



# Project KARAGATAN

*Implementation of the Coastal Resource Management Project  
Project No. 492-0444*

*Prepared by*

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# INTRODUCTION

## BACKGROUND

The Philippines' coastal resources -- extensive shallow seas, coral reefs, mangrove swamps, mudflats, beaches, caves and estuaries-- are under continuing siege from increased pollution, habitat destruction and environmental degradation, thereby eroding the country's natural resource base and potential for sustainable use.

Coastal resource management (CRM) has been practiced in the Philippines over the last two decades to try to arrest the increasing damage of habitats and declining fish catch. However, while the Philippines has been a pioneer in the development and practice of community-based CRM, it is observed that such pioneering efforts have not been taken to scale (ICLARM, 1995). In addition, there was generally low prioritization of coastal management issues and problems at both national and local levels and public awareness of CRM issues and problems was likewise low (Social Weather Stations, 1997).

The Local Government Code of 1991 provided the initial national policy structure to decentralize the management of coastal waters in the Philippines. However, experiences in past coastal resource management projects revealed that majority of LGUs were unaware of their roles in managing these waters and lacked the capacity or resources (personnel and financial) to carry out this mandate.

## THE COASTAL RESOURCE MANAGEMENT PROJECT (CRMP)

The Coastal Resource Management Project (CRMP) is a seven-year (1996-2002) project which provides technical assistance and training to local governments and communities in CRM. It is implemented by the Department of Environment and Natural Resources (DENR) in partnership with the Department of Agriculture's Bureau of Fisheries and Aquatic Resources (BFAR), the Department of Interior and Local Government (DILG), local government units (LGU), non-governmental organizations (NGO), academe and

other groups. The project is funded by the United States Agency for International Development (USAID).

CRMP's strategic objective is to achieve 3000 kilometers of shoreline (or 17% of the national shoreline) under improved management by the year 2002. Its mission is to "catalyze CRM in the Philippines to a threshold that will expand nationwide and be sustainable beyond the life of the project". In this regard, CRMP

- serves as a catalyst for CRM initiatives and leadership, promoting self-reliance, empowering coastal communities and building a cadre of leaders and constituencies to support CRM initiatives
- seeks to promote the strategic expansion of CRM through institutional and sectoral networks and to achieving a condition of mutual reinforcement or a critical mass of CRM in the country
- aims to achieve a threshold of CRM, the basic capacity and institutionalization required to sustain CRM beyond the life of the Project

CRMP's approach is both holistic and integrated and covers a diverse set of project activities designed to bring about effective management of coastal resources at national and local levels. It was designed to develop strategic and innovative approaches to address new paradigms in coastal resource management in the Philippines while building on previously tested approaches. Its objective is to move beyond implementing pilot-scale community-based projects to effecting the spread of CRM to a broad cross-section of coastal stakeholders.

The Project is initially being implemented in six learning areas – Olango Island, Cebu; San Vicente, Palawan; Malalag Bay, Davao del Sur; Negros Oriental; Bohol and Sarangani Province – which will serve as models of CRM and within the project's life, as strategic expansion nodes from which good CRM practices can be spread to other coastal areas in the country. To support the replication and sustainability of the Project, activities are directed at enhancing the capabilities of local governments and communities themselves



to develop and implement resource management processes and systems. The Project aims to influence policy at the national level, while implementing CRM activities at the local level.

CRMP falls under **USAID Philippines Strategic Objective 4, Enhanced Management of Renewable Natural Resources**. The Project's revised results framework highlights the following two top-level indicators:

1. Kilometers of shoreline where improved management of coastal resources is being implemented.
2. Percentage change of fish abundance and coral cover inside and adjacent to marine sanctuaries

The following three intermediate results and corresponding indicators feed into the strategic objective of enhanced management of renewable natural resources:

#### **IIR1.1 Improved local implementation of CRM**

- Per cent increase in annual LGU budget
- Number of resource management organizations formed
- Number of municipalities where CRM practices are being implemented
  - CRM plans adopted
  - Fisheries and coastal management ordinances implemented
  - Environment-friendly enterprises established
  - Enforcement units operational
  - Marine sanctuaries functional
  - Mangroves under CBFMA;s
  - Municipal water boundaries enforced
  - Other habitat protective measures /open access restrictions in place

#### **IIR1.2 Increased awareness of CRM problems and solutions**

- Number of government and assisting organizations using legal, jurisdictional, and operating guides for CRM
- Percent of survey respondents demonstrating knowledge of CRM

problems and solutions

#### **IIR1.3 Improved policy and legal framework for CRM**

- Number of adoptions of CRM guidance by key national government agencies

### **OBJECTIVES OF THE RESEARCH**

The conduct of this independent research by MBL Trends, Inc., is meant to provide scientific and objective documentation to IIR1.2 as determined by per cent of survey respondents demonstrating knowledge of CRM problems and solutions. Specifically, the research (conducted at mid-point in CRMP's project life) is expected to provide valuable data on:

1. Current CRM knowledge, attitudes and practices (KAP) of key CRM target groups (mayors, local government officials, local opinion leaders, fisherfolks and women).
2. Perception by key target groups on issues related to the Project's key critical result areas:
  - a) fishing effort reduced to sustainable levels;
  - b) illegal and fishing practices stopped
  - c) critical coastal habitats protected and managed
3. Attitudes and practices of key target groups toward proposed CRM solutions/interventions
4. Willingness to take action, to make changes in one's behavior or support those interested to take action
5. Willingness to adopt new (CRM) behaviors
6. Perceived constraints/motivating factors to adopt new (CRM) behaviors
7. Socio-demographic profile and household characteristics of fisherfolk communities
8. Preferred sources and channels of information on CRM and
9. What specific forms of CRM interventions are favored or are "socially accepted" in the respective areas.

It will also illustrate through scientific sampling of representative fisherfolks throughout the country (+- 4 - 5% margin of error), the extent of national acceptance/non-acceptance of CRM. Such findings in turn would serve as valuable inputs to policy and decision makers at national and local



levels in the formulation of CRM policies and strategies for action.

### The CRMP- IEC Framework

It was recognized early on in the Project that for CRMP to achieve its strategic objective – 3000 km of the Philippines coastline under improved/ sustained coastal management – the first task at hand was to move coastal issues to the forefront of the country's political landscape and public milieu, and for ownership of such issues to expand beyond sectoral confines to a much broader political base.

In this regard, IEC strategies of “mainstreaming” and “agenda setting” were adopted to promote CRM in the Philippine national social agenda. These included:

- tapping the League of Municipalities of the Philippines (LMP) as an “authentic” voice and advocate for CRM
- use of mass media
- adaptation/framing of CRM messages to fit national government programs
- engagement of the general public via the “I Love the Ocean” Movement to generate broad support for CRM
- conduct of high-impact information, education activities in observance of the 1998 International Year of the Ocean) which featured such high impact activities as the “Our Seas, Our Life” exhibit and public education campaigns
- partnerships and synergy with agencies, donor-assisted projects and organizations with CRM mandates/objectives
- alliances and partnerships with business and other sectors including church-based groups, professional, civic and environmental organizations to promote broader support for CRM
- leveraging of project resources and counterpart schemes with partner agencies
- declaration of May and every May thereafter as the Month of the Ocean

in the Philippines

- conduct of the first Conference of Coastal Municipalities resulting in getting together, 90% of coastal mayors in the country as well as presidential attention
- community mobilization activities in observance of specific environmental events

CRMP's mission “to catalyze CRM in the Philippines to a threshold that will expand nationwide and be sustainable beyond the life of the project” necessitated an IEC approach that is integrated, multi-level and multi-tracked, encouraging participation in IEC activities through sectoral partnerships and the leveraging of resources. The IEC approach also seeks to be strategic (implementing activities that would have the greatest impact in the shortest amount of time).

At the programmatic level, the project conducts intensive and extensive training programs on CRM in the learning areas and uses highly participatory methodologies in the conduct of resource assessment, CRM planning and implementation activities. A major objective of such participatory approaches is the inculcation of a strong sense of ownership for the CRM processes and their outcomes.

### Local Level Implementation

The following are the key features of field level implementation in the CRMP learning areas:

1. Partnership with the local government units (provincial and municipal) who commit personnel and budget for CRM
2. Partnership with local organizations and projects with CRM mandates / objectives who can play key roles in CRM planning and implementation
3. Conduct of participatory coastal resource assessment (PCRA) with community-level groups
4. Development of coastal environment profiles through community participation and collaboration with local academic institutions.
5. Conduct of integrated coastal management (ICM) trainings for key local government



- officials, community members and NGOs
6. Promotion and conduct of participatory strategic management planning.
  7. Definition and integration of coastal resource management plans and projects within large-area and other sectoral / provincial plans.
  8. Implementation of selected enterprise and livelihood development schemes
  9. Facilitation of coastal management interventions (e.g. mangrove management, marine sanctuaries, sustainable coastal tourism, CRM-based municipal ordinances
  10. Conduct of community meetings, public dialogues, and other information, education and communication activities

### Key Target Groups

The Project has identified the following key target groups as of greatest importance in the successful implementation and sustainability of CRM at the local level:

- Those responsible for adoption of CRM interventions/technologies
- Local Government Unit officials (Mayors, Municipal Planning Officers (MPDOs), Municipal Agricultural /Fisheries Officer, Chair of the environment committee of the municipal council (Sangguniang Bayan)
- Barangay Captains and the local community including women
- Fisherfolks

Those who can pressure or convince others to adopt new behaviors:

- Media representatives
- Academics, NGOs, and other relevant organized groups

Those who can facilitate and pressure for CRM adoption from the top down:

- Provincial leaders of importance to CRM
- Government line agencies in the field (DENR, DA-BFAR)

Also identified as influential players particularly in the formulation of CRM policy were key decision makers of national agencies specifically, the Department of Environment and Natural Resources, Bureau of Fisheries and Aquatic Resources and the Environmental Committee Chairs of the House of Representatives and the Senate as well as the business sector and commercial fishers. However, funding constraints limit the scope of the research and as such for this particular qualitative and quantitative study, the three above-mentioned key target groups were the study's primary respondents.

TRENDS-MBL'S response to these objectives is a two-tiered KAP study, using both qualitative and quantitative approaches. The qualitative approach consists of in-depth interviews and focus group discussions designed to reach specific audiences as follows:

1. In-depth interviews among Mayors and government officials at provincial and municipal levels.
2. Focus group discussions among
  - Barangay Captains
  - Key Informants (members of academic, civic, non-government organizations)
  - Women/Housewives

On the other hand, the quantitative approach consists of a survey / face to face interviews of fisherfolks selected via systematic random sampling in the Project's learning areas and outside learning areas.

### SIGNIFICANCE OF THE RESEARCH

As mentioned earlier, the results of the research will provide scientific and objective data to support the Project's Indicator Intermediate Result 1.2 (IRR1.2)-- Increased awareness of CRM problems and solutions-- as determined by per cent of survey respondents demonstrating knowledge of CRM problems and solutions.

In addition, after three and a half years of operation, CRMP has refined its strategies for CRM implementation to clarify project interventions and measures of success as illustrated in the Project's results indicators. It is anticipated that for the Project's learning areas,



the research will provide concrete indications on how key target groups perceive and support CRM and what specific forms of CRM interventions are favored or are “socially accepted” in the respective areas.

The research will also serve to illustrate through scientific sampling of representative fisherfolks throughout the country (+/- 4 – 5% margin of error), the extent of national acceptance / non-acceptance of CRM. Such findings in turn would serve as valuable inputs to policy and decision makers at national and local levels in the formulation of CRM policies and strategies for action.

#### **LIMITATIONS OF THE RESEARCH**

As mentioned earlier, the research limits itself to the groups identified by CRMP as key CRM target groups at the community level. Knowledge, Attitudes and Practices (KAP) research on other stakeholders such as commercial fishers as well as national policy/decision makers will have to be a separate research activity.

Furthermore, while the research serves as a feedback / monitoring tool regarding target groups' perceptions and attitudes regarding CRM, it is not meant to be a summative evaluation of the progress of the Project as a whole.



# QUALITATIVE STUDY:

## *Focus Group Discussions Among Barangay Captains, Key Informants and Housewives of Fisherfolks*

### **TECHNICAL DETAILS OF FOCUS GROUP DISCUSSIONS**

**Location.** Focus Group Discussions (FGDs) were conducted in the six learning areas of CRMP (see Study Site on page 4).

**Respondent and Group Size.** Sixteen (16) groups were convened among barangay captains and key members of academic and other sympathetic civic/non-government organizations. The groupings were further divided into the following cohorts:

**Screening.** Interviews were conducted two weeks before the sessions to screen for qualified respondents who were then invited to the meetings.

**Meeting (Focus Group Discussion).** A moderator experienced in facilitating group discussions guided the sessions. The discussions were unstructured. However, a discussion guide was kept on hand to ensure that all important aspects of the study would be covered.

#### **Timing.**

Group	Area	Date of Session
1	Negros Oriental	August 6, 1999
2	Negros Oriental	August 6, 1999
3	Olango, Cebu	August 7, 1999
4	Olango, Cebu	August 7, 1999
5	Palawan	August 10, 1999
6	Palawan	August 10, 1999
7	Sarangani	August 12, 1999
8	Sarangani	August 12, 1999
9	Sarangani	August 13, 1999
10	Sarangani	August 13, 1999
11	Davao del Sur	August 14, 1999
12	Davao del Sur	August 14, 1999
13	Bohol	August 23, 1999
14	Bohol	August 23, 1999
15	Bohol	August 23, 1999
16	Bohol	August 24, 1999

	AREA	RESPONDENTS	ATTENDEES
1	Negros Oriental	Barangay Captains	8
2	Negros Oriental	Key Informants	8
3	Olango, Cebu	Barangay Captains	7
4	Olango, Cebu	Key Informants	8
5	Palawan	Barangay Captains	6
6	Palawan	Key Informants	8
7	Sarangani	Barangay Captains	9
8	Sarangani	Key Informants	9
9	Sarangani	Housewives	9
10	Sarangani	Housewives	8
11	Davao del Sur	Barangay Captains	9
12	Davao del Sur	Key Informants	8
13	Bohol	Housewives	8
14	Bohol	Housewives	8
15	Bohol	Key Informants	8
16	Bohol	Barangay Captains	8



## TECHNICAL DETAILS OF IN-DEPTH INTERVIEWS

**Location.** In-depth interviews were conducted among mayors of CRMP learning area municipalities. Below is the distribution of interviews in each learning area:

Learning Area	No. of Mayors Interviewed
Bohol	4
Olango, Cebu	1
Davao del Sur	2
Negros Oriental	4
Palawan	1
Sarangani	3
TOTAL	15

**Respondent and Sample Size.** Fifteen (15) mayors of the 26 municipalities identified by CRMP and provincial officials in each learning area were respondents for the in-depth interviews.

**Methodology.** Expert Qualitative Researchers interviewed mayors and provincial officials in-depth. The interview guide used was prepared by the research agency and was approved by CRMP. Although an interview guide was on hand, the interviews were unstructured and extensive probing was used to get local government unit executives to talk freely and to express detailed opinions and feelings on coastal resource management issues.

### Timing.

Learning Area	Municipality	Date of Interview
Bohol	Calape	June 5, 1999
	Clarin	June 4, 1999
	Getafe	June 4, 1999
	Loon	June 3, 1999
Cebu	Cordova	June 5, 1999
Davao del Sur	Digos	June 2, 1999
	Malalag	June 1, 1999
	Negros Oriental	Bacong
Negros Oriental	Bais	June 2, 1999
	San Jose	June 1, 1999
	Sibulan	June 3, 1999
	Palawan	Puerto Princesa
Sarangani	Alabel	June 3, 1999
	Glan	June 3, 1999
	Kiamba	June 4, 1999



## **FINDINGS**

### **BARANGAY CAPTAINS/KEY INFORMANTS<sup>1</sup>**

#### **Profile of Respondents**

##### **Barangay Captains are a heterogeneous group.**

They come from different disciplines: local wise man, salesman, lawyer, farmer, merchant, teacher, each with his or her own concept of how a barangay should be run.

They are generally better educated and informed than the population they serve. However, they have clearly become highly politicized for a good reason. After all, they need the mayor's support and signature for standard government bureaucracy. In the discussions, the barangay captains also claim that they are concerned about how advocacies like CRM would affect their chances in the next elections. However, they also say that such concerns have not stopped a good number of them from getting highly involved in CRMP.

