

CLUSTER D: BANTIGUE MPA MANAGEMENT PLAN



Acknowledgement

Involving key stakeholders especially the local communities is always the key in planning for a better marine protected area management. Hence, it is very commendable that the formulation of the Management plan has been done through consultative process. The municipality of Bantayan would like to extend its gratitude to all who labored untiringly in coming up with this three-Year Protected Area Management Plan

- Municipality of Bantayan
- Local Government Unit of Barangay Bantigue
- AFOS Foundation

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I. Introduction

Marine Protected Areas (MPAs) are established to limit human activity and prevent fishing pressure and to help conserve natural resources for the present and future generations. Establishment of the MPAs along with proper management plan and strict implementation of rules will result to long-term biodiversity conservation, continued ecological functions (such as coastal protection) and provide economic functions (such as livelihood).

The Municipality of Bantayan, Bantayan Island, Cebu had an initiative to have their MPAs assess and come-up with a management plan in order to properly protect and manage their MPAs. The municipal waters of Bantayan lies between two big bodies of water (Tanon strait and Visayan Sea). The town has twenty five (25) barangays with twenty (20) coastal barangays. Among the twenty barangays, there are five island barangays and two coastal barangays with island communities. Almost all coastal barangays have Marine Protected Area (MPA). Bantayan town has fifteen (15) active and two proposed MPAs. The most number of MPAs in the whole province with a total MPA area of 525 hectares approximately. MPA clustering was done due to the different coastal conditions in the municipal waters.

Last November 21, 2021 the MPA in Brgy. Bantigue was assessed. The coral reef benthic profile of Bantigue MPA was 54.00% live coral cover categorized 'GOOD' condition based on Gomez (1979) Index with 16.17% dead corals with algae. In terms of reef fish community, the fish species diversity was 'POOR' with 18 species/500m² based on Hilomen et al. (2000) Fish Rating, while the fish population density was under 'POOR' condition based on Hilomen et al. (2000) and the fish biomass was under 'VERY LOW' category based on Nañola et al. (2006) Fish Rating. Whilst the macro-benthic invertebrates, phylum Molluska with 2 subgroups (bivalves and gastropods), phylum Echinodermata with 3 subgroups (the sea stars, sea urchins, and sea cucumbers), and the phylum Porifera or sponges have the highest density. In terms of the MPAs MEAT was Level 2 meaning they were able to strengthen their MPAs through patrolling and surveillance, documented the violators and cases were filed and penalized.

GPS Points of Bantigue MPA Bounaries.

Cluster	Barangay	DMS format (WGS 84)	
		Easting	Northing
D	Bantigue MPA	123° 42" 8.14'	11° 11" 0.07'
D	Bantigue MPA	123° 42" 8.16'	11° 11" 7.98'
D	Bantigue MPA	123° 42" 7.15'	11° 11" 17.04'
D	Bantigue MPA	123° 42" 18.94'	11° 11" 17.65'
D	Bantigue MPA	123° 42" 21.06'	11° 11" 7.74'
D	Bantigue MPA	123° 42" 23.21'	11° 10" 56.73'
D	Bantigue MPA	123° 42" 24.5'	11° 10" 44.15'
D	Bantigue MPA	123° 42" 8.55'	11° 10" 43.54'

Last April 8-9, 2021 a MPA Management Workshop was conducted to determine their vision, goals and objectives; issues and challenges; and determine MPA Management Plan (including Law Enforcement, IEC, Community Participation, and Other Trainings Needed).

The Barangay Bantigue, Bantayan, Batayan Island, Cebu came-up with the following MPA Management Plan:

- 1.) **Vision.** A resilient network of marine protected areas, which protects ecological diversity and maintains the ecological services of the marine environment for the benefit of present and future generations.
- 2.) **Goal.** “Ang pagproteher ug pagpalambo sa mga corals ug semilya sulod sa Marine protected Area.”
- 3.) **Objectives:**
 - (a) Adunay higpit nga pagbantay sa Marine Protected area.
 - (b) Supesiente ang Fish warden nga magbantay.
 - (c) Adunay cooperation ang comunidad.

4.) Issues and Challenges.

The Bantigue MPA continues to face illegal practices such as fishing pressure and sponge poaching. And due to the lack of budget, proper equipment for law enforcement, and lack of man power limits the local government unit to protect their MPA. Even though they face such challenges, they were able to identify their issues and challenges and most importantly how to address thesis issues/challenges.

