

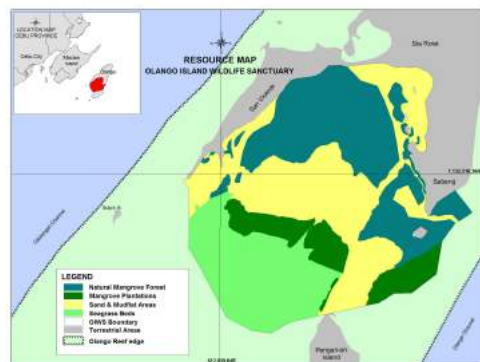
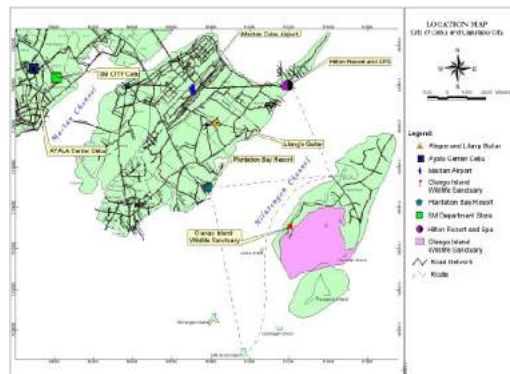
Eco-tourism and Biodiversity Conservation and Protection Management of Olango Island Wildlife Sanctuary

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Introduction

Olango Island Wildlife Sanctuary (OIWS) was proclaimed as protected area by virtue of Presidential Proclamation 903 dated May 14, 1992. It is one of the initial components of Republic Act 7586 otherwise known as the National Protected Areas System (NIPAS Act) of 1992. It covers a total area of 1,030 hectares. Eventually in Nov. 8, 1994, the sanctuary was recognized as the 1st RAMSAR SITE (Wetland of International Importance especially as Waterfowl Habitat) in the Philippines during the RAMSAR Convention in RAMSAR City of Iran for the Preservation and Protection of Wetlands of International Importance. Olango Island is also one of the Important Bird Area (IBA) in the Philippines (Mallari, 2001). There are 77 species of migratory birds that use the East-Asian Austral-Asian flyways and Olango hosted more than half of this numbers (62.23%).

Olango Island is located approximately 4 km. east of Mactan Island and 15 km east of Cebu City. It is composed of 11 barangays with a total population of 32,527. OIWS is located in the southern tip the Olango Island. It covers the coastal area under four (4) barangays namely: San Vicente, Sta. Rosa, Sabang and Pangan-an. The 1,030 hectares wetland is composed of mudflats, seagrass beds and mangrove forests comprise the entire OIWS. It is geographically located between 1132513.36 North and 612039.64 E.



Aside from the migratory shorebirds the sanctuary is also endowed with vase natural resources like mangrove forests, seagrass beds, invertebrates and other coastal marine wildlife.

There are Two (2) major activities in OIWS namely: **Eco-tourism** activities such as birdwatching, swimming, camping and site seeing and **Biodiversity Conservation, Monitoring and Protection**.

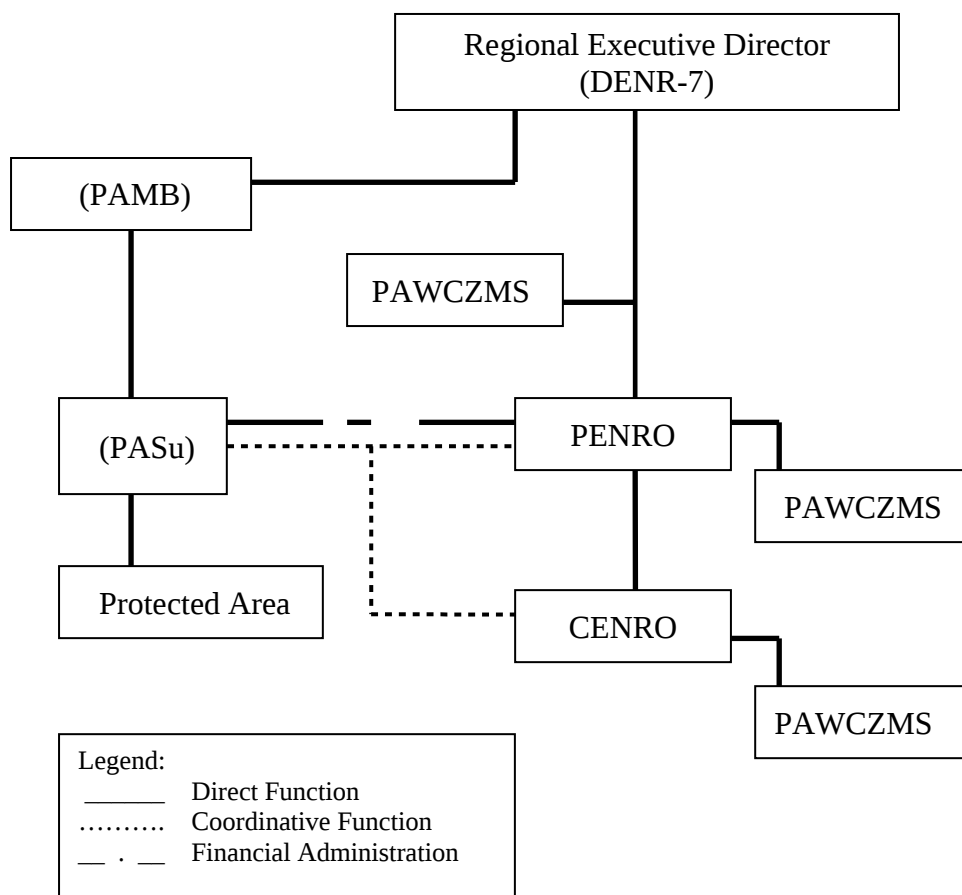
This paper intends to present the management options and strategies learned in Olango Island Wildlife Sanctuary.

