

Analysis of South Coast Marine Tourism Development in Jember Regency Using the Recreation Opportunity Spectrum Method

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Abstract

Marine tourism is a natural tourism activity that takes place in coastal areas which includes beach, seascape, and sea underwater. The development of marine tourism destinations in the southern coastal area of Jember Regency is urgently needed especially to the areas with promising prospects like Papuma and Watu Ulo beaches which are known to be located in the Blue Diamond area. Through the Recreation Opportunity Spectrum (ROS) method, it is expected that a framework can be designed to identify the opportunity of an area to become a tourist attraction. In the ROS analysis process, there are four criteria that become parameters, which are: experience, environment, location, and example of activities. The purpose of this research is to identify the recreational zones in planning that does not conflict with the principles of marine area management. This research uses a qualitative descriptive method approach. The result of this research is that Papuma Beach falls into the category of class II Semi-Primitive Motorized and Watu Ulo Beach in the category of class III Roaded Natural.

Keywords: Marine Tourism Destination, Recreation Opportunity Spectrum (ROS), Tourism Development.

Introduction

Tourism is a prospective commodity that is seen to have crucial role in the national development. Therefore, Indonesia pays special focus on the development of tourism industry due to the fact that the country is rich with tourism potentials ranging from natural to cultural ones. Suwena and Widyatmaja (2017) state that such great potentials enable Indonesia to strive regional development through tourism sector. For sure, the tourism development is expected to bring positive impacts especially regarding economic growth.

As stated above, tourism sector is one of the important aspects of regional development. This is due to the fact that this stimulates economic growth by the initiation and development of tourism-related business especially the small to medium-scale entrepreneurs which, according to Wattimena (2017), will resolve various economic problems including creating job opportunities, improving incomes, and improving local government revenue. Therefore, it always important for local governments in Indonesia to understand very well what tourism potential they have in their areas.

As an archipelagic country, Indonesia is well-known with its marine potentials including the ones related to marine tourism. Marine tourism is a type that covers coastal areas both seashore and offshore. Effendy (2009) states that the development of marine tourism is very pivotal and promising. This is because the coastal areas can be developed as a tourism destination both naturally and artificially. Marine tourism is well-known as

the destination where tourists do a lot of activities such as kayaking, swimming, snorkeling, diving, fishing, and many more. Even when the physical activities cannot be done, tourists can, still, enjoy the natural panorama of the beaches which is recreational for them (Rif'an, 2018). Besides, coastal areas are also known well as the areas for developing artificial tourism destinations both for recreational purposes and sporting events. It is obvious, then, that marine tourism should be one of the priorities of tourism development especially in the regions with coastal tourism potentials.

In its simplest definition, coastal areas are the areas that boarder to a coastline, the line where land and water surface meet (Yulianda, 2019). The water area is the area in front of the coastline, perpendicular to the coastline. Besides the marine biodiversity, there are proofs that coastline areas are attractive to people who need to do recreational activities. For sure, this does not apply to all coastline areas because only the ones with certain characteristics are considered attractive. The beaches with beautiful sand, unique rock formation, rich marine biodiversity, including coral reefs, and coastline with wide sandy areas are usually the ones appropriate for tourism destination development. This is the reason why Jember needs to take an action in developing its coastal areas as potential tourism destinations due to the fact that Jember has various beaches with such potential values. As suggested by Rimadhini (2019), Jember should focus on the development of tourism industry to increase its local government revenue.

According to Badan Perencanaan Pembangunan Daerah (Bappeda), the Regional Planning and Development Agency, of East Java, Jember is one of the districts in East Java which has promising potential for marine tourism development, because it has a coastline of approximately 170 km. The southern part of Jember Regency is a coastal and lowland area, and has around 82 small islands (Badan Perencanaan Pembangunan Daerah (Bappeda) Jawa Timur, 2018). Out of 31 sub-districts, there are 6 which are located in coastal areas and 2 of them, Wuluhan and Ambulu sub-districts, have been known to have marine tourism potentials including Papuma and Watu Ulo beaches. Interestingly, the destinations were quite popular with significant number of visitors in 2014 to 2018 (Tantri & Idajati, 2020), even though the Covid-19 pandemic had changed the trend in around 2020 to 2022.

In general, there are three main activities carried out in the coastal areas in Jember including fishing in the Indian Ocean, sand mining, and tourism (Niki, 2018). This shows that not all the coastal areas are utilized as tourism destinations because other activities are considered more profitable. Fortunately, there are Papuma and Watu Ulo beaches which have been developed to be major coastal tourism destinations in Jember even though various efforts to promote the destinations through branding and additional facilities are still very much needed (Rimadhini, 2019). Furthermore, it is also important to anticipate any negative impacts as the consequence of the increasing popularity of the destinations.

