

INFORMATION ACCESS SURVEY
WESTERN VISAYAS, PHILIPPINES
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In Collaboration with the Bureau of Fisheries and Aquatic Resources (BFAR) Region VI

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ACRONYMS

ABS-CBN	Associated Broadcasting System – Consolidated Broadcasting Network
AIJC	Asian Institute of Journalism and Communication
AQD	Aquaculture Department (SEAFDEC)
BBRMCI	Banate Bay Resource Management Council, Inc.
BEC	Basic Ecclesial Communities
BFAR	Bureau of Fisheries and Aquatic Resources
BFARMC	Barangay Fisheries and Aquatic Resources Management Council
CBCRM	Community-Based Coastal Resources Management
CHD	Center for Health Development
CMMD	Coastal Marine Management Division
CODE NGO	Caucus of Development NGO Network (Iloilo)
CRM	Coastal Resources Management
DA	Department of Agriculture
DECS	Department of Education, Culture and Sports
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DOH	Department of Health
DPPC	Diplomatic Post Publishing Corporation
FARMC	Fisheries and Aquatic Resources Management Council
FIMC	Fisheries Information Management Center
FRMP	Fisheries Resource Management Project
GMA	Global Media Arts
IIRR	International Institute of Rural Reconstruction
JASAC	Jaro Archdiocesan Social Action Center
KBP	Kapisanan ng mga Broadkaster ng Pilipinas
LGU	Local Government Unit
LIPASECU	Libertad, Pandan, Sebaste, Culasi Bay-wide Management Council
L&L	Livelihoods and Languages
MADECOR	Mandala Agriculture Development Corporation
M&E	Monitoring and Evaluation
MPA	Marine Protected Area
NACA	Network of Aquaculture Centres in the Asia-Pacific
NGO	Non-governmental Organization
NSCB	National Statistical and Coordination Board
OPA	Office of the Provincial Agriculturist
PhilFIS	Philippine Fisheries Information System
PhilDHRRA	Philippine Partnership for the Development of Human Resources in Rural Areas
PIA	Philippine Information Agency
PO	People’s Organization
PRA	Participatory Rural Appraisal
PROCESS	Participatory Research Organization of Communities and Education towards Struggle for Self-Reliance
RGMA	Radio Global Media Arts
SAC	Social Action Center
SB	Sangguniang Bayan
SEAFDEC	Southeast Asian Fisheries Development Center
STREAM	Support to Regional Aquatic Resources Management
UPLB	University of the Philippines Los Baños
UPV	University of the Philippines in the Visayas

EXECUTIVE SUMMARY

Introduction

The aim of this report is to provide brief profiles of the main stakeholders within the aquatic resources and fisheries sectors in Western Visayas, to describe their access to information, and the communication between and within stakeholder groups, organizations and institutions within the sector. The report goes on to identify current needs and key action points which might maximize efficient communication.

Audience Profiles

1. Government agencies that offer support for fisheries and aquaculture development include the Department of Agriculture (DA), the Department of Environment and Natural Resources (DENR), and the Department of Interior and Local Government (DILG). Support is provided to Local Government Units (LGUs) and to Fishers' Associations. Government employees hold bachelor degrees, and prefer English for technical and written information. The availability of computing facilities and internet access is generally low in government departments.
2. Numerous NGOs operate in Western Visayas (Philippines Region VI), and many who work with coastal communities are members of the NGO network PhilDHRRA. NGO employees are often educated to at least bachelor degree level, have high access to computing facilities and the internet, and high English proficiency. People's Organizations (POs) include fisherfolk associations, most members of which are literate in national and regional dialects, but not in English.
3. Research institutions in Region VI include the University of the Philippines in the Visayas (UPV), other fisheries state colleges, and SEAFDEC. The operational written language within research is English, and access to computing and internet facilities is high.
4. Local Government Units (LGUs) have exclusive rights to, and control over, local waters, and are responsible for fisheries extension. Most LGU officials have bachelor degrees and a high proficiency in English.
5. The population of Region VI is about 6.5 million people, of which 43% live below the poverty threshold. Many of these live in coastal communities, and are engaged in fishing, farming and livestock rearing. The main religion is Catholicism. Literacy levels are high, and most fisherfolk have completed elementary schooling. In addition to their local dialect, fisherfolk speak Hiligaynon and Filipino¹, and have some knowledge of English. Philippine society is hierarchical, and the nature of interactions between people is often determined by the rank of individuals, based on class, power and age.

Communications Media

6. Radio is a popular medium and access is high in coastal communities in Region VI, where a number of stations currently operate. A popular network is Bombo Radyo, which airs highly political and controversial shows. National radio is broadcast in Filipino (sometimes mixed with English), and local stations broadcast in regional or local dialects. In some coastal communities,

¹ Also called Tagalog, but many people use the word Filipino, because the former may be misconstrued as a local dialect of people living in the Tagalog regions of Luzon.

only one AM station can be received. Most government agencies and many NGOs use radio in their information dissemination strategies.

7. Television is another popular medium, although access to this within coastal communities is lower than radio. Nine TV stations and a number of cable networks broadcast from Region VI. ABS-CBN and GMA have the most viewers, and popular programs include the news and locally and internationally produced soap operas. Many government agencies use TV as part of their extension, and programs broadcast through the Philippine Information Agency get free airtime on many channels.
8. National, regional and local newspapers and magazines are available in Region VI. Most broadsheets are in English, and national tabloids are in Filipino. Popular magazines cover entertainment, news and sports.
9. Cinema is popular in the Philippines, and cinema advertising forms part of the extension strategy of the Department of Health.
10. Filipino comics (love stories with simple text accompanied by colorful cartoon drawings) are popular. The comic style is widely used in extension media to coastal communities, in the form of complete comic books, inserts within existing magazines, or comic illustrations accompanying extension text.
11. Access to video is quite high in coastal communities through public video entertainment houses that exist even in municipalities with no electricity. Video uses in extension include traveling information caravans, and distribution of televisions and VHS players to health centers.
12. Traditional communications media in the Philippines include town criers and religious festivals, as well as folk theater. Karaoke and development theater have been used as extension media.
13. Books are generally expensive and many are written in English. Within villages, information is posted in the barangay² hall, and leaflets and posters are often distributed as part of extension campaigns. Other commonly used printed media include T-shirts, caps and billboards.
14. Within urban areas, access to telecommunications facilities is high, and most working professionals use mobile telephones, in particular text messaging. Many coastal communities do not have telephone landlines, and mobile phone coverage is limited.
15. NGOs and research institutions have taken up information technology rapidly. However, access to computing facilities and the internet is still low within most government departments and LGUs, and almost non-existent in coastal communities. Recent fisheries and aquatic resource management projects aim to bring information technology to LGUs and regional and state government departments.
16. Group membership is common in coastal communities, mainly through fisherfolk and religious associations, and many NGOs see community organization as a key step towards empowerment. Information access from formal and informal personal contact is important in coastal communities.
17. The Catholic Church has a powerful influence in the Philippines. It plays a significant role in religious affairs as well as socio-politically. The majority of the dioceses all over the country have established Social Action Centers (SACs) headed by Archbishops. These SACs maintain regular paid staff who run their varied desk assistance extension programs. The extension in pilot

² A Philippines administrative unit which is approximately equivalent to a village.

barangays is through the Basic Ecclesial Communities (BEC) while in other barangays, it is through the barangay chapels or liturgical and apostolic councils based in each parish.

Information Exchange within the Fisheries Sector

18. There is a functional fisheries extension service in the Philippines but recent studies have suggested a number of needs, including formulation of national and regional extension strategies; increased financial support for extension; increased stakeholder participation in project planning; improved networking within the fisheries sector; adequate feasibility studies prior to project implementation; improved political relations between stakeholders to aid collaboration; and the provision of incentives for, and training of, extension workers.
19. Recent legislation has dramatically changed extension activities of BFAR, and the role of the Bureau is now to support extension activities carried out by the LGUs. BFAR has a limited budget and as a result of reorganization, most regional staff are now contract workers.
20. Within BFAR, communication follows official channels, and information updates normally occur through training. Networking between and within regions is strong. All offices are equipped with telephone and fax, but few employees have access to, or are comfortable using, computers and the internet. Efforts to change this are being implemented through the Fisheries Resource Management Project (FRMP).
21. Within Region VI there is a strong network between BFAR, NGOs and research institutions involved in fisheries activities. Communication initially follows official channels, after which more informal interactions occur.
22. The degree of collaboration between BFAR and LGUs depends largely on the relationships established between individual officials. BFAR conducts regular updating seminars for municipal extension workers, who are also given a financial incentive to carry out their extension duties.
23. All BFAR projects are implemented locally in collaboration with the LGUs. BFAR's national priority is increased food security and fish production, and the generation of employment. Individual projects promote backyard aquaculture, mariculture and sustainable coastal resource management. Crucially, project success largely hinges on the degree to which fisheries extension is prioritized within LGUs.
24. Fisheries and Aquatic Resources Management Councils (FARMCs) provide a framework for fisherfolk participation in decision-making regarding coastal resources. Although the structure has been in place for a while, many FARMCs do not function as intended, and most agree that additional capacity-building is required within fishing communities.
25. The level of support from the LGU to municipal extension workers depends on the prioritization of extension within the LGU, and priorities change regularly with new political leadership. Limited financial and training support provide limited motivation for extension workers. Few LGU employees have access to computers or the internet, and some municipalities are without telecommunications. Political allegiance is important, and political issues sometimes interfere with effective extension.
26. LGUs collaborate with research institutions and civil society through individual projects.
27. Extension to coastal communities occurs through extension workers, with projects focusing on the national aims of BFAR. Many LGUs limit their extension activities to law enforcement support to curb illegal fishing. Extension occurs through training seminars, the distribution of leaflets and

posters (mainly in English), and demonstration farms. Most of these activities are organized through BFAR.

28. NGO networks in Region VI are strong, and operate mainly through the national umbrella organization PhilDHARRA and CODE NGO.
29. Several NGOs in Region VI work with coastal communities. Activities mainly focus on capacity-building, and building longstanding relationships with communities, often strengthening the FARMC structure. Extension media used by NGOs include leaflets, comics and posters, and radio, sometimes developed with the local community.
30. The Department of Health (DOH) is broadly considered effective in its extension campaigns. This is partly because the DOH has a decentralized structure, but also because the department employs a progressive extension strategy, with routine audience profiling, pre-testing of materials, and monitoring and evaluation of campaigns. The DOH uses traditional tri-media (radio, TV and print) techniques and more novel approaches such as celebrity endorsement, cinema and billboard advertising, and theater.

Access to Information by Coastal Communities

31. Public education is widely used in coastal resources management projects to supplement local knowledge and raise awareness.
32. Radio is an efficient source of information in coastal communities in Region VI, where almost all households listen to the radio, in particular Bombo Radyo. Men and women listen to morning news, and women follow Ilonggo radio dramas in the afternoon.
33. About 25-55% of fisherfolk own or have access to television and those who can access both preferred TV over radio. ABS-CBN is popular, in particular evening news programs (men and women), Filipino soap operas (women), and a Taiwanese program (children). VHS or CD rental stores serving as mini-cinemas are available in many municipalities.
34. The Church is an important disseminator of information, and some priests incorporate socio-political and environmental topics into their sermons.
35. Friends, neighbors and relatives are common sources of information in communities, but for official matters, most fisherfolk prefer to receive communication in writing.
36. Established communication channels exist within communities, for fisheries information through barangay captains, councils and FARMCs.
37. Written correspondence in English is the most common, and preferred, means of formal communication between the municipal office and the community. In barangays with mobile phone coverage, text messaging between the municipality and the community is also important.
38. Fish vendors, transient vendors and fish buyers are the main sources of marketing information within coastal barangays.
39. For extension, communities favor training and study tours supported by effective information materials in Hiligaynon or Filipino, with color illustrations and large fonts. Women prefer posters to decorate the house, and men leaflets they can carry with them. Comics were considered suitable only for children.

Discussion and Recommendations

40. Areas recommended for attention include further study on extension needs within the fisheries sector; increasing the efficiency of the activities of LGUs through awareness creation about FARMCs; maximizing the targeting of information and projects to identified audiences through participatory planning, feasibility studies, audience profiling, pre-testing of materials, and monitoring and evaluation; and strengthening of the FARMCs through community capacity-building, awareness creation at all levels, and consideration of the power structures restricting communications. Many of these constraints are currently being addressed in a number of projects and activities initiated by some of the stakeholders.
41. When communicating to government departments, official channels should be used. Effective ways to reach government employees include operating through existing training structures, and through mass communications such as printed (English-language national broadsheets and newspapers) and broadcast media (ABS-CBN, GMA, Bombo Radyo).
42. NGOs in Region VI are most efficiently reached through the established network of PhilDHRRA and CODE NGO, through training followed up by e-mail and dissemination of electronic media, and through printed (English-language national broadsheets and newspapers) and broadcast media (ABS-CBN, GMA, Bombo Radyo).
43. Research institutions are best reached by e-mail, through local and international conferences or workshops, and print (English-language national broadsheets and newspapers) and broadcast media (ABS-CBN, GMA, Bombo Radyo).
44. Communication to LGUs is best done through official channels initially. Information dissemination is best done through training supported by written materials (in English). Mass communication should be through local and national newspapers, ABS-CBN TV, and local or regional radio stations. Local surveys should be carried out to establish the media available in different areas before mass communication strategies are formulated.
45. Coastal communities can be reached through formal channels. Training activities are best carried out in collaboration with existing NGOs, the Church or local projects, and supported by colorful training materials in local dialects. The most wide reaching mass communication media is radio, and TV may also be efficient in some areas. Studies of which channels can be received in local communities are essential prior to the formulation of a mass communication strategy.

1. INTRODUCTION

The Philippines comprises 7,100 islands, and a large proportion of the population rely wholly or partly on coastal resources. Coastal communities are among the poorest in Philippine society, and the development of sustainable management of coastal and fisheries resources has been identified as an important goal by government institutions.

This aim can only be realized through the effective and efficient communication with, and extension of resources and support to, coastal communities from the various stakeholders within the fisheries sector.

This study focuses on Region VI of the Philippines, and aims to:

- Provide brief profiles of the main stakeholders within the aquatic resources and fisheries sector (Section 2)
- Outline the main uses of different communications media within Region VI (Section 3)
- Describe the access to information, and the communication between and within stakeholder groups, organizations and institutions within the aquatic resources and fisheries sector (Sections 4 and 5), and
- Identify current needs and recommend strategies to maximize efficient communication, and summarize recommended communications strategies among stakeholders (Section 6).

The findings presented in this document comprise the results of a study carried out from 11-26 June 2003, during which time key informant interviews were conducted in Metro Manila, other areas of Luzon, and within Region VI, Panay and Negros Islands. Key informants included representatives from government departments, civil society, research institutions and municipal governments. In addition, focus group discussions engaging fisherfolk, village officials and representatives from fisherfolk associations, were conducted in three coastal municipalities.

The population of Region VI is more than 6.5 million people, and comprises a great variety of aquatic resources stakeholders, a selection of which were consulted as part of this study. Further, in a fast-changing society like the Philippines, access to communication and political situations may change quickly. It is therefore important that potential users of this document validate the findings within their local context.

2. AUDIENCE PROFILES

2.1 Government Agencies

Institutional support for fisheries and aquaculture development in communities is available through national agencies, which include the Department of Agriculture (DA), the Department of Environment and Natural Resources (DENR), and the Department of Interior and Local Government (DILG). Institutional support is provided at two levels: to Local Government Units (LGUs) and to Fishers' Associations.

Most government employees are educated to bachelor degree level, and because tertiary science texts are normally in English, they commonly prefer English for technical information. English is also the preferred language for written communication within and between government departments. Government officials know Filipino as well as their local language.

Computers are in short supply in some government departments, and the vast majority of employees do not use e-mail. The exception is higher-ranking officials who often have access to the internet (but rarely utilize it), and employees within projects such as the FRMP (see Section 4) and other projects with international funding agencies, where employees communicate with funding agencies through e-mail.

The majority of government departments aim to computerize their operations, and so computer and internet access is likely to increase steadily in the near future.

Most government departments provide mobile telephones for more senior employees, in some cases with a monthly maximum allowance for local calls.

2.2 Civil Society

Within the NGO sector, employees at management level are most commonly educated to at least bachelor degree level, and have a high proficiency in English. An international NGO operating within Region VI is Save the Children Foundation, Inc. National and local NGOs operating within Region VI include:

- ☞ Antique Integrated Area Development (ANIAD)
- ☞ Buklod Aklan
- ☞ Center for Alternative Initiatives (CADI)
- ☞ Freedom from Debt Coalition (FDC)
- ☞ Gerry Roxas Foundation, Inc.
- ☞ Hublag Evelio
- ☞ Iloilo Caucus of Development NGO Network (CODE NGO)
- ☞ Iloilo People's Habitat
- ☞ Jaro Archdiocesan Social Action Center (JSAC)
- ☞ Katin-aran Kauswagan Foundation (KKF)
- ☞ Magsasaka at Siyentipiko para sa Pag-unlad ng Agrikultura (MASIPAG)
- ☞ Paghidaet Development Group (PDG)
- ☞ Pambansang Kilusan ng Samahang Magsasaka (PAKISAMA)
- ☞ Peace Foundation
- ☞ Philippine Partnership for the Development of Human Resources in Rural Areas – Visayas (PhilDHRRA – Visayas)
- ☞ Philippine Rural Reconstruction Movement (PRRM)

- ☞ Participatory Research Organization of Communities and Education towards Struggle for Self-Reliance (PROCESS) Foundation
- ☞ Participatory Research Organization of Communities and Education Towards Struggle for Self Reliance – Panay (PROCESS – Panay)
- ☞ Taytay sa Kauswagan
- ☞ USWAG Development Foundation (USWAG)
- ☞ Visayas Cooperative Development Center (VICTO)

Most NGOs target international funding, and the majority have good computing facilities in their regional offices, with internet access, and e-mail is commonly used as a means of communication.

People's Organizations (POs) include fisherfolk's organizations, the main ones of which are:

- ☞ Pagduso sg Agrikultura sa Tingub nga Aksyon sg mga Organisasyon sg Mangunguma (PATANOM)
- ☞ Ipil Kauswagan Association
- ☞ Ibajay Fisheries and Fry Catchers Aquatic Resource Management Association
- ☞ Mambuquiao Fisherfolk, Farmer, Women Multi-Purpose Association
- ☞ Guimaras Federation of Fisherfolk Association

The members are fisherfolk, who have primary school education, are literate in Filipino and Hiligaynon, but have limited knowledge of English.

