

Analysis of the Island Sustainable Tourism base on Tourist' Perception -A Case Study of Mandeh Island, West Sumatera

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ABSTRACT

Archipelago tourism has become a widely popular marine tourism destination for visitors and a tourism trend. Sustainable island tourism, which emphasizes environmental, economic, and socio-cultural impacts, is the basis of tourism growth. This research aim to know about tourists' perceptions of Mandeh archipelago's tourist destinations based on sustainable tourism. Questionnaires and literature research were the approaches used to collect research results. The data was analyzed using descriptive frequency statistics presented in the form of percentages. The results showed that the characteristics of tourists, seen from gender, dominate female tourists by 67 percent, with a very active age between 17-25 years of age, 78 percent. The majority of those who visit Mandeh Island more than once are 69%, 72% with friends, and a group. Overall, the Mandeh Islands' expectations of sustainable tourism growth are strong, but some still have issues related to the quality of the Mandeh tourism region's environment. From this study, it can be seen that environmental measures of sustainable tourism need to be strengthened again. As for having a positive effect on sustainable tourism growth in the tourist destinations of the Mandeh archipelago, the collaboration between tourism stakeholders needs to be increased again.

KEY WORDS: *Tourism, Sustainability, Islands, Mandeh Island*

INTRODUCTION

Tourism is a service industry sector that can improve people's welfare (Amin & Ibrahim, 2015; Purwanto, 2019). Tourism is also a new industry that can accelerate economic growth, provide employment, increase income, and stimulate other productive sectors (Pendit, 2008). Based on data from the Central Statistics Agency related to tourism, the amount of foreign exchange income for the State has increased in the last four years, namely in 2015 amounting to the US \$ 10,761 billion, in 2016

amounting to 11,206 US \$, in 2017 amounting to 13,139 US \$ and in 2018 amounting to 16,426 US \$ (BPS, 2018). The increase in foreign exchange will positively impact the economy for both the government, local communities, and the private sector. Tourism has also become a community need apart from the need for clothing and food. Many of them even choose to travel to improve their quality of life (Zhang et al., 2020). Thus tourism becomes an industrial sector that is important to pay attention to in its development.

Tourism development must be following sustainable development, especially in the development of island tourism. Archipelago tourism is a part of marine tourism that is vulnerable to damage, so it is essential to apply sustainable tourism (Rijal et al., 2020). Sustainable tourism is a tourism development that pays attention to the natural, social, economic environment and ensures the exploitation of natural and cultural resources for future generations (Adrianatisca et al., 2016). Sustainable development is also a part of various life fields and development decisions (Kapera, 2018). In principle, tourism development must meet tourist satisfaction without sacrificing natural resources (Blancas et al., 2018).

Sustainable tourism can be used as a foundation in tourism development, mostly island tourism destinations. Indonesia is a country that has + 17,504 islands spread from Sabang to Merauke (BPS, 2016). The tourism industry, especially archipelago tourism, has snowballed and has become the most crucial part of the Indonesian tourism industry. The Mandeh Islands have become an important destination to develop in West Sumatera because tourist visits are high and have become a favorite tourist destination for tourists. The tourist attractions that are owned are mountains and maritime, and activities that



can be done are snorkeling, diving, around the island, and trekking. In the socio-culture, the local community is also exciting, such as hospitality and local people's concern for tourism development.

The problems seen in Mandeh Island tourist destinations are related to the natural, economic, and social environment. The natural environment is an aspect that is greatly affected by tourism. The amount of plastic waste from tourists has not been managed in an integrated manner, thus polluting every tourist location. Irresponsible tourist behavior is also a problem that continues to occur in tourist destinations. Although the Mandeh Islands tourist destination has been nominated in the ISTA (Indonesia Sustainable Award) event in 2019, its quality still needs to be improved from all these aspects. If the destination's quality increases, it will undoubtedly be following sustainable tourism because, in principle, sustainable tourism activities cover the development of environmental, economic, social, and cultural aspects (Pan et al., 2018). Based on these problems, it is necessary to analyze tourists' perceptions of sustainable tourism development measured by the natural, economic, and socio-cultural environment.

METHOD

This research was primary research that tested the concept and findings of making a more in-depth study and conclusions about the observed phenomenon (Suryani & Hendryadi, 2015). It is also included in quantitative descriptive research. The data was conducted at the tourist destinations of the Mandeh islands, Nagari Sungai Nyalo Mudiak Aia, XI Tarusan District, Pesisir Selatan Regency, West Sumatra Province. Techniques in data collection were carried out by distributing questionnaires and literature study. The sample used as research is 100 samples taken using a purposive sampling technique. The data that has been collected is tested for the validity and reliability of the instrument. If the data is valid and reliable then analyzed the results of research. Then the data were analyzed using quantitative descriptive analysis presented in the form of frequencies and percentages. Text in the columns must be full justified.