It is also crucial to anticipate the conflict of interest between the parties who wish to benefit from the development of tourism destinations. For instance, the development of Papuma and Watu Ulo beaches have made the nearby areas to be more crowded with the new tourism-related business units such as restaurants and parking businesses. This, surely, brings consequences to the nearby areas both socially and culturally (Tri & Puspaningrum, 2020). Therefore, due to the potential consequences, a reference regarding how to plan and develop a tourism destination is needed to make sure that the development will be aligned with the principles of marine tourism development and management.

Recreation Opportunity Spectrum (ROS) is a framework to identify important aspects of development of a tourism destination (Wahyuni, 2019). It has been utilized for decades as one of the planning frameworks of tourism destinations such as used by USDA Forest Service and the USDI Bureau of Land Management (Finley, 1990). Furthermore, the ROS is also reported to be correlated with how tourists make their decisions to visit a destination (Trigantiarsyah & Mulyadi, 2012). Three of important aspects that can be identified through the utilization of ROS are experience, environment, and location.

Based on the explanation above, this study aimed at identifying regional zoning of marine tourism destinations in forms of spectrum classes based on Recreation Opportunity Spectrum (ROS) approach. The data is expected to be the reference of the development of marine tourism in Jember according to ROS parameters as well as to ensure that the marine tourism development activities will not infringe the principles of marine tourism development and management (Wahyuni, 2019).

Research Method

This research was conducted in the southern coastal area in Wuluhan and Ambulu Districts, Jember Regency, especially in the Papuma Beach and Watu Ulo Beach areas. In determining the location of this research, it is based on the suitability of criteria related to the research objectives.

In this research, the authors needed an approach to be able to interpret phenomena that are considered interesting. Therefore, this research applied the Recreation Opportunity Spectrum approach to classify and manage opportunities for recreational or tourist activities based on the criteria: experience, environment, location, and examples of activities.

The results of these criteria were presented in a class spectrum. Experience criteria are related to: (1) social interaction with others (social interactions that occur) which include communities, cultural resources, and ancillary activities. (2) services and support which includes facilities and accommodation. (3) crowded which includes ancillary activities, cultural resources, in the water activities, on the water activities, and coral reef resources. Furthermore, the environmental criteria are related to: (1) human influences and structures (influence of human activities and existing development) which include, cultural resources, ancillary activities, facilities, accommodation, in the water activities, and on the water activities, and (2) Quality natural environment (the quality of the existing natural environment) includes littoral resources, nearshore resources, coral reef resources. Next, the location criteria are related to: (1) distance and (2) intertidal area.

The sampling techniques used in the study were snowball and accidental sampling. The snowball sampling technique aimed to identify, select, and take samples in an interconnected network. Next, accidental sampling was used based on spontaneous factors that accidentally were met by the authors according to the expected characteristics. The data collection was through primary data and secondary data. The primary data was the data obtained directly on site through observation. Meanwhile, secondary data was data obtained through supporting documents such as data from BPS, the Department of Tourism and Culture, as well as data from local sub-district offices.

Results and Discussion

The results of the observations at Papuma and Watu Ulo beaches by utilizing the Recreation Opportunity Spectrum (ROS) are presented as follows.

Experience Criteria

In identifying the experience there were three aspects observed including the social interaction with others, service and support, and crowded. As explained by Wahyuni (2019), social interaction with others, with the maximum score of 15, referred to the social interaction occurred in the destination, while the service and support, 10 points maximum, were related to any facilities and accommodations available in the location. Further, the crowded, with the maximum score of 25, aspect was related to any activities that can be done in groups. The identification of the experience criteria can be seen in Table 1 below.

Table 1. Experience Criteria

Destination	Experience			Total
	Social interaction with others (15)	Service and support (10)	Crowded (25)	
Papuma Beach	15	10	10	35
Watu Ulo Beach	15	5	10	30

As seen in the table above, both destinations were relatively equal regarding the experience criteria especially for the social interaction with others and the crowded. The only different aspect which was slightly different was the service and support, in which Papuma beach was slightly better than Watu Ulo beach.

Papuma Beach in Wuluhan District has a unique beach with white sand, with a landscape surrounded by hills. Apart from that, there is also a group of small islands to the south. There is the development of cultural events on certain major holidays involving the local community. The total assessment of the experience criteria is 35; with the existence of coastal communities, cultural resources, ancillary activities, facilities, accommodation, and the absence of in the water activities, on the water activities, coral reef resources.

