws. He has pressed for the stopping of dynamite fishing through strict penalties for violators. He also warns people against the use of toxic plant extracts and other poisons in fishing.

In 1991, PCAMRD chose Malalag as the venue for a seminar-workshop. Malalagnons were amazed to learn during the seminar that what Mayor Montejo had been advocating and

campaigning for a number of years was, indeed, CRM. With PCAMRD's assistance, they were able to streamline their CRM efforts.

Mayor Montejo organized consultations and massive information and education drives which led to amendments to their Municipal Fishery Ordinance, the establishment of a 50-hectare fish sanctuary, the organization of *Bantay-Dagat*[1], the organization of fisherfolk and women's groups, strict enforcement of fishery laws, discreet monitoring of boat loading or discharging of oil and other products, the identification of solid waste disposal sites, and others.

The Municipality of Malalag had its first Basic Fishery Ordinance passed on May 14, 1981. Malalag constituents amended the Municipal Fishery Ordinance on March 11, 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*. The judge ruled that the ordinance lacked sanction/ *imprimatur* of the Secretary of Agriculture. Thus, the case was dismissed. Mayor Montejo's position, however, was based on the Local Government Code (P.D. 7160), which stipulates that municipal ordinances are subject to review by the Provincial Board (*Sangguniang Panlalawigan*) only prior to its adoption. He brought the case to higher courts. The charged *lampornas* operators then filed a case to the Ombudsman against the Mayor, SB members, law enforcers and the *Bantay-Dagat*. The Ombudsman dismissed the case against the Mayor while the Supreme Court case is still pending.

Fish cage in Malalag Bay.

Recently, an ordinance to ban *tapay-tapay* or *basnigan* is being studied by the legislators of the municipality. Marginal fishers complained that these fishing methods reduced their fish catch per unit effort because *tapay-tapay* had fine mesh nets in its purse. Mayor Montejo is gathering more information on this matter.

The Mayor has made every effort to save and rehabilitate the remaining biota in Malalag Bay. The fish sanctuary was earlier opposed by many fisherfolk. Through continuing education, it gained the support of the majority as it increased their volume of catch. The municipal government hired a person to safeguard and monitor the sanctuary. A pump-boat was also provided for the same purpose. Fish cages for grouper and siganid cultures were established adjacent to the fish sanctuary. The mayor envisioned this fish cage as a demonstration to introduce the technology to his constituents. Today, eight more fish cages are to be constructed as alternative livelihood projects for fisherfolk organizations in the coastal barangays of Malalag.

Mayor Montejo has maintained good working relations with other mayors in the neighboring municipalities regardless of political bias.

Malalag was chosen by the Canadian International Development Agency and Regional Development Council XI as a beneficiary of the Local Government Support Program (LGSP). Through LGSP, the Development Academy of the Philippines is assisting Malalag to come up with a Strategic Area Industry Plan. Mayor Montejo wants other neighboring municipalities to benefit from the planned development as well. He has facilitated the Malalag Bay Area (MBA) development plan including the five municipalities of Hagonoy, Padada, Sulop, Malalag and Sta. Maria and an influence municipality of Kiblawan. He is the elected Chairperson of the MBA board.

By **Melchor L. Maceda**, Learning Area Coordinator (Malalag Bay), CRMP, c/o Mrs. Teresita Yuzon, 1772 Lopez Jaena St., Digos, Davao del Sur, Philippines

[1]Composed of community volunteers deputized by the government to patrol the coasts against illegal fishing activities.

the news

Manila Hosts the International Year of the Reef

April 10 marked the launching of the International Year of the Reef (IYOR) '97 in the Philippines. A press conference billed "Ugnayan sa Rembrandt" was held at the Hotel Rembrandt in Quezon City, Metro Manila. Panellists included Department of Environment and Natural Resources Undersecretary Delfin Ganapin, Bureau of Fisheries and Aquatic Resources-Coastal Resources Management Chief Jessica Muñoz, Philippine Council for Aquatic and Marine Research and Development (PCAMRD) Deputy Director Cesario Pagdilao, National Coalition for Fisheries and Aquatic Reform National Coordinator Hilario Manaog and University of the Philippines-Marine Science Institute (UPMSI) Director Edgardo Gomez. The Apo Hiking Society were guest performers. The whole occasion was highlighted by the unveiling of the IYOR logo. This signalled the official launching of the International Year of the Reef 1997 in the Philippines.

