



State of the Mangrove in **NORTHERN SAMAR**

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I. Introduction

Northern Samar is one of the three provinces of Samar Island located in the eastern portion of the Philippines (**Fig. 1**). It is composed of 24 municipalities subdivided into two congressional districts. Twenty municipalities and 219 (out of 569) barangays are in coastal areas. Fifty three percent (53 %) of its total population of 632,000 reside along the coast.

The province has a total land area of 349,798 ha (PPDO 2015). It has a shoreline length of about 250 km. Known to have one of the richest mangroves in the Eastern Visayas Region, *Nortehanons* as local folks are called, however remain among the poorest. It is the fourth poorest province in the country and the poorest in the region (NSCB 2017). The main livelihoods are farming and fishing, but they are hugely dependent on copra and abaca for cash. The main staple food is rice, but root crops and banana serve as supplement when there is a lack or absence of rice.

II. Status of Mangroves

Data from BSWM (1992) indicated that Northern Samar has around 9,300 ha of mangrove stand (around 5 % of the total forest of the province; **Table 1; Table 2**). More than half of its population are directly and indirectly dependent on mangroves as they provide numerous

benefits—as source of food, fuel wood, and housing materials. Coastal communities believe mangroves protect their communities from typhoons and tidal surges. More importantly, they valued mangroves because they provide food and income. Fishers are already aware that mangroves are sanctuaries and breeding grounds for many economically and ecologically important aquatic species. For one, Northern Samar boasts of being the major source of mud crab of the neighboring province of Bicol to as far as Cebu, Iloilo, and Metro Manila. The king crab (*Scylla serrata*) is locally known to abound in the municipalities of Laoang, Pambujan, Mapanas, Biri, Rosario, San Jose, and Lavezares. These municipalities have lush mangroves. Local fishers believe mangroves need protection. However, the 19 Marine Protected Areas (MPAs) in Northern Samar are mostly made up of coral reefs. Many mangrove sites remain unprotected.

Mangroves in general are under the mandate of the DENR. Thus, a great number of mangrove reforestation and rehabilitation projects are implemented by DENR. Their mangrove projects in Northern Samar, from 2012-2017, covered a total of 4,630 ha. BFAR also implemented mangrove rehabilitation program in 2012-2015 covering about 2,289 ha. Some NGOs also implemented similar activities covering around 135 ha. Some LGUs implemented mangrove reforestation projects under the PAF2 in 1998 and the CBRMP in 2000. These efforts have increased the mangrove areas from 6,814 ha (old growth stand) to a total of 12,426 ha.