Watu Ulo Beach in Ambulu District has a unique beach where there are clusters of rocks resembling snake tails. Several cultural festivals are also often held on this beach, one of which is the sea picking festival which involves the local community. The total assessment of the experience criteria is 30; with the existence of coastal communities, cultural resources, ancillary activities, facilities, and the absence of accommodation, in the water activities, on the water activities, coral reef resources.

Environment Criteria

Wahyuni (2019) explains that the environment criteria falls into two aspects including the human influences and structures and the quality natural environment. In this case, the observation focused on identifying the influences of human activities in the destination and the quality of the destination had naturally. The results of the identification can be seen in Table 2.

Table 2. Environment Criteria

Destination	Environment		Total
	Human Influences and Structures (25)	Quality Natural Environment (15)	
Papuma Beach	20	5	25
Watu Ulo Beach	15	5	20

As seen in the table above, Papuma beach was identified to be slightly better. It offers beautiful views, with white sand and green water. Existing facilities and infrastructure are managed by PT. Perhutani so that visitor facilities are available and do not damage the natural and cultural environment. The total assessment of the environmental criteria is 25; with the presence of cultural resources, ancillary activities, facilities, nearshore resources, and the absence of in the water activities, on the water activities, coral reef resources.

Watu Ulo Beach offers views of the vast expanse of the Indian Ocean, with fairly calm waves. The existing facilities and infrastructure are managed by the Government of Jember Regency so that visitor facilities are adequate and damage the natural and cultural environment. The total assessment of the environmental criteria is 20; with the presence of cultural resources, ancillary activities, facilities, nearshore resources, and the absence of accommodation, in the water activities, on the water activities, coral reef resources.

Location Criteria

The location criteria, according to Wahyuni (2019), covers two aspects including distance from the mainland, which was interpreted as the distance from the center of Jember Regency, and the intertidal area. An important consideration regarding the location criteria to inform is that both Papuma and Watu Ulo beaches are located in the same area. Therefore, as seen in Table 3, the scores for both are the same.

Table 3. Location criteria

Destination	Location		Total
	Distance from mainland (5)	Intertidal Area (5)	
Papuma Beach	5	0	5
Watu Ulo Beach	5	0	5

As explained, Papuma and Watu Ulo beaches are located in the same area. They are located on the south coast of Jember district, which is 40 km from the city center. The road to the location is in quite good condition. The difference is that Papuma has a slightly challenging part of the road in which after passing the ticket post the road is quite steep and uphill, so large buses cannot enter. Therefore, for the distance from mainland aspect both destinations got the same scores of 5. In addition, Papuma and Watu Ulo beaches do not have intertidal area, specifically the one that can be developed as tourist attraction. Therefore, both got the score of 0.

After identifying each of the three criteria regarding the ROS approach, the total scores of the criteria were summed up. From the total score of each, the destinations were classified into the Class I, II, III, IV, or V (Wahyuni, 2019).

Table 4. Classification of the Destination

Class	Total Score
I	81 – 100
II	61 - 80
III	41 – 60
IV	21 – 40
V	0 – 20

From the results of the classification process above, Papuma Beach ws included in class II, which means it is included in the Semi-Primitive Motorized area. Tourist activities can be carried out, but because the use of motorized vehicles is permitted, it will reduce the quality of tranquility for tourists

Then, Watu Ulo Beach is included in class III, which means it is in the Roaded Natural area. As easier access to carry out activities. This will increase some experiences of social interaction, but reduce experiences of loneliness, risk taking, and independence.

Based on the observation, the activities that could be done in Papuma beach belong to principal attraction category with the hills contour and vast natural scenery. Meanwhile, Watu Ulo beach can be categorized into depth and water because the destination, with its huge waves, is potential for surfing.

Conclusion

Papuma Beach and Watu Ulo Beach are beaches that have different characteristics and uniqueness. At Papuma Beach, visitors can enjoy a calm atmosphere away from the busy center (city center), therefore visitors can enjoy moments of solitude and independence which allows visitors to interact more closely with nature. There is little human influence on this beach, so the quality of the destination is still well maintained.

Watu Ulo Beach is a beach that has black sand stretching from west to east. If you look to the east, you will be presented with a panoramic view of a wide stretch of coastline that can see rows of hills in the Payangan area and Meru Betiri National Park. At Watu Ulo Beach, tourists get easier access to activities. This will increase some experiences of social interaction, but reduce experiences of loneliness, risk taking, and independence.

Based on the results of observations, the examples of activities that can be done at Papuma Beach are included in the principal attraction category, namely adrenaline by taking advantage of the contours of the existing hills, and also scenery, namely expansive views. Meanwhile, an example of activities that can be done at Watu Ulo Beach is included in the depth and water category, namely surfing.

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