One common sentiment picked up among Barangay Captains invited to the focus group discussions is the resentment they tend to have toward the government for not adequately recognizing their contribution to the process and system of local governance. They cite for example that the non-allocation of a fixed honorarium for Barangay Captains is a concrete illustration of such inadequate recognition. At best, they consider their current honorarium small or insufficient (about 2,000 pesos a month). They explain that being a Barangay Captain is a 24-hour job and one operates like a little president in their respective communities. Fueling their unhappiness is the knowledge that Mayor's Councilmen are given fixed salaries but usually

<sup>1</sup> Findings on these two groups were combined because they shared common sentiments, beliefs, and attitudes. The only difference is that key informants apparently operate at a higher level of consciousness because they have attended several

seminars and workshops on the environment and many are into marine biology, fisheries, teaching and CRM.

appear only when there are meetings. In their case, they say, barangay captains serve all hours of the day.

Among other duties and responsibilities, Barangay Captains have to attend to the following:

- dissemination and implementation of new governmental proposals
- attend to civil cases
- community needs and problems like garbage disposal
- disputes
- local emergencies
- not to mention the endless social expectations of the community where they are godparents at weddings or baptisms.

Barangay Captains attest that often they end up spending their own money to help local residents in emergency and health matters.

To help sustain their families, many Barangay Captains take on other sources of income like buying and selling goods, farming, or fishing.

Many of the Barangay Captains admit that while they have heard of it, talked about it, they had not read the new Fisheries Code (RA 8550).

#### **Key informants seem a more cohesive group.**

They are usually professionals handling responsible positions in government, private institutions or university. Though coming from different disciplines, e.g., teachers, college students, environmentalists, community leaders, government officials and business leaders, they are united in their concern for and interest in the environment. Apart from their professions, key informants are active members of various NGO and PO groups.

As a group, they sound more conversant with issues than barangay captains (with some college education, or are college degree holders) and are less politicized than barangay captains. Their knowledge about the environment is far more

*"What's hard about being a barangay captain is the honorarium. Like me, I just receive P1900 and I have to spend a lot. If somebody has been stabbed, I have to go to Glan and deliver medicines. It's really a difficult job."*



extensive than that of barangay captains as evidenced by their vocabulary and command of environmental terminologies, as well as their understanding of the situation.

Key informants are also much more familiar with the specifics of the new Fisheries Code and almost all had read the code in its entirety.

**Awareness.** Both groups appear to be very much aware of the problems affecting the coastal environment as well as their causes.

Both groups identify “coastal degradation” as the No. 1 environmental problem their communities are facing.

- Both groups have observed that fishermen’s catch is diminishing.
- They point to poverty and ignorance and government’s failure to meet the basic needs of people as the causes of coastal degradation (“*people have to cut trees for fuel and overfish for food, without realizing the long-term effects of their actions*”).
- Another reason cited was the government’s insufficient support (both financial and moral) to coastal resource management.
- Although illegal fishing (use of dynamites, cyanide, etc.), has diminished in more recent times according to discussants, it is tagged as one of the major reasons of coastal deterioration.
- Other causes of coastal degradation cited are: improper waste disposal, destruction of mangroves/corals, oil slicks, overpopulation.

*Awareness of coastal problems and their causes is high.*

*Although discussants come from, or have raised, big families (6-11 children), they were quick to point to migrants from the uplands as contributors to overpopulation in the coastal areas.*

**Knowledge.** Both groups exhibited a high level of knowledge about certain aspects of the ecosystem. They also say that coastal resource management is everyone’s responsibility.

Practically, they know what Coastal Resource Management (CRM) is all about.

Discussants acknowledge that much of their knowledge, consciousness and understanding of environment and its problems were learned during CRMP seminars/ workshops.

- They know that the forest and the coastal areas are interconnected, citing the cutting of trees and forest denudation as causes of siltation.
- They realize that an effective coastal program will not be possible without the cooperation of upland dwellers in managing the environment.
- They seem well aware that mangroves provide breeding habitat for fish and other sea creatures.
- They also know that mangroves foil siltation as they stop the transfer of soil to the sea and protect residents from inclement weather as well as tidal waves and high seas.
- They know that illegal fishing methods include use of bright lights, trawling, compressors and fine nets.
- They also relate the role of population growth with declining resources and see the need for a better population management program.
- They are also knowledgeable about marine sanctuaries and the various zones comprising these and general guidelines involved.
- They agree that caring for the sea involves everyone.
- For them, CRM means: taking care of the coast and the sea so that environmental deterioration will be arrested and its abundance will return.

**Attitude.** Both groups agree that everyone has a stake in coastal resource management, and appear to favor the implementation of CRM programs in their localities. However, they seem to doubt the commitment and ability of other key stakeholders (e.g., the government, community

*Those who have been exposed to CRMP activities say coastal resources deterioration can be reversed depending on how seriously the environment is managed.*



members) in pursuing CRM in the long term. The respondents particularly are concerned about the commitment of national government agencies as well as LGUs given that CRM needs some funding to sustain its implementation. As a result, the discussants are divided in their opinions regarding the future of CRM in the country, with some assuming a more “skeptical” attitude.

The discussants cite the inadequacy of coastal law enforcement as a primary problem. They state that the country has so many good laws, but lacks the tenacity and political will to enforce these laws. They cite as specific examples the enforcement of anti-dynamite and cyanide fishing laws as well as marine sand extraction and stone quarrying that continues to happen because of weak law enforcement.

The discussants say that they feel puny and inadequate in addressing big illegal fishers who they say are usually armed and supported by political bigwigs and well-paid lawyers.

Discussants reiterate the significant role played by municipal mayors in coastal law enforcement. They observe that where mayors are pro-active in CRM, coastal law enforcement can really be effective and environmental degradation minimized if not reversed.

They also cite the need for national government agencies to be more sensitive as well as responsive to local needs. They say that some people get away with getting permits from national agencies and use these as basis to do activities that are harmful to the environment such as mangrove conversion to fishponds, foreshore development, or logging. And yet, when disaster strikes, the national agencies do not end up footing the financial and emotional repercussions of these disasters, but the local government units.

Barangay captains who have achieved some level of CRM success and most key informants who have been exposed to CRM activities (seminars, workshops, trainings) are convinced that coastal deterioration can be reversed depending on how seriously the environment is managed or the “political will” of the government. This group of discussants have had direct observations or personal experiences in CRM and can easily attest to CRM’s value and significance.

Another group, however, maintains that harmful practices, like illegal fishing, will continue to happen, considering the increasing population. There are also some skeptics who believe they cannot continue managing the coastal resources once technical support from CRMP ends. They are concerned that the local government will not support them.

- These discussants also say that the government may be only paying lip service to CRM as it does not really provide the fiscal /financial support needed by the program.<sup>2</sup>

- Discussants claim government officials and

politicians are ineffective role models where CRM is concerned as they are perceived to be the backers or protectors of big illegal fishers.

*One major gripe: government has failed to provide alternative livelihood. Even as fisherfolk are willing to implement CRM, how they are going to survive for the moment is a challenge and a cause for worry.*

- Representatives of government line agencies do not seem to enjoy the confidence of some discussants. Discussants expressed the perception that staff of these agencies are not well-motivated and are even perceived by them as inefficient and in some cases, corrupt.

As for eradicating illegal fishing (big or small), they feel it would be close to impossible because people, being so poor, tend to use any method to catch something to eat. In addition, they cite the disparity of resources between illegal fishers and fish wardens or Bantay Dagat. They point out that fish wardens or even barangay captains don’t have high-powered boats or communications equipment to catch big illegal fishers. They also cited that generally, these illegal fishers are armed, with some commercial fishers enjoying protection from powerful politicians or members of the military.

<sup>2</sup> While there is the Internal Revenue Allotment (IRA), the general impression is that national government support is insufficient.



Discussants also look at some community members as lacking civic-mindedness (“my needs first before I worry about others”) and say some villagers do not care to attend seminars because they are cynical about the process.<sup>3</sup>

They say selling the CRM idea is not easy. The community’s willingness to change did not come overnight. There was anger and confusion at the onset, there was resentment, and some just took on a wait-and-see attitude.<sup>4</sup>

On the whole however, discussants appear “sold” on the concept and avowed objectives of CRM. They also see the need to ensure long term availability of these natural resources so that future generations can benefit. They seem to understand and appreciate the concept of sustainability.

Those who have actual experiences or first hand exposure to CRM benefits are particularly strong CRM advocates. “If they can do it, so can we!” seems to be their attitude after witnessing CRM successes in other areas.

The groups also expressed willingness to adopt “CRM-friendly” behaviors or to change one’s behavior in favor of CRM. They however cite that they cannot say the same for others who are not as like-minded as they are and who do not see CRM’s long-term benefits.

**Practice.** Both groups appear to have indeed imbibed the lessons from CRMP seminars/ workshops as they initiate and implement good CRM practices.

*CRMP activities appear to have influenced barangay captains to adopt CRM practices.*

Barangay captains have also come up with some strategies to get community members into CRM. For example, they organized *purok* meetings where CRM information was shared and discussed. They also

<sup>3</sup> Discussants say they have to deal with cynical reactions. For instance, some locals ask why CRM is strict with small fishermen but lax with commercial ones.

<sup>4</sup> Discussants said continuous interventions were necessary to overcome these challenges.

*According to barangay captains, local leaders have to demonstrate their CRM support so that people will follow. As an example, one barangay captain personally and publicly destroyed confiscated illegal fishing equipment .*

said that community members are encouraged to report the use of destructive fishing methods and perpetrators are fined accordingly.

They also claim that they help promote/undertake the replanting of mangrove areas and to protect these from illegal cutting and conversion. They also cited their efforts in helping promote the establishment of marine sanctuaries, artificial reefs, and mariculture/ aquaculture-based livelihood activities.<sup>5</sup> A barangay is even involved in coral farming /rehabilitation.

To sustain CRM and ensure the continued observance of good program practices, discussants say necessary groundwork should be done properly:

- a) Environmental education of the community
- b) People commitment
- c) Support of local government units (LGUs).

They consider people’s involvement a requisite for continued effort. They believe it is even better if the movement starts from the grassroots.

- Adoption of sound CRM practices appears to be a direct result of exposure to CRMP activities. Even for barangay captains, the turning point happened after a training program, a meeting or a workshop.
- The desire to continue adopting good CRM practices appears to have been bolstered by the fact that various sectors are willing to help the community.<sup>6</sup>
- To ensure the barangay’s support, some key informants make sure that barangay captains become officials or members of Fisheries and Aquatic Resources Management Councils (FARMCs).

<sup>5</sup> It is still the general belief that artificial reefs help provide a friendly environment for the fish.

<sup>6</sup> Barangay captains are grateful for assistance coming from various sectors: foreign-assisted projects, academe, NGOs, government agencies.



- Barangay captains play a key role in reinforcing community decision to adopt good CRM practices. There is a need to lead by example and demonstrate to the community that barangay leaders mean business.
- Total support of the LGU (mayor, the judge, the police) is needed so that CRM practice will thrive.<sup>7</sup>
- There is an impression that only a few national government employees really know their job. This is viewed as an obstacle to spreading good CRM practices.
- “*Too much politics*” is also a hindrance to CRM, according to discussants. They are particularly wary of politicians who support such efforts only for their own personal ends.
- To get communities to practice CRM does not happen with one effort, the discussants said. It has been a process of informing and explaining, explaining and informing.

Some successful strategies employed by the discussants to generate support for CRM include:

- Starting with a few core members (even just 10);
- Using networking (One barangay captain ordered all *purok* leaders to haul in at least 10 members each meeting.);
- Talking to women first (Wives are the ones who attend meetings anyway as their husbands are usually busy earning a living. Besides, if they are not convinced, wives can be obstacles to good CRM practice.)
- Encouraging participants to echo what they learned to neighbors/friends.

*Barangay captains have come up with their own strategies to reach community members and sell them the CRM idea.*

To get constituents to attend meetings, barangay captains:

<sup>7</sup> Discussants say LGU support should not be limited to financial support. It includes issuance of right ordinances and strict and impartial implementation of these. They also say mayors should be committed not only in words but also in deeds.

- Offer raffle prizes to attendees,
- Use meeting as venue to sign barangay clearances,
- Provide snacks during meeting,
- Distribute rice during meeting.

## HOUSEWIVES OF FISHERMEN

### *Profile of Respondents*

As required by the study, women invited to the discussions had to come from families which relied on the sea for their livelihood. As it turns out, the women discussants were involved in one way or the other with fishing, not just through their husbands but also in terms of their earning a living -- buying and selling fish either house-to-house or wholesale. For most of the women in this group, selling fish around town is preferred, because they realize higher profits.

They say that they turn to the sea for their daily sustenance because it is the only way they know how. As one housewife puts it, “*Our lives and the sea are one (naghiusa ang dagat ug among kinabuhi)*”. Yet another: “*Our lives are connected to the sea (“Sumpay sa dagat ang among kinabuhi”)*”.

It is typical of housewives to take on additional means of livelihood such as:

- raising animals (e.g., pigs and cows)
- cooking/buying and selling food items (kutsinta and other local delicacies, cooked food, candy, tuba, fruits)
- buying and selling odds and ends.

Almost all of the housewives are schooled but up to elementary grades only. At best, some finished secondary school. Although they are literate, they themselves claim that they read and write very slowly.

On a normal day, the usual fare at the table would consist of rice and vegetables and/or fish. The family gets to eat fresh fish if there are leftovers from a day's catch, for the best are sold to raise cash. Otherwise, the family has to contend with salted fish (“ginamos”) or dried fish (“buwad”).



**Children.** It can be said that these housewives are literally baby machines. Having more than 5 children is typical. To illustrate their mindset about children, they say “*I have seven only*” by which they mean that they have relatively fewer compared to a neighbor who has 10-15. They hope that one of the children will be lucky enough to make good and get them out of poverty.

Some of the bigger children are out earning a living as household helps or as fishermen themselves.

Although public school is free up to secondary levels, many of their children are out of school because they cannot afford the upkeep expenses required. They state that while public schools are supposedly free, government subsidy for these schools are woefully inadequate. As such, these schools have little choice but to charge a wide-range of fees including but not limited to, Parents Teachers Association (PTA) fees, examination fees, sports fees, floor wax fees, electricity fees, toilet fees, etc. which all add up to a tidy sum beyond the reach of parents.

**A typical day.** It is typical for a housewife in the areas sampled to wake up early, between 3:00-5:00 A.M., either in anticipation of the husband who is usually at sea in the early morning or to prepare for the day. Housewives do most of the household chores.

Among other details, a typical day's chores would essentially entail the following:

- Cooking at least three meals a day
- Cleaning the house
- Washing clothes at a nearby river or pump
- Fetching drinking water from a safe source
- Feeding the animals in the backyard
- Bathing the baby or toddlers
- Attending to needs of children.

Many homes do not have running water which requires them to go out to wash clothes or for drinking water. Some do not have electricity so there are times when they still have to gather firewood to be able to cook food.

Most of the housewives undertake fishing-related chores for their husbands. Not only do they prepare the food (*baon*) which the husbands take to the sea, they also take charge of preparing the fishing paraphernalia as required. It may mean going out to buy the gasoline for the motorized bancas, putting in the gasoline to run the engine, cleaning and smoothing out the fishing nets or preparing the baits.

According to the women, the role of the husband is mainly to provide for the family. With few exceptions, the women discussants claim that their husbands are generally free of household chores. At home, say the women, the husbands are to be served by their wives.

The discussants say that not only do they take charge of the day-to-day running of the household, they also take on the responsibility of making both ends meet. Housewives state that their husbands' income from fishing are not sufficient for their day to day needs. They are constantly short in their budget, and as such, it is up to them to find ways to augment their husbands' meager incomes. They take on whatever livelihood they can assume, from doing other people's laundry to cooking and selling food in the community.

Food takes up most of their income, followed by education, and household upkeep. There is very little left for clothing and personal items.

**Outlook.** The general impression at the time of the discussion was that compared to a year ago, for this group of women, quality of life for them had deteriorated. In spite of life's difficulties however, a few discussants were optimistic saying that they hope life will still turn out better than the year past. The general feeling, however, shared by about half of the women in the group is that the coming year will even be worse.

One thing that binds housewives, whether in Sarangani or in Bohol, is their prayerful stance. They start and end their day with prayer and surrender their lives to the care of the Almighty. Many are avid bible readers.



### **Relaxation and Entertainment/Other Activities.**

Housewives looked surprised when they were asked what forms of relaxation or entertainment they engage in. It seems relaxation and entertainment are not activities they look for or think about consciously.

The housewife is busy from the time she wakes up; the only time she can relax a little is after lunch. She takes a short nap. Then she is up again to welcome the children back from school and prepare supper. The next time she gets to rest is after supper. Bedtime is between 8-10 PM.

Housewives admit that they are inclined to go neighboring to chat and discuss their problems, as well as gossip with neighbors. They say it is actually very uplifting to be able to talk about one's problems to close friends. The usual topic is of course their husbands. Actually, other researchers have revealed that rumor mongering locally referred to as "Radio tilaok (radio by talking)" is an efficient way to communicate in rural areas. Housewives explain that getting along with neighbors is very important because in an emergency, with the husband often away, the first ones to go to for help are the immediate neighbors.