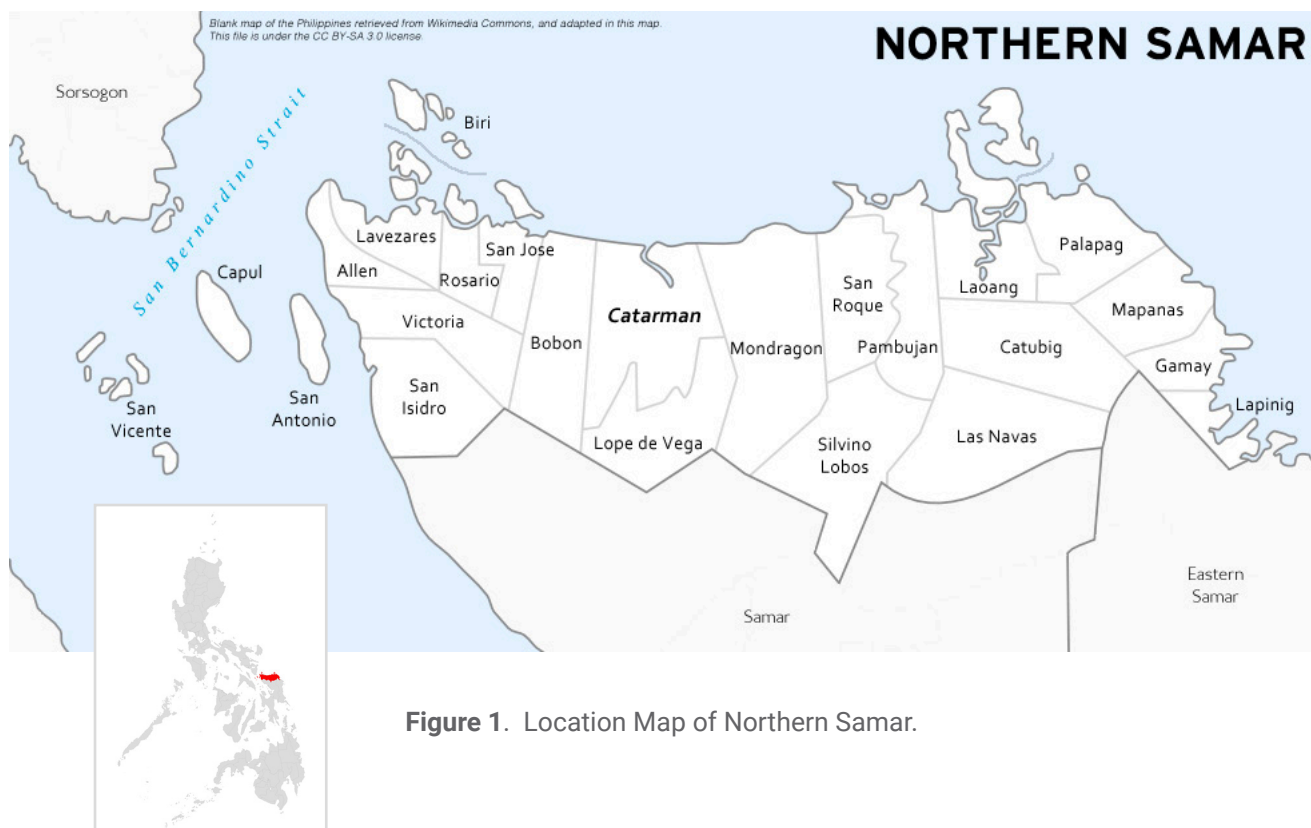


Figure 1. Location Map of Northern Samar.

Table 1. Forest area in Eastern Visayas Region (1992).

Province	Area covered (in '000 ha)				Total
	Woodland	Mangrove trees	Mangrove palm	Marsh and swamps	
Biliran	5.1	0.2	0.1	-	5.4
Leyte	48.7	4.0	3.9	2.8	59.4
Southern Leyte	25.6	0.4	0.2	-	26.2
Eastern Samar	134.4	6.9	1.8	-	143.1
Northern Samar	101.3	7.8	1.5	0.9	111.5
Samar (Western)	251.4	9.2	2.7	0.2	263.5
Total	566.5	28.5	10.2	3.9	609.1

Source: Bureau of Soils and Water Management, 1992

Table 2. Current Mangrove Stand in Northern Samar.

Mangrove stand	Area (ha)
Old growth	
First District	858.16
Second District	5,955.73
Total (old growth)	6,813.89
Reforestation/Rehabilitation	
DENR-First District:2011-2015	3,509.00
DENR-Second District: 2012-2017	1,121.00
BFAR: 2012-2015	613.70
NGOs: 2007-2012	135.00
LGU: CBRMP (2000); PAF 2 (1998)	233.28
Total (reforestation/rehabilitation)	5,611.98
Total mangrove area	12,425.87

Source: Coastal and Mangrove Assessment, Ibabao Hall, Capitol, Catarman, N. Samar (9 February 2018).

Data from BSWM, however, reveals that the mangrove areas in Northern Samar is only 9,300 ha. It is not farfetched to infer that there could be sites not suitable for planting, but were planted with mangroves anyway. Or, it could be that there were sites that have been reforested more than once especially because the province is along the typhoon belt. Mangrove reforestation is deemed important in providing protection against typhoons.