The objectives of the conference were to: discuss the state of coral reefs in the Philippines; and discuss the measures undertaken for the protection and preservation of this ecosystem. The President of the Republic of the Philippines will be formally informed of the International Year of the Reef through a letter signed by the panellists.

Other IYOR '97 activities are slated at least every month thereafter; many of which will start in May, the national coral reef month.

The "Ugnayan sa Rembrandt" was facilitated by the Coral Reef Information Network of the Philippines (PhilReefs). PhilReefs is a network of different groups (government, non-government, people's organizations, academic and research institutions, the private sector, etc.) and individuals that work together in establishing a coral reef information exchange database. The network was instituted in January 1996 and has an interim secretariat at the UPMSI and is under the auspices of DOST-PCAMRD.

The International Year of the Reef '97 was first launched at the 8th International Coral Reef Symposium in Panama City in June 1996. IYOR is the global celebration of enhancing awareness for the preservation of coral reefs.

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Indonesian CRMP Goes from Local Action to National Initiative

Awareness of the need for improved coastal resource planning and management has expanded rapidly in the past decade in Indonesia. There are now several sectoral, cross-sectoral and industry-based initiatives designed to support its national development plans. A lot has been drawn from global experience in integrated coastal management (ICM), encouraging Indonesia to "fast track" development of ICM systems and skills. Various types and levels of ICM effort are now underway although, few of these have, as yet, led to tangible changes in coastal resource allocation or use.

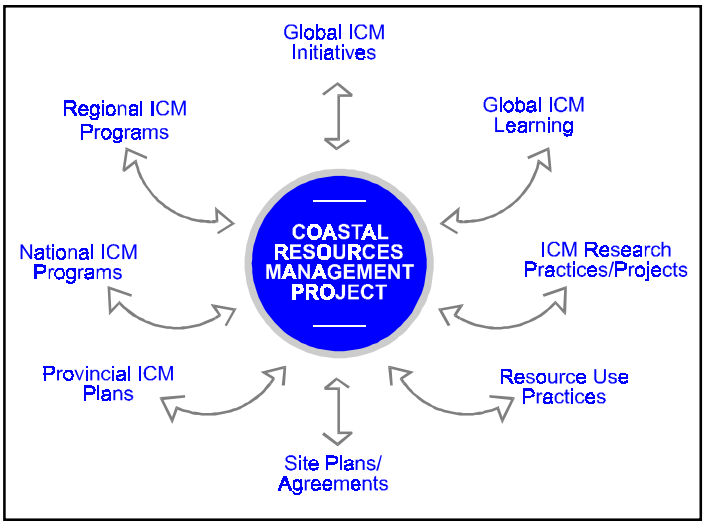
It is within this context that the United States Agency for International Development (USAID)-supported Indonesian Coastal Resources Management Project (CRMP) has been developed. The Indonesian CRMP is part of the strategically focused natural resources management (NRM) program developed by USAID and BAPPENAS (the Indonesian National Planning Agency) being implemented by various agencies in co-operation with Indonesian partners. The NRM program is designed to decentralize and strengthen natural resources

management in Indonesia. Interventions under the NRM program are intended to result in (USAID, 1996):

(a) greater stakeholder participation in decisions about the planning, management, use and monitoring of natural resources;

(b) improved NRM policy development and implementation; and

(c) strengthened institutional capacity for biodiversity conservation.



POTENTIAL IMPACTS OF THE CRMP.

The Indonesian CRMP operates at both the local and national levels and involves both government and non-government stakeholders in coastal resources management (CRM), seeking to apply lessons from local experience in institutional and national policy development. As Figure 1 suggests, the "two track approach" of the CRMP thus, has the potential to create impacts at a range of scales and is filling a key niche in the development of Indonesia's CRM capability. Equally significant, the project is actually achieving "on ground" results while establishing models and processes with more generic application.

There are five core CRMP components.

1. Field Development Program

Field programs are the foundation of the CRMP. The first is being established in Minahasa District of North Sulawesi. Sites in other Provinces will be incorporated in the CRMP from 1998 and the CRMP will also assist other NRM program partners with their programs in coastal locations.