They could also entertain themselves. Some play the guitar and sing songs; others engage in ballroom dancing in a neighbor's house or at the plaza.

Television and radio are the more pervasive broadcast medium. Housewives in the sampled area do not read newspapers too often (once a week on the average)

Some of the housewives have joined socio-civic groups such as:

- WOMENS
- DOLE-USAID
- GATSEAK
- SAMAHAN NG KABABAIHAN
- WINDS (Women For Nation Development of Sarangani)
- SUFA (Sitian Ubos Fishermen's Association)

- MAFFA ( Magtangkay Farmers Fishermen Association)

Others could not join groups because they had no one to leave the children with so could not get out of the house, while others had no inclination to join organizations at all.

### **Life's Problems**

**Inconstant Source of Income.** The women discussants say that the sea is now an inconstant source of income and food for the family. Women claim that food supply from the sea is getting to be even scarcer.

- There are days when the catch is meager or when there is no catch at all
- When the moon is full, there is no fish to catch
- Uncertainty of food supply becomes worse when the weather is bad

However, even as they note that coastal resources are getting depleted in their localities, moving away to other places is not considered an acceptable option. What if conditions are worse where they are going? As claimed by the women, "We were born here, we grew up here, we intend to die here".

**Domestic Strife.** Most of the housewives complain about their partners: they are insensitive, lazy, irresponsible and/or wife beaters. Getting drunk at the end of the day was considered a given for husbands. Still, those who complain find it difficult to separate from their husbands even if they can easily fend for themselves. "It is my fate" or "It is the will of God" is a common refrain heard from these women.

Another consideration, that deter these women from separating from their irresponsible husbands is the children.

**Health.** When someone is ill in the household, the first course of action is to self-medicate using herbal knowledge, or to approach a herbalist ("Albularyo"). If this does not work, the next step is to go to the Rural Health Center which, unfortunately, they say is often short of important medicines. On a worst situation, they seek a



medical practitioner in the nearest town. Consultation alone will cost 50-100 pesos depending on the doctor. One should also input the transportation cost of going to the doctor.

They are hardly ever prepared to meet such emergencies; they are driven to borrow from relatives, loan sharks, or sell their precious possessions.

**Security.** In Sarangani Bay, pirates (*ambak pari*) are a real threat to fishermen, and housewives constantly worry about the safety of their partners out at sea. At the time of the focus group discussions, four neighbors had lost their boats to pirates who gave the fishermen two choices for their lives: either go with the pirates or swim to shore. The women claim that the latter is more often the easier choice rather than suffer slavery in the hands of pirates. In several occasions, fishermen were known to have lost their lives while swimming to shore.

Those who had come from the uplands and had migrated to the coastal areas report that the peace and order situation in the upland barangays are not any better than the coastal areas. Instead of pirates, there are bandits and lawless elements who rob and kill people. They lament that for poor people like them, life can be so cheap.

Housewives share the view that at this point in time, they are not expecting much government protection. According to them, in instances of piracy in the seas, the Coast Guard generally comes to the rescue much too late. Sometimes, the women claim, some law enforcers arrive at the scene and even throw suspicion on the fishermen victims. They cited a case where the fishermen victims were even jailed. Women discussants who were former upland dwellers claim that the situation is not much different in the upland areas where the community members are subject to lawless elements.

Overall, there seems to be a strong element of cynicism on the part of the women discussants about the effectiveness of law enforcement /peace and order initiatives in their areas.

**Dreams and Aspirations.** Housewives wish that they could earn more to experience some relief

from financial burdens. They are so tired of being poor, they say. They state that they are not asking for too much, just enough to be able to buy life's necessities. For themselves, they wish they could get hold of some capital to go into the following to augment their meager incomes:

- Start a small business like selling snack fare, vegetables, fish, sari-sari store;
- Raise animals like pigs, cows.
- Learn new skills (e.g. cosmetology, hairstyling)

*There appears to be a certain willingness to shift to other livelihood as housewives expressed wish to get hold of capital to learn a skill or start a business.*

**For their partners:**

- A powerful motorboat so he can go faster and farther out to the deep sea
- Learn a skill like carpentry, mechanical skills
- Own a piece of land and a beast of burden (carabao) so he can farm at the same time

Making their children attain higher education is the ultimate dream as this would be their children's ticket out of the current poverty they are in. Thus, an improvement in their financial status would mean certain education for their children.

### **Coastal Resource Management Awareness.**

Housewives know that the sea is in trouble. They also appear very much aware of the causes of coastal degradation.<sup>8</sup>

*Housewives say that without these seminars (conducted by CRMP, FARMCs, DENR), they would not have been as conscious and as knowledgeable about the coastal environment*

<sup>8</sup> A similar study ("Project Kagubatan," 1996) of upland residents' awareness, knowledge, attitude and practice about the forest environment revealed that community members were not familiar with the real environment situation in the area. Respondents were not aware that most natural forests were gone; nearly half said they saw no problem in their forest. The study was done



The discussants can remember times in the past when fish catch was abundant and gleaning shells was a daily and productive habit. Their husbands did not have to go far out to sea, and it only took 2 or 3 hours to get 5 to 10 kilos of fish. However, they say that things changed drastically with the advent of dynamite and poison fishing in their communities as well as the advent of increasing population. They observed that their communities have largely doubled or tripled in population causing strain in basic services, particularly water, sanitation and garbage.

They also observed the fast disappearance of mangrove forests and seagrasses in their localities resulting in the decline of shell populations. A good number of the discussants attribute the illegal cutting of mangroves as well as their conversion to fishponds as contributing to declining fish catch.

Majority of them say that declining fish catch has resulted in the deterioration of their quality of life. Half of the women discussants were of the pessimistic opinion that the coming year would bring no improvement in their lives and could even be worse. Such awareness of the coming of more difficult times makes them aspire for additional means of livelihood.<sup>9</sup>

- Housewives observe that fish catch is becoming less each year.
- They are aware of illegal fishing methods like use of dynamite, cyanide, fine nets and trawling that harm even the small fish.
- They are also aware of over-fishing that is going on, of the destruction of coral reefs and mangroves as well as the poisoning of the sea by human waste/garbage and chemicals from industries, fishponds and farms.

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years after DENR's Community Forestry Program started to be implemented.

<sup>9</sup> Housewives wish to get hold of capital to learn a skill (manicure/pedicure, hairstyling) or start a small business (selling snacks, vegetables, sari-sari store, raise pigs or other animals) to augment their income. They also wish that their partners would learn a skill like carpentry or own a piece of land and a carabao to be able to farm.

- They also point to overpopulation as one main reason of coastal degradation.<sup>10</sup>

**Knowledge.** Like the barangay captains and key informants, housewives of fishermen seem knowledgeable about the marine and coastal ecosystems. They seem to know about the functions of mangroves, coral reefs and seagrasses as well as the impacts of illegal activities on the productivity of these ecosystems. However, at the outset, their knowledge does not seem to be as extensive as the first group's.

Housewives' knowledge about the environment appears to have been a result of their attending interpersonal communication activities like CRM meetings/seminars.<sup>11</sup>

- They are aware that what happens upland has a bearing on coastal conditions.
- They can confidently talk about sea grasses, mangroves and coral reefs. For example, they know that mangroves provide shelter to marine species and protect shorelines from the onset of storms and floods. It is also in the mangrove areas where fish spawn and nurture their young. Because some of them collect milkfish or bangus fry for a living, they are especially conscious of the "take-over" by "outsiders" of their mangrove areas and the subsequent conversions of these areas into fishponds.
- Of special concern to these women discussants is the so-called price cartel imposed by bangus fry concessionaires. They claim that these concessionaires are from outside the communities and are able to dictate fry prices because of personal connections with local officials.

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<sup>10</sup> Like the barangay captains/key informants group, the housewives also come from, or raise, big families. Seven children seem to be a relatively low number for them (compared to neighbors who have 10-15 children).

<sup>11</sup> In terms of mass media, TV and radio are the more pervasive. It may be worth noting that other researches have revealed that "rumor mongering", locally referred to as "Radio Tilaok," is also an effective way to communicate in rural areas.



- They are also conversant about marine sanctuaries and their importance to improve fish catch and regenerate fish stocks.
- They decry the intrusion of commercial fishing into their municipal waters, claiming that these activities deprive them of their regular catch. They cite the sophisticated equipment used by these fishers as in the “latest style” such as sonars and superlights. They claim that these big fishers are usually not from their areas.
- They also cite industrial pollution as one of the causes of environmental degradation.
- Women discussants also know about the destructive effects of fine mesh nets and how these contribute to premature harvest of juvenile fish.

**Attitude.** The women discussants claim that initially, there was resistance to CRM. Because the sea provides their daily sustenance, they were most apprehensive of losing access to the sea’s resources. They were also concerned that with CRM, their fishing habits and practices may have to be altered.

However, the women discussants claim that such initial negative attitude toward CRM is now changing for the better. They say that with a better knowledge and understanding of what CRM is, they now support the program. For some of the women who have who have witnessed CRM in action, and reaped some of its benefits (e.g. better fish catch outside marine sanctuaries or have attended CRMP workshops/meetings, they are able to eloquently express their deep sense of ownership of the environment. They echo the sentiment that they and the sea are one, and seem to look at themselves as the ones responsible for taking care of the coastal environment as they participate in CRM activities.

These women particularly cite the value of marine sanctuaries and how convinced they are of its benefits to improve fish catch over 2 to 3 years.

Those which had operational marine sanctuaries in their areas attest to the significant increase in the size and number of fish their community catches since the sanctuaries were introduced.

They also claim that while initially, there was resistance to the establishment of their sanctuaries, after a while and seeing real results, the whole community has become “sold” to the practice.

The women attribute their attendance to CRMP meetings and seminars as a key factor in making them understand and appreciate their environment. They also say that these seminars have provided them not only knowledge, but also a sense of self-value-- that they are important as individuals.

Women say that those who do not understand about CRM are generally the ones most vocal and complaining about the laws that require them to protect and manage resources. Because these people do not find time to attend meetings and seminars, they are usually the source of misinformation.

*Housewives now see the community as being responsible for managing the coastal resources. In contrast, findings of a 1996 study (“Project Kagubatan”) showed that their upland counterparts -- though there were already so many forestry projects at the time of the research -- didn’t see themselves as part of the solution to the problems afflicting the forests.*

As with Key Informants and Barangay Captains, Housewives in the focus group discussions express a negative attitude towards the government. It would seem that the government has not made a strong presence in their lives, nor has it provided them the kind of services and support that citizens like them expect. They also say that they feel left out of governmental decisions and services.

The women discussants say that it is through sheer self-reliance that they address their poverty because government has not been able to deliver much support in the areas of livelihood and employment. Housewives also say, that given their experiences in the past, they have come not to expect much support and protection from the government.<sup>12</sup> Their general feeling is that poor

<sup>12</sup> According to them, the Coast Guard comes to the scene after the pirates are gone. Government maritime



people like them have always been left to fend for themselves. As such, it is not a surprise that people like them mistrust the government to some extent.

They say that implementation of illegal fishing laws is not always consistent and are biased against the poor. They observe that big fishermen are seldom caught and can circumvent the laws because of political support and economic clout with local government and law enforcers.

Women discussants say that over time, they have come to understand and appreciate that something needed to be done to ensure the survival of their livelihood which is fishing. They are particularly appreciative of marine sanctuaries and the ordinances against destructive fishing practices. A few claim that while their husbands use hook and line fishing, catch is much better now since the establishment of their marine sanctuary.

However, they lament that people who are well connected can circumvent the law with impunity. They particularly cite private landowners which beach fronts who act as if they own the beaches in their property—cutting down mangroves, building dikes and quarrying marine sand and stones.

All in all, the discussants say, attitude towards CRM is improving. Before the CRM seminars, some housewives admit they used to employ fine nets to catch fish. Now they are deterred by their own ethics and conscience (“*nakunsiya na kam*”). The Housewives also claim that have come to realize that that CRM does not stop them from fishing altogether.

**Practice.** Housewives proudly relate that on account of seminars on the environment and coastal management that they attended, they became involved in the care of the coastal resources.

*Those with fish sanctuaries appear to be very satisfied with the outcome of their sacrifices.*

Some volunteered for the Bantay Dagat, others helped establish fish sanctuaries. There were also those who

employees, they say, can be bought with a basket/bucket of fish.

helped build artificial reefs<sup>13</sup> and assisted in replanting mangrove areas. They also joined coastal clean up activities as well as “clean and green” contests. Additionally, some stopped their illegal fishing practices (e.g., use of fine nets) and limited their shell gleaning activities.

- Housewives say that having an active barangay captain is one of the contributing factors to successful CRM practices.
- It is also of great importance, according to housewives, that serious CRM business is demonstrated (e.g., confiscation of offender's fishing paraphernalia).
- Housewives claim that fishermen in their community are actually better off now even as they observe legal means of fishing. The fishes that come out of their sanctuary are big and easier to catch. Moreover, the fishermen need not go far out into the sea to fish.
- The discussants also appear knowledgeable about the rules and regulations of their marine sanctuaries. They say that those who fish right in the fish sanctuary are warned (if they are first-time offenders) and subsequently arrested/fined or their fishing gear confiscated by their *bantay dagats* or fish wardens for repeat offenders.
- They also call the attention of fellow community members who continue to cut mangroves. They say they are now more conscious to demand the necessary permits from those who are doing “questionable activities”.
- Some have done volunteer work for guarding their marine sanctuaries or support their husbands when they take their turns in guarding the sanctuaries.
- They also claim that they are now more conscious of cleanliness in their areas, particularly citing the ill effects of plastics and cellophane wrappers.
- In addition to fishing related activities, most of the women discussants are already engaged in supplementary livelihood such as swine

<sup>13</sup> It is still common belief that tires and other artificial reefs are good.



raising, cooking and selling food, tending small neighborhood stores (sari-sari), tourism and buying and selling clothes. They are most anxious to earn extra income as fishing for them is no longer adequate as their only occupation.

- Women also say, that compared to a few years back, illegal fishing--use of dynamite, cyanide and other poisons, while not completely eradicated have been reduced. They state that in the past, illegal fishing was so rampant that it was almost a "way of life". They attribute this reduction to the vigilance of community members as well as the presence of Bantay Dagat in their municipalities.
- However, there are still those who engage in illegal fishing. Women observe that illegal fishers have resorted to keeping their activities less noticeable by doing their blasting activities under the water instead of throwing the explosives from the boat. However, they also claim that community members now report these offenders to the Maritime Police and sometimes to the media.
- Some housewives have joined socio-civic organizations (e.g., WOMENS, DOLE-USAID, Samahan ng Kababaihan).

*Community members now report illegal fishing activities to the police and sometimes to the media.*

## MAYORS

In terms of CRM, the mayor respondents may be classified into two groups:

- 1) those who are already in the CRM action and advocacy mode or the "fully cooperative mayors", and
- 2) those who are still in the "contemplation" mode or "not so cooperative" mayors.

In this particular research (conducted in the CRMP learning areas), the fully cooperative mayors outnumber the not so cooperative mayors

Mayors of the first group have taken on a leadership role in implementing / institutionalizing CRM in their respective municipalities through personal advocacy work, annual budget allocations and sponsorship of CRM-related ordinances. They have also become strong advocates of the CRM cause.

The "not yet cooperative mayors" on the other hand are those who have not taken on a leadership role in CRM, preferring to leave the tasks to subordinates, and are implementing /institutionalizing CRM largely because of the law (i.e. it is their mandate).

**Awareness.** All respondent mayors are aware that their towns are facing environmental problems. They said that based on their personal observations, there is now less fish catch and local fisherfolk have to go farther out to sea to have a good catch.

Indicators cited by the mayors as reflective of environmental problems in their municipalities were: the migration of upland farmers to coastal areas to fish instead of to farm; increase in the price of fish in the markets; and increased incidences of siltation due to massive denudation of the forests. Some mayors attribute these problems to community members' careless ways of doing things and the people's "survival" needs but shortsighted attitudes towards care and protection of their environment.

Mayor advocates of CRM also cited the erroneous policies of national government as contributing to environmental degradation. They gave as example, the conversion of mangrove areas into fishponds which resulted in the depletion of mangrove forests. In the opinion of these mayors, national government should have been more prudent and more selective in allowing the establishment of fishponds. For example, in provinces like Bohol where naturally grown mangroves are abundant, establishment of fishponds should not have been allowed as a matter of national policy.

Fully cooperative mayors were decidedly more knowledgeable about the marine and coastal environment than the "not yet cooperative mayors". They are able to speak not only about environmental issues/concerns but would have specific recommendations as to how these should



be specifically addressed. They are also able to discern gaps in national policy and are quite passionate about empowering LGUs in CRM.