2.3 Research Institutions

Research institutions in Region VI include the University of the Philippines in the Visayas (UPV), other fisheries state colleges, and SEAFDEC Aquaculture Department (AQD).

Within research institutions, English is normally used for textbooks and is the main language used for written communication. In UPV, essays and exams are written in English, but some other universities (e.g., University of the Philippines Diliman) are currently trying to promote the use of Filipino within the university sector.

Good computing facilities are normally available for all researchers, and internet access and the use of e-mail for communication is common. Much research in the Philippines is funded by international agencies, and communication with external funding bodies occurs through e-mail.

2.4 Local Government Units (LGUs)

There are a total of 17 municipalities in Aklan, 18 in Antique, 16 in Capiz, 42 in Iloilo, 22 in Negros Occidental, and five in Guimaras.

In a decentralization effort within the Philippines government, LGUs were granted exclusive access to their coastal resources with the Local Government Code of 1991 (Republic Act 7160). LGUs are authorized to issue licenses for, and collect fees from, fisheries activities in their municipal waters (within 15 km from the shoreline).

The structure of the municipal LGU can be seen in Appendix 1. The Municipal Agriculture Office is under the office of the Mayor. In between them is the Sangguniang Bayan (SB, legislative body), which is composed of ten elected members chairing different committees prescribed in the local government code. Committee assignment is not necessarily based on expertise or qualification, thus an SB member assigned to fisheries may not have any background in fisheries, or indeed in science.

Extension workers (Fisheries, Livestock and Crop Technicians) are employed under the Municipal Agriculture Office. Most officials within the LGU have bachelor degrees, with a high proficiency in English.

2.5 Coastal Communities

The population of Region VI is about 6.5 million people, of which the majority (>70%) live in the Provinces of Iloilo and Negros Occidental (NSIC, 2002). Within the region there are six provinces, 12 cities, 117 municipalities (of which 85 are coastal) and 4,050 barangays (villages).

An estimated 526,072 families (or 43%) are living below the poverty threshold within Region VI. The Annual Per Capita Poverty Threshold in 2002 was P 12,646 (US\$ 253). Coastal communities are among the poorest and most marginal in the region. Within the Philippines, municipalities are classified according to income levels, from the richest (1) to the poorest (6). Within Region VI, only Antique has 6th-class municipalities.

Population growth in Region VI is high (average annual population growth rate from 1995-2000 was 2.43%), and an estimated 45.3% of the population is currently less than 20 years old (NSIC, 2002).

Although the majority of inhabitants of coastal communities in Region VI rely mainly on fishing for their livelihoods, a great number are also engaged in farming and livestock raising (MADECOR-AIJC, 2002). Activities can be divided into municipal fisheries, commercial fisheries and aquaculture.

Income is generally low, with one-third earning less than P 2,000 (US\$ 40) and more than 75% earning less than P 4,000 (US\$ 80) per household per month.

The vast majority (96%) of the population in Region VI is Catholic (MADECOR-AIJC, 2002).

The majority of fisherfolk have completed elementary school, but only some secondary school. The functional literacy within Region VI is lowest in Capiz (76%) and highest in Guimaras and Iloilo (84%).

Filipino is the official language in the Philippines, but Hiligaynon (the local language in Region VI) and English are also taught in school, and whereas everybody understands Filipino and Hiligaynon, while English proficiency within coastal communities is typically low. Local (non-written) dialects within Region VI include Akeanon spoken in the northern part of Aklan, Capiznon in Capiz, Kinaraya in interior Antique and Iloilo, and Cebuano in areas near the border to Negros Oriental. Akeanon differs substantially from Hiligaynon, but the other dialects are quite similar to the regional language, with only a few vocabulary and minor pronunciation differences.

Philippine society is hierarchical, with interactions determined by the rank of individuals, based on their class, power and age. Where no vertical ranking exists, relationships are determined according to closeness of affiliation, determined in terms of kinship, political and religious persuasion, and proximity of living (Andres, 1988).

3. Communications Media

The communications media available in Region VI and their common uses are detailed below. Prices for the production of communications material can be found in Appendix 2.

The Philippine Information Agency (PIA)

The Philippine Information Agency (PIA) is one of the information agencies of the Office of the Press Secretary (OPS) which is directly under the Office of the President. The PIA is the government vehicle for information dissemination, and covers tri-media (radio, TV and print) communication, although there are two separate agencies for the broadcast (Radyo Ng Bayan, or People's Radio, and Philippine News Agency). The PIA has in-house production facilities.

The Kapisanan ng mga Broadkaster ng Pilipinas (KBP) is the regulating body of the broadcast industry. Most radio and TV stations are members of the KBP, but one popular radio station, Bombo Radyo, is no longer a member. Through members of the KBP, PIA and other government departments, broadcasting is free for the first month, in exchange for which the KBP member stations get tax rebates on imported media equipment. However, for free broadcasting, government departments have no control over when the broadcasts will be aired.

3.1 Radio

Nationally, there are about 600 broadcasting stations, with 270 AM bands and 329 FM bands (PIA, 2000). Radio programs produced at PIA are broadcast through members of the KBP on 100 radio stations nationally, 40 of which are within the National Capital Region, with 60 additional stations broadcasting in the provinces. Within the National Capital Region, there are currently 22 AM and 24 FM radio stations (DPPC, 2003). In Region VI, there are 23 AM and 34 FM radio stations (PIA, 2000). Most of these are located in Iloilo Province.

National radio is normally aired in Filipino, and mixed Filipino and English. Within Region VI, Hiligaynon is the most common language used, including by radio stations such as Bombo Radyo, Radyo Ng Bayan and Aksyon Radyo. The music station 93.5 broadcasts in mixed English, Filipino and Hiligaynon.

In 2000, 81% of households in the country owned radio sets (PIA, 2000). In the coastal villages of Region VI, the vast majority of households own a radio (MADECOR-AIJC, 2002).

Radio Culture in the Philippines

One of the most popular national radio networks in the Philippines is Bombo Radyo. This network commonly raises controversial issues and criticizes individuals and institutions, especially political figures and government officials in high positions. Bombo Radyo is also politically vocal. The shows' popularity mainly hinge on the presenters, who become well-known media personalities with followers among the population. Most who ran for local government positions during the last local election were elected.

Many people listen to radio stations which broadcast mainly music; radio soap operas are popular too, especially among women listeners. The government radio station, Radyo Ng Bayan, is not so popular.

Within Region VI, 71% of coastal communities listen to news and public affairs programs, with DYOW (Bombo Radyo, Capiz) and DYFM (Bombo Radyo, Iloilo) showing the highest listenerships (about 40% each) in coastal communities (MADECOR-AIJC, 2002). However, in many coastal municipalities, only one station (AM) can be received, so identification of the media available to target groups is essential prior to the formulation of any communication strategy using radio.

Radio in Extension

Radio is broadly believed to be the most widely disseminating media by Philippine government departments. A number of government agencies use radio broadcasting to disseminate information to people. The Department of Health (DOH) have their own in-house production facilities, and commonly use radio in their information campaigns. The DOH normally pays for airtime, because this gives them greater control over when and on what stations their programs will be aired.

The DENR, DA and BFAR regularly use radio programs as part of information campaigns. Bombo Radyo used to air a DENR program called "Environmentally Yours" on Sundays, which was popular among fishers in the region, but was not sustained due to lack of funding. Presently, the station airs "Ikaw at ang Palibot" (You and the Environment) twice a week at noon through Radyo Ng Bayan. The DA's "School-on-the-Air" is a long running (30 years) program which teaches farmers agriculture over the radio, using leading farmers as lecturers. However, this year it was temporarily taken off the air because of lack of funding. The DA also broadcasts shorter messages on five commercial channels in Region VI. Within the BFAR FRMP, short radio advertisements are made on Radyo Ng Bayan.

Within Region VI, as part of the FARMC initiative, radio programs are produced by municipal FARMC groups (with the assistance of BFAR and the provincial government of Aklan), and aired on local radio stations within the municipalities.

The NGO PhilDHRRA produces a weekly radio program in Region VII. The program is made in the field, and comprises interviews with local fisherfolk, highlighting recent activities, news, problems and success stories. Following a survey documenting the media habits of the audience, the program is aired on the most popular local station from 1:30-2:00 p.m. on Saturdays, when fisherfolk normally rest and listen to the radio.

3.2 Television

Within the National Capital Region, there are 13 TV stations, one (PTV 4) of which is government owned (DPPC, 2003). In Region VI, there are nine TV stations (PIA, 2000). There are a total of 217 cable stations throughout the Philippines, of which two are located in Region VI.

In 2000, 45% of Philippine households owned a TV, with TV ownership in coastal households within Region VI estimated at 55% (MACECOR-AIJC, 2002).

Within the Visayan region, 67% of coastal households watch news and public affairs programs on TV, and the most popular station is ABS-CBN (MADECOR-AIJC, 2002). GMA is another popular station in the region. Both ABS-CBN and GMA broadcast mainly in Filipino, with some English programs. The most popular programs on the two channels are soap operas, in particular Mexican tele-novelas and Philippine tele-series, both broadcast in Filipino.

Television in Extension

Most government departments use TV as an extension medium. The bigger departments have their own in-house production facilities, and normally air short messages through the PIA on a number of TV stations.

In addition to messages aired through the PIA, the DA pays for the release of feature stories and news on the "TV Patrol" program aired on ABS-CBN and a twice weekly guest appearances on the "Serbisyo Publiko" (Public Service) program aired on Sky Cable, and the DOH also occasionally pays for prime time on popular stations.

3.3 Newspapers and Magazines

Within the Philippines, a total of 559 print media were produced in 2000, which included 43 daily newspapers, and an additional 314 weekly papers. In the National Capital Region alone, 12 broadsheets and 16 tabloids are produced daily for nationwide distribution. Six of these (all tabloids) are in Filipino, the remainder in English. There are also five Chinese daily newspapers (DPPC, 2003). In 2000, the nationwide circulation of broadsheets was 1.6 million, and that of tabloids 3.3 million.

Within Region VI, a total of 12 daily and 12 weekly newspapers are produced (PIA, 2000). The circulation of the total 19 provincial dailies in the Visayas was estimated to be 139,000 in 2000. All regional daily newspapers are in English, and only one of the weekly news magazines is in Hiligaynon. Within Region VI, the national tabloids in Filipino are also popular.

Nationwide, there are a total of 45 magazines, most of which are published weekly, with an estimated circulation of 4.4 million. The most widely circulated magazines are the *Sunday Supplement* of newspapers, followed by entertainment and news magazines (*Glitter*, *Pilipino Reporter News* and *Woman Today*). Sports and horoscope magazines are also popular.

Printed Media in Extension

Most government departments regularly distribute press releases to national and regional newspapers. The use of press conferences to highlight important issues is common too.

One example of efficient use of printed news media is the DOH, which, as part of their Health Advocacy Promotion, produces and distributes three to four press releases a week. Under the same program, the DOH produces a bi-monthly newsletter highlighting their most recent activities, e.g., featuring prizes for active Local Government Units, which is distributed to all news agencies, LGUs, NGOs and other government departments. Once a year the newsletter includes a feedback questionnaire, and readers are also encouraged to e-mail comments to the DOH.

3.4 Cinema

Cinema is popular in Philippine culture, with 31 cinema houses in Region VI, most of which are located in Negros and Iloilo. Both English-language and Filipino films are shown.

Cinema in Extension

The DOH use cinema advertising as part of their extension activities. Cinema adverts are produced at the central office level in Filipino, and are translated in the regional offices and distributed to local cinema houses, where adverts are shown in the break between shows. The same adverts are also distributed to local TV stations.

3.5 Comic Books

The Philippine comic book tradition began in the 1920s, spearheaded by Antonio Velasquez, the “father of Filipino komiks”. Comics can be classified into Wakasan and Nobelas. Wakasan stories have fewer pages and each comic is a separate story, whereas Nobelas are serials which continue for months or years.

The most popular weekly comics include *True Horoscope* (circulation 320,000), *Star Horoscope* (circulation 190,000), *Crossword Puzzle* (circulation 171,000) and *Romance Special* (circulation 162,000) followed by a number of others.

Nationally, there are 39 comic magazines produced, mostly weekly in the National Capital Region (with nationwide circulation). The total circulation of weekly comics is 2.9 million (PIA, 2000). There are no local comic magazines produced in Region VI, but a 2002 survey showed that 24% of all respondents within coastal communities regularly read the comics (MADECOR-AIJC, 2002).

Comics in Extension

Comic book style is widely used in extension media targeting fishers and farmers, because the easy language and entertaining illustrations are thought to reach the rural population well.

The majority of government departments use comic style designs for extension media distributed to fishers and farmers. Examples include leaflets and booklets produced by the DENR, DA and BFAR, which are mainly text-based but include comic drawings illustrating the topic.

The DOH use small two-page comic inserts in magazines to deliver short messages to rural populations. They also produce whole comics devoted to one health issue (for example, the benefits of using iodized salt), which are published in Filipino and distributed to health centers in the regions.

The NGO PhilDHRRRA worked with coastal communities and an illustrator to produce four comic style posters highlighting the most important implications of the regulations following a change in the Fisheries Code. The posters were distributed to the communities that PhilDHRRRA work with.

Comics are normally love stories, and text is in simple Filipino, accompanied by lots of colorful cartoon drawings depicting the action. Because of the rise of television soap operas, comics are no longer commonly available in Region VI. Most people asked agreed that women read more comics than men.

3.6 Video

Within the coastal communities in the Visayas region, about 14% of households own a video player (MADECOR-AIJC, 2002). Remote coastal areas have no electricity, but even here entertainment video houses are common, where generators are used to power local video shows on a regular basis, for which villagers pay a small amount.

Video in Extension

Video is a widely used tool in extension in the Philippines. The information caravans used by the DA are traveling extension vans, bringing agriculture technology to the barangay level, with expert speakers, video shows, displays of equipment and plants.

Within FRMP, BFAR has produced ten educational videos of project activities for general teaching and promotional purposes.

Region VI DOH has in-house video production facilities, and produce videos in local languages on topics such as SARS, dengue fever and AIDS. The department has donated TVs and VHS players to most regional health centers, and distribute their videos for patients to watch while they are waiting for the doctor. In an attempt to increase the relevance of the programs, many are filmed in local areas.

3.7 Traditional and Folk Media

Philippine folk media can be categorized as religious, quasi-religious (festivals) and secular. Several studies have shown that folk media can be effective channels in delivering development messages (MADECOR-AIJC, 2002).

Town Criers are a traditional means of communication in Philippine villages, and a 2002 survey showed that 72% of respondents in coastal communities in the Visayas region obtained information from Town Criers (MADECOR-AIJC, 2002). Recently in Region VI, however, the popularity of Town Criers has fallen with the advent of more efficient communications media such as radio and TV.

Karaoke is a popular pastime in the Philippines, and about one-fifth of coastal households in Region VI own a karaoke machine (MADECOR-AIJC, 2002). Karaoke was used in communication centers in remote villages in the Philippines in the Tambuli Community Project, named after a horn used traditionally to call villagers to an assembly where important decisions were made and information shared. Tambuli trained and encouraged people to make their own neighborhood radio programs in barangays using their own karaoke recording machines (which are available in every village). The resulting radio program was called *Baranggayan sa Himpapawid*, or Village Activity on the Air.

Quasi-religious festivals in honor of St Nino, such as the Ati-atihan in Kalibo, the Dinagyang in Iloilo, and the Sinulog in Cebu, are celebrated in January. These festivities have become tourist attractions and most consumer product companies use this opportunity to launch their products. These present a potential communication channel to reach people from all over the country, who gather to see the parades and join the street dancing.

The *composo* is another folk media favored by communities in Region VI. *Composos* are folk ballads which recount tragedies, love's frustrations, life stories, struggles and triumphs of individuals or families. *Composo* contests are held during annual thematic celebrations such as the Ocean Month and Fisherfolk Day.

Another folk media recently revived is Development Theater. There is no recorded account of its use for fisheries extension, but agencies like the DA and PIA have used theater in extension. An example is the highly acclaimed PIA-trained Cordillera Theater Group, which is a product of an innovative project of the Population Commission called “Strengthening and Mobilizing the Youth in the Cordillera Using Development Theater and Folk Media”, which was funded by the United Nations Population Fund.

3.8 Other Printed Media

It is generally accepted that Filipinos are “not a reading people”, and that poorer people in particular have limited access to books because these are expensive and rarely available in their local dialect. Philippine extension experts recommend the targeting of written material to a ‘grade 6’ audience, as this should be understandable to 90% of the population, and to produce written media in local dialects.

Information materials are often posted in the barangay hall, and a 2000 survey showed that more than half of respondents in a fishing community in Region VI were aware of information posted in their village (MADECOR-AIJC, 2002). Leaflets were a common source of information, and many respondents reported having received T-shirts and caps promoting some information.

IIRR Write Shops

The NGO International Institute of Rural Reconstruction (IIRR) facilitate what they call Write Shops. A current topic about which more information is needed is identified, and expert participants are invited to prepare a paper on the topic for the Write Shop. The participants read out their paper at the workshop, and a plenary discussion follows, during which changes to the presentation are made. The writer is assigned their own personal team of an artist, an editor and a desktop publishing expert, with whom they work on the revisions. Once the paper is complete, the writer is free to comment on papers from other participants. The final papers are presented once more, and discussed again, and final changes implemented. The Write Shop lasts for 5-6 days, and at its completion, the final paper draft is ready.

A book is published with donor funding to the Write Shop. For example, *Utilizing Different Aquatic Resources for Livelihoods in Asia – A Resource Book* was supported by AIT Outreach, Deutsche Welthungerhilfe, FAO, ICLARM, IDRC, IIRR, NACA, the Netherlands Embassy Manila and SEAFDEC. These organizations all promote the publication as their own.

The Write Shop is normally held in English, but because of limited English proficiency in Bangladesh, a Write Shop was conducted in Bangla, and farmers were invited to take part.

Other Printed Media in Extension

All government departments use posters, leaflets and booklets as part of their extension campaigns. Within the DA, DENR and BFAR, printed materials are produced at the national level in English or Filipino. These are provided to a Regional Office, which distributes them in the community and to other target audiences. Because of limited resources, the materials are rarely translated into local languages. Budgetary constraints normally prohibit pre-testing of materials.

