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Master Plan of Togean Islands Marine Tourism

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Abstract

Togean islands is one of major tourist destination in Tomini Bay, Central Sulawesi. The area lies in the hearth of global marine biodiversity, so call "coral triangle." The beautiful seascape with small group of islands, and underwater scenery with numerous coral reef, unique creatures, offers great spectacular dive site for tourists. Moreover, some endemic species of marine and terrestrial ecosystem and ethnic group, such as Baja people lead the area as the richest touristict. Those nature and cultural diversity should be managed for sustainability of tourism. Therefore the master plan to guide the development of marine tourism is needed.

The research consists of preparation, field surveys, analysis and interpretation of data, synthesis, and preparing master Plan stages. The Master Plan of Marine Tourism was developed based on the assessment of aquatic, terrestrial, cultural and feasibility of potential objects and marine tourism attraction and formulated into six Marine Tourism Development Area (MTDA).

Keywords: master plan, marine tourism, Togean islands, coral triangle.

1. Introduction

Indonesia is an archipelago that is rich in diverse natural and cultural resources. Country with an area of marine waters by two-thirds (3.650.000 km2) of the region and 17 480 islands with long coastline of about 95 181 km is the potential for marine tourism.

Togean islands is one of major tourist destination in Tomini Bay, Central Sulawesi. The area lies in the hearth of global marine biodiversity, so call "coral triangle," composed of Indonesia, Philippines, Malaysia, Papua New Guinea, Japan, and Australia. It is the only place in the world where atoll, laguna, fringing reef, barier reef, and lagoon can be all found together.

The beautiful seascape with small group of islands, white sandy beaches, and underwater scenery with numerous coral reef, wall, pinnacles, unique creatures, coral garden offers great spectacular dive site. Diving, snorkeling, fishing, sunbathing, sight-seeing, nature tracks, roaming the village, are a leading activities of Togean islands marine tourism (Figure 1). This tourist area is supported by dive resorts, cottages, bungalows, and other accommodations.

Moreover, some endemic species of marine and terrestrial ecosystem and ethnic group, such as Baja people or the sea gypsies, lead the area as the richest touristict area within the triangle. Those diversity of marine resources and local community should be managed for *sustainability* of tourism. Therefore the master plan to guide the development of marine tourism is needed.





Figure 1. Objects and attractions of Togean marine tourism

2. Metodologi

The research was conducted at Togean Islands of Tojo Una-Una Regency, Central Sulawesi Province, for four months. This research method consists of the following stages: Preparation, Field surveys, Analysis and interpretation of data, Synthesis, and Master Plan.

Preparation phase performed desk studies to prepare the preliminary information that includes: marine potency for tourism, preparation of base map, thematic map, preparation of marine tourism resource typology as the basis in preparing Analysis Unit. Field survey conducted to collect primary data and secondary data, such as climate, bathymetry, monographs, statistical data, annual reports and other supporting information. Analysis of the potential for marine tourism carried out by assessing the aquatic, terrestrial, cultural and feasibility of objects and attractions on every unit of analysis.

Base on objects and attractions of marine tourism potential developed a master plan. Master Plan is based on the concept of marine tourism space (functions, activities and facilities) that will be developed. Space concept is a fundamental philosophical is used in the preparation of spatial structure in marine tourism development plan.

3. Data Analysis

As the leading sectors, marine tourism Tojo Una-Una distinguished by the orientation of tourism to the aquatic and terrestrial areas. Aquatic area includes waters that are influenced by the pattern of tides, waves and currents. While the terrestrial land area which is bounded by the waters in the direction of the inland. Details of the location of objects and marine tourism attraction is presented in Table 1.

3.1. Spatial Analysis Unit

Analysis of the potential for marine tourism and tourist attractions are spatially done on the unit of analysis. This unit consists of bottom depth, the presence of shallow water, the presence of small islands, coral reefs (barrier, fringing), atolls and lagoons, lagoon and mangrove vegetation existence. Dishidros bathymetric maps based on interpretation of 1990 (scale 1: 75 000), AMS 1957 bathymetric map (scale 1: 250 000), and bathymetric maps MCRMP 2004 (scale 1: 50 000) can delineate the space into 47 analysis units (Table 2 and Figure 2).

Table 1. Objects and Attractions of Marine Tourism of Tojo Una-Una Regency, Central Sulawesi

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Table 2. Spatial Analysis Unit of Tojo Una-Una Regency, Central Sulawesi

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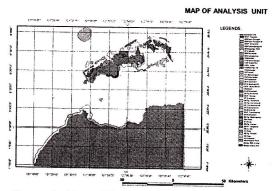


Figure 2. Map of Spasial Analysis Unit of Tojo Una-Una Regency, Central Sulawesi

3.2. Assessment of Potential Objects and Attraction of Marine Tourism

Analysis performed on marine tourism potential of each unit of analysis is based on the criteria of aquatic, terrestrial and feasibility of potential objects and marine tourism attraction. Tabulation of the results of potential assessmet of objects and attraction is presented in Table 3 and Figure 3.

