

Community-based Fishery Resources Management Project in Malalison Island: Institutional Arrangements for Fisheries Co-management

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Abstract

The paper discusses the monitoring mechanism of the SEAFDEC/AQD Community-based Fisheries Resources Management (CFRM) Project at Malalison Island in west central Philippines. The objective of the project was to learn from the collaboration of community organizations, biologists, and social scientists in adapting aquaculture and fishery management techniques and to assess the replicability of the experience to other fishing communities.

The monitoring mechanism used was Process Documentation Research (PDR), a way of recording the development process of a project focusing on the participatory model of the resource management strategy. A full-time, site-based process documentator gathered information. All activities, meetings, and consultations were tape-recorded. Informal talks or encounters with the people were also recorded.

The paper showed that PDR provided a better understanding and insight on the positive and negative perceptions of the project beneficiaries on the CFRM project. Unlike other research monitoring methods that match budget with accomplishments, PDR bares the feelings, hopes, and fears of the project beneficiaries regarding the impact of the project on their lives.

Introduction

The evolving development strategy of a democratic “bottom-up” approach in contrast to the highly centralized “top-down” approach has been given impetus by the government through decentralization of the decision-making process in development. A people-centered, community-based development model provides for the return of the decision-making to the people and recognizes their abilities to manage the resources to meet their needs. This development process will require the transformation of community institutions to enable them to manage and control resources in response to local needs and preferences (Korten, 1988).

In a community-based resource management system or co-management in a broader sense, the role of government is to facilitate and not control the development of resources. The enactment of the Local Government Code of 1991 and the new Fisheries Code of the Philippines provide the legal framework to empower fisherfolks and enable them to manage and control the fishery resources in close coordination with the government.

In order to help fisherfolks rise above their poverty and to regenerate and manage the marine and coastal resources, the Southeast Asian Fisheries Development Center/Aquaculture Department (SEAFDEC/AQD) with co-funding from the International Development and Research Center (IDRC) of Canada launched in 1991 the Community Fishery Resource Management (CFRM) Project in Malalison Island off western Panay Island, Philippines. The eight-year research project is development-oriented and integrates various disciplines in biology, economics, sociology, public administration, and engineering in its study of fishing communities and resources and in evolving interventions and strategies (Agbayani, 1995).

The overall objective of the project is to learn from the collaboration of community organizations, biologists, and social scientists in adapting recently developed aquaculture and fishery resource management techniques and to assess the potential replicability of the experience in other fishing communities. The framework of the project integrates the analysis of the socioeconomic condition of fisherfolks with the condition of the coastal resources, the types of fishing and aquaculture technologies, and the role of the institutions in setting up rules and rights in the use and management of the coastal resources. The framework is anchored on the fundamental principles of sustainability, equity, and efficiency.

The CFRM project implemented several interventions during the duration of the project. Development interventions focused on people empowerment through community organizing and capability building, implementation of livelihood activities (e.g., seaweeds farming and other family-based livelihood), deployment of concrete artificial reefs (ARs), implementation of territorial use rights in fisheries (TURFs), and searanching.

The third major development intervention was the deployment of concrete ARs in two reefs, one of which (Gui-ob reef) was declared a fish sanctuary by the community through its barangay (village) council. It was during this period that process documentation of the institutional arrangements for the fisheries co-management was performed. This stage of the project was critical since it included long-term policy considerations that were formulated and implemented by the community.

Process Documentation Research Methodology

Fishery co-management through community self-regulation of fishery resources is an alternative strategy to "top-down" policy making (Pomeroy, 1993). Process documentation research (PDR, de los Reyes, 1988; Veneracion, 1988; Borlagdan, 1988) was undertaken to test the usefulness of this methodology in documenting the self-regulation process or the institutional arrangements for fisheries co-management on Malalison Island.

PDR is both a learning and a blueprint approach. The overall goals and objectives of a project such as CFRM is the "blueprint. "How to do it" is the learning process component of the project. In a CFRM project, PDR records the development process by focusing on the participatory model of the resource management strategy. The participatory model includes: (1) the mass involvement in decision-making process through different consultation activities; (2) mass contribution in actual implementation of project activities; and (3) mass sharing of benefits from the project.

A full-time, site-based process documentor (PD) undertook the process documentation from January 1995 to November 1996. Most, if not all activities, meetings, consultations were tape-recorded. Informal talks or "encounters" with the village people were recorded later in the day.