2. Strengthening Institutions and Human Resources

This supports the institutional fabric for CRM and focuses on both government and non-government institutions, including academic, professional and industry bodies. Particular emphasis is being given to skills development in young professionals and women.

3. Monitoring, Learning and Policy Support

The Centre for Coastal and Marine Resource Studies (PKSPL) at the Bogor Agricultural University (IPB) is working closely with the CRMP Team and the Research and Learning Unit of the Coastal Resources Center to monitor field programs and support transfer of this information into the policy arena.

4. Communication, Outreach and Marketing

Many audiences for the CRMP are being targeted in a structured way via a range of educational and marketing strategies: awareness raising, information transfer and behavioral change and the use of a range of media.

5. Management and Coordination

This component provides the administrative support to enable CRMP resources to be applied efficiently and effectively. By collaborating with other coastal management programs and counterpart agencies (who will contribute 25% of project resources throughout the project), it is intended that strong integrated coastal management programs will continue once the CRMP ends in 2003.

Measuring the extent to which the CRMP can contribute to the realization of NRM objectives is a novel and challenging task in Indonesia. This has been proactively addressed from the outset of the project by establishing a Performance Monitoring Plan for the NRM program and thus underpins CRMP implementation.

For further information, please contact:

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Brian Crawford, CRC-URI, CRMP Manado or the CRMP/NRM Secretariat, Jl. Madiun No. 3, Menteng 10320, Jakarta Pusat INDONESIA, Tel: (6221) 3926424
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[Future editions of Tambuli will report on the progress of the CRMP in Indonesia. There is much potential for cross-program co-operation particularly in view of their geographic proximity and design similarities. Editor]

Mapping and Monitoring Go Full Blast in Eastern Samar MPAS

The provincial government of Eastern Samar, headed by Governor Lutgardo B. Barbo, has extended financial assistance to the Coastal Zone Management Councils (CZMC) of seven municipalities. The assistance to the towns of Lawaan, Balangiga, Giporlos, Quinapondan, Salcedo, Mercedes and Guiuan was channelled through the Guiuan Development Foundation, Inc. (GDFI). This assistance will enable these municipalities to delineate the boundaries of their respective municipal marine protected areas or MPAs (reserves and sanctuaries).

Approval of the provincial aid amounting to P280,000.00 was facilitated by Provincial Board Member Fernando Lugay. The amount will be used to purchase materials for markers and signboards, basic gear (snorkel, mask, etc.) for monitoring teams and to defray mapping expenses. The Department of Agriculture (Region 8) will provide the buoys while members of the CZMCs, including representatives from the local government units, Philippine National Police, church, youth, schools, and the communities, will provide the necessary person-power.

The CZMC, a multi-sectoral group organized by GDFI in each of the aforementioned municipalities, will take the lead in environmental protection and policy reforms at the local level. It will also manage the municipality's marine reserve and sanctuary. Each CZMC has a marine reserve monitoring team trained by GDFI to do simple monitoring activities.

Mapping and delineation of the boundaries is in May 1997. Michael Cusi of the Marine Biology Section, University of San Carlos University, Cebu City will head the team to provide technical assistance.

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updates

National Course on Integrated Coastal Management: Cebu

In line with the Coastal Resource Management Project's thrusts, CRMP jointly implemented the fifth National Course on Integrated Coastal Management (ICM), held from November 25 to December 6, 1996 at the Costabella Tropical Beach Hotel, Mactan Island, Cebu. Twenty-three participants representing five non-government organizations (NGO), four local government units (LGU), four government agencies, and two academic institutions from Bohol, Cebu and Negros Occidental took part in the training. The Learning Area Coordinators from these provinces and the Community Development Advisor of the project also participated.

The National Course on ICM has a nine-module curriculum. It aims to develop capacities in coastal management planning and implementation. The training course was originally conceptualized, developed and implemented by six organizations (Department of Agriculture, Department of Environment and Natural Resources, Philippine Council for Aquatic and Marine Research and Development, The Haribon Foundation, International Center for Living Aquatic Resources Management and the International Institute of Rural Reconstruction) with financial assistance from the Rockefeller Brothers Fund and other partners.