Issues/Challenges	Possible Action/Solution
1. Sudsud	Ipatuman ang R.A 8550
2. Baling	Ipatuman ang R.A 8550
3. Triple net	Ipatuman ang R.A 8550
4. Pataka ug labay sa basura sa coastal area	Ipatuman ang Municipal Ordinance for Proper waste disposal
5. Tubli	Ipatuman ang R.A 8550
6. Chlorine	Ipatuman ang R.A 8550
7. Manguhag baybay	Ipatuman ang Municipal Ordinance sa padili ug pagpanguha ug baybay
8. Pataka ug pagawas sa ilang hugaw nga walay palikuran	Ipatuman ang Municipal Ordinance for Proper waste disposal

5.) Management Body

After identifying the issues and challenges and how to addressed them, they then identified the possible management body. Designating certain tasks to the most appropriate management body will help in their MPA management Plan.

Position/Core Group	Function(s)
1. Barangay Captain	Ipatuman ang ordinansa
2. Kagawad (Committee of Agriculture and aqua culture	Mag bantay sa mo sulod sa sanctuary
3. Fish Warden	Motabang pagbantay ug pagbadlong

4. MFARMC	Mohatag ug budget alang sa mga expenses(gasoline sa magroving)
5. Peoples Organizations	Magmonitor sa Sanctuary kung unsa ang mga kinahanglanon
6. SK	Motabang aron ma implement ug mamonitor pag ayo ang sanctuary
7. Municipal DA	Motabang sa pagbantay
8. MENRO	Motabang alang sa kalamboan sa sanctuary
9. Purok Organizer	

6.) Capacity Building

Afterwards, they listed down the important training-workshops in order equip their personnel(s) with knowledge and power why they need to protected their MPA and for law enforcement concerns as-well-as pass down their knowledge to other people, sectors, and future generations.

Training	Details
1. Coastal Law Enforcement and Fish Warden Duputation	To enforce their bantay dagat with the proper knowledge and appropriate action during patrolling.
2. MPA Planning and Management Training	
3. Livelihood program: a. Cookery (Fish Tocino) b. Dress making c. Goat Raising d. Vermi Composting e. Fish Pot Weaving f. Organic vegetable gardening g. Fish drying h. Pastry making i. Seaweed farming j. Fiber glass boat making	Environmental Friendly and sustainable livelihood

7.) Data and Documents Available

Up to date, the Kabac MPA had limited data available but had the basic documents needed to jump start their MPA Management Plan. Other necessary documents they should have is the

Documents	Description
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1. Ordinance	-
2. Biophysical Monitoring	Conducted last November 21, 2020
3. MEAT Assessment(Management Effectiveness Assessment Tool)	Conducted last November 25, 2020

8.) Operation Facilities/Equipment Needed

Subsequently, they listed down the facilities and equipment needed to strengthen their monitoring and enforcement in their respective MPA.

Item name	Description
1. Fiber Bottom boat	5ft x 15 ft 16 hp
2. Search Light	
3. Megaphone	
4. Telescope	
5. Raincoat	
6. Hand held Radio	
7. Life vest	
8. Uniform long sleeve	
9. Hat	

9.) Action Plan

(a) **Project Plans.** Since they have identified their vision, goals and objective; the issues/challenges along with solutions; identified the management body; came-up with the necessary trainings they need; determined the data available; and the facilities/equipment they need to effectively manage their MPA. The following are some of their planned project.

Project Title	Description
1. Fish Shelter/Condo	Can be made of pile of recycled culvert or materials that is not harmful to marine organisms
2. Putting Buoy in the MPA Boundaries	

(b) **IEC Strategies.** Other than projects, Information Education Campaigns (IEC) is an import strategy to disseminate MPA facts and importance to educate people of the advantages of conserving biodiversity especially the coral reefs.

Topic	Target audience	Approach/venue
1. Solid waste management	Mulopyo	Recorida

2. Drug Clearing	Surrenderer	Barangay Assembly
3. Dog vaccination	Purok leader	Purok monthly meeting
4. Coastal Clean up	Comunidad	recorida

(c) **Monitoring and Evaluation.** Continued coral assessment and MEAT assessment and other relevant assessment that will contribute to properly management their MPAs is important.

Monitoring/Evaluation	Details
1. Biophysical Monitoring	Annual monitoring for the status of the reef. Can be done by the locals but needs to be validated by a Marine Biologist
2. MEAT Assessment (Management Effectiveness Assessment Tool)	Annually monitored to determine in which part of the management they lacks and needs more attention.
3. IEC Materials such as posters and bulletins	Should be maintained in order for local and foreign tourist to read is they happen to visit the area.