The “not so cooperative” mayors on the other hand are more inclined to attribute the responsibility of management to the national government and have not made CRM their priority citing water, health, agriculture, education, etc. as their main priorities. This group of mayors have not taken on a leadership role in promoting CRM in their municipalities and instead have delegated these responsibilities to their subordinates.

With regard to the coastal environment:

- All mayors observed a decline in fish catch in their municipalities.
- They are one in their response that corals, mangroves and other resources have been degraded or depleted through the years.
- They are all aware of what constitutes illegal or destructive fishing methods, although they say, that dynamite fishing and use of chemicals have greatly diminished in their areas.
- A few mayors say that the community does not fully appreciate the value and the wisdom of taking care of the mangroves, hence the illegal cutting and mangrove conversion.
- Mayors also mention the permanent structures built along the coasts, particularly in the buffer or salvage zones as one of their problems.<sup>14</sup>

They expressed different opinions about the issue of overpopulation and its effect on the environment. Mayors of relatively economically progressive towns see population increase as a threat to natural resources; officials of less developed municipalities say population is not a cause for alarm.

**Knowledge.** Most local officials mention that their environmental concerns are related to each other. It is

*CRM seems to be an important aspect of LGU plans. However, there are mayors who are really pushing CRM while others just pay lip service.*

<sup>14</sup> They say dismantling these structures should be done by the DENR.

important to note, however, that some mayors admitted that they only had a general idea of environmental issues.

They know that community members are aware that illegal methods of fishing are destructive, but admit that people use these methods in order to survive. They also believe that there should be a balance between coastal resource protection and survival needs of the constituents.

- Most mayors say everything is interconnected. All the waste from the upland will eventually end up in the coastal area.
- They say uncontrolled cutting of trees lead to soil erosion, causing siltation of rivers and seashores.
- Mayors appreciate the threat illegal /destructive fishing practices have on the health of the coastal and marine environment. However, while mayors know some community members engage in illegal practices, they also expressed the opinion that people are only doing it “in order to survive”. As a result “one must sometimes live at the expense of the environment”.
- Mayors cite fishing gear conflicts over such fish aggregating devices as *payaos* as a big problem. These *payaos* which are usually set up by commercial fishers and objected to by marginal fishermen as these serve as invitation to commercial fishers to fish in municipal waters.
- Fully cooperative mayors appreciate and understand what constitutes overfishing and why CRM interventions are needed to address these.
- Cooperative mayors strongly value the role of the community in resource management, while the less cooperative mayors still see resource management as successful only when there is support from national government by way of funding and personnel.
- Cooperative mayors are able to relate CRM with food security. They understand and appreciate the economic values of coastal resources and how much these contribute to the local economy. They realize that “fishing and fish catch and the products of the sea contributed a lot to the economy of the town



and was responsible for the poverty or well-being of the people”.

- Cooperative mayors see the need for a parallel program between CRM and population control.
- They also appreciate that marginal fishermen be given preferential attention and rights as articulated in the Fisheries Code.
- Mayors are strongly supportive of the proposal to include municipal waters in the computation of the Internal Revenue Allotment (IRA). They also cite the need for more support in the preparation of program proposals and solicitation of external funding.

**Attitudes.** CRM appears to be an important component of LGUs’ plans. However, there was a marked difference between the “cooperative mayors” and the “not yet cooperative mayors” in terms of enthusiasm for and prioritization of CRM.

*Cooperative mayors credit the strong presence of CRMP in their municipalities.*

Cooperative mayors appear to be serious about CRM and have actually made it a major part of their development programs. They personally took a leadership role in promoting CRM-related ordinances and practices in their municipalities. On the other hand, the “not yet cooperative” mayors may only be implementing CRM because of the law. However, while they are not negative towards CRM, they have not come around to prioritizing them.

Mayors say that coastal law enforcement in their municipalities leave much to be desired. In addition of severe lack of equipment, LGUs face uncooperative members of the police and judiciary. They cite cases where commercial fishers were arrested by the local Bantay Dagat but who are subsequently not prosecuted. They cite the need to include the judiciary when conducting trainings for CRM.

Mayors familiar with CRMP’s Participatory Coastal Resource Assessment (PCRA) cite the usefulness of the activity not only in educating the community but also in bringing about community participation in resource assessment and CRM planning.

Overall, Mayors look at success in terms of how much “development” they have introduced to their towns. These “developments” as well as their plans are almost always geared towards income-generating initiatives. This may be because of their desire to be self-supporting and less dependent on the national government.

They also seem wary of other government agencies<sup>15</sup> whose responsibilities overlap with theirs. Although they believe and appreciate the benefits of CRM, they also say implementing the program requires funds, which, unfortunately, their municipalities are always short of. However, cooperative mayors seem to find ways to augment their funds for CRM purposes. They take the initiative of sourcing funds to support CRM activities. While acknowledging lack of funding support as a constraint, this has not deterred the cooperative mayors from initiating CRM activities.

*Like the other discussants, mayors seem to be wary of national line government agencies whose responsibilities overlap with theirs.*

- Cooperative mayors display their supportive attitude by being in the thick of CRM activities.<sup>16</sup>
- Less cooperative mayors often delegate CRM matters to subordinates.<sup>17</sup>
- Though they welcome the passage of national laws to protect coastal resources, they lament that no funds have been allocated for Bantay Dagat and materials and equipment like speed-boats and buoys.

<sup>15</sup> Mayors say there are overlaps in the areas of responsibility concerning management of coastal resources. They cannot apprehend builders of illegal structures along the coastline because it is under DENR’s jurisdiction. Ports, which pollute their coastal areas, are under a different agency.

<sup>16</sup> Mayors excitedly narrate their hands-on experience in implementing CRM: joining the police to apprehend illegal activities, helping put up buoys, leading sea patrol teams.

<sup>17</sup> In fact, during the interviews, they would often attempt to refer the interviewers to their subordinates.



- They also find the judicial system undermanned (lack of judges, corrupt judges).
- Due to humanitarian reasons, they find it difficult to apply the full extent of the law, especially when a case involves their own fishers who, they know, engage in illegal activities to be able to survive.
- Their attitudes towards agencies/institutions involved in pushing environment issues are mixed. They find organizations like USAID, San Carlos and Southwestern as well as FARMCs cooperative, while they view national government agencies and some NGOs as less cooperative.<sup>18</sup>
- Mayors' attitude towards the institution of alternative livelihood for communities appears positive, considering that it complements coastal resource management activities. However, they say the initial capital for this alternative livelihood remains elusive.
- Cooperative Mayors also tap the services and support of the FARMC and sees the FARMC as a key player in implementing CRM in their municipalities.
- The mayors in general, appear not too motivated in applying to award-giving organizations.<sup>19</sup> They say the ultimate measure of their success is seeing that fishing villages and the entire community enjoy the abundance that the sea offers.
- Less cooperative mayors seem to see CRM as not their own. This is evident in their reference to external organizations helping implement the program as "they," as if the mayors are not partners in pursuing CRM goals.

**Practice.** Local officials view CRM implementation as one that requires a concerted effort among local officials, the people and various government and non-government organizations.

Mayors, especially from cooperative towns, say local officials should take an active role in CRM,

<sup>18</sup> Cooperative mayors mentioned the strong presence of CRMP in their areas, but only a few of the less cooperative towns did so.

<sup>19</sup> Of the 15 mayors interviewed, none spontaneously signified interest to apply to any award-giving organizations.

including in its promotion. They believe that a crucial step towards the appreciation and effective implementation of the program is to have an informed and educated population.

Mayors fully supportive of CRM concretely illustrate their commitment via the provision of a municipal budget for their CRM activities. They have likewise on their own looked for external financing and initiated relationships and partnerships with such national agencies as DENR, BFAR, Philippine Coast Guard, Philippine Navy, Philippine National Agency and various professional, civic groups and the academe. These mayors are pro-active and while they say that funding for CRM is a major constraint, they have not used such lack as an excuse for not implementing CRM in their municipalities.

Among the range of CRM initiatives cited by the mayors as being practiced in their municipalities are the following:

- conduct of participatory coastal resource assessment (PCRA)
- conduct of ICM trainings and workshops
- Information, education and communication activities
- organization of CRM Technical Working Groups,
- establishment of marine sanctuaries
- implementation of a coastal enforcement program (bantay dagat / deputation of fish wardens)
- implementation of alternative livelihood and mariculture
- implementation of tourism-based enterprise
- mangrove planting and rehabilitation, seaweed farming,
- formulation and adoption of CRM related ordinances
- CRM municipal planning

Mayors say a massive information drive was able to change negative attitudes towards CRM.

- Mayors take the lead in conducting CRM IEC activities.<sup>20</sup>

<sup>20</sup> One mayor says he visits schools to attend their flag ceremonies. He claims he tells children to scold their parents if they don't dispose of their garbage properly.



- Both cooperative and less cooperative towns pass ordinances in relation to CRM.
- Cooperative mayors have begun to draft zoning plans of their coastal areas. Portions are reserved for certain types of aqua-culture (e.g., seaweed farming, mud crab fattening).
- The mayors reiterate the need to provide alternative livelihood to fisherfolks, given that

there would be some occasions, when fishing would be reduced. Some mayors say that at their own initiative they have provided alternative livelihood to coastal communities. They are quick to add, however, that capital provided was not much.



# QUANTITATIVE STUDY:

## Survey of Fisherfolks

### TECHNICAL DETAILS

**Location.** The survey was conducted in 16 provinces, six (6) of which are CRMP learning areas while 10 are outside learning areas (see Study Site on page 18) to serve as control group or benchmark for the purpose of comparison.

**Respondent and Sample Size.** A total of 700 fisherfolks are interviewed for the study. This sample size gives an error margin of +/-4%. The distribution of the sample and corresponding error margins are:

Learning areas	=	450	+/-5%
Outside Learning areas	=	250	+/-6%
		-----	
		700	+/-4%

#### Sampling for Learning Areas:

##### Stage 1: Allocation of Sample Spots

Eighty (80) barangays (5 interviews per barangay) are distributed among the 27 learning area municipalities proportional to population size.

##### Stage 2: Selection of Barangays

Barangays are selected at random from within each municipality with probability proportional to population size.

##### Stage 3: Selection of Households

In each sample barangay map, interval sampling is used to draw 5 sample households:

A starting street corner is drawn at random.

The first sample household is randomly selected from the households nearest the starting street corner. Subsequent sample households are chosen using a fixed interval of 4 households in between the sampled ones; i.e., every 5th household is sampled.

#### Sampling for Outside Learning Areas:

##### Stage 1: Selection of Sample Provinces

Ten (10) out of the 27 provinces identified by CRMP as non-learning areas are selected using probabilities proportional to size.

##### Stage 2: Selection of Sample Municipalities

Fifteen (15) municipalities are selected from the provinces using simple random sampling from the total number of coastal municipalities.

##### Stage 3: Selection of Sample Barangays

Field interviewers are given a list of barangays per municipality based on the latest NSO data.

Field interviewers will proceed to the municipal hall to identify which barangays are coastal. The names of the coastal barangays are entered in a probability selection table from which the sample barangay will be drawn using simple random sampling.

##### Stage 4: Selection of Sample Households

In each sample barangay, interval sampling is used to draw 5 sample households:

A starting street corner is drawn at random.

The first sample household is randomly selected from the households nearest the starting street corner. Subsequent sample households are chosen using a fixed interval of 4 households in between the sampled ones; i.e., every 5th household is sampled.



## FINDINGS<sup>21</sup>

### PROFILE OF RESPONDENTS

The sample is comprised of fisherfolks aged 20 and above. Slightly more belong to the 20-44 age bracket (58%) [Table 1].

Practically all are married (93%) and half (47%) are not elementary graduates. Only one out of ten (11%) completed high school.

Although most of them (89%) are residents of their locality for over ten years, almost half (46%) were not born there but had transferred residency. Reasons for migration are almost always (38%) economic in nature.

**Table 1. PROFILE OF RESPONDENTS**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
<b><u>AGE GROUP</u></b>			
20 to 34 years old	27%	28%	25%
35 to 44 years old	31	30	33
45 to 54 years old	23	23	23
55 and over	19	19	19
<b><u>CIVIL STATUS</u></b>			
Married	93%	95%	91%
Widow	3	2	3
Single	2	2	2
Living-in as married	2	1	4
<b><u>EDUCATIONAL ATTAINMENT</u></b>			
None/Some elementary	47%	49%	42%
Elementary grad/ Some high school	42	41	43
High school grad to College grad	11	10	15
<b><u>RELIGION</u></b>			
Catholic	82%	83%	81%
Islam	4	4	4
Others	13	12	15
<b><u>LENGTH OF RESIDENCY</u></b>			
10 years or less	12%	13%	8%
Over 10 years	89	87	92
<b><u>MIGRATION</u></b>			
Migrated	46%	48%	45%
Livelihood	38	39	33
Family/Friends	6	5	8
Security	2	2	2

<sup>21</sup> Analysis of the quantitative data disaggregates the total sample of fisherfolks by CRMP learning areas and outside learning areas.

### ECONOMIC INDICATORS

Respondents belong to either socioeconomic class D or E<sup>22</sup>. Two out of three (68%) of those belonging to Class D do not own their lots. Slightly more of those from the CRMP learning areas belong to Class D and own their lots (34%) compared to those outside the learning areas (26%) [Table2].

In both areas, each household comprises more or less five members.

Almost all of the respondents own their houses (95%). However, majority (67%) neither own nor rent the lots where their houses are situated. Slightly more learning area fisherfolks (15%) own agricultural land versus those outside learning areas (10%). Almost nobody operates his own fishpond.

**Table 2. ECONOMIC INDICATORS**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
<b><u>SOCIOECONOMIC CLASS</u></b>			
D	60%	61%	58%
Own lot	19	21	16
Do not own lot	41	40	43
E	40	39	42
<b><u>AVERAGE HH SIZE</u></b>			
	5.5	5.5	5.5
<b><u>HOME OWNERSHIP</u></b>			
Own	95%	95%	96%
Renting	1	1	1
Neither own nor rent	4	4	4
<b><u>RESIDENTIAL LOT OWNERSHIP</u></b>			
Own	26%	27%	24%
Renting	7	6	8
Neither own nor rent	67	67	68
<b><u>AGRICULTURAL LAND OWNERSHIP</u></b>			
Own	13%	15%	10%
Not own	87	85	90
<b><u>FISHPOND OWNERSHIP</u></b>			
Own	1%	0%	1%
Not own	99	100	99

<sup>22</sup> Socioeconomic classification was based on the general appearance of the respondents' dwelling place. Class D dwellings are those made of light and cheap materials; poorly constructed; generally unpainted. Class E are temporary structures; poorly constructed one room affairs; unpainted and dilapidated.

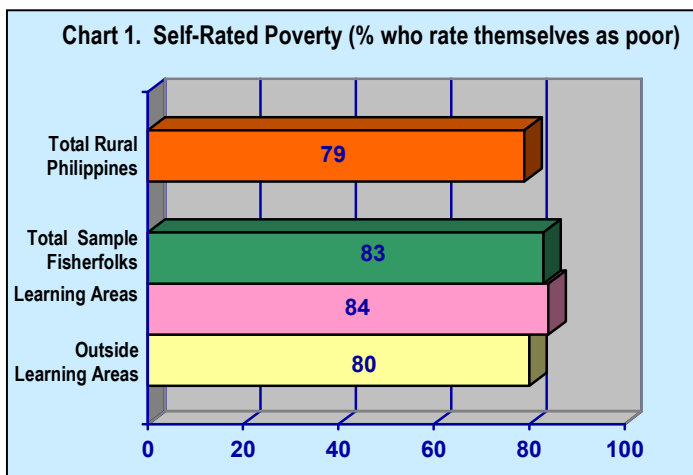


**Type of Fisherman and Lineage.** Only a few (5%) of the respondents are hired fishers. Most are small-scale municipal fishers who have their own boats for fishing [Table 3].

Majority have parents as fishers. This lineage of fisherfolks is more pronounced outside the learning areas. Almost half (47%) have grandparents as fishers as well.