PROTECTED AREA MANAGEMENT

KEY IMPLEMENTING PERSONNEL AND OFFICES

1. Protected Area Management Board (PAMB)
2. Office of the Regional Technical Director- Protected Areas and Wildlife Coastal Zone Management Service (PAWCZMS)
3. Protected Area Superintendent (PASu)
4. Provincial Environment and Natural Resources Office (PENRO)
5. Community Environment and Natural Resources Office (CENRO)

MANAGEMENT ORGANIZATIONAL STRUCTURE (Regional Level)



MANAGEMENT ISSUES

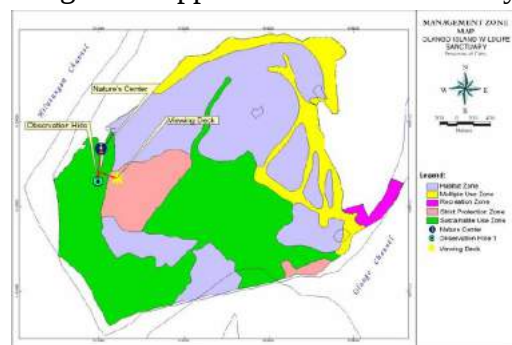
- a. Encroachment of the Mangrove Forest to the feeding area of the migratory birds;
- b. Encroachment of Destructive Fishing within the sanctuary;
- c. Subsistence fishing, gleaning and collection of mollusks and other invertebrates within the sanctuary;

- d. Dependence of the local community on mangrove forests for firewood and marine wildlife for food;
- e. The existing infrastructure and equipment are inadequate to meet demands of the domestic and foreign visitors to the sanctuary;
- f. The lack of sustainability and effectiveness in the information and education efforts to promote the sanctuary as an ecological destination;
- g. There is inadequate updated scientific data on the extant resources on the sanctuary resulting from lack of research programs;
- h. The financial allotment for OIWS is relatively low to sustain effective operation and maintenance and implementation of laws, rules and regulations

MANAGEMENT STRATEGIES

The management plan categorizes eleven strategies that will address the issues for sustainable management of OIWS.

1. MANAGEMENT ZONING – To categorize management approaches in the sanctuary different management zones were considered.



- a. Strict Protection Zone – Areas with high bio-diversity value which shall be closed to human activity except for scientific studies and/or ceremonial or religious use by indigenous communities. This zone covers the principal feeding and roosting sites for the migratory birds and an important habitat of economically important marine organisms with a total area of 69.70 hectares.
- b. Recreational zone – Areas with high recreational, tourism, educational, or environmental awareness values where sustainable eco-tourism, recreation, conservation education may be allowed as stipulated in the management plan. The area is best for swimming and picnic and also serves as docking area for motorized pump boats. It covers an area of 7.42 hectares.
- c. Multiple Use Zones – Areas where settlement, traditional or sustainable land use including agriculture, agroforestry, extraction activities and other income generating or livelihood activities, may be allowed to the extent as prescribed in the management plan. It covers an area of 97.659 hectares.

