

LIVED EXPERIENCES ON THE BEST PRACTICES OF FISH SANCTUARY: THE PHILIPPINE EXPERIENCE

Ramel D. Tomaquin & Retsy T. Malong

Public Administration Program, North Eastern Mindanao State University
Tandag City, Surigao del Sur, Philippines

*Correspondence Email: r_tomaquin@yahoo.com; malongden5@gmail.com; Telephone No.: 09309026878 & 09308084257

ABSTRACT: *The Mabua Fish Sanctuary is located in the coastal City of Tandag City, Surigao del Sur Province of the Philippines. The study used a phenomenological research method with eight (8) key informants. The said research design used qualitative interviews and FGD with intensive work with the key informants. It can be deduced from the study that the aims of the fish sanctuary were to promote food security, mitigate the effects of climate change, and implement coastal environmental measures at the village level. Further, the fish sanctuary was established because it is the most sustainable coastal conservation measure. The findings of the study included the following: The Mabua Fisherfolk Consumer Cooperative actively managed the Mabua fish sanctuary. The following agencies provided technical assistance: CLGU, BLGU, BFAR, PFAR, DOLE, and CDA, which resulted in effective fish sanctuary management. Each member of the fish sanctuary cooperative contributes ten (10) pesos monthly for the operation of the fish sanctuary. Likewise, the assistance of the City Local Government Unit further contributed to its success story. Moreover, the challenges encountered in the management of Mabua Fish Sanctuary include the following: limited capital build-up of the cooperative, limited number of members of the cooperative, and minimal reported violations of fish sanctuary norms or policies. The following are recommendations: increase the capital build-up of the cooperative and enhance the production of seaweed culture.*

Keywords: Fish Sanctuary, Mabua, Cooperative, Fisherfolks

1. INTRODUCTION

Mitigating climate change needs a concerted effort from the government and non-government sectors alike. Climate change has worsened due to the destruction of mangrove forests and coral covers, which have been depleted so fast that it has affected marine and coastal ecosystems, making fishermen the most vulnerable. Further, climate change imperils food security and supply, wantonly destroying biodiversity and natural habitats, flora, and fauna. With these scenarios, coastal states have introduced various climate change mitigating measures. The most popular measure in coastal conservation is the fish sanctuary or marine protected area. A fish sanctuary or marine protected area refers to an area or space in a marine or coastal area reserved by local legislation or ordinance where fishing is prohibited, not permitted, or regulated with the purpose of creating a nursery or spawning space for reef fisheries to enable them to regenerate or reproduce. A marine protected area, or fish sanctuary, is the space or area in the marine or coastal environment where offshore or coastal fishing is not allowed or regulated for conservation measures [1]. The fish sanctuaries or marine protected areas have the following importance: aesthetic value, promoting local tourism; cultural and social importance; protecting biodiversity; education importance; improving regeneration of marine and coastal biodiversity; and increasing fishery harvest [2]. No wonder fish sanctuaries or marine protected areas are the most functional and sustainable coastal or marine ecosystem conservation measures in the Philippines. Besides, it also has a community development component, like the promotion of aqua tourism. Thus, it has the potential to promote local tourism. Besides promoting food security and sustainable marine or coastal resources, The Philippines in particular is a coastal state with huge coral reefs and rich marine resources. With the increasing Philippine population, the demand for marine products and food supplies is also increasing. The Philippines in particular has a coastline of about 18,000 kilometers, with territorial waters covering 2.2 million square

kilometers [3]. The importance of fishing in the economy cannot be understated [4]. In 2004, the country ranked ninth in the world in terms of total fish production, yielding a total of 3.39 million metric tons, and third in tuna production. The country is also one of the top producers and exporters of cultivated seaweed (carrageenan) in the world [5]. In these settings, despite the rich marine resources of the Philippines, the use of a sustainable model of coastal or marine resources is key to the success of Philippine coastal and marine resource conservation measures. The study was undertaken with the cooperation of Mabua Fisherfolk Consumer Cooperative, a fisherfolk people's organization that manages the Mabua Fish Sanctuary. A descriptive narrative inquiry was used in the study using the phenomenological method. Narrative inquiry used the following strategies: participants and non-participants' observations, focus group interactions, or discussions using an interview schedule among the fisherfolk members of the Mabua fisherfolk cooperative. The people's organization that manages the Mabua fish sanctuary in Tandag City, Surigao del Sur Province, the Philippines. Further, the main tool used in the study is the interview guide, which underwent validation by the panel of experts.

