

BLUE ECONOMY IMPLEMENTATION ON THE MARITIME TOURISM IN DULLAH ISLAND

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ABSTRACT

Dullah Island is an island with a very strategic location due to its role as the main flow of international transportation highway, which connects the north (Philippines) to the south (Indian Ocean) as well as the potential of its ocean that is so fascinating. Regardless, the potential possessed by Dullah Island has not been utilized by the community due to the limited and existing facilities, and many obstacles experienced by the community in Dullah Island, such as not having the right alternative livelihood to be developed, less supportive fishing equipment, the absence of industries that accommodate the fishing industries that makes it low for sale, and low public awareness about the importance of tourism development. With the concept of maritime tourism in the island, it is expected that Dullah can be developed and a proportional economic distribution can also be felt by the island community in Dullah. We conducted a weighted analysis study for maritime tourism activities on Dullah Island so that the activities developed could be in accordance with the environment of Dullah Island. The comparison of maritime tourism activity is done by the method of conformity analysis, where from the results of activities should be in accordance with the existing land on the island Dullah, that is marine fishing tourism and marine diving tourism.

Keywords: Blue Economy, Maritime Tourism, Dullah Island.

I. INTRODUCTION

Maluku Islands is one of the provinces in Indonesia which has the largest clusters of the island in Indonesia with more than 4,000 large island islands and small island. One of them is Dullah Island with a very strategic location due to its role as the main route of international sea transportation highway, which connects the north (Philippines) to the south (Indian Ocean) (Adisasimita, 2008). Dullah Island is one of the group of small islands located within the administrative area of Tual in Maluku. The area of this island is ± 132.32 km² with the total population in 2015 was 55.654 inhabitants (BPS, 2016) With these conditions Dullah Island belongs to the small island category. This island has significant coastal and marine resource potentials such as capture fisheries and aquaculture, coral reef ecosystem, mangrove ecosystem and good seagrass ecosystem with high conformities for marine and fisheries sector development and tourism sector.

But in the process of economic development in Dullah Island, it is experiencing many obstacles such as how Dullah Island residents have not had the right alternative livelihood to be developed, less supportive fisherman equipment, low benchmark selling price, the absence of industries that accommodate the fishing industries that makes it low for sale, and low public awareness about the importance of tourism development. Some of the experts and researchers (Kay & Alder, 2005) said that in the context of developing a region, determining the management model is the most important part because it includes planning, development, supervision and evaluation. (Nikijuluw, n.d.) said that the involvement of coastal communities is needed in the development process since the planning of the program, its implementation, its evaluation, and its relevance. Thus, the determination of coastal area management model and small islands should be based on land conformity and environmental carrying capacity in order to be able to examine how much the ability of an area to plan the utilization of marine and fishery resources and tourism.

Based on these conditions, one of the model on coastal area management and small islands that can be developed on Dullah Island is a maritime tourism. According to maritime tourism, it can be defined as the development of community and regional economic activities based on the utilization of marine, fishery and tourism resources in an integrated region (Dermawan & Miftahul, 2012). According to (Haris, 2012), maritime tourism is the integration of potential of capture fisheries, aquaculture fisheries and maritime tourism in a conservation-based integrated management model. Basically the concept of maritime tourism brings the concept of Blue Economy which combines the economic development and environmental conservation, working conveniently with what nature has provided with efficiency while not reducing but enriching the nature instead.

What we know is that blue economy is an economic development paradigm based on ecosystem principles (KKP, 2012). In the process of developing the blue economic concept, the division of blue economic region is a group of small islands with the model of economic management of the islands, bay and coastal areas with a model of bay, coastal and integrated land management, and conservation areas with limited economic development model (Sunoto, 2013).

Therefore, it is expected that this can bridge the interests of various parties based on the welfare of the community and the sustainability of natural resources. This is one of the solutions that can be offered and studied in depth in order to avoid the development of an area that is irresponsible and lead to environmental degradation.

II. EXPERIMENTAL SET UP

The analysis used is literature review method where comparative study of the conformities between activities initiated in the development of Maritime Tourism in Dullah Island.

III. RESULTS AND DISCUSSION

In the process of building a nation, it cannot be separated from the constraints that will be faced. The obstacles are experienced by the community in Pulau Dullah,

such as how Dullah Island Residents have not had the right alternative livelihood to be developed, less supportive fishing equipment, low benchmark selling price, the absence of industries that accommodate the fishing industries that makes it low for sale, and low public awareness about the importance of tourism development. With the constraints faced by the community in the Dullah Island, the government need strategies in the process of economic development in the Dullah Island with the concept of maritime tourism.