- d. Habitat Management Zone – This zone covers an area of 413.94 hectares. Activities being done in the zone include mangrove planting, bird banding, netting and leg flagging.
- e. Sustainable Use Zone –Utilization and collection of natural resources by indigenous community and/or tenured migrants and/or buffer zone residents are allowed using traditional sustainable methods that are not in conflict with biodiversity conservation requirements. The zone is also utilized by the migratory birds as feeding and roosting area and excellent for birdwatching from the vantage point of the observation hide. It covers an area of 319.278 hectares.
- f. Buffer Zone/Environmental Protection Area - Areas outside the protected area but adjoining it. The area is open for development activities such as souvenir shops, restaurants, lodging houses and other business alike. However, the approval of the PAMB is required.

2. INFRASTRUCTURE AND EQUIPMENT

The Sanctuary has several infrastructures for visitors use such as Nature Center, View Deck, Observation Hide, Camping Ground, Comfort rooms, kiosks, tables and chairs, Binoculars and Spotting scope and kitchen.

3. RESEARCH AND MONITORING

- a. Implementation of the biodiversity Monitoring system;
- b. Conduct Carrying Capacity Determination on various activities and resources of OIWS;
- c. Bird Banding – the activity was temporarily stopped at during the influx of Bird Flu virus.

4. REHABILITATION

- a. Conduct mangrove planting on degraded mangrove areas caused by indiscriminate cutting.

5. PROTECTION

- a. Implementation of the following Environmental Laws
 - i) Republic Act 7586 “ NATIONAL INTEGRATED PROTECTED AREAS SYSTEM” of 1992
 - ii) Presidential Decree No. 705 “ REVISED FORESTRY CODE OF THE PHILIPPINES”
 - iii) Republic Act No. 7161 AN ACT INCORPORATING CERTAIN SECTIONS OF THE NATIONAL INTERNAL REVENUE CODE OF 1977, AS

AMENDED, TO PRESIDENTIAL DECREE NO. 705, AS AMENDED, OTHERWISE KNOWN AS THE "REVISED FORESTRY CODE OF THE PHILIPPINES", AND PROVIDING AMENDMENTS THERETO BY INCREASING THE FOREST CHARGES ON TIMBER AND OTHER FOREST PRODUCTS.

- iv) Republic Act No. 8550 “ THE PHILIPPINES FISHERIES CODE”
 - b. Deputization of Wildlife Enforcement Officers
 - c. Regular patrol and monitoring
 - d. Linkaging with the Philippine National Police and local Government Units
 - e. Installation of Signage
6. VISITORS AND COMMUNITY PROGRAM (Eco-tourism activities)
- a. Collection of protected area fees
 - b. Conduct periodic Coastal Clean Up and Mangrove Planting
7. LIVELIHOOD
- a. Involvement of the community in livelihood projects (guided tours, souvenirs, catering);
 - b. Vendors are allowed to sell souvenirs and refreshing drinks (coconut water)
8. INFORMATION AND EDUCATION CAMPAIGN
- a. Provide orientation lectures to visitors of the sanctuary;
 - b. Disseminate information materials (brochures, posters) to schools, libraries and barangay centers;
 - c. Installation of signage.
9. NETWORKING AND COORDINATION
- a. Establish linkage to other government, non-government organizations. Among the linkages established are with Wildfowl and Wetland Trust, Philippine Business for Social Progress (PBSP), Cebu Biodiversity Conservation Foundation (CBCF), Conservation International (CI), Wild Bird Club of the Philippines, Department of Tourism (DOT), Philippine National Police (PNP) and others government and non-government institutions.
10. TRAINING AND HUMAN RESOURCE DEVELOPMENT
- a. Seek training for OIWS staff to upgrade knowledge and skills in the management of the sanctuary
 - b. On the Job training for Biology students
 - c. Conducted Bird Identification and Monitoring trainings

11. MONITORING AND EVALUATION

- a. Annual Evaluation pertaining to the operation and management of the sanctuary.
- b. Monthly Bird Inventory and Monthly Statistical Report on visitors arrival and income

CONCLUSION

The goal to harmonize Eco-tourism and biodiversity conservation in Olango Island Wildlife Sanctuary is still continuously in the process. Though past experiences in the management proved that managers are successful in pursuing Eco-tourism in OIWS as well as promoting biodiversity conservation, there are still culprits to destruction of the wetland that evaded protection enforcement within the sanctuary. The management plan of OIWS will terminate this year along with the budget for the sanctuary. The DENR, PAMB and PASu are now formulating a new General Management Plan and Eco-tourism Management Plan for OIWS.

Literature Cited:

Mallari, Tabaranza, Gonzales, 2001. Key Conservation Sites of the Philippines

R.A. 7586 1992 “ National Integrated Protected Area System” sec. 11