2. RESEARCH OBJECTIVES:

The study endeavors to accomplish or answer the following objectives:

1. Construct or present a narrative inquiry of the best practices of the Mabua Fish Sanctuary;
2. Construct or present a narration on the problems/challenges encountered in the management of Mabua Fish Sanctuary;
3. Present the best practices on the monitoring approaches employed in the management of fish sanctuary;
4. Present the training needs of the fish sanctuary members;
5. Present the prospect of tourism activity or potentials of Barangay Mabua Fish Sanctuary.

3. MATERIALS AND METHOD:

The study used the descriptive qualitative method of inquiry using the phenomenological method. It further used the narrative inquiry approach. In which in conducted the narrative inquiry, documents the experiences of a focus group

or key informants, focusing on their lived experiences. This research strategy mainly employed narrative interviews & presented in chronological long narratives or records the lived experiences of the key informants. It also used focus group discussion & records the lived experiences [6] of the key informants [7]. Further, the qualitative interview was conducted in naturalistic observation, it also used non-participant and participant observation, fieldwork, and village immersion. The main tool of the study was the interview guide which underwent validation by the panel of experts. This was done in order to find out which part of the interview guide needs to be rewarded or vague to the key informants. This process aims to ensure that the narrative interview was comprehensible to the key informants. The following inclusion criteria were observed for selecting key informants: A member of the fisherfolk cooperative, at least a three-year member of the cooperative, handling a committee membership in the cooperative, and a member of good standing of the cooperative. Further, the study also used the group process diagnosis approach which makes use of a multi-method approach in gathering data, that is it makes use of several techniques to obtain a set of information regarding the group process (e.g., structured non-participant and participant observations, face to face interviews and questionnaires). This approach enables process diagnosis researchers to ensure convergence to the validity of data across methods and techniques [8].

4. RESULTS AND DISCUSSIONS

Table 1. Distribution on the Best Practices of Mabua Fish Sanctuary Management

Best Practices	Leadership and Management Style Used	Opportunity for Improvement
Active involvement of the PO (Peoples Organization) or cooperative members in decisions making process.	Participative and Consultative	Cooperative policy be posted on the website or other social media platform for more transparency.
Active assistance of CDA (Cooperative Development Authority)	Participative and Consultative	Application for loans from financial institution is recommended
Active assistance from BFAR (Bureau of Fisheries and Aquatic Resources) for capacity assessment & training on fish sanctuary management	Participative and Consultative	More livelihood assistance to the fisherfolk is recommended
Active assistance from CLGU (City Local Government Unit) for more livelihood assistance from the fisherfolk.	Participative and Consultative	Enhanced entrepreneurial activity be given to the fisherfolk
Vibrant seaweed (<i>guso</i>) culture	Participative and Consultative	Packaging of seaweed products recommended for IGP (Income Generating Projects) activities.

Table 1 revealed the distribution of the best practices of Mabua Fish Sanctuary. It can be deduced from the table that the following are the best practices: Active involvement of the PO (Peoples Organization) cooperative members in the decisions making process, active assistance of the Cooperative Development Authority, active assistance from the Bureau of Fisheries and Aquatic Resources (BFAR) for capacity assessment and training on fish sanctuary management, active assistance from the City Local Government Unit (CLGU) for the livelihood assistance from fisherfolk, and vibrant seaweed (*Guso*) culture. Thus, Group Process Diagnosis is an effective research strategy. For this group process is the substantive focal target of the diagnostic, intervention research strategy that we call process diagnosis [9].

