

### UNIVERSITY OF THE PHILIPPINES

Available to the general public

# FISHERIES YIELD AND THEIR HABITAT INTERACTIONS IN THE MANTALIP REEF SYSTEM

By

## DINO ANGELO E. RAMOS

A Master's Thesis Submitted to the
Institute of Environmental Science and Meteorology
College of Science
University of the Philippines
Diliman, Quezon City

In Partial Fulfillment of the Requirements
For the Degree of
Master of Science in Environmental Science

April 2012

#### ABSTRACT

# FISHERIES YIELD AND THEIR HABITAT INTERACTIONS IN THE MATALNIP REEF SYSTEM

Dino Angelo E. Ramos Univerity of the Philippines, 2014 Adviser:
Dr. Lemnuel V. Aragones
Co-Adviser:
Dr. Rene N. Rollon

Interacting habitats like mangroves, seagrass and coral reefs commonly occur together in the tropics and these exhibit enhanced productivity compared to single habitat systems. While these habitats are commonly studied individually, relatively few studies have focused on their interactions with other adjacent habitats in the Philippines. The type of biological connectivity between these habitats is determined for fish and its implications for fisheries production and management in the Mantalip Reef System in barangay Tinaogan, Bindoy, Negros Oriental. Movement across habitats was inferred through size distributions of families with species common in two or more of the habitats (mangrove, seagrass and coral reef). Only 14% of reef fishes were found to utilize multiple habitats but these included commercially important species that comprised 52.68% of recorded non-pelagic fish catch biomass in the reef system. Juveniles were commonly abundant in the near-shore habitats (mangroves and seagrass) while adults were recorded on the subtidal areas (seagrass and reefs). Based on this study, the Mantalip Reef System supports Finally, I would like to thank my family for giving me the strength to push on during times of frustration in the field and providing a great environment to come home to during the breaks in between. Special thanks to my brother, Andre, my cousins, James Kho (and Armarie Borden), Francis Kho, Justin Torres, for all accompanying me at one time or another in Bindoy and helping out despite their busy schedules and different fields of interest.