Group discussions before and after meetings are more relevant than what actually transpires in formal meetings (Volante, undated). Some fishers who were too shy or not used to articulating their

opinions in formal meetings expressed their honest opinions and perceptions concerning the project in informal conversations. Computer inputting of the data was done during weekends at SEAFDEC's main station in Iloilo. The local dialect ("Kinaray-a") was generally used during meetings and informal talks. The tape-recorded minutes were transcribed and translated to English by the PD, although literal translation was not always possible. The translated words and phrases retained the same style and sentence construction as the original statements since the translation, interpretation and analysis of data were done with the fishers.

The dynamics of the consultation process among the different stakeholders are vividly reflected or mirrored in the documentation process. PDR also reflects the articulation of relevant issues by the officers and members of the Fishermen's Association of Malalison Island (FAMI), Fisheries and Aquatic Resources Management Council (FARMC), and the barangay council on issues pertaining to resource management, livelihood, and the institutional arrangements.

Highlights of Institutional Arrangements (1995-1996)

The key institutions that played important roles in the institutional arrangements for fisheries co-management on Malalison Island are FAMI, Malalison Barangay FARMC, Malalison Barangay Council, Culasi Municipal FARMC, Culasi Sangguniang Bayan (local legislative assembly), PROCESS Foundation (the non-government organization or NGO that organized the Malalison community into a cooperative), national government agencies (such as DA or the Department of Agriculture, DENR or the Department of Environment and Natural Resources, DILG or the Department of Interior and Local Governments), SEAFDEC, and the local radio station. A total of 45 meetings and consultations were documented from 9 January 1995 to 17 November 1996.

The PDR study period was Stage 3 of the CFRM project. Stages I and II consisted of the implementation of territorial users' rights in fisheries (TURF) and construction and deployment of concrete ARs. The concept of TURF as a fishery management strategy has been found to be acceptable among the fisherfolk of Malalison Island (Siar *et al.* 1992). The implementation of TURF referred mainly to the planning and formulation of specific resource management strategies such as a creation of fish sanctuary and the rules and rights embodied in the provisions of the policy on fish sanctuary. At this stage of the project, the members of FAMI, FARMC, and the Barangay Council have already undergone social preparation (training, exposure trips, membership in provincial federations, etc.) and have fully understood the importance of formulating the set of rules and rights in the use and management of their coastal waters.

Manifesto by FAMI on TURFs

The FAMI manifesto written in "Kinaray-a" defines TURF as the proper utilization, management and control by FAMI of the body of water surrounding Malalison Island as provided for by Municipal Ordinance 5-90. There are two components of TURF: (1) creation of a fish sanctuary; and (2) deployment of concrete ARs. Fish sanctuary is defined as the habitat of fish and other aquatic species and where fishing of any type is prohibited. Artificial reefs are man-made structures to serve as fish habitat. These structures rehabilitate the natural reefs that have been destroyed by illegal fishing practices. Fishing in areas where ARs are deployed is regulated in terms of types of gears and fishing season. Specifically, commercial fishers are banned. Illegal fishing practices such as dynamite, cyanide, fine-mesh net and other destructive gears are also not allowed in the TURF area.

In enforcing TURF, FAMI agreed on the following guidelines: (1) a fine of P1,000, confiscation of fish catch, and filing of charges against those caught fishing inside the fish sanctuary; (2) charging

of a fishing fee for those fishing in areas where ARs are deployed at the rate of 5% of the value of their catch for non-Malalison fisheries and 1% for Malalison fishers; (3) no fishing activities during the spawning season of selected fishes. FAMI and the Malalison Barangay Council designate the fish wardens. DA has been requested to train the fish wardens to ensure full enforcement of the policies set by FAMI and the Barangay Council.

Consultation with Neighboring Coastal Barangays

In 1995, the Antique Integrated Area Development (ANIAD) Project, funded by the Netherlands Government, implemented a community-based coastal resource management (CBCRM) in all of Culasi's coastal barangays except Malalison. ANIAD contracted the assistance of SEAFDEC researchers in undertaking a resource and social assessment of the coastal barangays. In the process of assessment, consultation meetings with barangay leaders and residents of 16 barangays were done to discuss the principles, methods, and benefits of CBCRM to communities. The role of SEAFDEC researchers was to explain the status of Malalison CFRM project and its impact on other coastal barangays. A focus of the consultation was the TURF interventions (fish sanctuary and concrete ARs). The consultation process provided the fora for fishers of nearby coastal barangays to discuss the principles, process, and benefits of CBCRM and their role as co-managers of coastal resources.