The dominant management style used by the BOD (Board of Directors of the Cooperative) is participative and consultative management style. In this management style, the Board of Directors most extensively used the participative and consultative methods. This is due to the fact that cooperatives are managed in a democratic manner. The following is the opportunity for improvement: cooperative policy be posted on the website or other social media platforms for more transparency, application for loans from financial institutions is recommended, enhanced entrepreneurial activity be given to the fisherfolk, packaging of seaweed product is recommended for additional income generating activity

Table 2. Distribution of the problems/challenges encountered in the management of the fish sanctuary

Problems/Challenges	Proposed Solutions / Recommendations
Lack of Capital Build Up (CBU)	Active campaign to ensure the cooperative membership
Lack of Livelihood Projects for the fisherfolk/member from funding corporate and government agencies	Secure more assistance from the funding corporate & government agencies for more livelihood projects.
Lack of Livelihood Projects from the NGOs	More engagement with NGOs with mission/ mandate in providing livelihood projects
Lack of local tourist	Develop a program to promote local tourist in the fish sanctuary
Lack of foreign tourist	Promote foreign tourism using the social media platform

(IGP).

Table 2 revealed the distribution of the problems/challenges encountered in the management of fish sanctuary. It can be deduced from the table the following are the problems/challenges encountered: Lack of Capital Build Up (CBU), lack of livelihood projects for the fisherfolk or member of the cooperative from the funding corporate and government agencies, lack of livelihood projects from NGOs, lack of local tourist, and lack of foreign tourist.

The following are the proposed solutions: active campaign to ensure the cooperative membership, secure more assistance from funding corporate and government agencies for more livelihood projects, more engagement with NGOs with mission/mandate in providing livelihood projects, develop a

program to promote local tourist in the fish sanctuary, and promote foreign tourism using the social media.

Table 3. Distribution of the Monitoring Approaches employed in the management of the fish sanctuary

Monitoring Approaches	Challenges Encountered	Proposed Solution
Promotion on the relevance of fish sanctuary using social media	Low signal of the internet	Increase the internet speed
Monitoring of the livelihood program /assistance	Add the livelihood assistance program	More NGOs are needed for more livelihood assistance
Monitoring on the seaweed (<i>guso</i>) culture	Seaweed (<i>guso</i>) culture is affected by the weather disturbances	Adapt modern technology in seaweed (<i>guso</i>) culture
Monitoring of the coral covers	More diving equipment is needed	Purchase more diving equipment
Monitoring the arrival of foreign tourist	Lack of foreign tourist	Social media campaign of foreign tourist is recommended

Table 3 revealed the distribution of the monitoring approaches employed in the management of the fish sanctuary. The following are the monitoring approaches: Promotion of the relevance of fish sanctuary using social media, monitoring the livelihood program/assistance, monitoring the seaweed (*Guso*) culture, monitoring of the coral covers, and monitoring the arrival of foreign tourist.

The challenges encountered are: low signal of the internet, there is a need to add the livelihood assistance, seaweed (*Guso*) culture is affected by the weather disturbances, more diving equipment is needed, and lack of foreign tourist. The following are the proposed solutions: increase the internet speed, more NGOs are needed for more livelihood assistance, adopt modern technology in seaweed (*Guso*) culture, purchase more diving equipment, and social media campaign of foreign tourist is recommended.

Table 4. Training Needs of the Fisherfolk members of the Cooperative

Training Needs	Proposed Capital	Proposed Source of Fund
Fish Trapping	100,000.00 (in Philippine Peso)	From the Income Generated from IGP
Enhanced Seaweed (<i>guso</i>) culture	500,000.00 (in Philippine Peso)	From the Income Generated from IGP
Fish Cage	500,000.00 (in Philippine Peso)	From the Income Generated from IGP
Mud Crab Fattening	500,000.00 (in Philippine Peso)	From the Income Generated from IGP

Table 4 revealed the training needs of the cooperative members such as fish trapping, enhanced seaweed (*guso*) culture, fish cage, and mud crab fattening. The source of funds is the income generated from the IGP (Income Generated Project) of the cooperative.