Within the DOH, printed media prototypes are distributed to Regional Offices, who then pre-test materials in local languages within the region. Following pre-testing, material design is finalized, and the media produced and distributed. Evaluation of the efficiency of printed media by the DOH showed that posters are most efficient when health workers or other extension workers use them as a teaching tool, especially when supporting leaflets providing more detail are also distributed.

Advertising using billboards is common in the Philippines, and is particularly effective in larger cities where persistent traffic jams maximize the exposure of city dwellers to such media. Billboard advertising is now increasingly used in election campaigns and by the Catholic Church to spread its message. Most recently, the DOH has started using billboards in health campaigns.

3.9 Telecommunications

Within Region VI, access to telecommunications facilities is low. In a 2000 survey of a number of bays in the Visayas, only 2% of respondents had ever used a landline or cellular telephone (MADECOR-AIJC, 2002). The telephone density per 100 people within Region VI was 1.7 in 2001 (NTC, 2002).

Mobile telephones and text messaging are becoming increasingly popular in the Philippines, where networks cover all but the most remote areas, and the overwhelming majority of working professionals own mobile telephones. In some coastal areas mobile phones are becoming popular too.

3.10 Information Technology

Information technology has yet to become a regular feature of Philippine society. Although computers are available in all government departments, they are often scarce and typewriters are still a common feature in the office landscape. Computing facilities are rarely available within LGUs. Internet cafes have sprung up in most Philippine cities, but the users are still mainly the young and educated. NGOs and research institutions have been faster to take up information technology than government departments (although this is beginning to change, see box below), mainly because of their high information requirements and the need to collaborate with international funding agencies.

Within coastal communities, computers and information technology are still largely unknown quantities, although the access to high-tech equipment often occurs through children studying at college, or working overseas.

Information Technology in Extension

There is a current move towards the use of information technology, in particular databases, in coastal resources management projects within the Philippines. In Region VI alone, three such projects exist:

The Institute of Marine Fisheries and Oceanology of the University of the Philippines in the Visayas, in collaboration with the Department of Agriculture Bureau of Agricultural Research, are developing (at the time of writing) a "Knowledge-based, Decision Support and Adaptive System for Coastal Resources Management and Sustainable Offshore Fisheries Development Project" (KDACS for short). KDACS is a tool designed for LGUs, which includes:

- ☞ A tool for generating Municipal Fisheries Ordinances
- ☞ A tool for generating indicators for Fisheries Reserves (such as coral cover and catch per unit effort statistics)
- ☞ A fish identification tool (databased dichotomous keys), and
- ☞ A Fishery Law helper tool, integrating all relevant laws in a searchable database.

BFAR, in the FRMP, established the Philippine Fisheries Information System (PhilFIS), a centralized database comprising several databases on the project areas. The databases are initially intended for BFAR internal use, but an extension of the FRMP to 2006 intends to base them on the World Wide Web. The databases gathered include:

- ☞ Catch and effort
- ☞ Map database
- ☞ Licensing violation
- ☞ Resource and ecological assessment
- ☞ Social-economic assessment
- ☞ Bibliographic database
- ☞ Document database, and
- ☞ Fisherfolk registration.

The DENR's Municipal Coastal Database (MCD) was created as part of its Coastal Resource Management Project, funded by the United States Agency for International Development (USAID). The database comprises a number of fields dealing with budgets, resource management plans, operational status of marine sanctuaries and mangrove reforestation, and training activities. Activities are currently being implemented in 40 municipalities in three regions. MCD aims to:

- ☞ Provide a framework for monitoring and evaluation of coastal resources projects for use by the Local Government Unit and other organizations
- ☞ Identify current status of, and information gaps within, coastal resources management activities, and
- ☞ Facilitate the collection of information by LGUs.

3.11 Groups and Individual Communication

Group identity (kapwa) is a strong tradition in the Philippines (MADECOR-AIJC, 2002). In a study of fisherfolk in Region VI, 70% of respondents were members of at least one organization, including the Small Fishermen's Organization, Bantay Dagat, Comprehensive and Integrated Delivery of Social Services, Gintong Pamana, GLA, HMK, Catholic Organization, Farmers' Coop and Youth Movement (MADECOR-AIJC, 2002).

The organization of fisherfolk into groups as a step towards empowerment and efficient extension has long been recognized by government departments and NGOs, and a vehicle for fisherfolk

organizations to influence policy was established with the introduction of the FARMCs (see Section 4).

DENR and Community Organizing

The DENR have institutionalized community organizing within project development through their Coastal Resources Management Projects. The process began with the Coastal Environment Project, initialized in 1993. The follow-up activity, the Coastal Resources Management Project, was so successful that the DENR turned it into the Coastal Marine Management Division (CMMD), the remit of which is community organization, mangrove reforestation and coastal habitat conservation and protection.

Personal contacts are also important in Philippine culture, and in a 2000 survey, many NGO and government employees stated that they received most of their aquatic resource and fisheries information from contacts or friends (MADECOR-AIJC, 2002).

In the same study, the majority of respondents reported having seen barangay and other LGU officials, as well as government and non-governmental officials, making announcements in the village. Members of the community seeking out information reported having consulted mainly barangay officials, with smaller numbers seeking information from municipal agricultural and fisheries officers, community organization officers, local police or fisheries enforcers. Local NGO officials and the local mayor were also cited as information sources.

Training Extension through Priests

The NGO PhilDHRRA extends training in coastal resources management to priests in the coastal areas that they work in. The protection of natural resources can be integrated within a Christian framework by progressive priests, and PhilDHRRA report one area where a priest devoted whole sections of sermons to teachings about sustainable resources management.

A similar approach is used within BFAR-FRMP with great success in a number of regions.

The Church in Extension

The strong Catholic tradition in the Philippines means that the Church is often one of the most trusted sources of information in coastal communities. In the Catholic faith, the priest officiating the mass represents Christ. The teachings of Christ through the Gospel (which usually are related to relevant current national or community issues by the priest through his homily) are perceived as the truth.

Presently, Social Action Centers (SACs) have been established in dioceses all over the Philippines. They envision building Basic Ecclesial Communities (BEC) rooted in gospel values at the barangay level. The SAC is headed by the Archbishop and a Director who is usually a priest or a nun. An example in Region VI is the Jaro Archdiocesan Social Action Center (JASAC). It maintains paid regular professional staff members who handle its various desk assistance services and programs, which include justice and peace, poverty reduction, Alay Kapwa³, emergencies and ecology.

JASAC has a regular staff development program wherein staff are sent at least once a year for training in community organizing, cooperative development, PRA, monitoring and evaluation and other development training. JASAC is currently piloting BECs in Barangay Amurao, Cabatuan, Iloilo through the support of the Cabatuan municipal parish, and in Barangay Jawod, San Joaquin, Iloilo through the Pitogo Parish.

Interested parishes send potential BEC animators (barangay-level extension workers) for a one-month training conducted by the Jaro Archdiocesan Pastoral Secretariat (JAPS) which collaborates closely with the JASAC in the modular training that the BEC animators have to undergo. Trained BEC animators, in consultation with their parish priests, identify pilot BEC (barangay) sites in their municipalities. The BEC animators work closely with the parish priests and the apostolic parish councils in organizing BEC cells composed of 7-15 cluster households in the pilot site. In facilitating non-religious training and seminars for the BECs, BEC animators and the parish councils also collaborate with other service providers.

BEC development is categorized into three phases: liturgical, developmental and liberational. The major support of JASAC staff to the BECs starts when the communities are already organized and prepared to handle livelihoods projects or initiatives. For projects like fish pen culture or resource enhancement, JASAC engages the support of LGUs but otherwise, it directly conducts its activities in the communities through the parish network. At the barangay level, the barangay captains are involved in or informed of all activities being initiated. The BEC program is still in its first year of implementation and there is yet no concrete impact documented. However, it is interesting to note that the Director of JASAC, in his regular "Social Conscience" column under the "Opinion" section of two local dailies, the *Panay News* and *Visayas Examiner*, sometimes popularizes JASAC's program accomplishments through a "significant change story" format.

³ Alay Kapwa relief and emergency rehabilitation is a humanitarian support program of the Jaro Archdiocesan Social Action Center (JASAC), including food, clothing, medicines, housing materials and financial support for victims of manmade or natural calamities; medicines, used clothing, food or sometimes money to walk-in indigents who seek assistance; free regular medical, dental and optical services, and scholarship assistance, to deserving students at the college level. In Tagalog, *Alay* means "offer or offering", and *Kapwa*, "fellow human being".

4. Information Exchange within the Fisheries Sector

The Philippine Extension Service was organized into a national system in 1952; since then it has undergone a number of reorganizations. One of the most recent of these was with the Local Government Code of 1992, when agricultural and fisheries extension was devolved to LGUs. However, a number of studies suggest that effective extension within the fisheries sector is still not in place within the Philippines.

A 2001 investigation by the University of the Philippines Los Baños showed that uptake of extended technologies is still poor within most fishing communities, who reported inadequate access to information about fisheries and aquaculture (Cadiz and Garcia, 2001). The study highlighted the lack of comprehensive extension strategies within government departments, poor institutional networking, lack of incentives for extension workers, and the extension of inappropriate technologies to farmers, such as practices requiring large investments, which are inaccessible for poor fisherfolk.

These findings were supported in a 2002 report which formed part of BFAR's Fisheries Resource Management Project (FRMP). The findings of this survey highlighted the lack of access to appropriate information regarding alternative livelihoods options to the destructive fishing widely practiced in the country (MADECOR-AIJC, 2002).

Since the devolution of extension, the responsibility for fisheries and aquaculture extension have been with LGUs. The code was implemented in an attempt to aid meaningful governance of local natural resources by local governments. Unfortunately, the devolution has meant that no clear fisheries and aquatic resources extension strategy is in operation within the country, as it is up to individual local politicians to decide on the priority given to fisheries and aquaculture extension within the municipalities they govern. A 2001 study found that fisheries projects received less than 2% of total municipal budgets within Iloilo Province in Region VI (Hablo, 2001). This study identified poor training and technical skills among extension workers, low participation of communities in local planning of project priorities, lack of thorough assessment of the technical viability and feasibility of projects, and low levels of monitoring and evaluation of existing extension efforts. Another important constraint identified was frequent political interventions and changes in political leadership. The poor skill levels of extension workers were also highlighted by Encanto (2000).

Following is a description of access to information by, and information exchange between and within, the main institutional stakeholders of the fisheries sector in Region VI. Further details of information sources used by various stakeholders can be found in Appendix 3.

4.1 Bureau of Fisheries and Aquatic Resources (BFAR)

The Bureau of Fisheries and Aquatic Resources (BFAR) is a line agency under the Department of Agriculture (DA). BFAR has a national office and regional offices in the sixteen geographic regions of the country.

The extension activities of BFAR have changed dramatically with the introduction of several different legislations within the last 15 years. BFAR was integrated into the DA as a staff bureau (an agency providing advisory services on fisheries matters) in 1986, at which time fisheries extension became part of the numerous agricultural extension services of the Department. Just as fisheries extension was becoming established, devolution of all DA field personnel into LGUs was implemented through the newly approved Local Government Code of 1991. Agriculture and fisheries extension services became the immediate concern of LGUs, backed by technical support from the DA. Extension officers who were employees of DA prior to the devolution were mainly integrated within LGUs to continue providing agricultural and fisheries services to local communities. The recommendations

from, and relations with, fisheries office of the DA greatly determine the importance attached to fisheries extension within LGUs.

In 1998, BFAR was reconstituted as a line bureau (an agency implementing fisheries policies and projects) under the DA through the passage of the Philippine Fisheries Code of 1998. However, the reorganization into a line bureau was not supported with 'plantilla' positions (approved and funded list of permanent positions in the civil service) so BFAR was unable to undertake its mandate as a line bureau in the short term following the Code.

The Fisheries Resource Management Project (FRMP)

The FRMP is a BFAR-led development project funded by the Asian Development Bank and the Japan Bank for International Cooperation. The project started in 1998, and has been implemented in 100 coastal municipalities in 18 bays within ten regions of the country. A third phase is expected to take the project to 2006. The aim of FRMP is to facilitate reforms to conserve the country's fishery and coastal resources, and to promote sustainability and ensure food security.

The project works closely with LGUs and communities to identify alternative livelihoods options for community members engaged in destructive fishing, and to draft and implement coastal resource management plans. The main activities include the rehabilitation and management of fish sanctuaries and mangrove reserves, institutionalizing community-based law enforcement (through the provision of training, patrol boats and wireless communication devices), and bay-wide coastal resource management. Activities include workshops with LGUs to formulate and implement their resource management plans, and community organization through contracted NGOs. FRMP also aims to build capability and help reorganize BFAR to enable the Bureau to better assist its customers, in particular the LGU, to implement measures required for sustainable coastal management.

The structural changes required within BFAR are achieved through human resources and career development programs, staff training plans and the long-term installation of a centralized computer system linking all units and regional offices, as well as the development of management systems to ease administration efforts within BFAR.

A major part of the FRMP is the production of the Philippine Fisheries Information System (PhilFIS), which is a centralized database located within the Fisheries Information Management Center (FIMC). [For more details on PhilFIS, see Section 3.10.]

In BFAR Region VI, there are presently only 53 permanent employees, most of whom are over 40 years old. To enable the bureau to carry out its functions, contractual employees are hired (currently comprising about two-thirds of the work force of BFAR in the region). They do not earn leave credits, and are not entitled to the benefits of civil servants or of the Bureau's staff development programs. With permanent staff nearing the age of retirement, and no training provisions for new staff, BFAR is finding it harder to provide high levels of technical assistance to LGUs.

4.1.1 Communication within BFAR

The structure of BFAR is outlined in Appendix 4. The hierarchy of the system is adhered to in terms of communications, and any formal contact between employees normally goes through faxed or mailed requests to regional and group superiors. Similarly, information is disseminated via official channels.

National and regional offices have landlines for telecommunications, and have recently been provided with internet access. However, most employees have mobile phones and much of the communications within and between regions is carried out using mobile phones, either through calls or via text messages. Higher-ranking officials in BFAR Region VI are provided with mobile phones from the

office, which also provides the first P 2,000 (US\$ 40) for work-related calls. Fax is another commonly used communications medium.

BFAR has an extensive staff development program, and all BFAR employees attend frequent updates and orientations, and have opportunities for training in specific technologies, extension methodology, and various other topics. The national office also initiates frequent meetings discussing specific topics or technologies, and senior officials in BFAR regional offices attend 3-4 such conferences and meetings per year. Because employees get many opportunities to meet each other, networking within BFAR is strong.

Internet access is sporadic within both national and regional BFAR offices, and where available, most employees are not comfortable using e-mail or accessing the internet for information. However, the FRMP project (see Section 4.1) is providing internet access and information technology (IT) training to many BFAR regional offices. Most written communication within BFAR is carried out in English.

4.1.2 Information Exchange with other Government Departments, Research Institutions and NGOs

BFAR Region VI publishes a quarterly newsletter (in English), detailing events and activities within the Bureau. This is distributed to other regional BFAR departments, other government departments, research institutions, NGOs and local government units.

Personal interaction with other agencies occurs via official channels, and normally requires the mailing or faxing of requests, which are always written in English. More informal contact may then ensue, using landline telephones, mobile phones (including text messages) and fax.

Within Region VI there is a functioning network between BFAR and other regional government departments, research institutions involved in aquatic research and NGOs. Apart from conferences and meetings regarding specific technologies, contact is not scheduled formally, and interaction tends to occur as and when needed.

Because of annual budgeting within BFAR, NGO contracts have to be renewed every year, which is problematic for projects where longer-term relationships have to be established. Within the FRMP, community organizing and livelihoods development activities are facilitated by NGOs. These activities are often delayed because of the requirement of having to renew the NGO contracts annually.

4.1.3 Contact with LGUs

Initial contact with LGUs occurs through official channels, between the BFAR Regional Director and the municipal mayor. Primary contact is through mailed or faxed (in English) requests for meetings. Following initial meetings, more informal contact occurs via landline telephone calls, fax and mobile phones (including text messages) where available. Another point of contact is through fishers' organizations or the FARMCs, which is the only formalized framework for collaboration between BFAR and LGUs.

Because interaction is largely determined by the relationships between individuals, the state of collaboration differs from LGU to LGU, and relationships have to be renewed with each change of political leadership (as often as every three to nine years if the mayor is re-elected for the maximum three terms allowable) to ensure continued support of ongoing initiatives. This situation could be best addressed if aquatic resources management were institutionalized as one of the basic services mandated in the local government code, as are health, education and social welfare.

Regular updating of fisheries and aquaculture skills of LGU extension workers is carried out by BFAR when new technologies emerge, but most extension workers report having attended only one or

two such courses in the last ten years. Municipal extension workers are also provided with a P 1,500 (US\$ 30) per month incentive by BFAR to carry out fisheries and aquaculture extension in addition to their other duties.

4.1.4 BFAR Extension

In 2003, national priorities focused on food security, generation of employment and increased fish production. So-called Project Implementation is allocated half the P 23 million budget (US\$ 460,000) in BFAR Region VI. Individual project activities are conceived at the regional level with ensuing training activities and the provision of fingerlings and other inputs such as fish traps, fishing nets and related materials to fishing communities.

Backyard aquaculture is encouraged through extension, mainly to inland communities, where technical training and fingerlings (tilapia or catfish) are provided to farmers. About 90 three-day training sessions are conducted each year. The target group is low-income farmers who own less than 500 m² of land. Low-income subsistence farmers willing to participate in the program are selected from a list of potential beneficiaries provided by LGU extension workers. Following BFAR inputs, the project participants are helped by the extension officers. Other activities aimed at increasing fish production and generating employment include training in oyster and mussel culture, grouper or tilapia cage culture, seaweed farming and crab fattening.

A major effort is directed towards the stopping of illegal fishing through orientation about the provisions of the Fisheries Code of 1998, and through fisheries law enforcement. Several projects on coastal resources management are being implemented in the region, including the Visayan Sea Project, the FRMP and the National Stock Assessment Project, which all aim to address resource depletion and alleviate poverty in coastal communities. These projects teach sustainable coastal resources management and promote alternative livelihoods strategies such as crab fattening and seaweed culture.

Extension Methods Used

Municipal training seminars for LGUs and community members, often with invited experts from research organizations such as SEAFDEC or universities. Common seminar topics include technical issues, record keeping and husbandry procedures. Training materials include video (where available in municipalities), overhead projectors and flip-charts (used in municipalities without electricity). All training materials are in English, and teachers translate as they go along. Within Region VI, more than 100 training seminars are held each year.