The results of resource and social assessments done by SEAFDEC for ANIAD became the basis for the creation of barangay FARMCs and a municipal-wide FARMC in Culasi. Another positive impact of the assessment and consultation process was that leaders of two other barangays (Lipata and Batonan Sur) initiated the move to declare fish sanctuaries in their respective coastal waters similar to Barangay Malalison.

The entry of ANIAD in Culasi to implement CBCRM was a "bonus" for SEAFDEC's project in Malalison. The replication of the CFRM project in other coastal barangays of Culasi was hastened at no cost to SEAFDEC. ANIAD, on the other hand, benefited from the experience of SEAFDEC researchers and scientists at minimal cost. This type of linkaging and networking among research and development institutions should be harnessed in order to share manpower and financial resources for the benefit of more communities.

Construction and Deployment of Concrete ARs

The construction and deployment of concrete ARs was a major intervention to regenerate the corals destroyed after years of destructive fishing practices. In areas where ARs have been deployed, fishing activities are not allowed (as in fish sanctuaries) or are regulated as in the TURF area at Kawit reef.

The engineering designs of the ARs took into consideration the transport and deployment methods. Two prototypes of pre-fabricated modules, building blocks and pipe culverts, were deployed in May 1994 (Tenedero, 1995). The ARs were designed according to the capability of the community to fabricate and deploy. The experience in this experimental deployment resulted in reduction of time and cost in actual deployment in 1995. Techniques of transporting, hauling and deploying, and assembling of ARs were improved.

In 1995, fabrication and deployment of ARs were undertaken in Gui-ob reef (26 modules) and in Kawit area (26 modules). SEAFDEC and FAMI entered into an agreement to share the cost of deployment in selected areas. The deployment cost was P58,740. The Barangay Malalison Council agreed to share P5,000 from their Internal Revenue Allotment (IRA) as provided for by the Local Government Code. Although the share of the community was minimal (8.5% of cost), the willingness

to share the cost as “co-owners and co-managers” of coastal resources was notable.

1995 Malalison Forum

The holding of an annual forum in Malalison became a tradition. It was an effective venue to assess and evaluate the CFRM project and discuss problems and issues affecting the project. Forum participants were representatives from neighboring coastal barangays, local government officials, NGO representatives, SEAFDEC researchers and staff, and the community as a whole.

The issue of putting into operation TURF was one of the major concerns discussed during the forum. There were apprehensions on the efficiency of law enforcement, especially policing or preventing the entry of commercial fishers in the TURF area. There was a suggestion of putting up markers.

Another problem discussed was the inadequacy of capital to add more livelihood activities aside from the present seaweeds farming and consumer store operation. FAMI had intended to tap other funding sources such as ANIAD and to implement more land-based livelihood activities. The possibility of getting the island supplied with electricity from the mainland was also proposed.

The annual forum became an occasion for socializing with the members of the community, government representatives, and NGOs. The day usually ended with disco dancing in the evening.

Creation of Barangay Malalison FARMC

As mentioned earlier, the Barangay Malalison FARMC was created on June 24, 1995 in compliance with Executive Order (EO) No. 240 of the President of the Philippines dated April 27, 1995. There was, however, already an existing Barangay Coastal Resource Management Council (CRMC) created in 1994 to plan, formulate and implement rules and rights in the management of the coastal resources. The new FARMC took over the functions of the previously organized CRMC. Election of officers of the newly created FARMC was done immediately.

Specifically, the functions of the FARMC are to: (1) prepare fisheries management plans and policies based on sound assessment and socioeconomic characteristics and, (2) recommend to local government units and other agencies the issuance of licenses and permits for appropriate use of fishery resources. It is worth noting that EO 240 gives value to research, i.e., resource and socioeconomic assessments in making policies related to fishery resource management. Participatory type of research involving members of the community is also encouraged.

Declaration of Gui-ob Reef as a Fish Sanctuary

After the creation of the Barangay Malalison FARMC, the officers together with the Barangay Council members held a series of meetings and consultations with the residents of Malalison Island regarding the plan of declaring Gui-ob reef as a sanctuary. The choice of the sanctuary site was based on several factors, such as the use of the area as a fishing ground, the presence of various species which must be conserved, and the distance from the island for surveillance purposes.