Similar training courses will be implemented by CRMP in 1997 and 1998.

By **Dolores Ariadne D. Diamante-Fabunan,**
CRM Specialist, CRMP

CRMP Policy Component

The Coastal Resource Management Project Policy Component kicked-off with its Coastal Resource Management (CRM) Policy Forum on 16-17 December 1996 at the Rembrandt Hotel in Quezon City. With the theme "Policy and Media: A Partnership for Coastal Resource Management", the first policy forum brought together representatives from various government agencies, local government units (LGU), non-government organizations and the media in what was considered as an initial effort to formulate a set of jurisdictional guidelines for CRM and to drum up support for such guidelines through media.

The forum focused on emerging legal and jurisdictional issues that confront fisheries and coastal resource management and the organization of a Technical Working Group (TWG). The TWG will work on these issues to define an objective jurisdictional framework from which coastal management activities can be supported.

Activities on the first day consisted of presentations from the Bureau of Fisheries and Aquatic Resources (BFAR), National Coalition for Fisheries and Aquatic Reform (NACFAR), University of the Philippines-Marine Science Institute, Parks and Wildlife Bureau, and the Local Government Development Foundation. In the afternoon, participants were divided into four groups, each of which was requested to answer a set of queries and issues concerning legal and jurisdictional aspects of CRM which originated in the field. To ensure that the groups were well advised on the legalities of their answers, an environmental lawyer was assigned as an adviser to each group. On the second day, the TWG discussed approaches and inputs to the formulation of CRM jurisdictional guidelines.

The workshop outputs were remarkable in several aspects. First, the answers to most of the legal questions were very consistent, indicating that there is a high degree of conformity on how many of the country's laws on resource management should be properly applied. In effect, laws with clear-cut purposes and sufficiently clear applicability have been culled out and endorsed for appropriate situations in the light of the devolution of management responsibilities over municipal waters to local government units. The solicitation of questions from the field proved effective for identifying institutional and legal deficiencies in CRM. This process has now been infused into CRMP as a feedback mechanism known as the "CRM Hotline" (see page 35) Second, while deficiencies and inconsistencies were identified in some laws and mandates of agencies involved in coastal management, the corrective measures are not as complex as previously thought. The mere fact that a consensus was immediately reached among various agency delegates with varied disciplines and concerns on the need to refine some existing laws based on the merits of achieving sustainable use of resources is a positive indication of acceptance of CRM. Eventually, such a consensus is expected to foster greater collaboration among these agencies insofar as finalizing CRM jurisdictional guidelines under the CRMP is concerned. An outstanding feature of this policy forum is the partnership with media which is viewed not just in its traditional role in information dissemination but as a more proactive participant in advocacy.

Substantial inputs have already been generated, including a collation of existing laws applicable to coastal management as well as analytical abstracts of important provisions of the Local Government Code. Drawing upon the outcome of the first policy forum, CRMP, led by its policy advisor, Annabelle Cruz-Trinidad, scheduled further workshops with the TWG to complete the process of its policy dialogues before working on the final CRM jurisdictional document and securing the endorsement of all concerned agencies in support of the guidelines.

The second meeting of the TWG was held on 28 January 1997 at the Department of Environment and Natural Resources' (DENR) legislative conference room in Quezon City. In attendance were 33 representatives from various offices under the DENR, BFAR, the Department of Interior and Local Government, the Asian Institute of Journalism, NACFAR and staff of the CRMP.

Ms. Annabelle Cruz-Trinidad, assisted by Atty. Mikhail Maxino of the Silliman University and Benjamin Francisco of CRMP, steered the discussions towards the identification and clarification of legal and jurisdictional concerns on fisheries, mangroves, protected areas, pollution and waste management. The discussions focused on what agency representatives stressed as the proper interpretation of laws affecting coastal resource management in the light of the devolution of significant management functions previously being dispensed by national agencies to local governments.

Some of the more complex issues in CRM have been addressed in ways that are subtle and practical, while some issues that were seemingly simple had to be dissected lengthily.