According to (Naskay, 2011) the strategy needed in the process of developing the small island is a development strategy that can provide answers from various aspects of the community problem and give the right priority in its settlement effort, while according to (Bappenas, n.d.) The management of small islands requires a comprehensive, integral and appropriate policy, in accordance with its existence as a region that has problems, distinctive potentials and characteristics. The policy must be supported by a full understanding of the concepts of synergistic policies, programs, strategies, effective coordination and integrated information systems from various parties / managers of small island management programs. (Andrianto, 2004) added that the small island management strategy should be able to link all activities and stakeholders on small islands using a coordinated approach. Thus, we can see aspects such as selecting activities that can answer the problems in Dullah Island development, utilization of spatial strategies in accordance with the carrying capacity of the environment on Dullah Island, as well as a coordinated approach of stakeholder.

In determining the activities that meet the needs of Dullah Island, we must first look at the general criteria for determining the activities of small islanders. As the research conducted by (Bengen, 2002) stated that there are 3 criteria that should be concerned in the development of small islands such as capture fisheries activities, where we should take notes on how the location of fishing should be far from the zone of fish cultivation, then the safe distance of the other co-regions in which the tide type and the current velocity shall also be taken into account, the existence of the front, that is, the confluence of two different periods of water must also be considered. Geographical conditions which correspond to the designation should also be one of the constituents in fishing activities. The development of facilities and infrastructures that support coastal fisheries activities is carried out without changing the coastal conditions, so that erosion and sedimentation can be avoided.

For marine aquaculture activities, criteria that should be our concern is how this activity must be protected from the waves and wind, the provision of good water quality, and its security. The last is the tourism activity criteria that must be obeyed is on the distance between tourist attractions with fisheries areas and protected areas so that the negative impact of tourism activities does not affect the fishery area. The construction of tourism sectors and infrastructure should not change coastal conditions and carrying capacity in small islands.

According to (Haris, 2012) in the analysis of the potential on Dullah Island maritime tourism activities that can be developed, there are (a) maritime tourism on fisheries; (b) maritime tourism in the collection of shells (molluscs); (c) maritime tourism on diving; and (d) maritime tourism on mangrove. All of these maritime tourism categories are utilizing the associated marine and coastal ecosystems and

resources as objects. We can see it from the Conformity Analysis conducted for the maritime tourism, as shown in table 1 :

Tabel 1 Results for Conformity Analysis for Maritime Tourism on Fisheries (Haris, 2012)

No	Conformity Level	Areas (ha)	Areas (%)	Activities
1.	Appropriate (S)	169,22	58,52	Maritime Tourism on Fisheries
2.	Conditional (SB)	119,95	41,48	
3.	Inappropriate (TS)	-	-	
Total		289,17	100,00	

Based on the result of land conformity analysis, the land area for maritime tourism on collecting molluscs can be seen in Table 2:

Tabel 2 Results for Land Conformity Analysis for Maritime Tourism on Collecting Molluscs (Haris, 2012)

No	Conformity Level	Areas (ha)	Areas (%)
1.	Appropriate (S)	107,23	37,08
2.	Conditional (SB)	69,15	23,92
3.	Inappropriate (TS)	112,79	39,00
Total		289,17	100,00

Based on the result of land conformity analysis, the land area for maritime tourism on diving can be seen in Table 3:

Tabel 3 Results for Land Conformity Analysis for Maritime Tourism on Diving (Haris, 2012)

No	Conformity Level	Areas (ha)	Areas (%)
1.	Appropriate (S)	24,12	8,34

2.	Conditional (SB)	157,82	54,58
3.	Inappropriate (TS)	107,24	37,08
Total		289,17	100,00

Based on the result of land conformity analysis, the land area for maritime tourism on mangrove can be seen in Table 4:

Tabel 4 Results for Land Conformity Analysis for Maritime Tourism on Mangrove (**Haris, 2012**)

No	Conformity Level	Areas (ha)	Areas (%)
1.	Appropriate (S)	-	-
2.	Conditional (SB)	29,29	72,39
3.	Inappropriate (TS)	11,17	27,61
Total		289,17	100,00

Meanwhile, according to (Boer & Adrianto, 2011) activities that can be developed on Dullah Island is to utilize the potential and resources of reef fish packed in the form of maritime tourism on fish traps aggregation. Based on the results of land conformity analysis, we can obtained the extent of land for marine ecotourism of fish traps aggregation, as shown in Table 5:

Tabel 5 Results for Land Conformity Analysis for Maritime ecotourism of fish traps aggregation (**Boer & Adrianto, 2011**)

No	Conformity Level	Areas (ha)	Areas (%)
1.	Appropriate (S)	44,97	15,55
2.	Conditional (SB)	136,97	47,37
3.	Inappropriate (TS)	107,24	37,08

Total	289,17	100,00
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Data on field shows that for aquatic environment with S (appropriate) conformity level are generally included into biophysical and oceanographic parameters such as current velocity; wave height; water depth from the bottom of the net; water temperature; salinity; dissolved oxygen; water pH; nitrate; phosphate; as well as the distance from the shipping channels and other areas that meets the required range, but there are other limiting factors that cause the water environment conditions to be included in the level of conditional (SB) and inappropriate (TS) i.e. the depth of the waters.