On 5 July 1995 or about 10 days after the creation of Barangay Malalison FARMC, a joint meeting between the FARMC and the Barangay Council was held. The outcome was the promulgation of Malalison Barangay Council Resolution No. 01, Series of 1995 declaring Gui-ob reef a fish sanctuary and adopting a barangay ordinance necessary for its preservation, protection, control, and supervision. The sanctuary covered 28.27 hectares and had a radius of 300 meters. The Malalison FARMC

promulgated on the same day a resolution (Resolution FARMC No. 01, Series 1995) requesting the Barangay Council to approve the rules and regulations regarding the "strictly no fishing" policy in Gui-ob. Copies of the Barangay Resolution were submitted to the offices of the Mayor of Culasi, Sangguniang Bayan, DILG, DENR, Philippine National Police, Coast Guard, and the Association of Barangay Captains.

In support of the resolutions, the Barangay Council promulgated Barangay FARMC Ordinance No. 01, Series of 1995 dated July 19, 1995 prohibiting fishing in Gui-ob. The Ordinance penalized violators as follows: (1) first offense - barangay captain to summon the violator and ask him to explain why he violated the ordinance; (2) second offense - warning and his catch would be confiscated; and, (3) third offense - fine of P1,000 and the catch to be confiscated. The ordinance also provided that fishers from Malalison Island and from other areas could fish in Salangan reef area east of Malalison, Balabago reef south of the island, Nablag reef to the west, and Layag-layag reef to the north. However, only Malalison fishers could fish in the fringing reefs surrounding the island.

The ordinance was favorably endorsed by the residents of Malalison Island in a general assembly meeting on 12 July 1995 as attested by their signatures.

Lobbying for the Approval of Malalison Barangay Resolution No. 01

Malalison FARMC and Barangay officials wasted no time in working for the approval of the Barangay Resolution by the Culasi Sangguniang Bayan or Municipal Council. On 14 July 1995, a meeting was arranged by the Malalison officials with the Vice Mayor (who acts as Chair of the Sangguniang Bayan), municipal councilors, and a local radio announcer. Two important issues regarding the Resolution were discussed, namely: (1) penalties imposed on violators and (2) consultation process with Malalison residents. The radio announcer promised to support the Malalison cause by broadcasting the information on Malalison fish sanctuary. The Culasi municipal officials assured support and made arrangement for DENR and municipal officials to visit the site.

Succeeding lobbying activities were undertaken to hasten the approval of the fish sanctuary resolution. The Sangguniang Bayan deliberated on the resolution in almost every regular session but could not get approval for the Malalison resolution. Some of the Sangguniang members together with Malalison consulted with national government officials (DENR and DILG) regarding the resolution as it relates to the Local Government Code. At that time, even the representatives of the concerned national government offices could not provide advice that would help the Culasi and Malalison local officials legislate or approve resolutions and ordinances related to coastal resource management.

Need for Scientific Data to Support the Fish Sanctuary Ordinance

In support of the Malalison Municipal Ordinance on the fish sanctuary, SEAFDEC provided the officials of the barangay and FAMI with the biological resource data of Gui-ob reef. The information included: (1) number of families (27) and species (172) of reef fishes; (2) estimated and relative annual yield of reef fishes at Gui-ob reef (2,646.1 kg/ha/year); (3) list of coral species (12 families and 63 species); (4) average cover of benthic lifeforms; and (5) average frequency of benthic lifeforms. The list included scientific and local names of fishes.

The value of scientific data for policy-making has been demonstrated in the formulation of the fish sanctuary ordinance. This partnership between policy-makers and scientists could upgrade policies that would ensure sustainability of the coastal resource. This linkage should be encouraged in all levels of governance from the barangay to the national level because it is consistent with the provision

of E.O. 240 on the use of sound scientific assessment for policy-making.

Approval of the Malalison Resolution on Fish Sanctuary

Barangay Malalison Resolution No. 01, Series of 1995 was approved by the Sangguniang Bayan by default. According to one local legislator, the parliamentary procedure is for the Council to act (approve or disapprove) on a resolution within the statutory period of 30 days upon submission of the resolution. Failure to act would mean automatic approval. The Malalison fish sanctuary ordinance has been technically approved one month after 13 July 1995 when the Malalison Barangay Council submitted the ordinance to the Culasi Sangguniang Bayan. This was due to the lack of experience of the municipal council regarding the parliamentary procedures on ordinances emanating from the barangays using the Local Government Code as a legal framework. This was the first time the Sangguniang Bayan of Culasi received a community-initiated resolution related to the declaration of a fish sanctuary based on the provisions of the Local Government Code. On record in the municipal council, however, was the approval of the ordinance, which was effected during a regular session on 3 July 1995.

There is a need for training of local legislators on the provisions of the Local Government Code and other pertinent laws related to the decentralization of authority to manage the coastal resources. The performance of the participating institutions, especially local legislative bodies in fishery co-management, can be enhanced through formal training courses and sharing of experiences with other local legislators.