They are as follows: scuba diving, snorkeling, boating, boat racing, and skimboarding. The proposed source of funds is the Barangay Local Government Unit (BLGU). The strategy is to be promoted using social media platform.

Proposed Tourism Activity	Proposed Source of Fund	Proposed Strategies
Scuba diving	BLGU	Social media campaign for tourism attraction/arrival
Snorkeling	BLGU	Social media campaign for tourism attraction/arrival
Boating	BLGU	Social media campaign for tourism attraction/arrival
Boat racing	BLGU	Social media campaign for tourism attraction/arrival
skimboarding	BLGU	Social media campaign for tourism attraction/arrival

CONCLUSIONS AND RECOMMENDATIONS

The management of Mabua Fish Sanctuary has the best practices namely: active membership of the Peoples Organization (PO) and cooperative members in cooperative decision-making, active assistance from the BFAR & CDA, BLGU & CLGU, PFAR & the vibrant seaweed (*guso*) culture. The leadership style used in the management of the fish sanctuary is participative and consultative because the cooperative such as the Mabua Fish Sanctuary is managed in a democratic manner.

The problems/challenges encountered are as follows: Lack of Capital Build Up (CBU), lack of livelihood projects from the funding agencies and NGOs, lack of local tourists, and lack of foreign tourists. The monitoring approaches of the fish sanctuary are as follows: promotion of the relevance of the fish sanctuary using social media, monitoring the livelihood assistance, monitoring the seaweed (*Guso*) culture, monitoring the coral covers, and monitoring the number of foreign tourists. The training needs are fish trapping, enhanced seaweed (*Guso*) culture, fish cages, and mud crab fattening. The recommendations are as follows: cooperative policy be posted on the cooperative website or FB page or other social media platforms for more transparency. Application for loans from financial institutions is recommended and enhanced entrepreneurial activity be given to the fisherfolk, packaging of seaweed (*guso*) product of the cooperative is recommended.

6. REFERENCES:

[1]. White, A.T., Meneses, A.T., & Ovended, C.A. (2002). "Experience with Marine Protected Areas: An Important Tool to Improve Management". In: The Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) (eds): In Turbulent Seas: The Status of Phil. Marine Fisheries. Coastal Resource Management Project. Cebu City, Philippines.

[2] Malong, R. (2014). Best Practices in Marine Protected Areas (MPAs) Stewardship in the contexts of participatory environmental governance, empowered fishing communities, and the economics of its sustainability in Cortes of Caraga Region, Philippines: A Discourse. European Journal of Research in Social, 2(2), 41-67 from: <http://www.idpublications.org/cjnss-vol-2-no-2-2014/>

- [3] Bello (2007), Amelia L. and et.al. "Economics: An Introduction". C and E Publishing. Quezon City.
- [4] Bello (2007), Amelia L. and et.al. "Economics: An Introduction". C and E Publishing. Quezon City
- [5] Bello (2007), Amelia L. and et.al. "Economics: An Introduction". C and E Publishing. Quezon City
- [6] Bautista, M.L. and Go, S.P. editors (1998). "Introduction to Qualitative Research Methods". De La Salle University Press. Manila, Philippines.
- [7] Bautista, M.L. and Go, S.P. (1998). "Introduction to Qualitative Research Methods". De La Salle University Press. Manila, Philippines.
- [8] Bautista, M.L. and Go, S.P. (1998). "Introduction to Qualitative Research Methods". De La Salle University Press. Manila, Philippines.
- [9] Henson N. and Henson, F.G. (1998). "Introduction to Qualitative Research Methods". De La Salle University Press. Manila, Philippines. Editors Bautista, M.L. and Go, S.P.