Demonstration farms for aquaculture (mainly seaweeds). About 200 demonstration farms for seaweed culture are currently in operation.

At festivals, conferences and fairs, such as the Month of the Ocean Celebration, and Aquafair, BFAR promote their activities through the distribution and display of posters, brochures, T-shirts, caps, calendars and banners.

Mass dissemination of information occurs through radio programs and distribution of leaflets and booklets, mainly written in English or Filipino.

The success of BFAR extension efforts are compromised by the lack of direct control over extension workers, and the need to constantly re-negotiate relationships with ever-changing political priorities at the LGU level. In areas where local powerful politicians endorse high profile fisheries or aquaculture projects, political considerations sometimes override the technical feasibility of projects, with ensuing low rates of uptake following project completion (Hablo, 2001). Politics are important in the Philippines, and in some cases political differences stall project initiation.

Because all extension is implemented through LGUs, no national extension strategy has been planned or budgeted for (Pilar Fontelar⁴, personal communication). Attempts are made to monitor the efficiency of extension efforts and individual project activities, but as no funding is allocated for this purpose, efforts are often sporadic. Limited community involvement in the formulation of project goals has been noted to reduce uptake and feelings of ownership of projects within communities (Hablo, 2001).

The fact that only about one-third of staff within BFAR VI is permanent, decreases extension efforts because contract staff cannot travel or receive training. The non-approval of new permanent positions limit career development, so advancement through the ranks is slow, which acts to dampen staff morale.

4.1.5 BFAR Access to Information from Communities

Fisheries and Aquatic Resources Management Councils (FARMCs) are community forums which link BFAR and LGUs. The FARMC structure has been in operation for some time, but BFAR internal reviews of the organization have recently revealed that a great deal of further empowerment and capacity-building is needed before FARMCs function effectively in all areas.

The FARMC

The Fisheries and Aquatic Resources Management Council (FARMC) is a multi-sectoral body of fisherfolk representatives from municipal and commercial fisheries, a fisheries worker (casual or long-term employee in the fishing industry), representatives from NGOs and the private sector, representatives from the LGU (planning and development officer), chairperson of the Agriculture and Fisheries Committee of the Sangguniang Bayan (municipal legislative body) and a representative from the DA-BFAR.

FARMCs were established to enable fisherfolk to take an active role in the development, management and conservation of local fisheries resources. The Council also provides a venue to raise fisheries-related issues, discuss problems and recommend solutions that could eventually be adapted into legislative agenda.

The FARMC was created in 1995 through Executive Order No. 240 from the Office of the President and was amended through the Fisheries Administrative Order (FAO) Number 196 by virtue of the Fisheries Code of 1998. The law mandates the creation of national and municipal FARMCs to institutionalize the major role of fisherfolk and other resources users in the planning and formulation of sustainable development of fisheries resources.

Adequate representation of fishers is constrained by low educational levels of fisherfolk leaders who, as members of the FARMCs, are expected to negotiate with local government officials, politicians and industry leaders. Moreover, despite FAO 196 and the guidelines on the organization of FARMCs, exactly how FARMCs should be formed is still unclear to many. Section 69 of the Philippine Fisheries Code of 1998 states that, “the FARMCs shall be formed by fisherfolk organizations/cooperatives and NGOs in the locality and be assisted by the LGUs and other government entities. Before organizing the FARMC, the LGUs, NGOs, fisherfolk, and other concerned people’s organizations shall undergo consultation and orientation of the formation of FARMC.”

However, interview findings suggested that some FARMCs in Region VI, and perhaps in other regions, were formed without existing people’s organizations in the locality. In these cases, FARMC

⁴ Division Chief, Fisheries Industry Development and Support Division, Bureau of Fisheries and Aquatic Resources

members were appointees of the mayor, which questions the validity of FARMCs as an independent council. Further, it seems that the appreciation of the FARMC mechanism is still not fully developed within BFAR itself nor the LGUs.

In a national review of FARMCs, BFAR identified limited awareness about FARMCs among fisheries extension workers as one of the constraints to further development, and awareness creation is now being conducted. In addition, BFAR focuses on learning from the experiences of successful FARMCs, and carrying out capacity-building in terms of seminars, workshops and training in coordination with LGUs. Seminar topics include coastal ecology, resource enhancement (e.g., fish sanctuaries, mangrove reforestation), fisheries law enforcement, plus skills training in documentation of meetings and preparation of resolutions or position papers.

Additional communication from the community to BFAR occurs through written requests for assistance, most often from fisherfolk associations, often assisted by NGOs. Limited by budgetary constraints, BFAR primarily focuses on extension to those groups that actively seek assistance.

4.2 Local Government

4.2.1 Information Exchange within Local Government

The structure of the LGU is hierarchical, and communications tend to follow official channels, with all written communication in English. The mayor meets the head of the Municipal Agriculture Office once or twice a week, and the Municipal Agriculture Officer meets with extension workers several times a week.

The level of support from the LGU to Municipal Extension Workers depends largely on the degree to which extension is prioritized within the LGU. The municipal government is elected for three years, for a maximum of three consecutive terms. Regular changes in municipal leadership mean that standards and practices within the Municipal Agriculture Office frequently change, and that employees have to repeatedly sensitize new politicians to the importance of fisheries and aquaculture extension.

Many Extension Officers feel that they do not get the support they need from the LGU. Facilities are often run down, and access to information and seminars is restricted because of the unwillingness of superiors to provide funds for training.

Few municipal agriculturists and extension workers have access to computing facilities, and some municipalities are without telephone landlines. Internet access is only available in a few municipalities. Where there is mobile coverage, most municipal employees have personal mobile telephones, which they often use for work. Where there is no fax, the office often has an arrangement with a telecommunications company so that they can receive faxes at their number.

Again, politics are important in the Philippines, and the political persuasion of a person is commonly known within local communities. This often causes tension when a change of political leadership occurs, where politicians commonly extend less support to employees who supported the opposition. Similarly, a number of interviewees suggested that opposing political views between the mayor and the Sangguniang Bayan member on Fisheries can freeze support for any fisheries or aquatic resources management activities within the municipality.

4.2.2 Interactions between Local Government and Other Parts of the Fisheries Sector

LGUs collaborate with a number of research institutions, NGOs and government departments. Within the fisheries sector, LGUs receive training from, and participate in projects run by, research institutions such as UPV and SEAFDEC.

Malalison Island

An eight-year community-based fisheries resources management project was carried out by SEAFDEC in collaboration with the NGO PROCESS Foundation, on Malalison, a small island located within Region VI. The project had four stages:

- ⌘ Community organizing and institution-building
- ⌘ Sea farming and land-based livelihoods
- ⌘ Implementation of territorial use rights in fisheries and deployment of artificial reefs, and
- ⌘ Sea ranching.

Within the project, SEAFDEC extended mainly technical training to the community, and the PROCESS Foundation facilitated the formation of the Fishermen's Association of Malalison Island with the support of the municipal government.

(See Aldon, 1998 and Surtida, 1998)

UPV also support capacity-building of Local Government Units through studies funded by the Local Government Support Program. Within this program, a survey published in 1999 highlighted the need for organizational restructuring of, and organized support to, LGUs, in an effort to enable them to effectively coordinate and implement plans and activities on environmental management and sustainable development. This led to the "Organization and Strengthening of LGU-Based Environmental Institutions Project" (Bedano and Vargas, 1999). Another project, focusing on strengthening gender and development advocacy for municipal LGUs, was completed in 1998 (Asong and Espano, 1998).

Communications between LGUs and NGOs tend to take place on the initiative of the NGO, who arrange for contact through fax or mail (in English), or, once relationships are established, by telephone. Once joint projects are operational, contact tends to occur between fisheries extension workers and NGO personnel in the field.

4.2.3 LGU Extension

There are 172 fisheries extension officers in Region VI. Within each Municipal Agriculture Office, there can be between zero and three fisheries extension workers.

Extension tends to focus on transfer of technology, and is commonly limited to activities with fishers or their organizations. The extension agenda is set by the LGU, and mainly concentrates on cage culture of tilapia, catfish, grouper and milkfish targeted to middle-income farmers and Coastal Resources Management (CRM) Projects targeting whole communities. These include the establishment of marine sanctuaries and the deployment of artificial reefs. Indeed the main extension activity of the LGUs visited was law enforcement to curb illegal fishing within marine sanctuaries, extended in the form of personnel, vessels and fuel for patrolling sanctuaries and the provision of watch towers.

Some emphasis is also placed on the extension of alternative livelihoods options to fishers (who are among the poorest in the community). Such options include livestock raising, passive fishing gear, and seminars on seaweed, mollusk and finfish cage culture. The uptake of these technologies is generally low, because of limited initial feasibility studies, and the requirements for investments are beyond the capacities of the poorest fisherfolk.

Extension methods used include training seminars for fisherfolk (organized through BFAR or research institutions), the distribution of leaflets and posters (mainly in English, produced by BFAR,

DENR or research institutions), and demonstration farms (particularly for seaweed and backyard aquaculture of tilapia, catfish or milkfish).

Most extension workers were originally employed under the DA before the devolution into the local government. They have science bachelor degrees in agriculture or fisheries, but often find themselves extending information from areas other than their specialty. None of the extension workers have any training in community organizing or facilitation, and many have only limited knowledge of marketing, accounting and other skills required to run a business.

Retraining of fisheries extension workers used to occur regularly when they were employed under BFAR, but nowadays it is rare. All fisheries extension workers interviewed had received less than two re-training courses since devolution in 1991. This they attributed to lack of political will within the LGU to provide funds for re-training. The lack of skills updating led some extension workers to feel that they sometimes knew less than the fishpond owners they were trying to extend information to, and middle-income fish farmers were commonly cited as an information source.

Within Philippines municipalities, political leaders are aware of which barangays, and to a certain extent, which individuals, voted for them at the last election. Barangays which did not support the current mayors tend to get less support in terms of extension.

Extension officers are paid about P 9,000 (US\$ 180) per month, to which incentives from BFAR are added (P 1,500 per month, update seminars, and occasional training and study tours). They do not receive travel allowances, and rarely have access to vehicles. Field visits thus have to be paid out of their own pocket, which in practice means that many extension officers rarely go to the field. In addition, several extension workers reported that because of limited resources they focus on supporting existing projects, which leaves barangays without any existing projects rarely visited.

The FARMC provides the organizational structure for fisherfolk to have a say in the direction of development within their community, and the municipal FARMC is supposed to meet every month. However, extension workers report that many FARMCs exist only in name, with little true representation of fisherfolk because the members were put in place by the LGU rather than elected. Where strong FARMCs exist, they were either formed from existing fishermen's organizations, or are the result of intensive capacity-building by NGOs. Within the municipal agriculture office, there is a general opinion that organization of communities should be facilitated by NGOs, and that fisheries extension workers should focus on technical matters. The need to strengthen FARMCs is recognized, however, and in some areas where bay management councils operate (e.g., BBRMCI), honoraria are provided by the council to barangay FARMC chairmen.

4.3 Civil Society

4.3.1 Communication within the NGO Sector and between NGOs and Other Parts of the Fisheries Sector

NGOs working in Region VI report a strong network. The NGO PhilDHRRA acts as a national umbrella organization for NGOs, and strengthening networks. As a result of this, there are regular meetings between most NGOs in the region. English is the most common language used in communications within and between NGOs, and e-mail is cited as the most commonly used medium.

NGOs work closely with local government units, but complain that government departments often do not recognize the existence of an NGO in a community when they initiate projects, with the result that many organizations work separately towards the same goal in the same area.

4.3.2 NGO Fisheries and Aquaculture Extension

A number of NGOs operating in Region VI work with coastal communities, including Save the Children, PhilDHRRA and the PROCESS Foundation. NGOs mainly focus on capacity-building and longstanding relationships with coastal communities. Organization of fisherfolk is considered a priority, as is strengthening the operation of existing frameworks such as the FARMCs.

Strengthening FARMCs

When the NGO PhilDHRRA started working in Leyte in Region VII, the Fisherfolk Organization was already strong. Once Executive Order 240 was issued in 1995, they helped the fishers adapt to the FARMC structure. Aided by the NGO's facilitation, the FARMC decided to initiate the establishment of a Marine Protected Area (MPA). In collaboration with the NGO, the FARMC arranged a study tour to fishing communities in Dumaguete and Bohol to view successful MPAs and mangrove reforestation projects. Once back, the FARMC set up a marine sanctuary in Leyte, hiring divers to assess the area required. The FARMC made a resolution, with policies on sanctuary management practices, such as the prohibition of motorized crafts within the sanctuary, and the provision of fines for persons violating the resolution. The resolution was endorsed at barangay and municipal levels.

Local LGUs and the international NGO Save the Children have been running the "People and Environment Co-Existence Development (PESCO-Dev) Project" since 1999 in two provinces in Region VI. The project is funded by the Packard Foundation, and aims to develop reproductive health and coastal resources management capacities within coastal communities. The project uses awareness-raising about environmental and reproductive health issues, in addition to capacity-building with local government health workers. Training materials for family planning are produced with the community, and youths trained to act as 'peer facilitators' for adolescent reproductive and sexual health. LGUs have allocated staff to work with the NGO within the community, and have provided 'counterpart funds' for the project. An important part of project activities was the strengthening of FARMCs, through the training of members. A positive project outcome so far is the reduced incidence of illegal fishing within project areas.

In addition to training and other forms of personal interaction, extension media used by NGOs in Region VI include printed materials such as leaflets, comics and posters, as well as radio programs. Many NGOs develop training materials with the local community, and teach community members to act as local coaches.

Creating Extension Media with Users

The NGO PhilDHRRA worked closely with communities to produce extension materials within the theme 'gender and reproductive health'. Using a process-oriented approach, the NGO worked with a group of women to identify the most important issues that the group wanted to highlight, and the materials they wanted to produce. The group identified a number of topics and appropriate materials, including:

- ☞ T-shirts illustrated with comic style drawings advocating equal division of labor
- ☞ Posters on the topic of incestuous rape
- ☞ Comics depicting the plight of women in rural households, and
- ☞ Bookmarks detailing the impacts of teenage pregnancies, for distribution to schoolgirls.

The materials were all authored and designed by the women, who were assisted by artists to add the final touches. The materials were mass-produced and distributed to other households in the area.

The advantage of a participatory approach to the production of extension materials is that the relevance of material content and format is ensured, and that capacity-building forms an essential part of the production process for the groups involved.

4.4 Other Sectors

4.4.1 Department of Health

Within the Philippines, the Department of Health (DOH) is broadly considered effective in its extension campaigns, and Region VI is no exception. The DOH owes part of its success to the large national and regional budgets directed towards health. A large number of staff is employed at the regional level.

The Center for Health Development (CHD) based in Iloilo City has a total of 237 staff and personnel, 58 of which compose the technical staff and 80 comprising administrative and support groups. There are 99 DOH representatives assigned in all the provinces, cities and municipalities of the region. The CHD has four divisions – Health Operations; Local Health Assistance; Management Support; and Licensing, Regulation, and Enforcement – which are appropriately situated to facilitate communication, mobility and being client-friendly.

The DOH is also progressive in its approach to information dissemination, perhaps because the current Health Secretary has a background in Information Management. The department recognizes the need for efficient communications systems, for efficient accounting and administrative functioning, and for continuous retraining of personnel. These goals form an integral part of the DOH strategy, which also emphasizes materials pre-testing and the monitoring and evaluation of the impact of extensive campaigns.

At the time of writing, the DOH is running 47 different programs, in addition to which four to five monthly advocacy campaigns are carried out. A large effort is directed at capacity-building at the LGU level and improving mechanisms for inter-LGU cooperation, as well as towards the strengthening of collaborations between communities and civil society.

The DOH uses all traditional extension media such as radio, TV and printed materials such as posters, leaflets and banners. At the regional level, these are all translated into local languages. In addition, a range of more novel techniques are used, including:

- ☞ Puppetry and drama for reproductive health campaigns for women, using local theater groups comprised of communications students
- ☞ Production of comics and comic inserts
- ☞ Cinema advertising
- ☞ Endorsement by famous personalities
- ☞ Billboards
- ☞ Production of CD-ROMs for use by health workers in their teachings, and
- ☞ Provision of funding directly to LGUs to increase their promotional activities in, for example, nutrition programs.

5. Access to Information by Coastal Communities

As part of the Fisheries Resource Management Project (FRMP), a social assessment of communities was conducted in the Region VI site in Sapián Bay. The study found that communities saw effective information dissemination as important to participatory development and community organizing. Information and community education were seen as factors that promote cooperation among community members. The study also showed that within the community, 21% consulted their village officials, 14% consulted other fisherfolk and 13% their family or relatives. Outside of the community, about 75% had not consulted any entity, 11% mentioned municipal or local government and 4% consulted BFAR.

Common sources of information on technology and fishing grounds included “own experience”, “other fisherfolk” and family or relatives. The village officials were perceived as doing well in disseminating information on trainings and credit. The local fish buyers were the main source of marketing information. A quarter of fisherfolk shared fisheries-related information with fellow fisherfolk, 24% with family or relatives, and 18% with neighbors. New information on fishing was mainly shared through informal discussions (56%) and barangay assemblies and meetings (32%).

Appendix 5 shows the results from the fieldwork conducted in three communities within Region VI.

5.1 Sources of Information in Coastal Communities

5.1.1 Education

In a 2000 survey conducted in Sapián Bay in Region VI, the majority of respondents (fisherfolk and farmers) were high school graduates, but a quarter of respondents had not gone further than elementary graduate (MADECOR-AIJC, 2002). In the Philippines, English is the medium of instruction in the majority of the subjects taught at all levels. Although most people in communities may not speak English, they can usually understand simple messages on billboards and in brochures.

Public education is one of the tools adopted by CRM practitioners to supplement local knowledge and awareness of resource management problems and solutions. Public education also helps motivate people to change their values, beliefs and behaviors to promote sustainable use of resources. For public education, information materials disseminated to communities may be in English or locals dialect, but seminars and meetings usually accompanying such campaigns are conducted in the local dialect.

5.1.2 Radio

Radio was perceived as the most efficient source of information because of its wide reach. Almost all households owned or had access to radios. Listening to local news and commentary programs in the morning while preparing for work, after lunch when arriving back from fishing trips, and in the evenings (from 6 p.m.) was a daily habit for the majority of the population. Bombo Radyo network was mentioned as one of the preferred stations because of its clear signal in all areas. Most radio programs favored by fisherfolk are either in Filipino (from Manila stations) or Hiligaynon (Iloilo and Capiz stations). Women in particular listen to local Ilonggo radio dramas in the afternoon.