Enforcement of the “No fishing” Ordinance in the Sanctuary

The enforcement of the ordinance requires physical, financial, and manpower resources. The first priority is to define the boundary by setting-up markers. The second requirement is a reliable boat for mobility in doing monitoring and surveillance work. The third is the dissemination of information to fishers and residents of Malalison and neighboring coastal barangays who traditionally fish in the area.

With financial support from SEAFDEC, Malalison officials purchased, fabricated, and installed markers in the Gui-ob fish sanctuary. FARMC through its members from neighboring coastal barangays disseminated the information to their constituent-fishers who fish in Malalison waters.

A very effective partner in information dissemination and advocacy on sustainable management is the local radio station. The radio announcer, a resident of Culasi, actively informed the public by broadcasting the provisions of the ordinance and the long-term benefits which the fishers from Culasi would gain. The announcer was also effective in exposing violations especially by Malalison fishers and even one involving a Malalison barangay official. The radio is an effective medium in relaying information in rural areas like Malalison. In spite of the absence of electricity in the island, most households have battery-operated radios for news and entertainment. The radio announcer was always present during investigations of violations done in the municipal hall.

Community-initiated Survey on TURF

As mentioned earlier, the Municipality of Culasi granted to FAMI a TURF area covering 1 km² located between Culasi mainland and Malalison Island as early as 1990 before the start of the CFRM project. There were, however, no rules and rights defined in the use and management of the TURF area especially in Kawit reef where 26 modules of concrete ARs have been deployed.

There was a need to gather information and know the perception of fishers from different coastal and island barangays regarding TURF and the rules and rights that go with it. A community-initiated survey was done in October-December 1995 to determine: (1) whether fishers agreed to the concept, (2) the types of fishing gears that should be allowed in the TURF area, and (3) amount of fee as percentage of value of catch that fishers were willing to pay FAMI to defray operational expenses in overseeing the fishing activities in the TURF area. A total of 146 respondents from Malalison and 6 coastal barangays facing Malalison were interviewed.

The survey revealed that 61 were in favor and 5 were against the implementation of TURF. The rest (80) had no idea about TURF. A great majority of the respondents were against net fishing especially destructive ones such as "pamo" and "muro-ami." Respondents were also against the use of compressor in spear fishing ("hookah"). This practice is similar to spear fishing using SCUBA where even spawners can be easily caught. This practice, however, is tolerated in the island as long as it is done by Malalison fishers. Any kind of hook-and-line fishing gears are acceptable. The survey revealed that fishers were aware of destructive gears that should not be allowed if further destruction of fishery resources is to be prevented.

Draft of Policies on Excursionists and Visitors in Malalison Island

In late 1996, Barangay Malalison officials drafted an ordinance to regulate the activities of excursionists and visitors on the island. They encouraged tourists to visit Malalison. Salient provisions of the draft ordinance are: (1) designated docking area is only the Kawit area; (2) visitors will pay an entrance fee of P10 (foreigners) and P1 (locals); (3) visitors must log-in before going around the island and log-out before leaving the island; (4) cleanliness will always be observed in the island; (5) picking of "pitcher" plant is not allowed; (6) religious camping is not allowed; and (7) foreigners and local tourists are not allowed to stay for more than three days.

There has been no follow-up meetings or consultations regarding this proposed ordinance. This action, however, shows that the community residents are now enlightened on their power and responsibility in the co-management of fishery and land resources.

The provisions of the proposed ordinance on tourism reveal the conservatism of the Malalison people. In spite of the promise of economic benefits from tourism, they fear a "Boracay" situation happening in their community. The "Boracay" scare refers to the adverse social and environmental effects of tourism on the community and its environment. They fear that foreign tourists would wear skimpy swimsuits or go topless and "tempt the husbands and sons" residing on Malalison Island. Boracay Island resort is one-and-a-half hour drive from Culasi.

Conclusions

Community-based projects will benefit from the use of PDR. The dynamic field level interactions in a participatory development process are complex and dynamic, requiring "blow by blow" (so-to-speak) documentation. It provides a systematic "ringside" view of field experiences.

Overall, PDR provided a better understanding and insight on the positive and negative perceptions of the project beneficiaries on the CFRM project. Unlike the traditional monitoring of status of development projects, which matches budget versus accomplishments, PDR as a monitoring mechanism bares the "inner" feelings, hopes and fears of the project beneficiaries regarding the project's impact on their lives.

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