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
<b>TYPE OF FISHERMAN</b>			
Small-scale	99%	99%	99%
Owner	94	93	95
Hired	5	6	4
Hired commercial	1	1	1
<b>FISHER PARENTS</b>			
	59%	57%	62%
<b>FISHER GRANDPARENTS</b>			
	47%	46%	49%

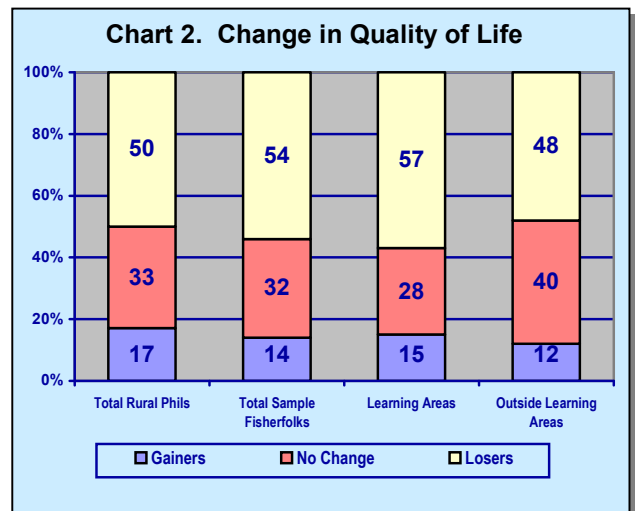
**Self-rated poverty<sup>23</sup> and Quality of life.** Slightly more (83%) fisherfolks rate themselves as poor compared to the national total rural figure<sup>24</sup> of 79%. Poverty is slightly more pronounced in learning areas (84%) than those outside (80%) [Chart 1].



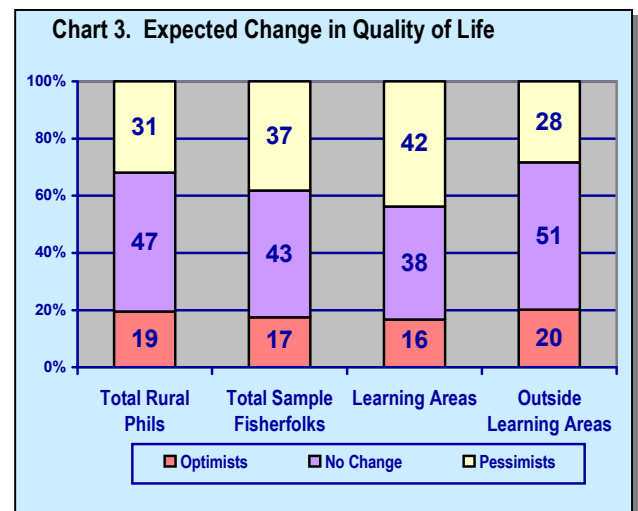
<sup>23</sup> Self-rated poverty is a survey research technique to measure poverty using the bottom-up approach. This technique yields the respondent's subjective perception of whether he regards himself as poor or not poor.

<sup>24</sup> Source of all Total Rural Philippines figures: Pulse Asia's December 1999 *Ulat ng Bayan* Survey.

**Quality of Life Trends.** More fisherfolks (54%) tend to feel that their quality of life now is worse than that of 12 months ago compared to the total rural residents (50%) [Chart 2]. This proportion of "losers" is higher among those in learning areas (57%) than those outside learning areas (48%).



Similarly, the number of pessimists (those who say that their quality of life in the coming 12 months will be worse than now) is more pronounced (42%) in the learning areas [Chart 3].



**Household Expenditures.** Food tops the list of expenditures in the past year (93%). Six out of ten (60%) spent on fishing-related expenses followed by housing needs (53%). Ranking does not differ



much in the learning and outside learning areas. However, a larger proportion among those in the learning areas spent more on fishing gear (63%) while those outside learning areas spent more on education (45%) [Table 4].

**Table 4. TOP 3 FAMILY EXPENDITURES**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
Food	93%	92%	95%
Fishing-related	60	63	55
Housing	53	54	52
Education	42	40	45
Health	28	28	28
Clothing	18	17	20
Transportation	3	4	1
Farming	1	1	1

**Borrowings.** Four out of five (80%) households have borrowed money for their basic necessities [Table 5]. Their usual sources of borrowings are their own relatives and friends. Only a few (8%) go to formal credit institutions.

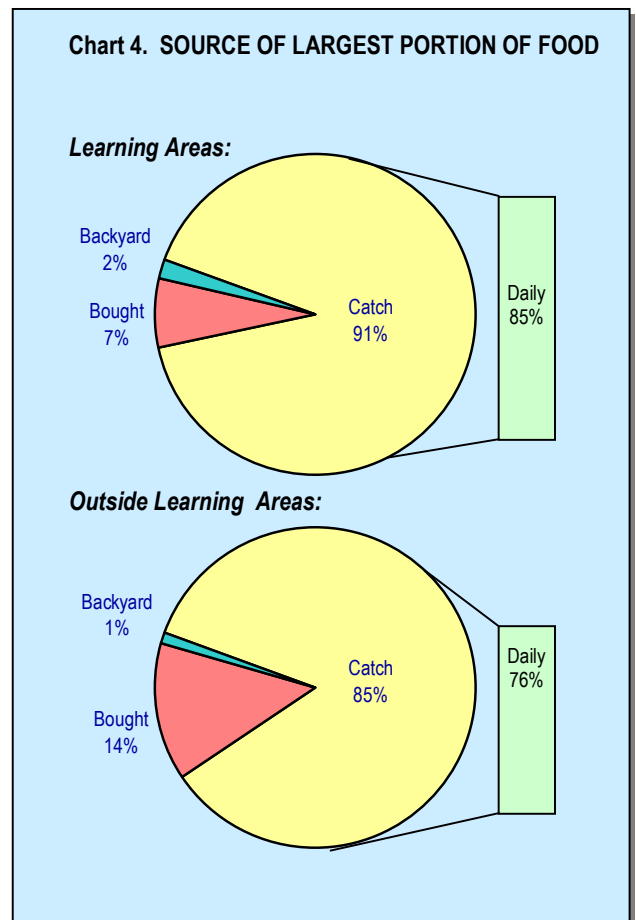
When asked to compare how often they borrow money now versus three years ago, majority of those who have borrowed (60%) say it is less often now.

**Table 5. BORROWINGS**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
<b>INCIDENCE</b>	80%	78%	82%
<b>Base: Those who have borrowed</b>			
<b>PURPOSE</b>			
Food	52%	54%	52%
Fishing-related	30	32	27
Health	21	21	23
Housing	19	18	20
Education	12	14	11
Farming	4	5	2
Clothing	1	1	0
Transportation	1	1	0
<b>SOURCE</b>			
Formal	8%	9%	8%
Informal	92	91	92
<b>FREQUENCY NOW VS. 3 YEARS AGO</b>			
More often	15%	15%	15%
Same as before	22	22	26
Less often	60	63	61

**Source of Daily Food.** Households in the learning areas (91%) tend to be more dependent on their catch from the sea for food than those outside learning areas (85%) [Chart 4]. Daily dependence on catch is also higher in the learning areas (85%).

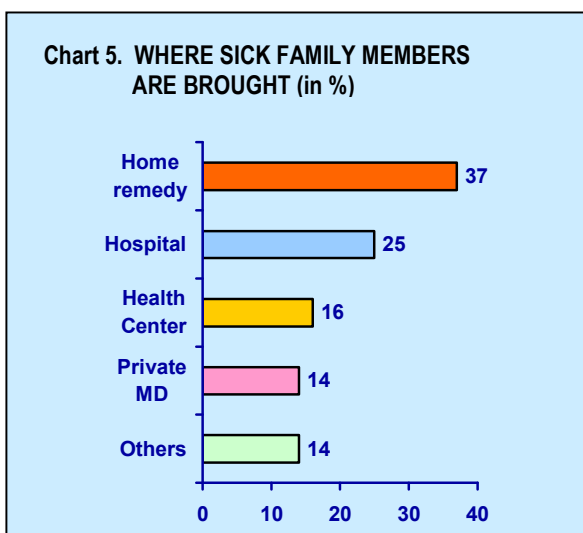
**Chart 4. SOURCE OF LARGEST PORTION OF FOOD**



**Health.** A plurality (37%) resort to home remedy or self-medication whenever a family member gets sick [Chart 5]. A quarter (25%) would bring him/her to a hospital (more commonly to a government hospital). The local health center (16%) and a private physician would also be turned to by some. Others would summon a local healer (*albularyo/herbolaryo*) or bring the sick to a religious group.



In almost all cases (88%), the family would have to spend for the medications themselves. Few (8%) are able to get free medicines from the local health center.



**Most Urgent Personal Concerns.** Another indicator of poverty is established as three out of four (74%) cite assurance of enough food everyday as their most urgent personal concern [Table 6]. Health (64%) and education (62%) are also more frequently worried over by respondents.

**Table 6. THREE MOST URGENT PERSONAL CONCERNS**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
At least to be able to have enough to eat everyday	74%	76%	70%
Health of family members	64	65	64
To provide schooling for my children	62	61	64
To have a secure and well-paying job or source of income	42	42	43
To have my own house and lot	25	26	22
To be able to pay our debts	15	15	15
To have enough and safe water/electrical power at home	14	14	15

**Most Pressing Problems in the Community.** Economic (76%) and environmental (75%) rank first as pressing issues in their communities [Table 7]. A large 67% acknowledge that decrease in fish catch is top environmental problem in their place today. This issue yielded the largest proportion from this probe.

Services such as bad roads and water supply is also cited by majority (54%) of the respondents.

**Table 7. THREE MOST PRESSING PROBLEMS IN THE COMMUNITY**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
<b>ECONOMIC</b>	76%	74%	79%
Poverty	55	52	61
Unemployment	43	44	40
Overpopulation	6	6	6
<b>ENVIRONMENT</b>	75%	75%	75%
Decrease in fish catch	67	69	64
Municipal water pollution	14	14	15
Destroyed mangroves	9	8	11
Illegal fishing	1	1	2
<b>SERVICES</b>	54%	52%	57%
Bad roads	24	23	25
Lack of water	21	21	22
No electricity	13	12	15
Waste disposal	8	8	8
Sewerage system	3	4	1
<b>PUBLIC SAFETY</b>	18%	22%	12%
Drug addiction	10	12	6
Peace and order	9	11	7
<b>GRAFT &amp; CORRUPTION</b>	8%	9%	6%

**Trends in the Coastal Environment.** Nineteen percent (19%) say that the general condition of the coastal environment has improved in the past three years [Table 8]. This observation is significantly higher in the learning areas (21%) than outside learning areas (15%). Ease in catching fish, improved size and quantity of fish to catch has been observed by some in the past 3 years.

The deterioration of the coastal environment is perceptible to the fishermen. They say it takes a longer period to catch fish these days and observe smaller and less fish available.



**Table 8. TRENDS IN THE COASTAL ENVIRONMENT**

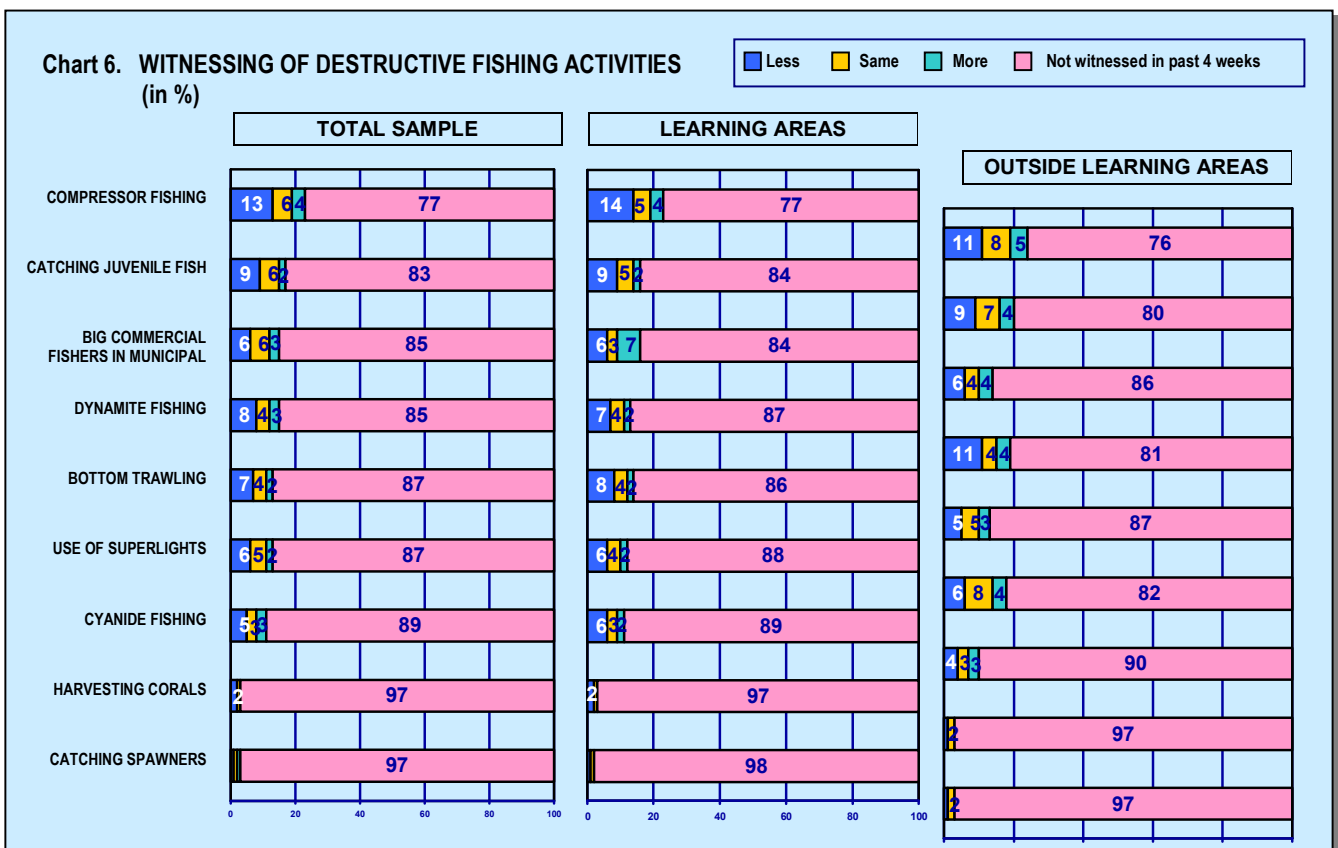
	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
<b>General condition of coastal environment</b>			
Improved	19%	21%	15%
Remained the same	25	21	33
Worsened	56	58	52
<b>Length of time to catch fish</b>			
Shorter	16%	17%	13%
No difference	14	11	18
Longer	70	71	69
<b>Change in size of fish</b>			
Larger	8%	9%	6%
Remained the same	24	21	28
Smaller	68	70	66
<b>Change in quantity of fish</b>			
Increased	8%	9%	7%
Remained the same	18	17	22
Decreased	73	74	72

Respondents were asked if they themselves have witnessed destructive fishing activities in their community during the past month. Within the learning areas, less catching fishes which are not yet mature (16%), less dynamite fishing (13%), and less use of superlights (12%) were reported as compared with the destructive fishing activities outside learning areas [Chart 6].

Those who witnessed destructive fishing activities were asked to estimate how frequent these activities are being done in their area. Most say these happened, one to five times in the past 4 weeks. In general, illegal fishing activities seem to be more frequent in the outside learning areas where bottom trawling, use of superlights and catching immature fishes were said to have been witnessed by some more than 20 times in the past month.

Furthermore, witnesses were asked to assess if they feel that each activity has become more or less rampant these days. The study shows that compressor fishing has lessened in both areas but more significantly in the learning areas (14%).

**Chart 6. WITNESSING OF DESTRUCTIVE FISHING ACTIVITIES (in %)**





**PRACTICES**

**Fishing practices.** Slightly over half of the fishermen go out fishing every day (55%) [Table 9]. The rest would fish 4-6 times a week. Gleaning is done by about a third of the sample (33%) and they do so once or twice a week only (29%).

**Table 9. FREQUENCY OF FISHING/GLEANING PER WEEK**

	FISHING			GLEANING		
	Total Sample	Learn. Areas	Out L. Areas	Total Sample	Learn. Areas	Out L. Areas
Daily	55%	53%	58%	2%	2%	2%
> 3X	42%	45%	36%	4%	3%	4%
< 3X	3%	2%	4%	29%	31%	26%
Ave.	5.6	5.5	5.7	2.5	2.4	2.6

Although almost everyone usually fishes within their own municipality, a third (33%) say that they still sometimes fish in other municipalities.

The amount spent by fishermen each week in maintaining their fishing gear range from PhP5.00 to PhP7,000.00, depending on what type of gear they use. Plurality (31%) would spend between PhP50-100 [Table 10]. One-third (36%) of fishermen do not have regular buyers for their fish catch.

**Table 10. AMOUNT SPENT IN FISHING**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
< P50	13%	12%	14%
P50 – 100	31	31	30
P101 – 200	20	19	20
P201 – 300	11	11	10
P301 – 400	7	6	7
P401 – 500	8	8	9
P501 – 1000	5	7	3
> P1000	3	3	4
Median	P150	P150	P150

**Marine Sanctuaries.** The survey shows that learning areas (56%) have more marine sanctuaries than outside learning areas (47%).