5.1.3 Television, VHS and CD

Between 25-55% of people living in coastal communities own or have access to television. Those who own both radio and TV say that they prefer TV over radio. The most popular station in all communities visited was ABS-CBN because of its clear signal. Men and women who had access to

television watched news programs with live reports from field reporters in the evenings (6-9 p.m.). Women also watch the local Filipino tele-series (soap operas) after the evening news programs. Women and teenage girls favor imported Filipino-dubbed Mexican tele-series shown in the afternoon. For children, the current favorite program was *Meteor Garden* (on ABS-CBN 5:30-6:00 p.m. Mondays-Saturdays), a Taiwanese love story dubbed in Filipino.

Several municipalities within the region have local VHS or CD rental stores which also serve as mini-cinemas showing popular movies, the majority of which are local Filipino love stories and action movies, and Chinese and American action movies. Karaoke tapes are also popular.

5.1.4 Church

The vast majority of people in Region VI are devout Catholics (96%), and the *misallete*⁵ was identified as a possible means for extension in the FRMP (MADECO-AIJC, 2002). About half of villagers reported receiving information from the church.

The church is significant in the Philippines, not only in religious matters but also socio-politically. In fact, the mass mobilization during the first so-called “People-Power Revolution⁶” was attributed to the call for action by the Catholic Church. The Church publishes a weekly national newsletter, *The Veritas*, and the Archdiocese of Jaro publishes a weekly newsletter, *Candlelight*, which features activities, events and Wedding Banns⁷ of the church.

Going to church on Sundays in the *poblacion* (town proper) is part of the weekly life of people in communities living near the town. For remote barangays, the assistant Catholic parish priests in the municipalities try to hold masses at least once a week, not necessarily on a Sunday. Occasionally, in their sermons they relate gospel teachings to pressing national and local issues to raise community awareness of socio-political and environmental topics that have implications on their lives.

Presently, each Catholic diocese has its own Social Action Center (SAC) headed by the Archbishop and a Director who is usually a priest or a nun. The SAC maintains a regular paid staff to run its various desk assistance services, which cover justice and peace, poverty reduction, emergency relief and ecology. A good example is the Jaro Archdiocesan which conducts its community programs and activities through the Basic Ecclesial Communities (BEC) organized in pilot barangays or through the municipal or barangay parishes. Through the BEC, communities learn about the liturgy as well as about other issues that have implications on their lives. Each pilot barangay has a trained BEC animator who, in close coordination with the parish priest, conducts regular meetings with the BEC members and facilitates seminars or training on self-awareness, relationships with self, God and community, the sacraments and bible studies. After this liturgical phase, the BEC animator engages the support of JASAC staff to conduct training and seminars on cooperative formation, CBCRM, electoral education during election years, and other awareness-raising and strengthening.

The language used during training or in meetings is Hiligaynon mixed with some English, but most information materials distributed are in English and a few in Filipino. VCDs and VHS, brown manila paper with diagrams, and text written in colored marker pens, mostly in English but a few in Filipino, are also used during seminars. However, JASAC facilitators use Hiligaynon for discussing topics or information contained in the brochures and other communications media used.

⁵ *Misallete* are mass guides distributed to church parishioners at the start of every service.

⁶ The peaceful mass actions which led to former president Marcos being deposed.

⁷ The publication of Wedding Banns (Notice of an Intended Marriage) is a legal requirement in the Philippines.

5.1.5 Word of Mouth

Friends, neighbors and relatives are common sources of information in communities. In the barangays, community members gather near *sari-sari* stores⁸ or in waiting sheds (transport stops) during their free time, especially early in the morning and late afternoon. During these informal gatherings, information and news are shared. Most NGOs see these gatherings as opportunities to establish good relationships with the community during the social integration phase of community organizing. However, most community members did not consider 'word of mouth' a reliable source of information for official matters conveyed to the community. They would prefer to receive a formal letter from the municipal office, usually written in English.

5.1.6 Punong Barangay (Barangay Captain) and Point (Contact) Persons

Official communications written in English from the municipal office are usually coursed through the Barangay Captain who may then call a Barangay Council meeting or an assembly meeting to inform residents of activities or programmes that the Municipal Office is extending or facilitating. In the case of health information from the Municipal Health Unit, information is disseminated to midwives and Barangay Health Workers, who in turn conduct meetings or relay house-to-house messages for information that needs to be disseminated.

For fisheries concerns, messages usually pass through the Barangay Captain, who would in turn delegate the dissemination of information to the Barangay Kagawad (Village Council Person) on fisheries and the BFARMC if the barangay has one. Community members preferred the use of this established communication network for relaying important messages or information.

5.1.7 Written Communications and Mobile Phones

Written correspondence in English is the most common, and the preferred, means of formal communication between the Municipal Office and the community.

In most barangays where there is a cell site, mobile phone text messaging is becoming a popular means of communication between the Municipal Office and the community, mainly because it is faster and cheaper than post. Text messages may be in English, Hiligaynon or Filipino. In some municipalities mobile phones are issued to Barangay Chairpersons to facilitate communication. Text messaging is usually preceded by formal written communication in English.

5.1.8 Fish Vendors and Transient Vendors

Fish vendors (*lab-asero*), transient vendors (*bolantero*) and fish buyers are the main sources of marketing information. Communities are updated about current market prices by fish vendors. The *bolanteros* – who peddle their varied wares (utensils, clothes, food stuffs) from one barangay to another – are rich sources of information on events in nearby municipalities or barangays.

5.1.9 Extension

Other extension techniques favored by communities include trainings and seminars, regular meetings, study tours (coupled with colored and effective informative materials such as livelihoods or technical brochures, preferably with big fonts), and posters with colored drawings and clear messages. Women preferred colored posters to brochures because they liked to post them on the walls of their houses. Men tended to favor technical brochures because they are handy to carry along. Both men and women preferred colored drawings and photos to comics because serious messages might not be absorbed if using the latter. Comics are perceived to be more appropriate for children and teenagers.

⁸ Small local shops selling provisions.

Most community members preferred information materials written in either Hiligaynon or Filipino, although they thought they could understand simple messages written in English. Both men and women stressed the importance of the presence of extension workers to explain messages or information every time information materials were distributed in communities, whether in English or local languages, as posters or leaflets.

Study tours or cross-visits were also perceived to be one of the most effective extension techniques. NGO or government projects that can afford it facilitate cross-visits of community and municipal representatives to model CRM or livelihood sites. Cross-visits provide good opportunities for community leaders to share experiences and lessons learned with communities they visit. It usually motivates and encourages the visiting group to initiate similar projects in their own communities.

6. Discussion and Recommendations

6.1 Recommendations to Maximize the Effectiveness of Information Access and Exchange

In this study, a number of areas were identified which, if addressed, could increase the effectiveness of communication within the fisheries sector in Region VI of the Philippines. The needs identified are summarized below.

6.1.1 Need for a National Framework for Fisheries Extension Services

The limited funding available for communications and extension within the fisheries sector means that it is important to ensure that all activities are coordinated and that funds are spent in the best possible way. The framework should clearly identify policy, organizational and operational frameworks for municipal and commercial fisheries and aquaculture. This issue was addressed in a national workshop aiming to formulate such an extension strategy, held from 10-12 July 2003. The workshop participants included representatives from LGUs, NGOs, government departments (BFAR, DA), FARMCs and community members. A draft of this survey was presented at the workshop.

6.1.2 Rethinking of the LGU Role, and Interaction between the LGU and Other Stakeholders

It is important to provide a mechanism to ensure that fisheries activities are prioritized and funded where relevant within LGUs, and that BFAR is more closely tied in with project implementation and fisheries extension. BFAR could look into strategies adopted by other devolved agencies with strong LGU communication linkages, like the DOH. The DOH takes a progressive approach towards information dissemination and seemed successful in forging strong collaborations with local governments and communities. The DOH directs a large effort at capacity-building at the LGU level and improving mechanisms for inter-LGU cooperation.

6.1.3 Increasing the Efficiency of LGU Activities

This could be done through creating awareness of the intended role of the FARMCs, regular training of extension workers, and the provision of additional incentives for extension workers to visit the field (through remuneration of travel expenses, bonuses for field visits, and the creation of a better work environment through personal development and upgrading of facilities). There is a need for activities and budgets to be planned at a national level, so the efforts are not left up to individual LGU and BFAR employees.

6.1.4 Targeting of Information and Projects to Identified Audiences

This could be done through participatory planning at many stages, involving many stakeholders (BFAR, LGUs, research institutions, NGOs, communities), comprehensive feasibility studies, audience profiling and thorough pre-testing of information materials, and monitoring and evaluation of activities and information campaigns. These issues are currently addressed in individual government departments through the FRMP and CMMD, which budgeted for participatory coastal assessments, audience surveys, planning of communications strategies, pre-testing of materials, and monitoring and evaluation. These activities could be integrated more widely in implementing agencies.

6.1.5 Strengthening the FARMC Process, Where This is Not Yet Working Optimally

Activities could include capacity-building within fishing communities to ensure that representation is fair, and consideration of the power issues related to communication between largely uneducated fisherfolk and powerful politicians. This might utilize the SPARK-STREAM Livelihoods and Languages Process⁹ for building shared understandings, which forms part of STREAM's activities. The basic steps involve:

1. Defining the “conversation group”
 - ⌘ Who the conversation partners are
 - ⌘ Their relationships with each other
 - ⌘ Relevant communication issues, which may include power dynamics within the “conversation group”, languages to be used and how the conversation might best be facilitated
 - ⌘ The purpose of the conversation, and
 - ⌘ The purpose of working together
2. Exploring ranges of meanings of concepts or terms being discussed, and arriving at shared understandings
3. Agreeing on the outcomes of the conversation and follow-up steps to be taken.

There is also a need to increase awareness of the intended function of the FARMCs within LGUs and BFAR. BFAR monitors the performance of FARMCs in annual national surveys. In Region VI, it started engaging FARMCs in capacity-building activities through seminars and exposing them to communities with successful CRM experiences and practices. These initiatives could be integrated into a framework for national action.

The needs identified above and the suggested actions taken by the different stakeholders within the fisheries sector in Region VI of the Philippines are summarized in Figure 1 below. Table 1 on the following pages details specific suggestions for consideration by different stakeholders within the fisheries sector.

In addition, to effectively reach different stakeholders involved in fisheries and aquatic resources management within Region VI, communications could be targeted to the intended audiences. Section 6.2 summarizes recommended channels for communication to the audiences identified in Section 2. These recommendations follow from the fieldwork conducted as part of this study. Before implementing any communications strategy, however, it is advisable to conduct a brief investigation to ensure local relevance.

⁹ Developed jointly by the SPARK (Sharing and Promotion of Regional Awareness and Knowledge) Program of Voluntary Service Overseas (VSO) and the STREAM Initiative. For more details see <www.streaminitiative.org/Library/Livelihoods/livelihoods.html>.

Figure 1 Identified Needs and Suggested Actions for Different Stakeholders

What	Need(s)	Best addressed through	By	Concepts / Activities	Needs
Fisheries Sector	National framework for extension services	1. July workshop & follow-up activities	National & regional BFAR, research institutions, NGOs, LGUs, communities	Stakeholders	Suggested Actions
LGUs	<div style="border: 1px solid black; padding: 2px;"> Mayors </div> <div style="border: 1px solid black; padding: 2px;"> Municipal Agriculture Officers </div> <div style="border: 1px solid black; padding: 2px;"> Extension Workers </div>	Better understanding of FARMC Skills development Better understanding of extension	2. Awareness creation, training 3. Training 4. Awareness creation, training	National and regional BFAR Regional BFAR, LGUs, research institutions, NGOs LGUs, regional BFAR	
Individual Projects	Increased efficiency Information targeting	5. Participatory planning involving all stakeholders 6. Adequate feasibility studies 7. Increased networking between different stakeholders 8. Comprehensive M&E – ‘significant change’? 9. Audience identification & pre-testing of materials	LGUs, national / regional BFAR, research institutions, NGOs STREAM, LGUs, national / regional BFAR, research institutions LGUs, regional BFAR, research, NGOs		
FARMCs	Effective communication Better representation of fishers	10. L&L process for building shared understandings 11. Capacitybuilding & group formation at community level	STREAM, NGOs NGOs, LGUs		
Coastal Communities	Empowerment, political awareness, alternative livelihoods, income-generating activities	12. Capacity-building & group formation 13. Training & awareness creation	NGOs, LGUs Regional BFAR, research, NGOs		

Table 1 Specific Actions for Different Stakeholders in the Fisheries Sector of the Philippines Region VI

Needs	Suggested Actions	Stakeholders	Specific Suggestions
National framework for extension services	1. July workshop & follow-up activities	All	Participate in workshop and share findings of the survey, particularly the needs and suggested actions.
Better understanding of FARMCs in LGUs	2. Awareness creation, training	National and regional BFAR	Increase budget for, and conduct, extensive information campaigns using workshops to inform LGU employees of the intention behind, role of, and structure of FARMC. Continue and document current evaluation of FARMCs, and through this, identify critical attributes of successful FARMCs. Publish these (in English and local languages) and make them available to communities, NGOs, LGUs and other stakeholders working with communities (including the Church) and through FARMCs.
Extension worker skills development	3. Training	Regional BFAR LGUs Research NGOs	<p>Prioritize budget for hands-on training in new techniques and technology; facilitate training in extension, participatory methods, community organizing, facilitation skills and business development. Training should be at seminars in the region, and supported with materials written in English.</p> <p>Prioritize budget for hands-on training in new techniques, technology; facilitate training in extension, participatory methods, community organizing, facilitation skills and business development.</p> <p>Provide inexpensive training (through hands-on seminars) in new techniques, technology; extension, participatory methods, community organizing, facilitation skills and business development. Support training with materials written in English.</p> <p>Provide inexpensive training in community organizing, participatory methods and extension. Support training with materials written in English.</p>
Better understanding of extension work	4. Awareness creation, training	LGUs Regional BFAR	<p>Review budget allocation for extension and develop schemes to provide financial incentives for fieldwork activities. Cover all transport costs. Provide better facilities where possible (work stations, access to computers and vehicles) and reward employees for good efforts, e.g., through prize-giving ceremonies.</p> <p>Continue to pay incentives to extension workers. Relate BFAR newsletter to the LGUs, use this as a vehicle for sensitizing LGUs to the role of extension and praising extension workers (success stories, pictures of local projects) and persuading LGUs to increase financial support for fisheries extension.</p>

Table 1 Specific Actions for Different Stakeholders in the Fisheries Sector of the Philippines Region VI (continued)

Needs	Suggested Actions	Stakeholders	Specific Suggestions
Increased efficiency of individual projects	5. Participatory planning	LGUs	Provide training in participatory needs assessment for extension workers (action 13) and conduct these in communities. Use findings to plan projects with community members and other stakeholders, using FARMC as a forum.
		Regional BFAR	Facilitate participatory needs assessments in communities. Devolve project planning to community level, and plan individual projects responding to identified needs with all stakeholders (including community members and NGOs working in the area).
		Research	Facilitate participatory needs assessments in communities. Devolve project planning to community level, and plan individual projects responding to identified needs with all stakeholders (including community members and NGOs working in the area).
		NGOs	Conduct participatory needs assessments in communities, and collaborate with other stakeholders to plan individual projects.
	6. Feasibility studies	LGUs	Budget for, and carry out, a comprehensive feasibility study (assessing environmental, social, political, economic and market parameters) prior to the initiation of any project. Involve other stakeholders where needed.
		National and regional BFAR	Budget for the development of a protocol for carrying out comprehensive feasibility studies (assessing environmental, social, political, economic and market parameters) for individual projects. Publish protocol in English and distribute to LGUs. Conduct provincial seminars training all extension workers to carry out feasibility studies, support with written materials in English. Stress the importance of feasibility studies prior to initiation of projects to avoid wasting funds. Reward projects where good feasibility studies are done by mention in BFAR newsletter. Make thorough feasibility studies a mandatory part of any project.
		Research	Budget for, and carry out, a comprehensive feasibility study (assessing environmental, social, political, economic and market parameters) prior to the initiation of any project. Involve other stakeholders where needed.
	7. Increased local networking	NGOs	Budget for, and carry out, a comprehensive feasibility study (assessing environmental, social, political, economic and market parameters) prior to the initiation of any project. Involve other stakeholders where needed.
		LGUs	Hold quarterly meetings with all stakeholders working in municipality, and representatives from communities.
		Regional BFAR	Identify other stakeholders in local areas through the needs assessment and feasibility study (actions 4 and 6), and invite them to contribute in the participatory planning process (action 5).
Research		Identify other stakeholders in local areas through the needs assessment and feasibility study (actions 5 and 6), and invite them to contribute to the participatory planning process (action 5).	
NGOs	Identify other stakeholders in local areas through the needs assessment and feasibility study (actions 5 and 6), and invite them to contribute to the participatory planning process (action 5).		

Table 1 Specific Actions for Different Stakeholders in the Fisheries Sector of the Philippines Region VI (continued)

Needs	Suggested Actions	Stakeholders	Specific Suggestions
Increased efficiency of individual projects (continued)	8. M&E	STREAM	Facilitate workshop to adapt 'significant change M&E' to Region VI, participants should include regional BFAR, research institutions involved in fisheries projects, NGOs working with coastal communities and LGUs. From workshop outputs, create easy-to-follow printed guidelines in English, and distribute these to all stakeholders. Follow up with annual workshop to assess progress.
		LGUs	Work with regional BFAR to develop written protocol for cost effective M&E of all projects, and make M&E a mandatory part of project planning.
		National and regional BFAR	Develop written (in English) protocol for cost effective M&E of all projects through regional workshop with FRMP staff, to share M&E skills and experiences. Make M&E a mandatory part of project planning. Conduct training in the protocol for employees working on project implementation. Stress the importance of considering M&E in project planning, and its use for identification of suitable projects and cost-effective planning. Reward good M&E practice with mention in the BFAR newsletter, and use success stories to seek funding and develop new strategies.
		Research	In collaboration with LGUs, carry out M&E within all projects implemented. Publish findings and distribute to regional BFAR and LGUs to share experiences. Use success stories to seek further funding and develop new strategies and research avenues.
Individual projects information targeting	9. Audience identification & pre-testing of information materials	LGUs	Collaborate with producers of information materials to ensure that audience identification and pre-testing in local areas are carried out.
		Regional BFAR	Provide a forum to discuss the development of a protocol for audience identification and pre-testing of information materials with all stakeholders involved (extension workers, NGOs, research and community representatives). Publish protocol in English and distribute to LGUs, research groups and NGOs working with coastal communities. Publish pre-testing results in regional newsletter to share findings with other stakeholders. Use recommendations of this survey as basis for audience identification.
		Research	Collaborate with BFAR and LGUs to ensure that audience identification and pre-testing in local areas are carried out whenever information materials are used. Use recommendations of this survey as basis for audience identification.
		NGOs	Collaborate with BFAR and LGUs to ensure that audience identification and pre-testing in local areas are carried out. Share experiences of the production of information materials with communities in July workshop.
Effective communication within FARMCs	10. Livelihoods and languages process	STREAM	Facilitate the use of the 'livelihoods and languages process' for building shared understandings (through meetings, seminars, workshops) to explore the effect of power relations on communications in FARMCs. Work with NGOs and FARMC members to integrate 'livelihoods and languages' concepts into every FARMC.
		NGOs	Work with STREAM to integrate the process of building shared understandings in the conduct of livelihoods analysis.

