

# Mindoro State College of Agriculture and Technology-Bongabong Campus

# Survey of the Fish Catch and Volume in Naujan Lake in Relation to Fishing Gears



### Oriental Mindoro Santa Cruz Occidental Mindoro Clona Bansud Bongabong Tablas Strai

#### Naujan Lake National Park

- Philippines is home to 59-70 lakes (Guerrero, 2001; Mutia 2001).
- Fifth largest lake in the Philippines
- Total area 8,125 hectares (Ramsar 1999).





 Fishing is a major source of livelihood in communities along the lake. Naujan Lake has rich biodiversity and nutrients that supports the major fishery of both pelagic and demersal species, but the study about the aquatic biodiversity is poorly studied, unlike the other major lake of the Philippines (Labatos, 2012).

## Objective

 A stock assessment was done to determine the commercially important fishes caught in Naujan Lake in association with the fishing gears used.

### Methodology

 Sampling was done twice a month from July-September 2016 through actual observation and direct interview with the fisherfolks. Data were consolidated and analyzed.





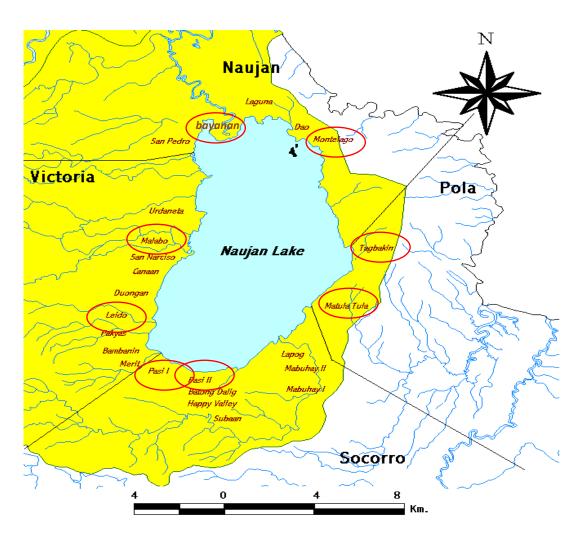






## Sampling Sites

- Brgy. Bayanan
- Brgy. Leido
- Brgy. Pasi I
- Brgy. Pasi II
- Brgy. Tagbakin
- Brgy. Matulatula
- Brgy. Montelago
- Brgy. Malabo



### Results

#### Fish Catch Volume (kg) per Fishing Gears used

Fishing Gear	July	August	September	Total	% Distribution	Rank
Gill net	1,131.7	980.4	1,086.9	3,199.07	58.98	1
Spear gun	288.5	271.7	363	923.2	17	3
Fish pot	59	106.7	10	175.7	3.23	4
Fish Trap	71	21	10	102	1.88	5
Encircling net	274	390.05	334	998.05	18.40	2
Spear	5	0	0	5	0.09	7
Long line	21	0	0	21	0.38	6
Total	1,850.3	1,769.9	1,803.9	5,424		

#### Fish Catch Volume (kg) and Composition

Fish Species	July	August	September	Total	% Distribution	Rank
Tilapia	1,011.75	1,344.6	1,210.9	4,402.85	64.01%	1
Common Carp	335.12	146.5	311.3	1,065.22	15.49%	2
Silver Therapon	240.5	169.9	227.4	779.6	11.33%	3
White Goby	211	88.5		343.5	4.99%	4
Mudfish	21	7.5	11	49.5	0.72%	5
Catfish	1	3		4	0.06%	9
Milkfish	21			21	0.31%	6
Mullet	3	4.5		7.5	0.11%	7
Snakehead Gudgeon	1.5			1.5	0.02%	10
Gourami	5			5	0.07%	8

Gourami (*Trichogaster* pectoralis)





Mudfish (*Opicephalus* striatus)



White Goby (Glossogobius giuris)

Common Carp (Cyprinius carpio)



#### Snakehead Gudgeon (Giuris margaritaceae)



### Conclusions

- The study showed that selected species of fish stock in Naujan Lake was declining.
- Native fish species like goby was further outnumbered by introduced species.
- Catch of migratory species such as Milkfish and Mullet was also diminishing.

 It is necessary to conduct a similar study with emphasis on the reproductive biology of Goby, in order to determine the maturity and spawning season for a closed season regulation.

# Thank You!!