**Illegal Fishing Activities.** Seven out of ten (69%) report that there are fishermen from other municipalities who fish in their town. Incidence within learning areas and outside learning areas shows no significant difference.

Three out of ten (30%) know of someone who was fined for illegal fishing while about a quarter (23%) know someone who was jailed. These penalties seem to be imposed more often outside learning areas.

**Possibility of Doing Destructive Fishing Activities.** Respondents were asked if there would be situations when they would consider doing destructive fishing activities. Only a few say that they would consider [Table 11].

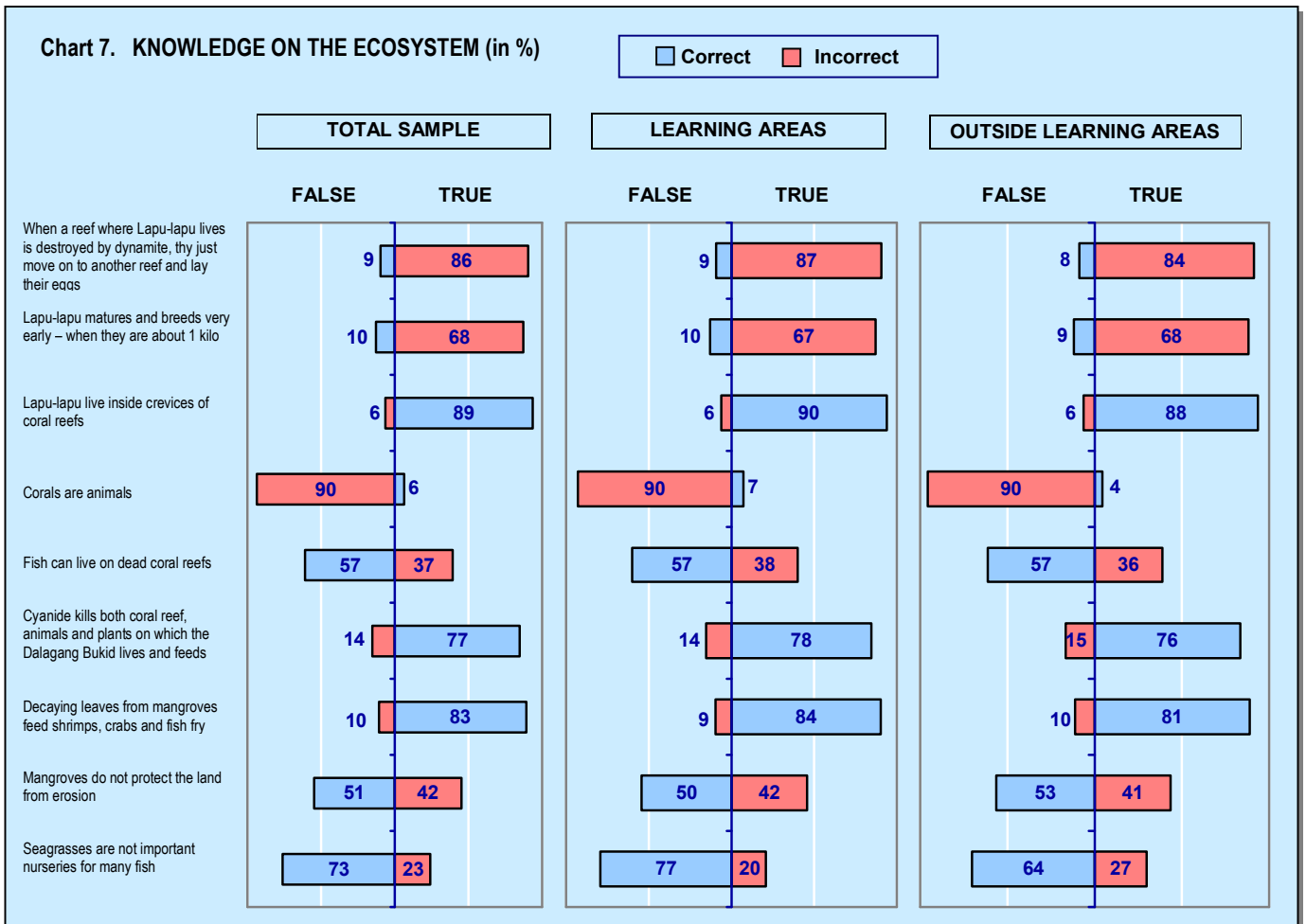
**Table 11. POSSIBILITY OF DOING DESTRUCTIVE FISHING ACTIVITIES**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
Use fine mesh net	8%	8%	8%
Bottom trawling	5	6	3
Catch juvenile fishes	4	3	4
Use superlights	3	4	2
Use compressor	3	3	3
Cut mangroves	2	2	2
Use cyanide	2	2	1
Convert mangroves to fishponds	2	2	2
"Muro ami"	1	1	1
Harvest corals	1	1	1
Use dynamite	1	*	1

**KNOWLEDGE**

**The ecosystem.** Respondents were given a battery of true or false statements to measure their knowledge about coastal resources.

- Most fishermen (89%) are aware that the Lapu-lapu inhabit crevices of coral reefs [Chart 9]. However, there seems to be a misconception among about 7 out of 10 fishermen (68%) that this type of fish breeds very early.
- Another misconception is that the Lapu-lapu would migrate to other reefs if theirs are destroyed by dynamite.



- Corals are not well-understood by most fishermen. About three-fourths (77%) are aware that coral reefs are destroyed by cyanide; majority (57%) know that fish cannot survive in dead coral reefs, but practically all (94%) still think that corals are rocks.
- The knowledge that mangroves protect against erosion is weak in both areas (51%). However, many (83%) know that the leaves of these trees provide nutrients to sea creatures.
- About three out of four (73%) acknowledge the importance of seagrasses as nurseries for certain fishes.

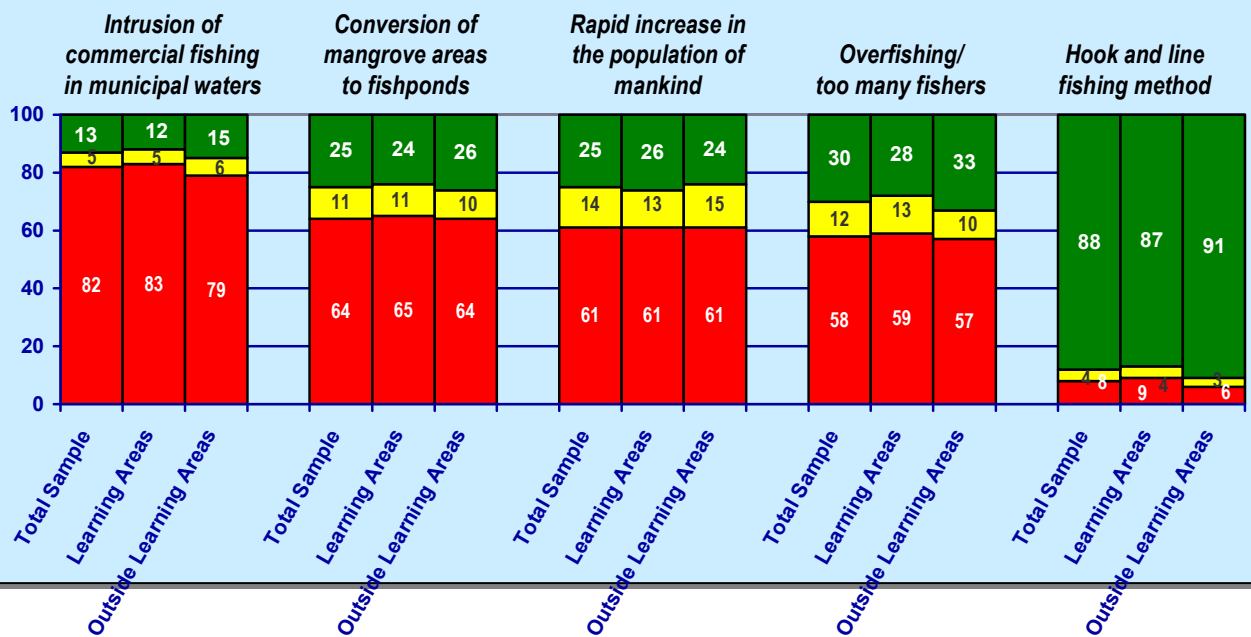
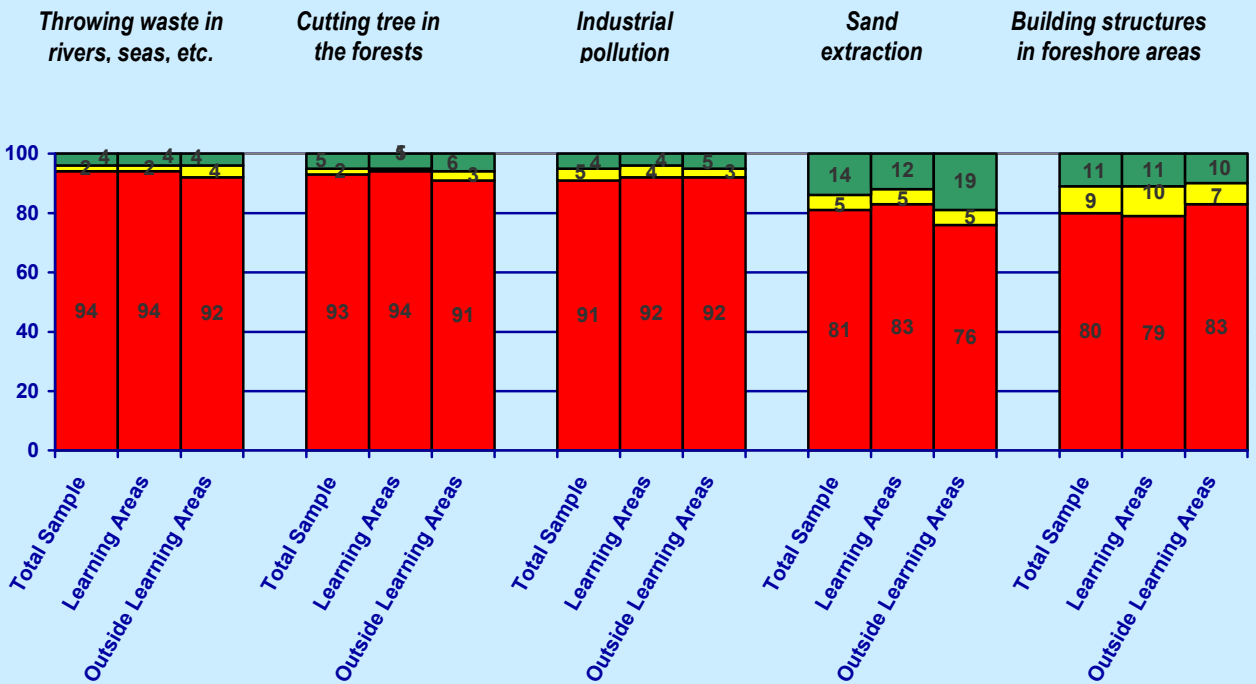
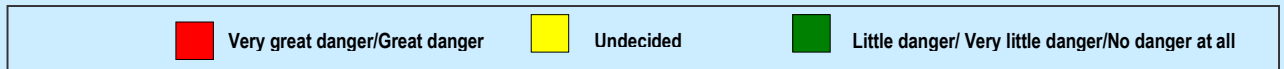
Level of knowledge with the above facts generally do not significantly differ between learning areas and outside learning areas.

**Danger Brought about by Specific Activities to Coastal Resources.** A list of activities was shown to the respondents to determine the degree of danger they perceive these present to coastal resources.

- The largest proportion who say “very great danger” or “great danger” are those which involve pollution and deforestation [Chart 8].
- Next perceived dangerous activities include sand extraction, construction near the coast and encroachment of big time fishers within municipal waters.
- Conversion of mangroves areas into fishponds, rapid population growth and overfishing are also said to be dangerous although to a lesser degree.
- Almost everybody say that hook and line as a fishing method poses almost no danger at all to coastal resources.



**Chart 8. DEGREE OF DANGER TO COASTAL RESOURCES BROUGHT ABOUT BY SPECIFIC ACTIVITIES (in %)**





**Agreement-Disagreement with Knowledge Statements.** Another test of fisherman's degree of knowledge about sound coastal resource management is through a series of statements

- Practically all fishermen agree that dolphins and juvenile fishes caught should be thrown back to the sea [Chart 9].
- They also know that marine sanctuaries will help rejuvenate fish stocks and recover coral reefs.
- A large majority also know that the management of municipal waters is the responsibility of the local government.

- Fishermen generally believe measures such as establishing catch ceilings and closed seasons are means to revert the decreasing amount of fish.
- Still a majority but a smaller proportion associate other environmental hazards like deterioration of forests, soil erosion, and natural calamities, with the health of the seas.
- A significant number of fishermen still do not believe that the ocean does not have an infinity of resources.

**Chart 9. AGREEMENT/DISAGREEMENT WITH KNOWLEDGE STATEMENTS (in %)**





**Awareness of municipal coastal laws.** Republic Act 8550 or “Fisheries Code” mandates local chief executives of coastal municipalities to enact ordinances to protect their municipal waters. The study determined if fisherfolks are aware that these laws are being enacted in their own towns.

It is encouraging to find that fisherfolks are aware of coastal laws that should be followed. Results

show that awareness of the ban in the use of explosives, poison, and electricity in fishing is universal. [Table 12].

There are also observed differences in the degree of knowledge among the learning areas and outside learning areas about certain ordinances.

**Table 12. ORDINANCES BEING IMPLEMENTED IN RESPONDENT’S MUNICIPALITY**

	<u>TOTAL SAMPLE</u>	<u>LEARNING AREAS</u>	<u>OUTSIDE LEARNING AREAS</u>
Restriction on the use of explosives, noxious or poisonous substance or electricity in fishing	93%	95%	91%
Restriction on the use of fine mesh net	81	80	81
Ban in the use of compressor/“hookah” diving	71	74	65
Ban of activity which will bring about aquatic pollution	63	60	68
Ban in the use of superlights	61	62	60
Ban in the entry of commercial fishing in municipal waters	58	61	53
Establishment of fish sanctuaries	51	56	42
Ban in catching “sabalo” or other breeders/spawners	51	49	56
Restriction on gathering or exporting corals	49	50	48
Delineating boundaries of municipal waters	49	49	49
Ban on “muro-ami” or any method which destroys marine habitat	47	47	48
Limiting the use of fish aggregating devices such as “payaws”, artificial reefs, etc.	35	40	26
Restriction on conversion of mangroves into fishponds	33	30	39
Reverting abandoned fishponds to mangrove areas	32	28	38
Establishment of a closed season during specific period of time	28	23	38
Providing alternative livelihood	23	25	18
Promoting coastal ecotourism	19	22	12
Limiting the quantity of fish that may be captured or catch ceiling	16	15	17

The following ordinances were identified by more respondents from learning areas:

- Ban in the use of compressor/“hookah” diving
- Ban in the entry of commercial fishing in municipal waters
- Establishment of fish sanctuaries
- Limited use of fish aggregating devices
- Municipal government should provide alternative livelihood to fishermen
- Municipal government should promote ecotourism.

On the other hand, the following were identified by more respondents from outside learning areas:

- Ban in any activity which will pollute the waters
- Ban in catching spawners
- Restriction on turning mangrove areas into fishponds
- Revert abandoned fishponds to mangrove areas
- Establish a closed season of fishing



It should be noted however that the study assumes that these ordinances are already in place in the sample municipalities.

**Knowledge on whom one should go to for CRM assistance.** The official most proximal and familiar to them is the person they will first approach for

CRM concerns. Asked to whom they will turn to for different CRM concerns, the barangay captain is point person. Whether it be to report an illegal fishing activity to or to be provided with an alternative source of livelihood, the village chief is the person to go to. The town mayor is a far second [Table 13].