Table 3. Assessment of potential objects and Attractions of Marine Tourism

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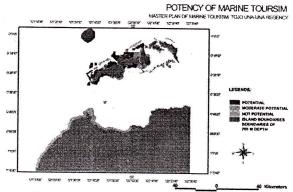


Figure 3. Potency of Marine Tourism of Tojo Una-Una Regency, Central Sulawesi

4. Master Plan Marine Tourism

In the development of marine tourism in Togean islands, Tojo Una-Una, the concept of the proposed development are: (1.) Improving the quality of the object and marine tourism attraction through improved facilities, infrastructure, institutional, human resources and promotion, (2.) Preservation of aquatic conservation area a type of coral reefs (barrier reef, fringing reef, lagoon, atolls and lagoons, small islands), as well as terrestrial (Malenge island protected areas with endemic habitat for several

species, such as tarsiers), living culture and preservation of cultural communities such as Bajo, Bongbongko, Bugis and Gorontalo and (3.) integrated development of tourist activity and the activity of mariculture, seaweed cultivation, cultured pearls as objects and attractions.

Delineation of the marine tourism development is based on the following criteria, namely: (1.) Uniformity of object types and intrinsic character and tourist appeal, (2.) The location of the access patterns of common objects and marine tourism attraction, (3) the proximity of marine attractions with the service centers, and (4) the proximity of the object distribution and attractions, geographically. Based on these delineation criteria can be developed regionalzaion based on physiographic unit, ecological and geographical.

Spatial arrangement of the Master Plan of Marine Tourism can be formulated into 6 (six) Marine Tourism Development Areas (MTDA) that carries a specific theme, namely: 1. MTDA A with the theme "Aquatic –Mariculture Tourism", 2. MTDA B with the theme "Aquatic –Beach Tourism", 3. MTDA C with the theme "Beach-Terrestrial Tourism", 4. MTDA D with the theme "Aquatic Tourism", 5. MTDA E with the theme "Aquatic-Cultural Tourism", and MTDA C' with the theme "Beach-Terrestrial Tourism". In detail, the theme, scope, object and marine tourism attraction is presented in Table 4. and Figure 4.

5. Remarks

Master Plan of Togean Island Marine Tourism was developed base on assessment of the potential aquatic, terrestrial cultural and tourism feasibility. Marine tourism development.

The spatial arrangement of the Master Plan of Marine Tourism can be formulated into 6 (six) Marine Tourism Development Areas (MTDA) that carries a specific theme, namely: 1. MTDA A with the theme "Aquatic –Mariculture Tourism", 2. MTDA B with the theme "Aquatic –Beach Tourism", 3. MTDA C with the theme "Beach-Terrestrial"

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Tourism", 4. MTDA with the theme "Aquatic Tourism", 5. MTDA E with the theme "Aquatic-Cultural Tourism", and MTDA C' with the theme "Beach-Terrestrial Tourism".

Table 4. Marine Tourism Development Area

MTDA	Theme	Area	Objects and Attractions
MTDA A	Marine Tourism- Mariculture	Taupan, Kulingkinari, Bomba, Pasir Tengah, Pasir Tengah B, Lusjung Kanau, Unasuna, Siatu	Dive Spot (Taupan I. & 2, Mimpi dingm, Light house, Goa goa, Jack's point, Menrar, Fishonania, Kolelioh, Apollo), Taupan Is, And Inguna, Bajo Comm., Atol Pasir Tengah, Karang Pelindung Siatu Is., Capatana beach, Tipac beach, Poya beach, Tungkubi is., Mangrove (Tumbulawa), Cave. Kenari crap waching, Old Mosque, Mariculture, Seagrass, fishery (pearl)
MTDA B	Aquatic- Beach Tourism	Kadadiri, Pohondongo, Pinumota, Teluk Kilat, Pangempa	Dive Spot (Batu Gila, Domino Rock, Gap, Kadidiri House reef), Mangrove (Simpinti, Lembanato), Paragempa is, Mangrove boardwalk, animal watching, Lembanato beach, Tilupan is, Taipi is, Kadidiri is, Coral is, Jake o' stingless (Jiffish)
MTDA C	Beach- Terrestrial Trourism	Malenge, Tasteh	Dive Spot (Malingi, Lumpatan), Pasar Putih beach, Papan is., Malenge is. with animal endemic: Togean macaque (Mocaco tegeomas), Togean fizard (Varanns salvatur togeanns), the babinase or 'pig deer' (Bubynnso babinase or pig deer' (Bubynnso babinase togeanns), Rajo comm., reef coral and white sandy beach (Bulako is., Makeat is. Lamo is., Takukhak is.)
MTDA D	Aquatic Tourism	Tg. Keramat, Pasokis, Tg. Keramat B. Tg. Keramat C	Dive Spot (Bultocki, Milly's Reef, Walea House Reef, Cape Balkapa), coral reef and white sandy beach (Tingki beach, Pongidan beach, Tanjung Keramat beach)
MTDAZE	Aquatic- Cultural Tourism	Fortress, Kabalutan	Dive Spot (Bomber Plane Wreck, Gunung Laut), Bajo comm. (Kabalutan, Finam is.), wali graveyard, fortress, graveyard of the Togean King
MTDA C'	Beach- Terrestrial Tourism	Buka-buka, Tj. Api. Amparia Tete, Ampana. Rato dan Tojo	White sandy beach (Matako, Tombiano, Kale, Popa, Tampo, Uc Funtu, Malotong, Ampana, Lubuan), bursts of fire Tj. Api, nature reserve of Tj. Api

MASTER PLAN OF MARINE TOURISM TOXINA INA RECENCY CENTRAL SILAMES PROMICE

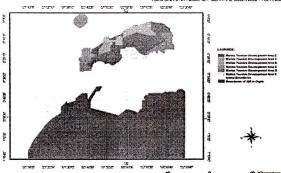


Figure 4. Mater Plan of Marine Tourism of Tojo Una-Una Regency, Central Sulawesi

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