Table 1 Specific Actions for Different Stakeholders in the Fisheries Sector of the Philippines Region VI (continued)

Needs	Suggested Actions	Stakeholders	Specific Suggestions
Better representation of fisherfolk in FARMCs	12. Capacity-building and group formation in coastal communities	NGOs	Continue to work with community organizing and capacity-building to strengthen fisherfolk representation in FARMCs. Using hands-on workshops, teach community organizing techniques to fisheries extension workers in LGUs. Budget and arrange for training of extension workers in capacity-building techniques.
Empowerment of communities	13. Capacity-building and group formation	NGOs LGUs	Continue to work with community organizing and capacity-building in coastal communities. Using hands-on workshops, teach community organizing techniques to fisheries extension workers in LGUs. Arrange for training of extension workers in capacity-building techniques.
Promote alternative livelihoods & income-generation in communities	14. Training and awareness creation	Regional BFAR	Reassess current alternative livelihoods (to destructive fishing) portfolio and use the outcomes from the M&E process (action 9) to assess which options work best. Use radio (Bombo Radyo and local stations) for awareness creation (in local languages) about these livelihoods options within coastal communities, and disseminate information about this to the Church. Continue to provide training in techniques and technology to LGU extension workers, support teachings with technical brochures in English. Continue to establish demonstration farms, and actively encourage cross-visits. Arrange training seminars for fisherfolk in specific techniques, support teachings with posters and leaflets in local languages featuring colors and pictures but not cartoon drawings.
		Research	Conduct on-site participatory research into alternative livelihoods (to destructive fishing) with coastal communities. Ensure that feasibility studies (action 7) are in place, to target research to the needs of communities so that findings are relevant and practical.
		NGOs	Continue to work with community organizing and capacity-building in coastal communities. Using hands-on workshops, teach community organizing techniques to fisheries extension workers in LGUs.

6.2 Recommendations for Communication with Stakeholders

6.2.1 Government Agencies

When communicating with government departments, it is important to go through official channels, and to request interaction or collaboration in writing. English is the preferred language for written communication, and also for any information material disseminated to government departments.

Although a number of government agencies aim to increase their access to computers and the internet, only a few divisions within agencies in Region VI have fully functioning systems, and most employees have no access to a computer or the internet. Aside from the standard practice of distributing hard copies of information to government departments, digital copies may be provided to individuals with computer access.

Most government employees have no access to research published in international scientific journals, but would welcome articles sent to them.

One of the most efficient ways of reaching government employees would be the common practice of tapping into existing training programs within departments, through guest speakers or lecturers, where a large number of employees could be reached. Similarly, regular conferences attended by government agencies and research institutions could be used as an avenue for communicating novel approaches.

Mass communication could be used to reach employees of government departments. Within Region VI, most government employees read the *Philippine Daily Inquirer*, the *Manila Times*, the *Manila Bulletin*, and the local *Panay News*. Radio programs favored by government employees include Bombo Radyo, DYOK and DCRH. Government employees most often reported watching ABS-CBN and GMA news programs.

6.2.2 Civil Society

NGOs operating within the Philippines generally have good access to computers, and prefer to receive information through e-mail or electronic media such as CDs, although file formats should be agreed upon before dissemination to ensure compatibility. Most employees have bachelor degrees, and English is the preferred communications media for all technical information.

NGOs generally access information through the World Wide Web, and are easily reached through electronic newsletters pointing them to appropriate information on specific websites.

Within Region VI, the best way to communicate with NGOs would be to work through the established network of PhilDHARRA and CODE NGO, where information dissemination to members already occurs.

For specific training of NGO personnel, workshops or demonstration facilities can be used, where lectures should be supported with printed materials in English.

General awareness-raising on specific issues for NGO personnel could be done through advertising in mass media, including the national daily newspapers, *Philippine Daily Inquirer* and *Philippine Star*, advertising between news programs on ABS-CBN or GMA TV stations, and on Bombo Radyo. However, as NGO personnel often work late and in the field, they may not read newspapers or watch news programs regularly.

Community-based People's Organizations (POs) are best reached through the FARMCs and NGOs working in the area, or contacting existing projects by government departments (who most often work through POs rather than individuals).

6.2.3 Research Institutions

Research institutions often already have access to a lot of information. All research staff generally have access to the internet, and can be reached by e-mail or through electronic newsletters.

Although research scientists read journals, many universities have not got subscriptions to more than a few journals because of limited funds, and scientists could be made aware of novel techniques or approaches through mailing hard or soft copies of research papers. Research staff can also be reached through local and international conferences and workshops.

English is the working language of most universities, and researchers prefer to receive technical or scientific information in English.

Mass media communication suitable for reaching university and research institution lecturers include the newspapers, *Manila Bulletin*, *Philippine Star*, and *Philippine Daily Inquirer*, adverts between news programs on ABS-CBN and GMA TV stations, and Bombo Radyo.

6.2.4 Local Government Units (LGUs)

Communication with LGUs is best directed through official channels, initiated with written communication in English, and followed up by more informal contact via telephone, fax or visits. Computing facilities and access to e-mail is limited, and many employees have no experience with computers. In some municipalities, landline telephones are not available, and LGU staff can only be reached by mail or visit, or perhaps by mobile phone if available.

The most efficient way to reach employees within LGUs would be through training seminars and workshops, where written materials (in English) are also distributed. Extension workers in particular would benefit from training in capacity-building, facilitation, extension techniques, community organizing, and a range of technical and business-related topics.

Mass communication techniques could successfully be employed to reach LGU officials. Most employees within LGUs read the national newspapers, *Philippine Daily Inquirer*, *Philippine Star*, *Manila Times* or *Manila Bulletin*. Many also read the national tabloid *Bandera*. Many people in LGUs listen to Bombo Radyo for political news (although some mayors specifically avoid this station for fear of hearing criticism of themselves), as well as local provincial radio stations. Preferred TV stations include various cable channels as well as ABS-CBN and GMA (the last two for news programs). Because LGUs differ greatly in their access to different media, it is recommended that smaller local surveys identifying locally preferred media be carried out when information dissemination is planned.

6.2.5 Coastal Communities

When communicating with coastal communities, a combination of mass communication media and personal interaction is most appropriate. For information campaigns which would need wider dissemination, use of local commercial AM stations such as Bombo Radyo, Aksyon Radyo and DZRH would be effective. For localized provincial or municipal campaigns, provincial radio stations (e.g., DYKA and Radyo Natin in Antique) would be more cost-effective. Technical programs should be aired early in the morning, and short awareness-raising campaigns could be aired throughout the day between news programs. The language used should be Hiligaynon or Filipino. Television adverts with clear messages in Filipino between news programs in the evenings would reach a wide range of community audiences. Collaborating with local churches (either through the parish or Social Action Center network) to disseminate messages to communities during homily or announcements is also a potential channel of communication.

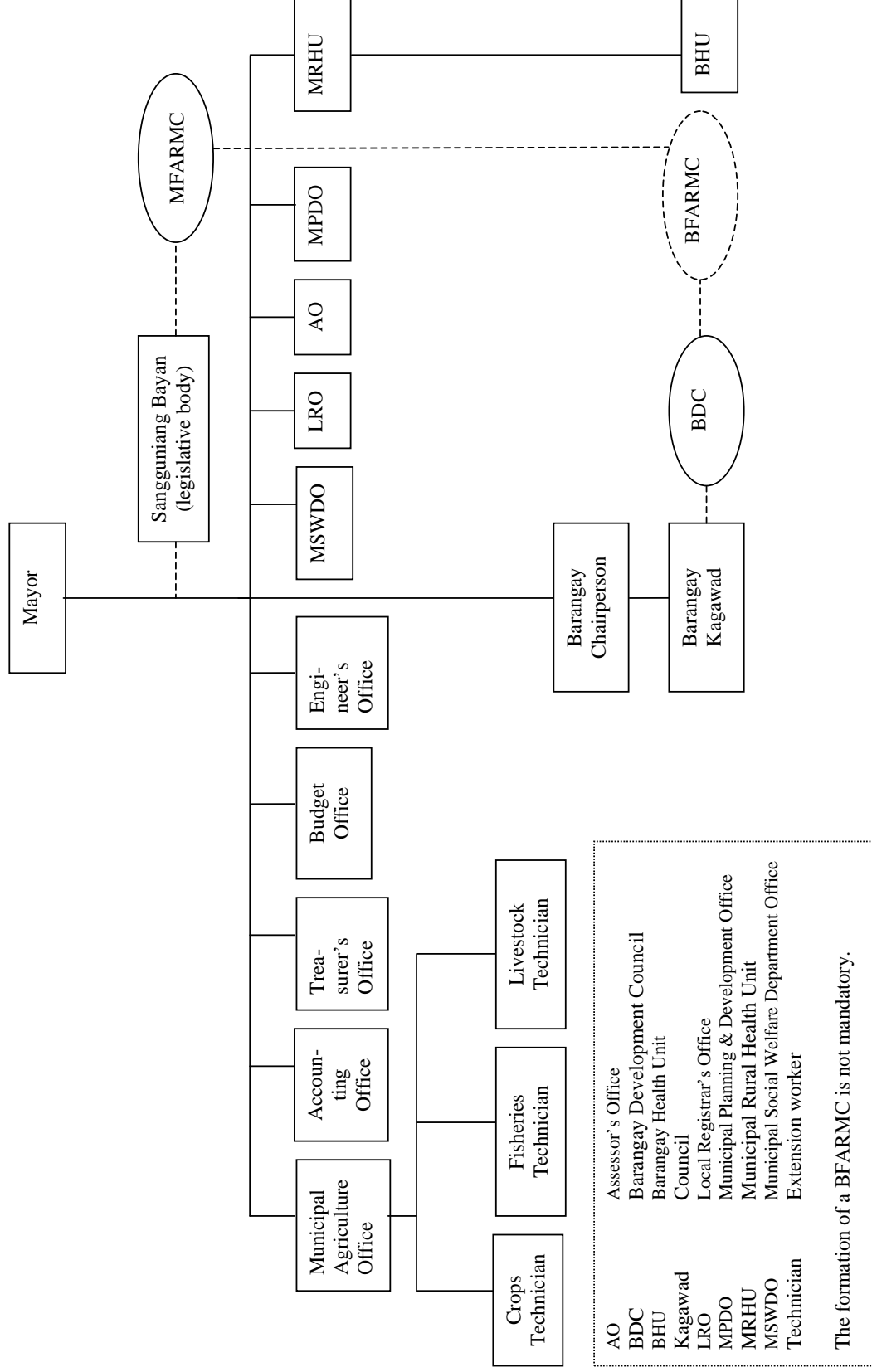
Face-to-face communication in the form of training, seminars or meetings, coupled with the distribution of colored posters and leaflets, are favored extension media. Preferred languages during training seminars are Hiligaynon or Filipino. Information materials distributed may be written in Hiligaynon or Filipino, or could be in English for simple and catchy messages. Colored drawings or photographs would be most suitable to reach men and women, and comics for youth and children.

For formal communications, the use of written communications in English – coursed through the Mayor at the municipal level and through the Barangay Captain at the barangay level – is the preferred channel. Within the community, communication should occur through assembly or focus group meetings, the dissemination of which is then coursed through different contact persons such as barangay council members, the Barangay Health Worker or the BFARMC.

References

- Aldon E T 1998 Organizing the Malalison Community. *SEAFDEC Asian Aquaculture* 20(6), 18-19.
- Andres T Q D 1988 *Community Development: A Manual*. Quezon City, Philippines: New Day Publishers.
- Asong R H and Espano A 1998 *GAD Advocacy and Integration in LGU Policies, Plans and Programs: The Case of Region VI*. Terminal Report. Funding Agency: Local Government Support Program (LGSP) Region VI. Miagao, Iloilo: College of Arts and Sciences.
- Bedano J A F and Vargas B J D 1999 *Environmental Capability Status and Needs Assessment Survey*. Terminal Report. Funding Agency: Local Government Support Program (LGSP) Region VI. Miagao, Iloilo: School of Technology, University of the Philippines in the Visayas.
- Cadiz M C H and Garcia L M 2001 *Efficiency and Effectiveness of Technology Delivery Systems in the Fisheries Sector*. Final Report. College of Development Communication, University of the Philippines Los Baños College, Laguna, and Philippine Council for Aquatic and Marine Research and Development, Los Baños, Laguna.
- DPPC 2003 *Tri-Media Directory 2003*. Makati City, Philippines: Diplomatic Post Publishing Corporation.
- Encanto V S 2000 The Flow of Information in the National Extension System and Current Information Needs, 3 Philippines. *Taiwan Extension Bulletin* 482, 12-18. Taipei, Republic of China: Food and Fertilizer Technology Center.
- Hablo R S T 2001 *Issues and Challenges in the Planning and Implementation of Coastal Fisheries Projects in the Province of Iloilo*. University of the Philippines in the Visayas.
- MADECOR-AIJC 2002 *Integrative Report: Community/Audience Profile and Community Consultations (August 2002) of the Consulting Services for the Information, Education and Communication (IEC)*. Quezon City, Philippines: Mandala Agriculture Development Corporation, in association with the Asian Institute of Journalism and Communication.
- NSIC 2002 *Regional, Social and Economic Trends 2002*. Iloilo City, Philippines: National Statistical Information Center, Republic of the Philippines National Statistics Office.
- NTC 2002 *Annual Accomplishment Report*. Iloilo City: National Telecommunications Commission Region VI.
- PIA 2000 *Philippine Media Factbook – Other Facts and Figures 2000*. Quezon City, Philippines: Philippine Information Agency (PIA).
- Surtida M B 1998 Malalison Makes Full Circle. *SEAFDEC Asian Aquaculture* 20(6), 12-13.

Appendix 1 LGU Organizational Structure



Appendix 2 Communications Media in Philippines Region VI

Radio

Examples of Costs			
<p>Bombo Radyo, Consolidated Broadcasting System, Sky City Tower Bldg, Mapa St, Iloilo City, Tel 337-9393 30 seconds: P 1,500* 15 seconds: P 920* Production costs: P 500/script *Aired four times per day Longer slots not available</p>	<p>DYSI-AM (Super Radyo Iloilo), RGMA, Phase V, Alta Tierra, Jaro, Iloilo City, Tel 329-1041 30 seconds: P 375 15 seconds: P 225 Production costs: P 1,000/script</p>	<p>DYMK-FM (Campus Radio), RGMA, Phase V, Alta Tierra, Jaro, Iloilo City, Tel 329-1041 30 seconds: P 250 15 seconds: P 175 Production costs: P 1,000/script</p>	<p>Through the PIA (for government agencies only) 30-60 seconds: P 25,000 (100 AM/FM stations with nationwide broadcast, aired 2-3 times daily for 30 days)</p>
Other Radio Stations in Region VI			
<p>DYKR-AM Radio Mindanao Network, C Lserna St, Kalibo, Aklan, Tel 268-5129, 268-3136, 262-3118</p>	<p>DYRG-AM International Broadcasting Corporation, Toting Reyes St, Kalibo, Aklan, Tel 268-5206</p>	<p>Radyo Natin-FM (San Jose) Manila Broadcasting Company, Funda-Dalipe, San Jose, Antique, Tel 036-540-8254</p>	<p>DYBB-AM (Super Radyo) Roxas Avenue, Roxas City, Tel 6-215-627</p>
<p>DYLL-AM (Radyo ng Bayan) Philippine Broadcasting Service, PNRC Bldg, Bonifacio Drive, Iloilo City, Tel 337-5445, 335-1060</p>	<p>DYIC-FM (Smile Radio) Radio Mindanao Network, Madison Bldg, Ledesma St, Iloilo City, Tel 335-0244, 337-0610 Punta Tabuc, Roxas City, Tel 6-211-972</p>	<p>DYBQ-AM (Radyo Budyong) Islands Broadcasting Corp, UEC Bldg., Mapa St, Iloilo City, Tel 335-0894, 335-0377</p>	<p>Super Radyo-AM Radio Global Media Arts, 3rd Floor, Planters Products Bldg, Rizal-Lacson S, Bacolod City, Tel 434-2085, 434-2086</p>
<p>DYKR-FM United Broadcasting Network, Rm 208, 2FG, Esteban Bldg, Galo-Gatuslao St, Bacolod City, Tel 2-52-07</p>	<p>DYOK-AM (Radyo Balita) Manila Broadcasting Company, Kahirup Bldg, Guanaco St, Iloilo City, Tel 338-1584</p>	<p>DYJJ-AM (Radyo Budyong) Intercontinental Broadcasting Corp, Arnaldo Blvd, Roxas City, Tel 6-211-363</p>	<p>DYRL-AM Radyo Pilipino Corporation, Cameroli Avenue, Rodriguez Baybay, Bacolod City, Tel 2-52-24</p>