**Table 13. WHOM ONE WOULD GO TO FOR CRM ASSISTANCE**

<u>CRM CONCERN</u>	<u>TOTAL SAMPLE</u>	<u>LEARNING AREAS</u>	<u>OUTSIDE LEARNING AREAS</u>
<i>Organize a fishers' organization</i>	Bgy. Capt. (45%) Mayor (13%) BFAR (12%)	Bgy. Capt. (44%) Mayor (12%) BFAR (10%)	Bgy. Capt. (46%) Mayor (15%) BFAR (14%)
<i>Report an illegal fishing activity</i>	Bgy. Capt. (40%) Mayor (13%) Police/PNP (11%) Bantay Dagat (11%) BFAR (10%)	Bgy. Capt. (41%) Police/PNP (12%) Mayor (11%) Bantay Dagat (11%) BFAR (10%)	Bgy. Capt. (40%) Mayor (17%) Bantay Dagat (12%) Police/PNP (10%) BFAR (10%)
<i>Report incidence of gathering corals</i>	Bgy. Capt. (40%) Bantay Dagat (12%) Mayor (11%) BFAR (11%)	Bgy. Capt. (39%) Bantay Dagat (13%) Mayor (10%) BFAR (10%)	Bgy. Capt. (41%) Mayor (13%) BFAR (12%) Bantay Dagat (11%)
<i>Get mangrove management assistance</i>	Bgy. Capt. (40%) Mayor (12%) BFAR (10%)	Bgy. Capt. (39%) Mayor (11%) BFAR (9%)	Bgy. Capt. (42%) Mayor (14%) BFAR (14%)
<i>Be deputized as a fish warden</i>	Bgy. Capt. (40%) Mayor (15%) BFAR (14%)	Bgy. Capt. (39%) Mayor (15%) BFAR (11%)	Bgy. Capt. (41%) BFAR (18%) Mayor (17%)
<i>Report intrusion of commercial fishers in municipal waters</i>	Bgy. Capt. (39%) Mayor (16%) Bantay Dagat (12%)	Bgy. Capt. (40%) Mayor (15%) Bantay Dagat (14%)	Bgy. Capt. (38%) Mayor (18%) Bantay Dagat (10%)
<i>Get information about fishing rules and regulations</i>	Bgy. Capt. (38%) BFAR (14%) Mayor (14%)	Bgy. Capt. (38%) BFAR (12%) Mayor (12%)	Bgy. Capt. (37%) BFAR (17%) Mayor (17%)
<i>Alternative livelihood assistance</i>	Bgy. Capt. (36%) Mayor (22%)	Bgy. Capt. (34%) Mayor (20%)	Bgy. Capt. (38%) Mayor (26%)
<i>To attend a CRM training</i>	Bgy. Capt. (33%) Mayor (13%) BFAR (13%)	Bgy. Capt. (34%) Mayor (12%) BFAR (12%)	Bgy. Capt. (32%) BFAR (15%) Mayor (14%)



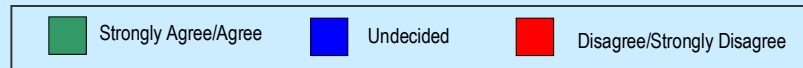
## **ATTITUDE**

**Agreement-Disagreement with Attitudinal Statements.** Various statements were presented to the respondent in an attempt to measure their attitudes toward coastal resource management. It is comforting to find that fisherfolks, both from learning and outside learning areas have generally positive attitudes toward CRM [Chart 10].

- Fishermen from both areas already perceive themselves as stakeholders of the sea. They also feel that everyone should do their share in ensuring abundance of coastal resources.
- A large majority feel that registration and licensing of municipal fishers should be done.
- Fishers extend their vigilance to the point of telling fellow fishers to refrain from doing illegal fishing activities even if faced with the risk of being ostracized by others. They seem to have no hesitation to report them to proper authorities.
- Respondents acknowledge the importance of mangroves to coastal resources. There is demand to revert unproductive fishponds to mangrove areas.
- There is high concern for mangroves as well as coral reefs for continued supply of coastal resource.
- Majority believe that local government planning on coastal resource management should be done in consultation with the local fisherfolks.
- Fisherfolks seem to be ambivalent about their self-efficacy. This ambivalence is more pronounced outside learning areas.
- The prohibition of harvesting corals as an income-generating activity is quite a debatable issue especially outside learning areas.
- Most fishermen still believe that imposition of fishing rules violate their right to earn a living.

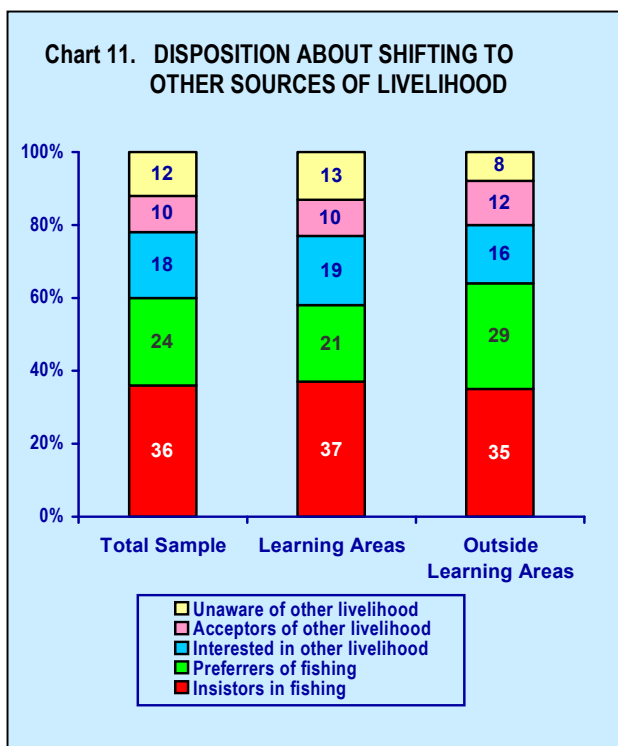


**Chart 10. AGREEMENT/DISAGREEMENT WITH ATTITUDE STATEMENTS (in %)**





**Disposition About Shifting to Other Sources of Livelihood.** The survey inquired about the level to which fishermen would be willing to shift to other income-generating activity. About one in every ten fishermen (10%) would be willing to leave fishing [Chart 11]. A larger proportion (18%) expressed interest in shifting. An even larger proportion (24%) prefer fishing while 36% of the fisherfolks are insisters of fishing as an occupation and rejectors of any other source of livelihood.



All respondents were asked which factors would most likely convince them to shift from fishing to other income-generating activity. Majority (57%) say they would leave fishing if they have the capital to start their own business [Table 14].

The assurance of employment is also an important factor (32%). Others would shift if they get the chance to be trained in other skills (7%) or if they can be relocated to another area (3%).

**Table 14. FACTORS WHICH WOULD CONVINC FISHERMAN TO SWITCH FROM FISHING TO ANOTHER LIVELIHOOD**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
Capital	57%	57%	56%
Assurance of employment	32	31	34
Skills training	7	8	5
Residence relocation	3	3	3
None	2	1	3

If they were to shift to other sources of livelihood, about two out of five (40%) would most likely render their services as carpenters, laborers, etc. Others see themselves farming or starting a small business [Table 15].

**Table 15. TYPE OF LIVELIHOOD OTHER THAN FISHING RESPONDENT WOULD MOST LIKELY DO**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
Services	40%	41%	39%
Farming	30	31	26
Small scale stall	22	18	28
Medium scale business	4	3	2
None	5	5	4

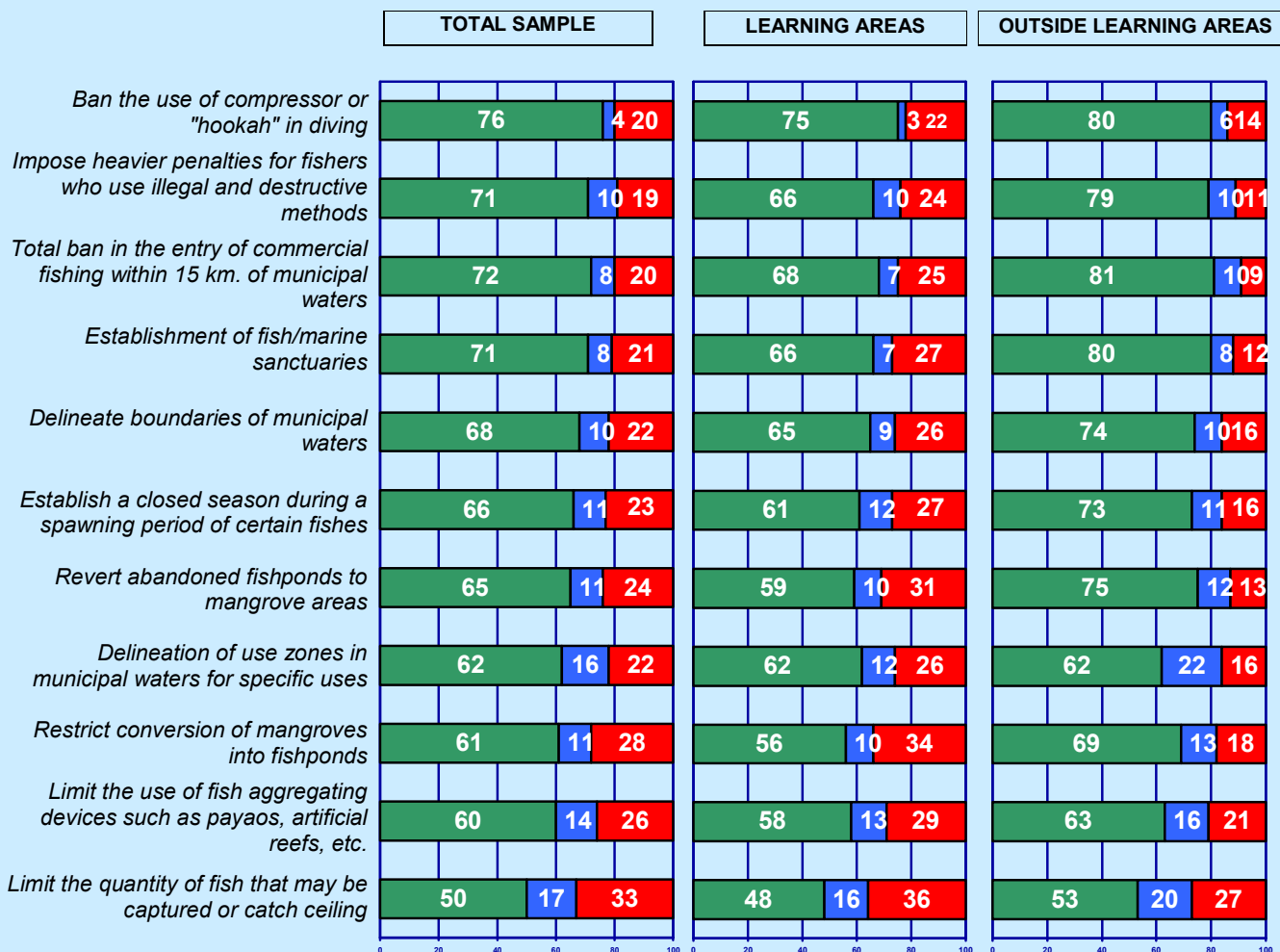
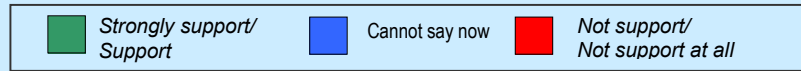
As for their descendants, only 6% would want his children to be fishermen. Most would like to see them as employees or professionals.

Many (54%) of the respondents personally know someone who has left fishing and taken another livelihood.

**Support for Local Government in CRM.** Majority of the respondents say they would support their local government in imposing specific laws/ordinances for coastal resource management. The specific law that yielded the least support is the one on limiting the quantity of fish that may be captured or catch ceiling (50% support/strongly support) [Chart 12].

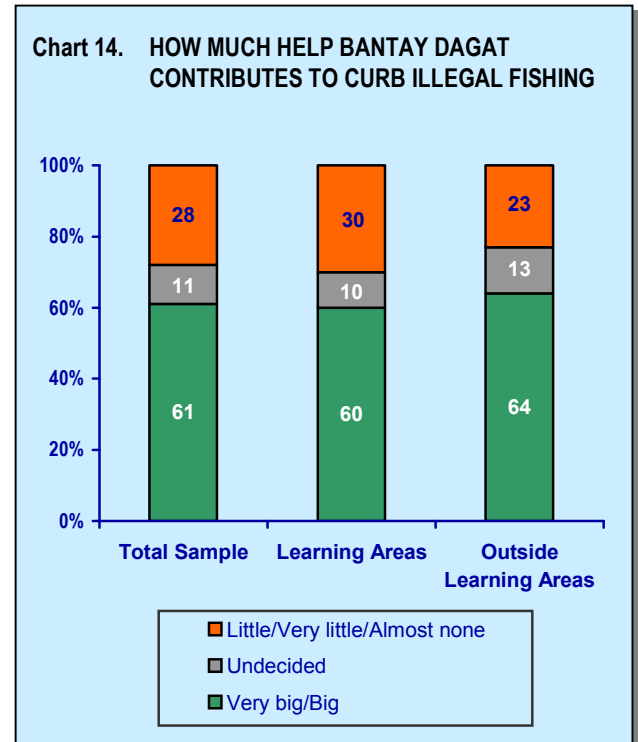
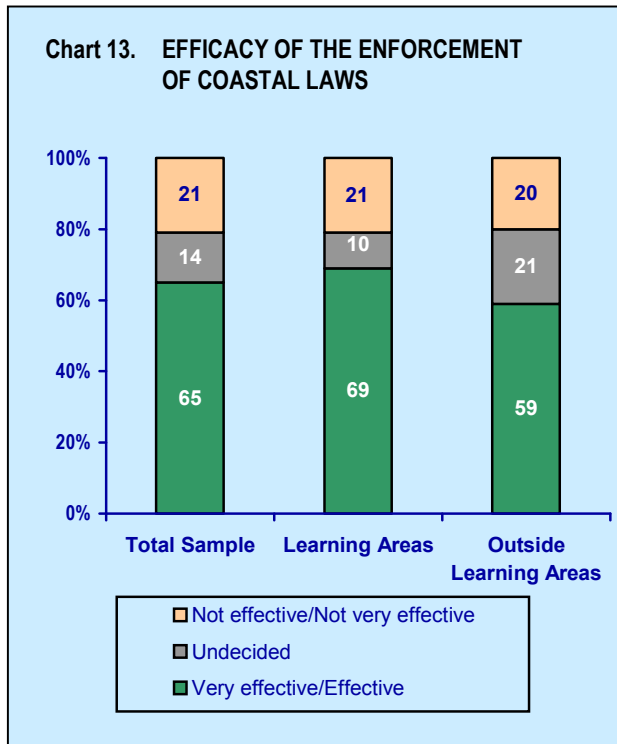


Chart 12. SUPPORT FOR LOCAL GOVERNMENT UNIT IN CRM ACTIVITIES (in %)



**Attitudes Toward Enforcement of Coastal Laws.** Fishermen from the learning areas tend to perceive the enforcement of coastal laws in their locality as effective (69%). This proportion is significantly higher than that outside learning areas (59%) [Chart 13].

With regard to the Bantay Dagat, about three out of five (61%) say that this volunteer group helps a lot in curbing illegal fishing. About the same proportion was yielded in both learning and outside learning areas [Chart 14].

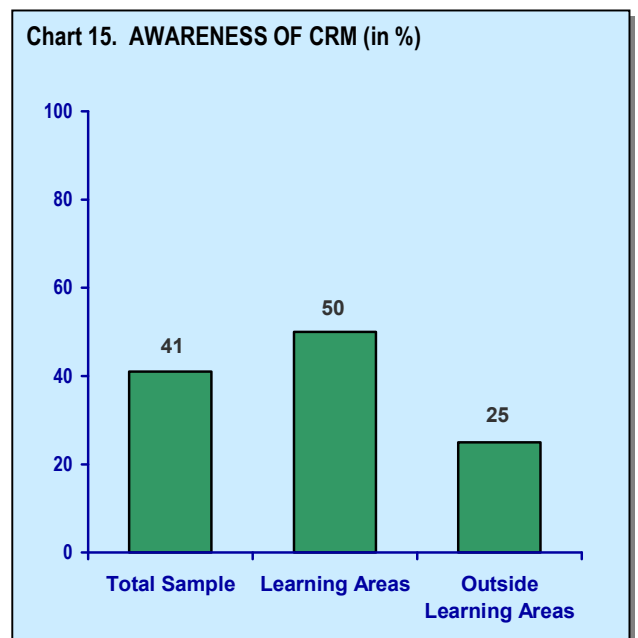


**COASTAL RESOURCE MANAGEMENT (CRM): Awareness level, scope and sources**

**Awareness of CRM.** Fifty percent (50%) of fisherfolks in learning areas are previously aware of CRM. This proportion is double that of residents outside learning areas (25%) [Chart 15].

Respondents were also asked to define the scope of coastal resource management. Most commonly known scope of CRM is the restriction on the use of explosives, noxious or poisonous substances or electricity in fishing.

- CRM is also defined as not using fine mesh net.
- A multitude of answers were generated from the probe but all answers were part of CRM thrusts.





**Sources of CRM Awareness.** Around nine out of ten (88%) fishermen from the learning areas became aware of coastal resource management through CRMP activities [Table 16]. The training/seminars and community meetings account for 66% while other forms of information-education campaign materials such as radio, flyers, posters and video showings are sources of the rest.

Other sources are friends, relatives, local government officials, and other concerned government agencies.