Among the more salient items that were clarified are:

a. that the Local Government Code is not "self-operating" and that in order to execute its provisions, municipal ordinances have to be enacted;

b. LGUs should enforce fishery laws that are both locally enacted

and those which are expressly provided for in subsisting Fishery Administrative Orders;

c. that in spite of the fact that the authority to grant licenses for certain fishery resources have been devolved to LGUs, the national laws imposing controls in the exploitation of the same resources should be followed and be part of the conditions of the license;

d. the establishment of municipal fish sanctuaries do not need approval from the BFAR or the Secretary of the Department of Agriculture (DA), but the process of establishing the sanctuary can be patterned after a previous order issued by the DA;

e. the creation of Fisheries and Aquatic Resource Management Councils is mandatory but in the absence of penal provisions to the contrary, its immediate creation is not obligatory; and

f. that protected areas established under the National Integrated Protected Areas System (NIPAS) are considered to be outside of direct LGU jurisdiction.

On the other hand, some major issues needing further clarification, possibly through bilateral arbitration, include:

a) jurisdictional mandates and processes involving the management of coral reefs;

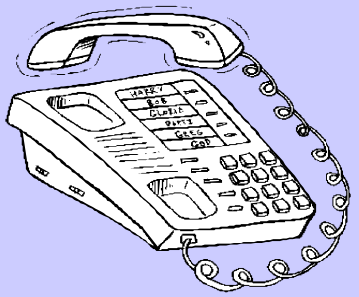
b) fine-tuning of NIPAS implementation insofar as LGU roles are concerned; and

c) the inter-generational equity issue regarding renewal of Fishpond Lease Agreements for another 25 years.

In the end, a very substantial segment of CRMP's policy agenda has been addressed and clarified. It can be said that the project's jurisdictional guidelines for CRM has taken a solid shape after this meeting. What remains to be done is to concretize the inputs into what the project sees as a user-friendly document for use by anyone involved in coastal resources management.

By **Annabelle Cruz-Trinidad,** CRM Policy Advisor, CRMP, PRIMEX, 502 Manila Luxury Condominium, Pearl Drive, Pasig City

CRM HOTLINE



Does a municipal ordinance banning the use of certain fishing gear within municipal waters need approval from the national agencies for the ordinance to be effective?

- No. The municipality/city may institute ordinances banning the use of certain fishing gear without approval from the national agencies. Sections 48 to 59 of Republic Act (RA) 7160 enumerate the step-by-step procedure in local law making vested to the Mayor and the *Sangguniang Bayan* (SB) and the manner of approving and validating local legislation by the *Sangguniang Panlalawigan* (SP) pursuant to Sections 54 and 56, respectively. While Section 534 (e) expressly repeals only Sections 2, 16 and 29 of Presidential Decree (PD) 704 and not Section 4, which provides for Department approval before any ordinance is passed, Section 534 (f) of the Local Government Code (LGC) states that "all general and special laws, acts, city charters, decrees, executive orders, proclamations and administrative regulations, or part or parts thereof which are inconsistent with any of the provisions of this Code are hereby repealed or modified accordingly." This provision thus, renders Section 4 of PD 704 irrelevant.
- Sec. 17 of the LGC clearly devolves the enforcement function to the appropriate Local Government Unit (LGU), i.e., "for a municipality: enforcement of fishery laws in municipal waters…." Sec. 149 further reinforces this capability by identifying the appropriate entity, the SB, specifying its powers and the mechanism to enforce such, via ordinances, to wit: "the SB shall, by appropriate ordinance, penalize the use of explosives, noxious or poisonous substances, electricity, muro-ami, and other deleterious methods of fishing and prescribe a criminal penalty in accordance with provisions of this code; the SB shall have the authority to prosecute any violation of applicable fishery laws."

Who has jurisdiction over areas designated as protected areas—the Protected Area Management Board (PAMB) (under the National Integrated Protected Areas System or NIPAS Act) or the LGU? In cases where the PAMB and the LGU do not agree on matters governing the protected areas, how should the conflict be resolved?