P 50 = US\$ 1

Television

Examples of Costs		
<p>GMA 6 GMA, Phase V, Alta Tierra Village, Jaro, Iloilo City, Tel 329-1041</p> <p>Prime time 6-10 pm, 30 seconds: P 9,500 Prime time 11 am to 2 pm, 30 seconds: P 7,000 Non-prime time, 30 seconds: P 5,000</p> <p>Production costs: P 3,000 Monthly sponsorship: Local News (Ratsada: 5-5:30 pm, Mon-Fri); 1-30 sec spots/day: P 75,000</p>	<p>ABS-CBN TV 10 4, ABS-CBN Broadcast Complex, Luna St, Lapaz, Iloilo City, Tel: 320-9453, 320-9451</p> <p>Prime time 6-10 pm and 11 am to 2 pm, 30 seconds: P 1,980, 15 seconds: P 1,188 Brandbug: P 900 Non-prime time, 30 seconds: P 1,188, 15 seconds: P 712 Brandbug: P 500</p>	<p>Through the PIA (for government agencies only) 30-60 seconds: P 100,000</p> <p>(Six TV stations and four cable stations nationwide broadcast shown 2-3 times daily for 30 days. Filipino or English only.)</p>
Other Television Stations in Region VI		
<p>TV 12 Islands Broadcasting Corporation, UEC Bldg. Mapa St, Iloilo City, Tel 335-0894, 335-0377</p> <p>RPN TV 8 Radio Philippines Network, RPN Compound, Sum-ag, Bacolod City, Tel 2-78-13</p> <p>GMA TV Relay RGMA, Roxas Avenue, Kalibo, Aklan, Tel 268-3875-6 P 50 = US\$ 1</p>	<p>ABS-CBN – TV 4 25th Laeson St, Mandalagan, Bacolod City, Tel 2-92-97</p> <p>GMA TV 10 3rd Fl, Administration Bldg, University of Negros Occidental – Recoletos, Lizares Ext, Bacolod City, Tel 2-84-05</p> <p>Alto Cable Alto Cable Services, Fuentes Subdivision, Roxas City, Capiz, Tel 6-212-333</p>	<p>SBN TV 5 Southern Broadcasting Network, Barangay Bata, Bacolod City, Tel 441-0700, 441-0800</p> <p>ABC 32 ABC DC, 3rd Fl, HO Bldg, B S Aquino Drive, Bacolod City, Tel 434-4654</p> <p>Wesfardell Cable Lapu-Lapu St, Roxas City, Capiz, Tel 6-210-853</p>

Workshops, Demonstration Farms and Study Tours

Examples of Costs			
Workshop	Workshop	Workshop	Workshop
FARMC estimate: P 5,000 per day FARMC	Through the PIA (for government agencies only): P 5,000 per person for 3 days (for 30 people)	Iloilo City: Centennial Hotel: P 885 La Fiesta: P 900 Punta Villa: P 650-750 John B Lacson: P 600 Sport Pension: P 750 (per person per day, food and accommodation estimated for 30 persons for 3 days)	Roxas City: MVW Tourist Inn and Restaurant: P 650 (per person per day, food and accommodation estimated for 30 persons for 3 days) Ivisan, Capiz: P 200 (per person per day for food only)
Workshop Training Kit	Demonstration Farms	Technical Training	Study Tour
Iloilo: Per person: P 300	Seaweed farm: P 25,000 (for ¼ hectare farm: supplies and materials; 3-day training for 5 persons @ P160/day for food; 2-time travel expenses) Tilapia/catfish: P 6,000 (for 500 fingerlings, 1-day training for 15 persons, 2-time travel expenses)	SEAFDEC: In-house: P 12,000 per person for 30 days; P 15,000 for 45 days; P 29,000 for 60 days Distance learning: P 6,500 for 103 days	(team of researchers traveling from one municipality to the other to give talks on research) P 8,000-15,000/person (cost depends on where the tour goes)

P 50 = US\$ 1

Video

Examples of Costs			
Contracted Professional	Through the PIA	J&R Family Studio	Tabares Photo & Video Coverage
10-minute production in English and local language versions, with basic script improved: P 60,000 (4 CDs and 2 VHS) 17-minute production documentary including scripting: P 125,000 P 50 = US\$ 1	(for government agencies only): 10-12 minutes: 250,000 (shot within Metro Manila)	c/o James Chua, Gaisano, La Paz, Tel 320-8698 15 minutes (1 VHS & 1 CD): P 20,000	281 Osmena, Arevalo 15 minutes (1 VHS & 1 CD): P 2,000

Printed Media

Examples of Costs			
Newspaper	Newspaper	Newspaper	Prints
<p>Daily Headlines, Iloilo Full page: P 15,000 1/2 page: P 8,000 1/4 page: P 4,500 1/8 page: P 2,500 Per column cm: P 60 Color: 1 color + 20% 2 colors + 40% 3 colors + 60% Full color + 100%</p>	<p>Paray News, Iloilo Tel 509-4163, 337-6302 1/4 page: P 4,000 1/8 page: P 2,000</p> <p>Prints Malones Printing Lopez Arcade, Tel 320-2857 Brochure: P 3,500 (2-fold, glossy, 2 colors, 1,000 copies)</p>	<p>News Today, Iloilo Tel 336-9788 1/4 page: P 4,000 1/8 page: P 2,000</p>	<p>Through the PIA (for government agencies only) Poster: P 300,000 (18"Δ24", full color, 25,000 copies) Brochure: P 250,000 (6"Δ9", full color, 16 pp, 10,000 copies) Flyer: P 50,000 (8.5"Δ11", full color, 10,000 copies) Komiks inserts: P 5,940/publication (inside back or front cover) Magazine inserts: P 16,500/publication (weekly magazines, inside back or front cover) Indoor ads: P 625,000 (60"Δ40", at five sites within Manila, 10 hours daily for 12 months)</p>
Other Newspapers in the Region with Circulation > 1,000			
<p>The Aklan Reporter (weekly) Rizal Street, Kalibo, Aklan, Tel 268-4158</p>	<p>Antique Reporter (bimonthly) Provincial Capitol, San Jose, Antique, Tel 036-540-8593</p>	<p>Daily Informer (daily) San Jose, Antique Tel 036-540-8974</p>	<p>Daily Informer (daily) Airport Area, Mandurraio, Iloilo City, Tel 321-2522, 320-8054</p>
<p>The Capiz Times (weekly) Marc's Apartment, Zamora Street, Roxas City, Capiz, Tel 6-210-591</p>	<p>Watchman's Report (weekly) San Roque St, Roxas City, Capiz, Tel 6-213-155</p>	<p>Sun Star Iloilo Daily (daily) 153 Rizal St, Iloilo City, Tel 509-7831</p>	<p>Negros Daily Bulletin (daily) A-1 Esteban-Magalena Bldg, Hernaez St, Bacolod City, Fax 435-0973</p>
<p>P 50 = US\$ 1</p>			

Appendix 3 Information Access within the Fisheries Sector

Sources and Access

Information Source	Access to Information Source by											
	Coastal Communities		Local Government Units	Extension Workers	NGOs	Government Departments	Research Institutions	Church	Men		Women	
	Men	Women							Men	Women		
TV	Medium-low	Medium-low	High	High	High	High	High	High	High	High	High	High
Radio	High	High	High	High	High	High	High	High	High	High	High	High
Newspapers and magazines	Low	Low	High	High	High	High	High	High	High	High	High	High
Leaflets, brochures, posters	High	High	Medium	Medium	Medium	High	High	High	High	High	High	Medium
Research articles	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Medium
Internet	Low	Low	Low	Low	High	Low	Low	Low	High	Low	Low	Low
E-mail	Low	Low	Low	Low	High	Low	Low	Low	High	Low	Low	Low
Post	Low	Low	High	High	High	High	High	High	High	High	High	High
Fax	Low	Low	Medium	Medium	High	High	High	High	High	High	High	High
Landline telephones	Low	Low	High	High	High	High	High	High	High	High	High	High
Mobile telephones	Low-medium	Low-medium	High	High	High	High	High	High	High	High	High	High
Personal communication	Medium-high	Medium-high	Medium	Low	High	Medium	Medium	Medium	High	Medium	Medium	Medium
Rank of preferred language of information materials	Hiligaynon Filipino English	Hiligaynon Filipino English	English Hiligaynon Filipino	English Hiligaynon Filipino	English Filipino Hiligaynon	English Filipino Hiligaynon	English Filipino Hiligaynon	English Filipino Hiligaynon	English Filipino Hiligaynon	English Filipino Hiligaynon	English Filipino Hiligaynon	English Hiligaynon Filipino

Information Sources for Different Stakeholders

Interviewees	Fisheries and Aquatic Resources Management Issues	General
NGOs	NGO newsletters, internet bulletins of NGO networks, BFAR, SEAFDEC, UPV, friends working in other NGOs, internet	Newspapers: <i>Philippine Daily Inquirer</i> , <i>Philippine Star</i> TV: ANC, ABS-CBN, GMA, CNN, BBC World Radio: DCRH, Bombo Radyo
Government departments (national and regional)	Superiors, BFAR, SEAFDEC, training, seminars, workshops, conferences, friends and colleagues working in those areas, ICLARM's <i>NAGA Journal</i> , municipal agriculture officer	Newspapers: <i>Philippine Daily Inquirer</i> , <i>Manila Bulletin</i> , <i>Philippine Star</i> , <i>Panay News</i> , <i>Informant</i> , <i>Guardian</i> TV: GMA (news), ABS-CBN (news) TV and cable: Discovery, National Geographic, HBO (movie channel), CNN, BBC World Radio: DCRH, Bombo Radyo, DYOK, Radyo ng Bayan
Mayors	BFAR, DA, DENR (leaflets and training), mayors' associations seminars, National Agriculture and Fisheries Council (NAFC), fisherfolk, fisheries extension workers	Newspapers: <i>Philippine Daily Inquirer</i> , <i>Philippine Star</i> , <i>Bandera</i> TV: ABS-CBN (5:30-6:30 pm), IBC (6 am, 1 pm, 8 pm for news) TV and cable: SBN, Star Sports, ANC (news), NBN, National Geographic, Discovery Radio: Radyo Bombo, Agong, DCM (Manila FM station, news and music)
Municipal agriculture officers	BFAR, SEAFDEC, UPV, PCWARD, NOAA, internet	Newspapers: <i>Philippine Daily Inquirer</i> , <i>Manila Times</i> , <i>Manila Bulletin</i> , <i>Sun Star</i> , <i>Daily Star</i> , <i>Bandera</i> TV and cable: GMA (5-8 am & 6-12 pm), ABS-CBN (news 6-8 am), CNN, National Geographic, sports channels (5-10 pm) Radio: Radio Veritas (8-10 pm), DYKA, Radio Natin (6-8 am) Magazine: <i>Liveway-way</i> (monthly magazine with comics)
Fisheries and agriculture extension workers	FRMP training, leaflets, BFAR (leaflets in English), SEAFDEC, UPV, fishpond owners, ELAC (Environmental Lawyers Assistance Center, a national organization) quarterly newsletter	Newspapers: <i>Manila Bulletin</i> , <i>Philippine Star</i> , <i>Philippine Daily Inquirer</i> , <i>Bandera</i> TV and cable: IBC, GMA (7-9 pm), ABS-CBN (news 6-11 pm), Channel 10 (dramas), Discovery, PTV 4 Radio: Radyo Bombo (5-7 am, 6-7 pm), Aksyon Radyo, DYKA (5-7 am Saturday), Radio Natin (news and music), RMM FM station (music, weekdays 5-7 am), 93.5 FM (music)
Community (men)	Barangay officials, FRMP, BFAR, NGOs, FARMCS	TV: ABS-CBN (news) Radio: Bombo Radyo, Aksyon Radyo, Radyo Natin (news morning, lunch and evening)
Community (women)	Barangay officials, FRMP, BFAR, NGOs, FARMCS	TV: ABS-CBN (news, tele-series) Radio: Bombo Radyo, Aksyon Radyo, Radyo Natin (news and dramas, morning, lunch, afternoon and evening)
Barangay Captains	NGOs, LGU extension workers, DA, BFAR, SEAFDEC, UPV, leaflets (English), training seminars, fishpond owners	Newspapers: <i>Antique Reporter</i> TV: ABS-CBN, GMA, Bombo Radyo, Radyo Natin
Researchers (universities, SEAFDEC)	International journals, internet, friends and colleagues working in research, BFAR, leaflets and brochures, training seminars	Newspapers: <i>Manila Bulletin</i> , <i>Philippine Star</i> , <i>Philippine Daily Inquirer</i> TV: ABS-CBN (news, tele-series), GMA (6 pm, news, tele-novela), ANC (news) Radio: FM stations (music), Bombo Radyo (news)
Priests	Mostly from NGO newsletters like NFR, SHKAT, Save the Children, VSO, Lingkod Tao Kalikasan; occasionally from BFAR, DENR, UPV/CF in the conduct of technical training on CRM and fish culture, mangrove reforestation, resource and ecological assessment; newsletters, brochures and documents from NGOs, written in English mostly and a few in Filipino; internet from directors who have access; fisheries forum; training; cross-visits	Radio: Bombo Radyo, Aksyon Radyo (news and commentary programs) TV: BBC for world news, GMA for local news, especially from morning news program and Ratsada in the afternoon Newspapers: <i>Philippine Daily Inquirer</i> , <i>Philippine Star</i> , national news; <i>Panay News</i> , <i>The Visayas Examiner</i> , local news Magazines: <i>Ibon Facts and Figures</i> for economic-related data and information Philippine Center for Investigative Journalism books and magazines for a year Encyclopedias and books, internet and relevant websites for a few directors

Media Mentioned

Newspapers

Philippine Daily Inquirer: national broadsheet, English
Philippine Star: national broadsheet, English
Manila Times: national broadsheet, English
Manila Bulletin: national broadsheet, English
Sun Star: regional broadsheet, English
Daily Headlines: regional broadsheet, English
Visayas Daily Star: regional broadsheet, English
The Visayas Examiner: regional broadsheet, English
Bandera: national tabloid, Filipino
Antique Reporter: provincial monthly, Kinaray-a

Newsletters

Candlelight: Jaro, Iloilo City archdiocesan weekly newsletter, English
Veritas: Catholic Church weekly national newsletter, English
Linkod Tao Kalikasan: monthly NGO newsletter, English, Filipino

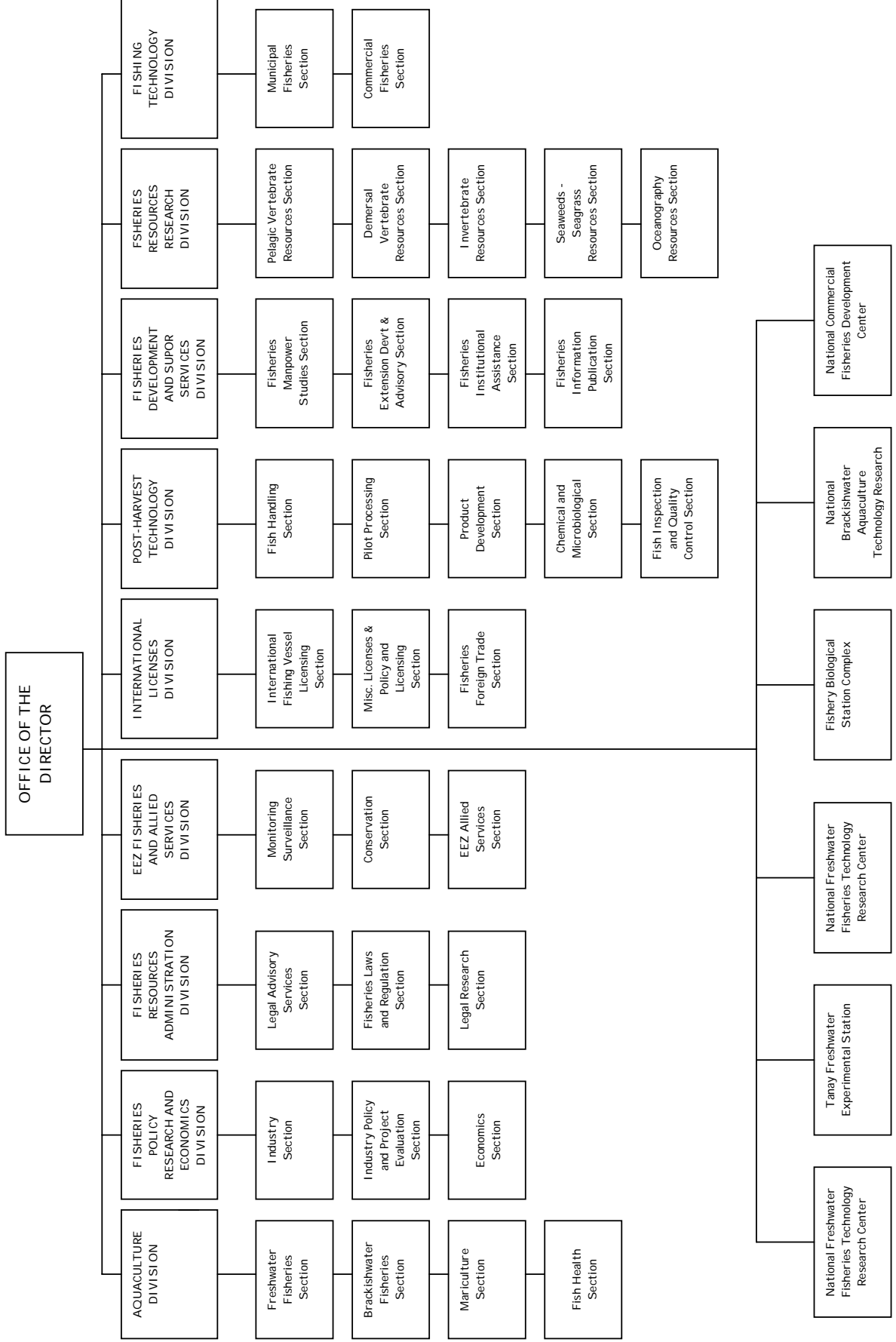
Radio Stations

Agong: local station, Hiligaynon
DYOK, Aksyon Radyo: national network, local station, Hiligaynon
DYKA: local station, Kinaray-a
Bombo Radyo: national network, local station, Hiligaynon
Radyo Natin: local franchise radio station owned by community, mixed Filipino and Kinaray-a
Radio Veritas: national religious station, Filipino
DZRH: national, Filipino