**Table 16. SOURCES OF CRM AWARENESS**  
Base: Previously aware of CRM

	<u>LEARNING AREAS</u>
CRMP	88%
Training/seminars	40
Community meetings	26
Radio	12
Pamphlets/flyers	4
Poster	4
Video showing	2
Friends/Relatives	24
FARMC	14
Local government	2
National line agencies	2

The types of CRM seminars they have attended are:

- Fish warden (6%)
- FARMC organizing (6%)
- Fisheries code orientation (4%)
- Community meetings (3%)
- CRM planning (3%)
- Integrated coastal management (2%)
- Participatory Coastal Resource Assessment (2%)
- Alternative livelihood (1%)
- Coastal law enforcement (1%)

In learning areas, dissemination of information on CRM to fisherfolks does not end with only those who attended trainings or seminars. The research shows that the reach of information-education

campaigns is multiplied by at least a third as 36% share what they have learned to fellow fishers. The same proportion (36%) shifted to legal methods of fishing. Others deputized themselves as guardians of the sea [Table 17].

**Table 17. WHAT RESPONDENT DID AFTER LEARNING ABOUT CRM**

Base: Previously aware of CRM

	<u>LEARNING AREAS</u>
Shared information with other fisherfolks	36%
Refrained from doing destructive fishing activities	36
Became vigilant to coastal environment	18
None	14

### CHANNELS FOR CRM INFORMATION-EDUCATION CAMPAIGN

**Media Exposure.** Around two out of five (42%) of fishermen listen to the radio at least once a day [Chart 16]. More (20%) fishers from the learning areas listen to the radio while at sea as compared to those outside learning areas (4%).

News programs are usually (32%) what respondents listen to but more than half (55%) do not have a favorite radio personality.

Television exposure is regular (at least once a day) to 23% of those in the learning areas and 29% outside learning areas [Chart 16].

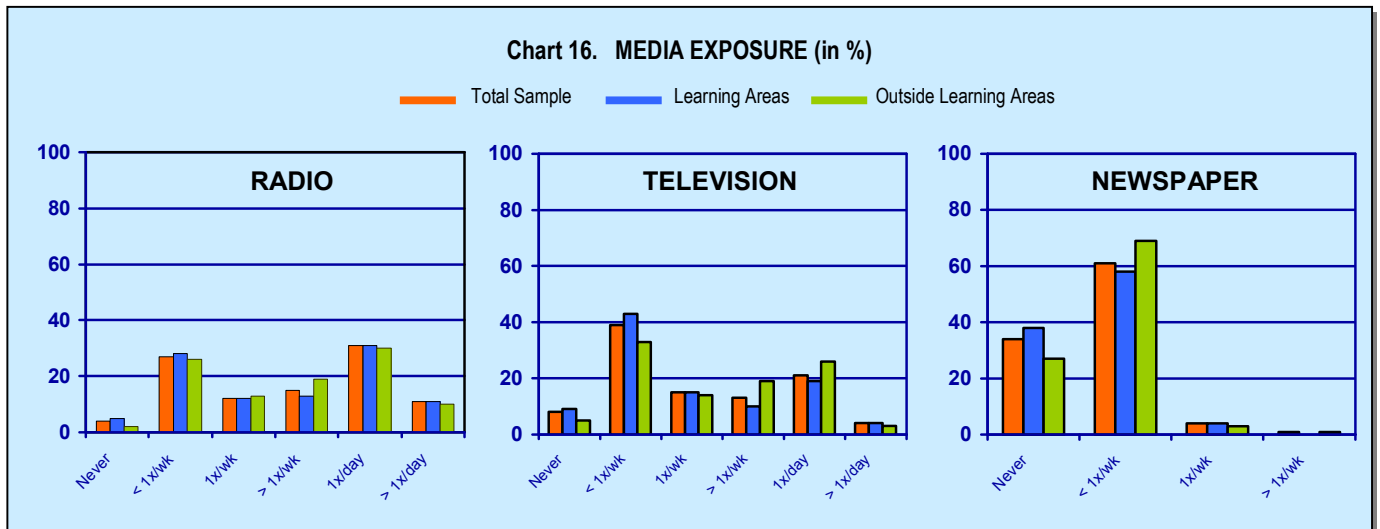
One-third (33%) do not have favorite TV programs but among those who have, news and public affairs are the most preferred. This holds true especially outside learning areas. Telenovelas rank No. 2 in the learning areas but quite low outside learning areas where noontime variety shows are second. Sports programs were also mentioned by some.

Anchor person of a public affairs program, Noli de Castro, is quite popular among fishermen. The TV personality is preferred by 32% outside learning areas and 19% in learning areas.



Only one in twenty fishermen (5%) reads the newspaper at least once a week. A larger proportion (38%) among the learning areas never

read newspapers as against 27% outside learning areas [Chart 16].



**Most Influential Person in Respondent's Place.** When respondents were asked who they think is the most influential person in his place, the mayor is the most common response (63%). This perception is higher among the learning areas (67%) than outside learning areas (56%). The Barangay captain is the answer of 24% followed by the parish priest at 11% [Table 18].

**Membership in Organizations.** Less than half of the sample belong to organizations. Twenty percent (20%) are members of fishermen's associations. More respondents outside learning areas (14%) are members of cooperatives. However, more learning area fishermen are members of the Bantay Dagat (10%) [Table 19].

**Table 18. MOST INFLUENTIAL PERSON**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
Mayor	63%	67%	56%
Barangay Captain	24	23	26
Parish Priest	11	10	14
Vice-mayor	1	1	*

**Table 19. MEMBERSHIP IN ORGANIZATIONS**

	TOTAL SAMPLE	LEARNING AREAS	OUTSIDE LEARNING AREAS
Fishermen's Association	20%	20%	20%
Cooperative	9	7	14
Bantay Dagat	8	10	5
Barangay Organization	8	6	12
Religious group	7	9	3
FARMC	6	7	6
Fish Warden	3	3	2
NONE	56	55	56



## CONCLUSIONS

### Knowledge

- Both local leaders and fisherfolks say that coastal degradation is foremost of all the problems in their communities. Furthermore, they observe that the coastal environment has worsened through the years (decrease in fish catch and increased fishing effort).
- It is very encouraging to find the marginal fishermen to be generally knowledgeable on selected facts about the ecosystem. They also know the degree of danger to coastal resources brought about by specific activities.
- Given their awareness of the coastal environmental problem they are faced with, leaders as well as fisherfolks (including the housewives) strongly believe that sound coastal resource management should be adopted in their communities.
- Knowledge of CRM is universal among town and community leaders. Mayors became aware of CRM through the Coastal Resource Management Program. The Mayors' Conference provided them with the knowledge of CRM and at the same time provided a venue to air their opinions about their needs to implement CRM in their localities.
- As for the marginal fishermen, half are already aware of CRM. Likewise, they learned about this through the trainings and seminars given to them.

### Attitude

- Mayors express their appreciation with the technical support given by CRMP. Through the Project, they not only learn about proper coastal resource management and its benefits but also obtain help in the information dissemination process.

- The prime motivator for Mayors to seriously implement CRM in their localities is food security. They believe that if abundance in fish catch is ensured, then poverty will eventually be alleviated and a better quality of life for their constituents is likewise ensured.
- Cross-visits to model areas make barangay captains optimistic about their own communities. They feel that if others can do it, there is no reason for them not to replicate what others have done and eventually be able to reap the same benefits being enjoyed by the model communities.
- Barangay captains of less cooperative municipalities blame their local government for the slow implementation of CRM ("too much politics"). On the other hand, those of cooperative municipalities feel that reversal of coastal degradation is possible if the national government is serious about it.
- On the perspective of the Mayors, the three barriers for implementing coastal laws are: lack of financial support (i.e., IRA allocation), no alternative livelihood programs, and in some municipalities, corruption in the judicial process.
- Even housewives already have a sense of ownership towards the sea. They say that they cannot depend on the government and they themselves should do something about it. Housewives strongly believe in the practice of CRM mainly to ensure the livelihood of their progeny.
- Self-efficacy is observed among fishermen as a significantly large group say that they as individual fishermen can do something about the problem of coastal resources.
- Data also show that fishermen feel they are stakeholders of the sea and it is just right that each of them do their share in taking care of the coastal environment. This perception is further validated by their willingness to report any destructive fishing activity even at the risk of being ostracized by fellow fishers.



- Majority of the fishermen would support local government units' efforts toward CRM. This would include supporting the implementation of coastal laws and ordinances.
- One notable finding is the barangay captain's vital role in CRM as perceived by the fishermen. In a series of CRM concerns (from deputizing a fish warden to providing mangrove management assistance), the barangay captain is the top-of-mind person to go to for these concerns.
- Another encouraging finding is that quite a number of fishermen have already become open to the idea of leaving fishing and shift to other income-generating activity. The shift would be reinforced by providing them with the needed capital to start their own small business.

#### **Practice**

- Mayors made CRM as a major part of their development programs. They personally involve themselves in CRM activities to show their constituents how serious their local government is in addressing the problem.
- Most mayors tie up with non-government organizations to assist them in the implementation of CRM. Creativity in sourcing funds for CRM activities is also developed among cooperative mayors. Some also thought of strategic ways to involve their constituents which gave them a sense of ownership.
- Barangay captains have also become creative in motivating the fishermen to attend purok meetings where CRM information is disseminated. They also join fishers' organizations to keep them abreast with fishers' sentiments. This also serves as a venue to disseminate CRM information. Another innovation is the use of housewives as channels to educate the fishermen.
- Witnessing of destructive fishing activities are few and far between. The small number of respondents who have witnessed destructive fishing activities in the last month say that these activities have lessened now as compared to the past year.
- The survey also found that very few fishermen would still consider doing destructive fishing activities under certain circumstances.
- Upon learning about CRM, fishermen reported that they shared what they learned to other fishermen and refrained from doing destructive fishing activities. Another effect of CRM to fishermen is they have become vigilant. They volunteer to guard the seas and report illegal activities to authorities.



## **RECOMMENDATIONS**

Most of the recommendations below are already being undertaken by the Project. These are stated only to emphasize the importance of these activities and to recommend that these should be retained and sustained by the project. Other recommendations are presented to further improve the efficacy of the Project.

### ***Present concrete livelihood programs.***

When properly motivated, people appear willing to adopt right CRM practices (food security and poverty alleviation seem to be good motivating factors). It appears, however, that the main stumbling block for the moment is how people can meet their daily needs to survive as they begin to learn the CRM way. Weaning people away from their traditional means of livelihood – even if only for a certain period of time – is almost impossible if there are no clear and concrete alternatives presented.

Increasing efforts to conduct training/seminars on alternative livelihood may address the interest of fisherfolks to attend such. Having an alternative livelihood would also help increase their support for the imposition of ordinances that they perceive as depriving them of their right to earn (e.g., catch ceiling, closed season).

***Provide doable programs.*** Among community members (housewives), there appears to be a willingness now to shift to other means of livelihood. Environment program managers should seize this opportunity and come up with doable alternative livelihood activities whose results can be realized sooner than later. Examples are seaweed farming and hog and chicken raising.

***Involve LGUs.*** Implementation of such activities should be closely coordinated with LGU officials who fully recognize the need for alternative livelihood for their constituents and who view “developments” in their towns in terms of income-generating activities.

***Establish/strengthen collaboration between and among sectors, agencies and programs.***

All discussants agree that environmental issues and concerns are inter-related. To create greater impact, there should be closer coordination between agencies, sectors and programs that are involved in environment work. (e.g., between DENR’s upland and coastal programs, between and among foreign assisted projects that deal with environmental issues, between DENR and Bureau of Fisheries and Aquatic Resources, LGUs and national agencies as well as law enforcement agencies).

***Link with other relevant programs.*** CRM and other environmental programs may be linked with agencies that address the issue of poverty. In addition, linking these programs/projects with health/family planning programs is also worth considering given the fact that all groups interviewed pointed to overpopulation as a major cause of coastal as well as other environmental problems.

***Adopt an integrated strategy.*** A strategy that may be adopted is the Total Integrated Development Approach that looks at the priority needs of the people and the whole community and actively involving groups that could help meet those needs.

***Reinforce community decision to adopt CRM practices; continue spreading the program’s good news.***

Knowledge about right and wrong CRM practices has definitely expanded in all sectors and a certain level of commitment (from community members and leaders to mayors) seems to have been realized. These indicate that CRMP activities were able to create a critical mass of CRM advocates.

Encouraging LGUs to conduct public consultations for CRM planning. This is highly appreciated by the fisherfolks and strengthens their identification with the program.

***Identify and tap CRM champions.*** These advocates should be identified and tapped to help in consolidating CRMP gains. For example, they should be involved, or perhaps take the lead, in continuing to do communication activities (which all groups say are very important) that aim to reinforce community decision to adopt CRM and



help prevent program dropouts. These advocates could also play a key role in the CRM expansion process; they can assist in spreading the good news about the program.

**Use face-to-face communication.** Interpersonal communication seems to be the right IEC approach, based on discussants' own admission that they would not have known a lot about the program without CRMP's seminars/workshops/meetings.

**Arm CRM champions with enough materials.** These CRM advocates could be the program's interpersonal communicators who should have sufficient training and support materials (leaflets, briefing kits, etc.) as well as opportunities (e.g., they could be invited to speak before a group of stakeholders or any interest groups) to fully explain the program, broadcast CRM success stories and combat misconceptions about CRM.

**Link champions with mass media organizations.** It would also help if these advocates could be linked to mass media organizations that are interested in addressing concerns and issues about the environment.

Popular media personalities may also serve as worthy channels for information dissemination.

**Continue cross visits.** Conducting cross visits should also be seriously considered. Based on the interviews with barangay captains and key informants, the most effective way to convince people is to allow them to see CRM in action.<sup>25</sup>

**Strengthen CRM institutionalization efforts at the local level.**

Efforts are being exerted to institutionalize CRM at both the national and local levels. Such an approach can never be wrong, considering that a program like CRM requires the support of national agencies as well as the legislative branch of government and the cooperation of LGUs and the people.

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<sup>25</sup> Some may say conducting these activities is expensive to projects concerned. Cost-sharing schemes may address this concern.

However, institutionalizing CRM at the national level, while very necessary, takes time considering that change in leadership (and with that usually comes change in policies) takes place more often than anticipated. That change in leadership does not usually happen at the LGU level whose governors, mayors and barangay captains have fixed terms, with a possibility of getting re-elected.

Communities look up more to the leadership not of the national government, but of the local executives. Barangay captains and key informants are of one mind that much really depends on the leadership of the mayors who set the tone in terms of urgency, funding and implementation. And, more often than not, relevant LGU officials, (e.g., barangay captains, policemen, judge) follow the mayors' directions. Residents, in turn, almost always follow the leadership of their barangay captains.

**Consider coming up with provincial CRM plans.** Coming up with consolidated, comprehensive provincial CRM activities or plans may also be a good idea so that municipalities would have a common ground. As of now, ordinances vary per municipality and implementation of laws and ordinances is so arbitrary.

**Strengthen people's organizations.** Local level institutionalization strategy should be complemented by efforts to strengthen even people's organizations whose members are the immediate CRM stakeholders.<sup>26</sup>

These groups should be properly organized, empowered through training and encouraged to speak up to their leaders. For example, if the mayor does not listen, they can go to the governor, or if representatives of national government agencies do not perform their tasks, the people can write a senator or even the President. Making community members realize that their future is in their hands -- and not in anybody else's -- seems to be a logical approach

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<sup>26</sup> Barangay captains and key informants say that people involvement is a requisite to sustain CRM, and both groups expressed the view that it would be better if a movement like CRM starts at the grassroots.



in making them share in the responsibility of ensuring CRM's sustainability.

In short, if they want to make something happen, they should exert every possible effort to make it happen. Because in the ultimate analysis, it is the people, not the mayor or head of any government agency, who have the most to lose if CRM failed to work.

**Tap women's groups.** It is about time that women in rural areas become actively involved in decision making, especially when it comes to decisions affecting the family's livelihood. As barangay captains have acknowledged, talking to women first is important. Housewives can influence family decisions, have the time to attend meetings/seminars and have the opportunity to share CRM information with neighbors and friends.

**Assist in increasing credibility of local representatives of national agencies.** One main reason people distrust the government, especially the national agencies, is the perception that most

government personnel do not know how to do their jobs. Such a negative image can be improved if local representatives of national agencies (DENR, BFAR, maritime police) can be provided with necessary training to upgrade their skills and increase their knowledge about CRM. Joint training activities can also help in promoting closer coordination between and among representatives of different agencies.

**Strengthen the Village Chief.** The head of the smallest political unit has a more intimate relationship with his/her constituents. Making the barangay captain a partner and providing enough resources to promote the program will help in the dissemination process.

**Constant education-re-education.** Results show that the Filipino fisherman is not completely ignorant about coastal resource management. Education has already been started well and this should not be curtailed but sustained.