III. Mangrove Protection and Management

Mangrove management is perceived by local government units as the mandate of the DENR. There were initiatives by LGUs, barangay leaders and residents to establish mangrove sanctuaries and management council. These are especially in areas where there are NGOs leading mangrove projects. However, most of the structures established were not sustained. Even if community leaders and organized members are still around, their involvement is oftentimes dependent on what local government

offices (e.g., MAO, MENRO, or fishery officers) would say. Very few LGUs provide funds for protection and management of mangrove areas. Besides, LGUs have very lean personnel in agriculture, or the MENRO themselves are in the lower echelon of LGU hierarchy and sometimes in “job order” status.

DENR admitted that they are responsible for monitoring their mangrove projects in various localities. However, they do this only once to twice a year. But oftentimes, monitoring is done only as the need arises. Normally, monitoring is conducted because it is anchored on whether to release the retention fund or not. LGUs, likewise, confess they do monitor mangrove projects within their territorial jurisdiction but, often, their monitoring is confined only to those projects they themselves implemented. Or, only for projects where the LGUs have been a partner of lead implementer.

For both the DENR and LGU, monitoring of mangrove projects is a challenge. Topmost of their concern is the monitoring system itself, where effectiveness of mangrove projects is measured solely by survival rate.

Issues and challenges

In an apparent recognition to take on a more active part in the management of mangroves in their territory, LGUs, together with the DENR, BFAR, and local NGOs, noted the following issues and challenges:

- Lack of appreciation on mangrove and its ecological functions;
- Continued mangrove cutting;
- Overexploitation of mangrove resources for fuelwood, crabs, shrimps, shellfish;
- Conversion of mangrove areas into other uses (e.g., settlement);
- Mangroves as solid waste disposal sites;
- Lack/absence of law enforcement; and
- Lack/absence of effective management mechanism (structure/system).

IV. Summary and Recommendations

- Establish stronger coordination between and among the major actors, the LGUs, BFAR, DENR, local NGOs, and the barangay.
- Establish/institutionalize a protocol for the implementation of mangrove-related projects.
- Institutionalize programs that would enhance protection, management, and sustainability of mangrove projects, and not just planting. Capability development for LGUs/communities must be addressed.
- Technical aspect of mangrove projects must be ensured. Mangrove ecosystem site analysis and site-species matching, among others should be considered in designing management programs.
- Develop a comprehensive, effective, and simple monitoring and evaluation systems that will account important quantitative and qualitative indicators of success.
- Conduct an annual mangrove forum.
- Establish a Northern Samar mangrove society.

- Include mangrove areas in the LGUs' preparation of FLUPs/CLUPs.
- Have a continuing education/awareness campaign about mangroves.
- Conduct capacity development training for those directly involved in the management/protection of mangroves at barangay, municipal, and provincial levels.
- Conduct a training needs analysis for those who will be directly involved in the management, protection, and sustainability of mangroves.
- Designate Provincial Government as the repository of data on mangroves and mangrove interventions (in coordination with DENR, BFAR, NGOs, and other sectors).
- Define industry-anchored livelihood and alternative livelihood for coastal communities to effectively divert current and potential over-exploitation and destruction of mangroves.
- Target marginal fishers as beneficiaries in poverty alleviation programs.

V. References

- Bureau of Fisheries and Aquatic Resources (BFAR). 2018. Update on the mangrove reforestation project of BFAR, a power point presentation by BFAR Northern Samar Provincial Office during the coastal and mangrove assessment held on 9 February 2018 in Catarman, Northern Samar.
- Bureau of Soils and Water Management (BSWM). 1992. Forest area in Region VIII.
- Locator map: Northern Samar. Retrieved 14 November 2018 from <https://pinoyindexph.wordpress.com/2012/04/09/locator-map-northern-samar/>.
- National Statistics and Coordination Board (NSCB). 2017.
- Provincial Government Environment and Natural Resources Office (PGENRO). 2018. Proceedings of the coastal and mangrove assessment, Ibabao Hall, New Capitol Bldg., Catarman, Northern Samar.
- Provincial Planning and Development Office (PPDO). 2015. Provincial profile of Northern Samar.