- The PAMB. Sec. 10 of RA 7586 (NIPAS ACT) provides for the administration and management of the NIPAS, "the NIPAS is hereby placed under the control and administration of the Department of Environment and Natural Resources (DENR). For this purpose, there is hereby created a division in the regional offices of the Department to be called the Protected Areas and Wildlife Division in regions where protected areas have been established, which shall be under the supervision of a Regional Technical Director, and shall include subordinate officers, clerks, and employees as may be proposed by the Secretary, duly approved by the Department of Budget and Management, and appropriated for by

See* HOTLINE *on p.36

HOTLINE ***from p.35***

Congress." Sec. 11 of the same provides for a Protected Area Management Board which shall be established for each protected area, the composition of which includes several nominees from various LGUs, including: a) one representative from the autonomous regional government, if applicable; the Provincial Development Officer; one representative from the municipal government; one representative from each *barangay* (village) covering the protected area; one representative from each tribal community, if applicable; and, at least three representatives from non-government organizations (NGO)/local community organizations, and if necessary, one representative from other departments or national government agencies involved in protected area management.

- Sec. 7 of Department Administrative Order (DAO) 25 (series of 1992), or the implementing rules and regulations for RA 7586, further provides for a two-tiered management planning, "NIPAS site management planning and implementation shall be undertaken by protected area staff, which may include an NGO component, by technical specialists and representatives of local communities within and near the site following a general planning strategy prepared at the national level. The protected area management plan shall be contained within a management manual as provided by Section 9 of the Act. Protected area management shall be under the direction of a site specific Protected Area Management Board as provided in Chapter V of this Order and NGOs are expected to play an important role in area management along with DENR staff."
- Since majority of the composition of the PAMB members are representatives from LGUs and considering that the Board is mandated by law as the site-specific policy making body of protected areas, the LGUs have greater influence in the decision making process than the other representative groups. Therefore, the decision of the Board carries the majority vote of representatives from the LGUs.

Can the LGU create a fish sanctuary within its municipal waters without authority or approval from the DENR, Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR), or any other national agency?

- Yes, the LGU can create fish sanctuaries within its municipal waters without authority or approval from the DA-BFAR. LGC Sec. 3 states that "the LGU shall share with the National government the responsibility in the management and maintenance of ecological balance within their territorial jurisdiction subject to provisions of this code and national policies." This can be done via specific ordinances. The LGU may seek technical assistance from DA-BFAR in establishing fish sanctuaries. DA General Memorandum Order No. 3 (series of 1990) provides for guidelines in the establishment of fish sanctuaries.
- In cases where the initiative to create a fish sanctuary emanates from the national government agency (NGA), permission has to be requested from the LGU as provided for by Sec. 27 of the LGC which states that "no project or program initiated by NGA shall be implemented unless approved by SB and appropriate consultations are made."
- The establishment of fish sanctuaries within proclaimed protected seascapes (RA 7586) in municipal waters needs authorization from the PAMB.

Is there a law/regulation governing the establishment, utilization, and management of artificial reefs (AR) in municipal waters?

- None. However, a Joint DENR-DA-Department of Interior and Local Government-Department of National Defense Administrative Order (AO) is in the process of being signed by the four departments (DENR has signed the memo as of February 7, 1997) providing for a nationwide moratorium on artificial reef deployment pending formulation of policy guidelines. The moratorium will take effect for one year upon signing of the Joint AO.

What law can be used to control solid waste disposal (for example, coming from a poultry farm) and who should enforce this?

- The LGU should enforce policies pertaining to solid waste disposal. Sec. 17 (Basic Services and Facilities) of the LGC states that "Local government units shall endeavor to be self-reliant and shall continue exercising the powers and discharging the duties and functions currently vested upon them. They shall also discharge the functions and responsibilities of national agencies and offices devolved to them pursuant to this code. Such basic services and facilities include, for a *barangay*: services and facilities related to general hygiene and sanitation, beautification, and solid waste collection; for a municipality, solid waste disposal system or environmental management system and services or facilities related to general hygiene and sanitation." The responsibility of cities and municipalities for providing an efficient system of collecting, transporting and disposing refuse is also provided for in Sec. 82 of PD 856 (Sanitation Code).

PD 856 (Sanitation Code) series of 1975, Chapter XVIII, provides for a system of refuse (inclusive of all solid waste products such as garbage, rubbish, ashes, manure, dead animals, street sweepings and industrial wastes) disposal.

For more information, please contact Annabelle Cruz-Trinidad, CRM Policy Advisor (02-6339052), or other advisors of the Coastal Resource Management Project.