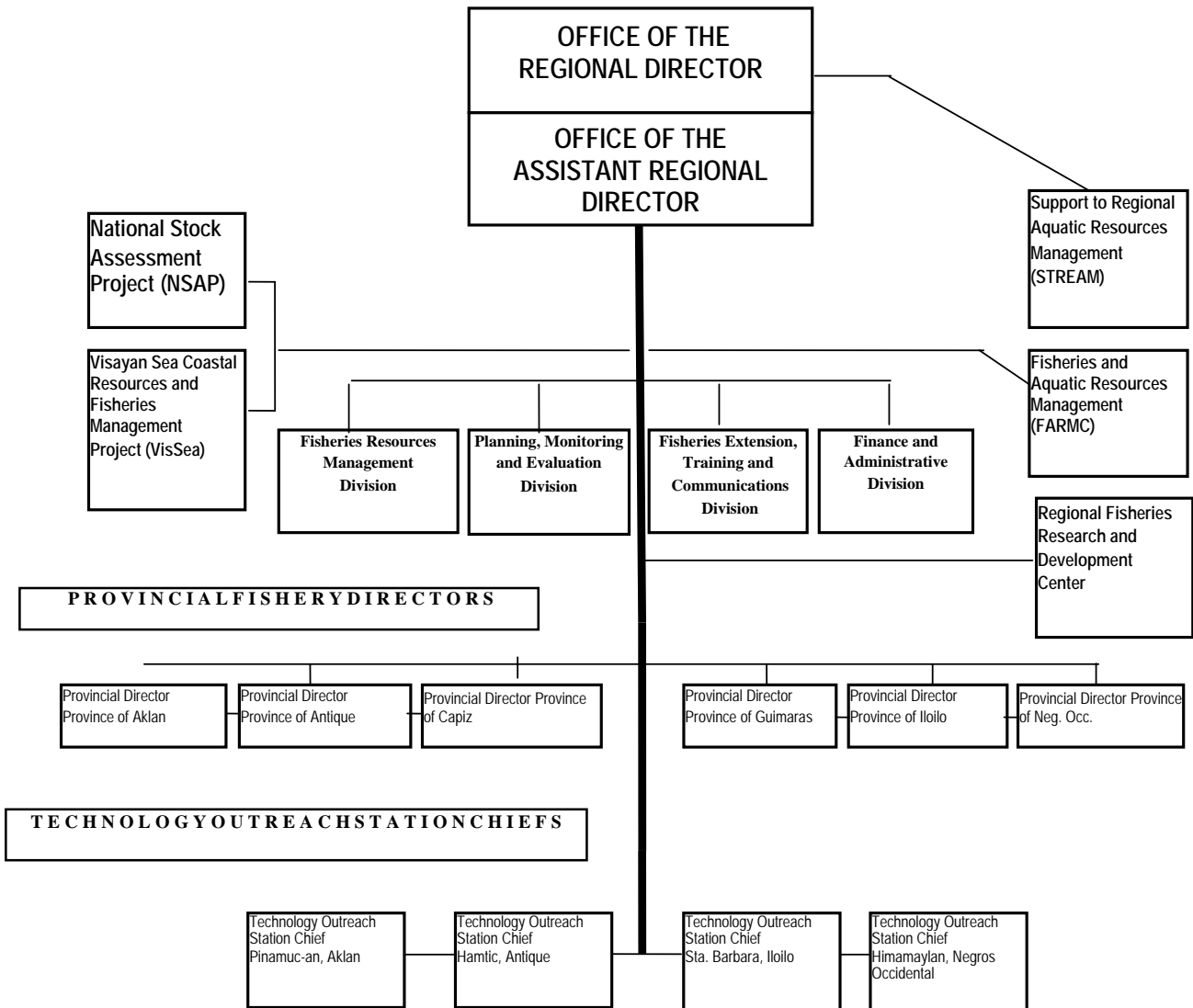
TV Stations

ABS-CBN: commercial national, Filipino, English
GMA: commercial national, Filipino, English
IBC: government national, Filipino

Appendix 4 BFAR Organizational Structure



BFAR Organizational Structure (continued) (as of December 2002)



Appendix 5 Fieldwork Results

Information Sources	Banate Bay Resource Management Council: Anilao, Banate, Btác Nuevo, Btác Viejo	Mambuquio, Batan, Aklan	Naba, Culasi, Antique
<p>Radio: ownership and accessibility</p> <p>Preferred station</p> <p>Preferred program, time-slot, frequency</p>	<p>Almost all own radios</p> <p>Bombo Radyo and Aksyon Radyo because of their clear signal and news programs. Radyo ng Bayan, the government station, has a poor signal in the area.</p> <p>Zona Libre (6:30-9:30 pm daily)</p> <p>Bombohanay Big Time (7-9 am daily)</p> <p>Both programs are news and commentary programs which keep people updated on news and issues, not only in the country but also from other countries.</p> <p>Women also like to listen to drama but no particular program was cited because they only listen if they have free time, which is not often.</p>	<p>Almost all own radios</p> <p>Bombo Radyo because of its clear signal and news programs. Radyo ng Bayan, the government station, has a poor signal in the area.</p> <p>Bombohanay Big Time (7-9 am daily)</p> <p>Ugnayan (12-1 pm daily)</p> <p>Both are news and commentary programs which keep people updated on news and issues, not only in the country but also from other countries.</p> <p>“Toyang Hermitania”, a comic and naughty drama whose story revolves around varied village characters and their everyday lives, aired over Bombo Radyo Mon-Fri 3-3:30 pm, popular with both men and women.</p> <p>Women also like to listen to dramas in the afternoon but no particular program was cited because they only listen if they have free time, which is not often.</p>	<p>The majority own radios</p> <p>DYKA because local language is used and signal is clear; DZRH which broadcasts in Filipino and community members like its news and commentary programs in the morning; Radio Natin, a community broadcast station; Bombo Radyo</p> <p>Bugtaw Banwa (6:30-7 am Mon-Fri)</p> <p>Zona Libre (6:30-9:30 pm daily)</p> <p>5-7:30 am news and commentary programs of DZRH</p> <p>Agritech (4:30-5 am Mon-Fri)</p> <p>Women also like to listen to dramas in the afternoon but no particular program was cited because they only listen if they have free time, which is not often.</p>

Information Sources	Banate Bay Resource Management Council: Anilao, Banate, Btac Nuevo, Btac Viejo	Mambuquio, Batan, Aklan	Naba, Culasi, Antique
TV: ownership and accessibility	About 40-50% own or have access to TV	About 55% own or have access to TV	About 25% own or have access to TV
Preferred channel	ABS-CBN because of its clear signal	ABS-CBN and GMA because of their good reception	ABS-CBN and GMA because of their good reception
Preferred program, time-slot, frequency	<p>“TV Patrol” (news program with live updates in Filipino: 6-7 pm Mon-Fri)</p> <p>“Game Ka Na Ba” (a show using mixed English and Filipino: 7-7:30 Mon-Fri)</p> <p>“Magandang Gabi Bayan – Knowledge Power” segment (news feature covers a variety of topics and issues: 6-7 pm Sat)</p> <p>“Meteor Garden” (life drama/love story of the popular F4 Taiwanese singing group dubbed in Filipino, current favorite program of women and their kids: 5:30-6 pm Mon-Sat)</p> <p>“Daniela” (Mexican soap opera dubbed in Filipino, preferred by women: 11-12 am Mon-Fri)</p> <p>Filipino tele-series (preferred by women and female teenagers: 7:30-9:30 pm Mon-Fri)</p>	<p>GMA’s “Unang Hirit” (news program with live updates from upbeat, young field reporters in Filipino: 5-7 am Mon-Fri)</p> <p>ABS-CBN’s “Magandang Umaga Bayan” in Filipino: 5-7 am Mon-Fri)</p> <p>Both programs have news and commentary which keep people updated on news and issues not only in the country but also from other countries.</p> <p>“TV Patrol”, “Game Ka Na Ba”, “Magandang Gabi Bayan – Knowledge Power” segment, “Meteor Garden”, “Daniela”, Filipino tele-series [see information in column to the left]</p>	<p>GMA’s “Unang Hirit” (news program with live updates from upbeat, young field reporters in Filipino: 5-7 am Mon-Fri)</p> <p>ABS-CBN’s “Magandang Umaga Bayan” in Filipino: 5-7 am Mon-Fri)</p> <p>Both programs have news and commentary which keep people updated on news and issues not only in the country but also from other countries.</p> <p>“TV Patrol”, “Game Ka Na Ba”, “Magandang Gabi Bayan – Knowledge Power” segment, “Meteor Garden”, “Daniela”, Filipino tele-series [see information in column to the left]</p>

Information Sources	Banate Bay Resource Management Council: Anilao, Banate, Btác Nuevo, Btác Viejo	Mambuquia, Batan, Aklan	Naba, Culasi, Antique
VHS and CD players	About 40% of the population own or have access to VHS and CDs. They are rented in <i>betahan</i> in towns, small stores which rent and show current hit movies. Rented VCDs are either karaoke or action movies.	About 30% of the population own or have access to VHS and CDs. VHS and CDs are rented in <i>betahan</i> in towns. Rented VCDs are either karaoke or action movies (Filipino and Chinese).	About 10% own or have access to VHS and CDs. Rented VCDs are either karaoke, Filipino love stories or action movies (Hollywood and Chinese).
Cell phones	SMART and GLOBE networks have signals in the area. About 50% of the population owned prepaid cell phones, mostly used for texting. Text messages are in both English and Hiligaynon; texting rate is P 1/text. This became popular because the unit is reasonably priced (cheapest at around P 2,500/unit) and landlines have not reached these areas and are quite expensive to install. Used to text reminders regarding meetings, for example.	SMART is the preferred network because of its clear signal. About 35% own or have access to cell phones, mostly used for texting. Text messages are mostly in Filipino. Texting rate is P 1/text. This became popular because the unit is reasonably priced (cheapest at around P 2,500/unit) and landlines have not reached these areas and are quite expensive to install. Quite useful to follow up concerns between municipal office and barangay.	No signal in the municipality.
Romance novelettes	Romance novelettes similar to Harlequin and Mills & Boon which could be rented at P 2/copy are popular, especially for women and girl teenagers. Popular comics such as <i>Wakasan</i> have been phased out due to drop in sales with the advent of VHS and CDs.	Romance novelettes similar to Harlequin and Mills & Boon which could be rented at P 2/copy are popular, especially for women and girl teenagers.	Romance novelettes similar to Harlequin and Mills & Boon which are brought by teenage daughters studying in cities or by barangay friends from Manila.
Newspaper	Only a few, mostly men, read newspapers. Tabloids (mainly <i>Bandera</i>) are preferred because they are cheap, have catchy headlines, contain lotto results and have attractive sports sections.	No regular distribution schedule in the barangay so they are not popular.	Only popular in the municipality but not in the barangay.

Information Sources	Banate Bay Resource Management Council: Anilao, Banate, Btac Nuevo, Btac Viejo	Mambuquioao, Batan, Aklan	Naba, Culasi, Antique
Magazines	Not popular anymore. Only one man FGD participant said that he still reads <i>Hiligaynon</i> , the only magazine written in the local language. Magazines are quite expensive for villagers.	No one reads magazines anymore as far as they know.	No access.
BBRMCI and FARMC meetings	Monthly meetings of BBRMCI staff and BFARMC chairpersons held in different barangays. Both English and Hiligaynon are used during discussions.		Occasional meetings in the municipality.
Written communications from the municipal office	For formal announcements or invitations from the concerned local municipal offices, the usual media is a letter written in English addressed to the Barangay Chairperson, Council or FARMC Chairperson.	Official correspondence written in English is the usual formal information channel.	Formal communication channel is through letters written in English from the municipal office addressed to either the Barangay Chairperson, Health Worker or FARMC. Communications from the NGO are written in Kinaray-a.
Barangay meetings	Monthly joint or separate FARMC and barangay council meetings are important sources of information for villagers.	Co-op meetings are important regular meetings in the village.	Valuable sources of information for women.
Health Centers	For women and mothers, monthly meetings or updates from barangay nutrition scholars and community volunteer health workers are important sources of information.	For women and mothers, monthly meetings or updates from the village midwife or barangay nutrition scholars and health workers are important sources of information.	Most women get information. Monthly meetings or updates from the village midwife or barangay nutrition scholars and health workers are important sources of information.
Municipal fishery technicians		Visit the village regularly to monitor activities and share information updates with barangay BFARMC officers.	Visit the barangay only occasionally. Instead, people visit their office to seek information.
BFAR-FRMP		Technical staff of BFAR-FRMP (including contracted NGOs) visit the barangay regularly to do monitoring activities and share updates with barangay officers.	

Information Sources	Banate Bay Resource Management Council: Anilao, Banate, Btác Nuevo, Btác Viejo	Mambuquioao, Batan, Aklan	Naba, Culasi, Antique
Barangay Learning Resource Centers (BLRC)		<p>Barangay officers on duty, fisherfolk, and school children sometimes visit the BLRC to read books and brochures that are available in the library. Discussions or meetings are also held there. Saturday classes for elementary kids are facilitated by the custodian. Printed information materials in the library are in English and Filipino. <i>STREAM Journals</i> in Hiligaynon are also available.</p> <p>Last summer, a poster-making contest (theme ARM) for school children was facilitated by the BLRC custodian on top of sports activities organized by the SK (barangay youth organization) and the barangay council.</p>	
Study tours or cross-visits	Occasional cross-visits coordinated by the office of the municipal agriculturist and the BFAR or DA are good sources of technical information and approaches in CRM implementation.	Occasional study tours coordinated by the office of the municipal agriculturist and the BFAR or DA are good sources of technical information and approaches in CRM implementation.	
Trainings and seminars	Seminars coordinated through the BBRMCI or health centers.	Trainings and seminars conducted by BFAR-FRMP and contracted NGO; and also health seminars facilitated by the mid-wife.	Trainings and seminars are preferred extension media. Thus, it is fine for them to receive information materials in English during training because facilitators give illustrations and explain topics covered.

Information Sources	Banate Bay Resource Management Council: Anilao, Banate, Btac Nuevo, Btac Viejo	Mambuquia, Batan, Aklan	Naba, Culasí, Antique
Church and Mass	Masses are held once a week in every barangay. On Sundays, there are at least two masses held in the morning and one in the afternoon, the most attended one is usually the second mass at around 6:30-7:30 am.	The majority of people go to church on Sundays at the village chapel.	Masses are held once a year during fiesta. They go to the town for Sunday masses. The two major religions are Catholic (50%) and Aglipay (50%). Some residents are Baptist.
Schooling	About 10-20% of school-age children, especially boys, stop going to school as soon as they are old enough to assist their parents in their fishing activities.	The majority of children attend elementary school in the village. However, for high school, some children drop out to help their parents earn their livelihood.	The majority of children attend elementary and high schools. There are only a few out-of-school youth in the barangay.
Friends, neighbors and relatives	Common sources of information, but not preferred formal matters such as schedules of seminars and visits, because the medium is perceived as unreliable unless there was a written advice preceding it.	Common sources of information, but not preferred formal matters such as schedules of seminars and visits, because the medium is perceived as unreliable unless there was a written advice preceding it.	Common sources of information, but not preferred formal matters such as schedules of seminars and visits, because the medium is perceived as unreliable unless there was a written advice preceding it.
Fish vendors and transient vendors	Fish buyers update fisherfolk about market prices and some lend money.		Fish vendors and transient vendors (<i>bolanteros</i>) are the main sources of market information.

Preferred Sources of Information

	<p>Banate Bay Resource Management Council: Anilao, Banate, Btac Nuevo, Btac Viejo</p>	<p>Mambuquio, Batan, Aklan</p>	<p>Naba, Culasi, Antique</p>
<p>Ranking</p>	<p>1) Radio is the most popular because almost all households have radios. 2) TV is the second most popular because about 40% of the population own or have access to TV sets (but when asked if they have both radio and TV, they prefer TV). 3) Written communications in English for formal matters and cell phone text messages for informal messages. 4) Barangay council meetings 5) Barangay health worker</p>	<p>1) Radio is the most popular because almost all households have radios. 2) TV is the second most popular because about 50% of the population own or have access to TV sets. 3) Written communications in English for formal matters and cell phone text messages for informal messages. 4) Barangay nutrition scholars and health worker 5) Barangay council meetings 6) Cooperative meetings 7) BLRC</p>	<p>1) Radio is the most popular because almost all households have radios. 2) TV is the second most popular because about 50% of the population own or have access to TV sets. 3) Written communications in English or Kinaray-a for formal matters. 4) Barangay council meetings 5) Barangay health worker</p>
<p>Preferences in visual media</p>	<p>Men prefer technical or how-to brochures and flyers with colored drawings or photographs because they are handy, attractive and useful. Women and their children appreciate more posters with comic colored drawings and catchy messages. All prefer colored pictures or photographs with ARM messages on top and with tidal calendar with big font attached.</p>	<p>Men preferred to have both 1) the big posters with colored photographs (not the comic drawings) and big font messages because their interest is peaked with familiar scenes in the photographs; and 2) technical brochures with colored pictures because they can bring them on site if they need them. They do not like comic drawings if the messages conveyed are serious. One woman said she appreciates more the poster with colored drawings and big font messages. All participants agreed that comic drawings would be more appropriate for the youth group.</p>	<p>Both men and women prefer colored drawings with big font messages. They also like the technical flyers with colored drawings. Most, however, said that no matter how attractive the materials may be, they would not be appreciated much unless there are extension workers who discuss their importance and relevance. They prefer Kinaray-a or Filipino for the information materials. Comic characters are perceived as more appropriate for children.</p>

Preferred Sources of Information (continued)

	<p>Banate Bay Resource Management Council: Anilao, Banate, Btac Nuevo, Btac Viejo</p>	<p>Mambuquioao, Batan, Aklan</p>	<p>Naba, Culasi, Antique</p>
<p>Latest message or activity remembered</p>	<p>The SARS campaign; tri-media (radio, TV and print) outlets were used. Barangay officials and barangay health workers were called to a meeting at the municipal office for a briefing. Then the barangay health providers and barangay council officers conducted barangay meetings and a house-to-house campaign.</p>	<p>The SARS campaign and the joint session between the SB (legislative body) and the villagers about the delay in the passage and implementation of the municipal ordinance regulating number of fishing structures in the bay. Barangay officials and midwives were called to a general briefing at the municipal office. Then a task force composed of barangay health providers and barangay officials monitor cases of SARS in the barangay by going from house to house twice a week.</p>	<p>The SARS campaign where RHU teams, through the barangay council, called an assembly meeting to raise awareness about SARS. Barangay evaluation for the contest on Clean and Healthy Barangay facilitated by the RHU.</p>
<p>Fisheries extension network</p>	<p>Perceived as relatively good but resolution of some issues is quite delayed or suspended because of lack of support from the mayor or the SB (political).</p>	<p>Perceived as efficient but sometimes due to political reasons, approval and implementation of programs (such as regulation of establishment of fishing structures in rivers) are delayed.</p>	<p>Perceived as relatively good but not as it used to be when it was supported by ANIAD (government project assisted by the Netherlands government), PROCESS (NGO) and BFAR. Health service is more efficient (women).</p>