From the results comparison of the activities examined through land conformity analysis conducted (Haris, 2012), there are 2 suitability on (S) level confirmity, 1 mismatch on (TS) level confirmity and 1 Conditional (SB) level confirmity where the activities corresponds to the situation in Dullah Island as a maritime tourism and submarine tourism. While the results of analysis (Boer & Adrianto, 2011) on the activities of maritime tourism on fish trap aggregation obtained a value in accordance conditional (SB) level confirmity.

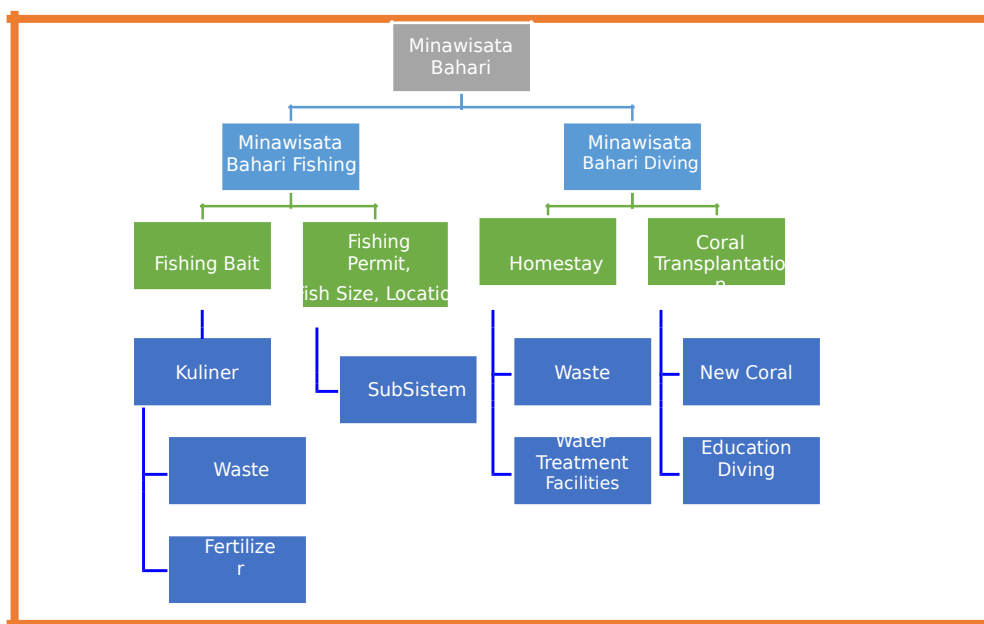


Figure 1 mapping of the activity of maritime fishing tourism and maritime diving tourism

Thus, in the process of determining which activities will be the first priority in the development of maritime tourism on Dullah Island, a more in-depth assessment should be conducted. For conformity level for activities such as fisheries and diving, it is very clear that this will be one of the activities that can be accepted both from the community and the environment on Dullah Island, as for the conditional conformity level such as mangrove and fish trap aggregation, a review of the conditions should be done so that it must be suitable in order to avoid negative impacts on both society and environment.

Figure 1. shows the mapping of the activity of maritime fishing tourism and maritime diving tourism where the activity has been calculated on the land suitability analysis. And we can see that by applying the maritime fishing tourism and maritime diving tourism we have to prepare raw materials, facilities and infrastructure in the development maritime fishing tourism and maritime diving tourism. In the description above we can also produce local products derived from the island dullah as souvenir tourists. From these maritime tourism of activities, it can be used as an alternative or even main livelihood for the people of dullah island, the creation of new workers, and create food security in dullah island. So that the blue economy in the concept of the existing marine minawisata dullah island can be implemented in accordance with the concept.

IV. CONCLUSION

In the development of the Dullah Island as maritime tourism objects, a study is conducted in the selection of activities suitable with the conditions that exist on Dullah Island. By conducting conformity study, we obtained 4 types of activities, such as maritime tourism on fisheries, maritime tourism on diving, maritime tourism on fish trap aggregation, and maritime tourism on mangrove. With the assessment of activities that is suitable with land and potential owned by Dullah Island, it can be develop into the island of maritime tourism. Automatically, the economic growth will be high due to the tourists who come to enjoy the maritime tourism provided, thus the potential of fishes that is underutilized and used to be in a low selling cost is now a major sales sector for the community due to maritime tourism. This can be concluded with the development of maritime tourism on Dullah Island in order to solve the constraints experienced by Dullah Island. Blue Economy concept is also one of the factors in the development of maritime tourism in Dullah Island as the development of maritime tourism activities will automatically open new job opportunities from Dulah Island community and will create unlimited jobs other than fisherman. Therefore, it will lead to the proportional economic distribution and equality that can also be felt by Eastern part of Indonesia, especially in Dullah Island.

An in-depth study needs to be done in terms of social approach, economic analysis, and overlapping analysis. Thus, the impact of maritime tourism development in Dullah Island can be felt by society, and there is no overlap between activities of maritime tourism. It needs support and participation of both government and foreign investors in the process of building maritime tourism in dullah island, and the policies of the government in the development process so that development can run optimally.

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