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July 20-26, 1997. **The International Coastal Zone Management Conference, CZ97.** Boston, Massachusetts. Contact: Dr. Martin C. Miller, USAE Waterways Experiment Station, Attn.: CEWES-CR-O, 3909 Halls Ferry Road, Vickysburg, MS 39180. Tel: 601-634-3999. E-mail: m.miller@cerc.wes.army.mil.

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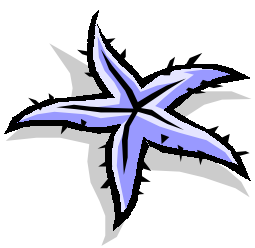
September 7-11, 1997. **Pacific Coasts and Ports '97.** Christchurch, New Zealand. Contact: John Lumsden, Conference Chairman, Centre for Advanced Engineering, University of Canterbury, Private Bag 4800, Christchurch, New Zealand. Tel: 64 3 364-2219. Fax: 64 3 364-2069. E-mail: j.lumsden@cae.canterbury. ac.nz. Web site: http://www.cae. canterbury.ac.nz/coastal/pacific.html

September 8-11, 1997. **First International Symposium on Stock Enhancement and Sea Ranching.** Bergen, Norway. Contact: PUSH, Bontelabo 2, N-5003 Bergen, Norway. Tel: +47 55 317395. E-mail: borthen@telepost.no. Web Site: http://www.irm.no/sear.hav97.html

September 22-27, 1997. **6th International Conference on Fluvial Sedimentology.** Cape Town, South Africa. Contact: The Conference Organizer, 6 ICFS, Postgraduate Conference Division, UCT Medical School, Observatory, 7925, South Africa. Tel: +27 21 406 6911. Fax: +27 21 448 6263. E-mail: sally@medicine.uct.ac.za

October 10-13, 1997. **Third LOICZ Open Science Meeting: Global Change Science in the Coastal Zone.** Leeuwenhorst Conference Centre, Noordwijkerhout, The Netherlands. Contact: LOICZ Core Project Office, Netherlands Institute for Sea Research, P.O. Box 59, 1790 AB Den Burg, Texel, The Netherlands. Fax: 31-222 369430. E-mail: loicz@nioz.nl WWW Home Page: http://www.nioz.nl/loicz/osmnot.htm

October, 1997. **MEDCOAST 97: The Third International Conference on the Mediterranean Coastal Environment.** Tunisia. Contact: MEDCOAST Secretariat, Middle East Technical University, 06531 Ankara, Turkey. Tel: 90 312 210 54 35. Fax: 90 312 210 14 12.



PUBLICATIONS ORDER LIST

Charting Papua New Guinea's Coastal Resource Development: Lessons from a Participatory Workshop and Coastal Resource Issues in Papua New Guinea: A Photo Text Collection. Available from Greenpeace Pacific, Private Mail Bag, Suva, Fiji, for US$8.95 each or US$14.95 for the pair. The latter can also be obtained from Tory Read, Greenpeace, 568 Howard Street, San Francisco, CA 94105. The first is a 67-page booklet that chronicles planning for, implementation of, and the follow-up to a workshop held in 1993. Its focus is human interactions. Environmental issues are given more attention in the second material, a 55-page booklet. For a copy of the proceedings of the PNG coastal resources management workshop, write to Biodiversity Support Program, 1250 24th Street NW, Washington, DC 20037 USA.

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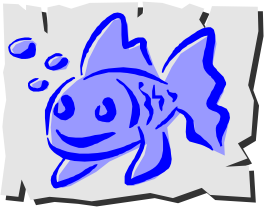

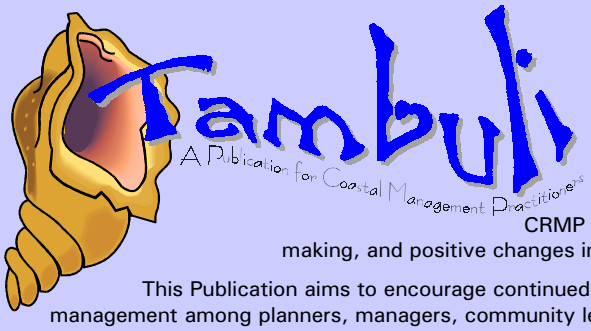

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