Suitability Analysis on Swimming Recreation in Bintalahe Beach

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Abstract

This study aims to assess the suitability of Bintalahe Beach Tour as a place to Swim in Kabila Bone District, Bone Bolango Regency, Gorontalo Province. The location of the study was divided into five stations. Parameters measured include Water depth, Bottom substrate, Current velocity, Wave height, Coastal type, Coastal width, Water transparency, Hazardous biota, Freshwater availability, Tidal, Beach Tilt. The data analysis was performed based on the calculation of Beach Tourist Suitability Index. The result of this research indicate that the value of Coastal Equality Index of Bintalahe Coast is about 64,166 - 71,66% which means it is included in the category of Conditional Suit.

Keywords: Swimming; recreation; beach; suitability.

Introduction

The beach is a region where the forces of nature that come from the sea, land, and air interact, and create the form as seen today that is dynamic and ever-changing. Beach shape that is dynamic and always changing can be caused by natural factors and human intervention, so it takes a management to keep its existence sustainable. One form of utilization of coastal resources that rely on nature services for human satisfaction is tourism (Ramadan, et al, 2014).

Almost all regions in Indonesia have coastal areas, and if this is well managed it will certainly provide benefits for the community. One area in Gorontalo that can be developed for coastal tourism area is Bone Bolango Regency because it has a long beach area. Bintalahe is one of the coastal villages in Bone Bolango District.

The utilization and management of coastal areas conducted by people in Bintalahe Beach area is not the same as Botutonuo beach area which has been visited by many tourists. Though in terms of location Bintalahe beach directly adjacent to Botutonuo Beach, but tourists still more to visit Botutonuo Beach. Therefore, it is deemed necessary to conduct a study on the suitability of swimming in Bintalahe Beach as the basis for the management of future development.

Research Methodology

The study was conducted from February 2016 to August 2016. This research took place in Bintalahe Village, Kabila Bone Sub-district, Bone Bolango District, Gorontalo Province. Tools and Materials used in this research are GPS, scale board, meter, kite current, secchi disk, rapiah rope, camera, water pass, and stationery

Sources of data in this study consists of two types of data, namely primary data and secondary data. Primary data was obtained through survey method where the researcher went directly to the field to observe and collect information and conduct measurement in coastal area of Bintalahe. Secondary data collected derived from literature studies, books, reports of previous research, books related to this research, and other supporting data. The data collected includes natural resources and the general state of the Bintalahe coastal area.

Regional suitability analysis is associated with activities around the beach such as sunbathing, sand play, sporting tourism, swimming and other activities. The analysis is done by considering eleven parameters which have 3 (three) assessments classification. These parameters are tidal, water depth, water base material, current velocity, wave height, water brightness, coastal slope, coastal type, beach width, harmful biota and freshwater availability (Rahmawati, 2009).

The class of suitability is divided into 3 classes of conformity according to Yulianda (2007) ie Category Appropriate (S) (77.78% -100%), Conditional (SB) (55.56% - <77.78%) and Not Match (TS) (<55.56).

The formula used for the suitability of swimming tourism is (Yulianda, 2007 in Ermawan, 2008).

Result and Discussion

Based on the results of research that the water level in Bintalahe waters has the type of tidal Semi Diurnal is a situation where in one day happened 2 times the pairs and 2 times receded. However, this data can not be used as the basis for determining the type of tidal because the data collection is only done for 24 hours.

The calculation result of Temporary Central Value (DTS) for Bintalahe waters is 1.43 meters and based on the tidal parameter matrix in the category as per conditional (SB). This is in accordance with the statement Purbani (1997) in Pasiyolanan (2014), that the limitation of coastal tourism development for swimming that has a tidal range that is not too large that is between 1-3 meters.

Water depth of Binthalahe Village at station I is 1.63 m, station II is 1.72 m, station III is 1.88 m, station IV is 1.84 and station III is 1.83 m. Based on the matrix, then for the parameters of the depth of entry in the appropriate category. This is in accordance with the opinion of Yulianda (2003) in Wuni (2014) that a coastal tourist area can be said appropriate if it has a depth between 0-3 meters.

Based on the matrix, the stations I and IV fall into the category according to conditional (SB) and other stations ie station II, III, V into inappropriate category (TS) for swimming beach tourism. In Rahmawati (2009) stated that the area around the beach with sand substrate is a very suitable location for coastal tourism.

Based on the matrix, the current velocity parameters for all appropriate ink supply stations (S).Widiatmaka (2007) states that the current velocity is very suitable for coastal tourism activities that is 0-0.17 m / s classified as weak currents.

The highest wave height at Bintalahe beach reaches 0.07 meters. Based on the matrix of conformity of the study sites entered in the appropriate category (S) for the wave height parameter as a swimming beach resort destination.

Effendi (2002) in Armos (2013) states that factors affecting brightness include weather conditions, measurement time, turbidity and suspended solids and researchers' accuracy at the time of measurement.Based on the matrix, the study sites fall into the appropriate category (S) for the water level brightness parameter.

Based on the matrix of travel suitability for coastal slope parameters, station I and station III fall into the category as per conditional (SB) and station II and station IV fall into the appropriate category (S).

Based on the matrix, then station I entered into the category according to conditional (SB) and station II, III, IV, and V entered in the category of inappropriate (TS).

According Rahmawati (2009), the wider the beach the better the tourists to do activities, otherwise if the smaller width of the beach will then narrow the activities of visitors. Based on the matrix of the suitability of the tour for the parameter of the beach width all stations enter the category as per conditional (SB).

Bintalahe village has two types of harmful biota: sea urchins and sea snakes. The less dangerous biota found in a tourist site, the location of the tour will be better, but if found many types of harmful biota then the beach is not suitable for swimming tourism. According to Yulianda (2007) that harmful biota that can disturb the convenience of tourists are sea urchins, stingrays, lepu, sharks. Based on the travel suit matrix, all stations enter in inappropriate categories (TS) for dangerous biota parameters.

Based on the observation result there are some parameters that are not suitable as observation of development of swimming tourism area such as substrate, wave height, and dangerous biota. At all stations in the location of the study found harmful biota of pigs which must be considered for the safety of tourists who do activities in this region. All stations generally have the same characteristics.

Conclusion

Based on the research result, it can be concluded that Bintalahe Beach has a suitability index that ranges from 66.5 - 75.84% with the category according to conditional for the development of swimming tour. Based on the results of the research it is necessary to further research on the suitability of diving tourism. Further in-depth research such as an analysis of aquatic biota and oceanographic analyzes should be emphasized to the sea condition at certain times and can identify the types of marine biota in the sea in order to obtain more accurate and detailed data in Development of tourist area swimming at Bintalahe beach.

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