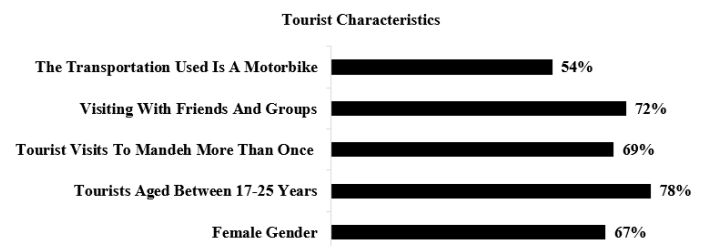
RESULT

Tourist Characteristics

Identification of tourist characteristics needs to be done so that area managers can determine the potential market that becomes the target market. The characteristics of

tourists visiting Mandeh Island tourist destinations have been identified to determine the target market to be aimed quickly. The characteristics of tourists visiting Mandeh Island tourist destinations with the female gender are 67%. Female tourists dominate in tourist visits; in this case, the manager needs to prioritize tourism facilities that support tourists. For tourists aged between 17-25 years, the largest is 78%. This age is classified as very productive and is included in the millennial generation. Then the tourist visits to Mandeh more than once were 69%. Visiting with friends and groups is 72%, and the transportation used is a motorbike with 54%.

Figure 1. Tourist Characteristics



Source: Processed from Research Data, 2020

Tourist Perceptions of the Environment

Based on responses from tourists related to sustainable tourism, environmental indicators are classified as good. In table 1, there are six responses to tourists. Environmentally friendly local transportation is very good (32%) and good (34%). The destination environment's cleanliness is very good (33%) and good (44%). Waste management is very good (27%) and good (45%). Water quality is very good (45%) and good (32%). The protection of marine ecosystems is very good (42%) and good (37%). According to local wisdom, the last, the building architecture, is very good (27%) and good (51%). Although most tourists already think that it is good concerning the environment, some tourists give different responses, according to them not good and very bad. It is based on tourists' knowledge. For tourists who have a type psychometric, they understand more about the development of sustainable tourist destinations because their goal of visiting tourist destinations is not just having fun but also seeking experience and caring about the natural environment.

Table 1. Tourist Perception of Environmental Indicators

Variables studied	Very Good (%)	Good (%)	Fair (%)	Not Good (%)	Very Bad (%)
Environmentally friendly local transportation	32	34	27	5	2
Cleanliness of the destination environment	33	44	14	8	1
Waste management	27	45	21	7	-
Water Quality	45	32	15	7	1
Protection of marine ecosystems	42	37	18	2	1
Building architecture according to local wisdom	27	51	15	7	-

Source: Processed from Research Data, 2020

Tourist Perceptions on Economy

The next indicator is being part of the development of sustainable tourism is economical. This study describes how tourists respond to the economic indicators that have been identified. The tourists' response to economic indicators is generally good. Table 2 shows that the welfare of the community is 52% good and 32% very good, the involvement of local communities in good management is 47% and 30% very good, the conditions of traders around the destination are good as much as 50% and very good 21%, the availability of local specialties is good 41% and 28% sufficient, the availability of local souvenirs both 40% and 32% sufficient, the prevention of commercialization practices and all forms of exploitation was sufficient for 40% and 34% good.

Table 2. Tourist Perception of Economic Indicators

The Variables Studied Were	Very Good (%)	Good (%)	Fair (%)	Not Good (%)	Very Bad (%)
The welfare of the Community	23	52	24	1	-
Involvement of local communities in the management	30	47	19	4	-
Conditions of traders around the destination	21	50	25	4	-
Availability of local specialties	20	41	28	9	2
Availability of local souvenirs	14	40	32	11	3
Prevention of commercialization practices and all forms of exploitation	19	34	40	5	2

Source: Processed from Research Data, 2020

Tourist Perceptions on Socio-Culture

Based on the results of the study, it shows that the tourist response to sustainable tourism on the socio-cultural indicators as a whole is classified as good. Table 3 shows that the characteristics of the local community are good 53% and very good 26%, the interaction of local people with tourists is classified as good as much as 44% and very good 31%, the appreciation of the local community to tourists is good as much as 46% and quite 25%, cultural attraction activities were classified as good as much as 37% and sufficiently 33%, and cultural preservation activities were classified as good 42% and very good 32%.

Table 3. Tourist Perception of Economic Indicators

Variables studied	Very Good (%)	Good (%)	Fair (%)	Not Good (%)	Very Bad (%)
Characteristics of local communities	26	53	18	3	-
Interaction of local people with tourists	31	44	22	3	-
Appreciation of local communities to tourists	22	46	25	7	-
Cultural attraction activities	10	37	33	19	1
Cultural preservation	32	42	17	7	2

Source: Processed from Research Data, 2020

DISCUSSION

Sustainable tourism is a concept of tourism development that emphasizes the natural environment, economic, and socio-cultural. This concept is fundamental to be applied to every tourist destination, especially natural tourist destinations. Natural tourism destinations are vulnerable to damage due to excessive human activity (Renold, 2019). The application of a good tourism concept will have a positive impact on tourism development. In the Mandeh Islands' tourist destinations, it is quite good in its application based on tourist responses. It can be seen from the results of the research that has been done. The natural environment is crucial in developing sustainable tourism. Overall, the response of tourists to the natural environment in Mandeh Island tourist destinations is quite good. However, several variables need to be considered, such as waste management. The response of tourists who are still negative to Mandeh Island tourism's natural environment is that the management is not optimal. There are still many people who ignore waste management, some even littering. It will affect the natural environment's quality. If it is continued, the longer the environmental quality will decrease. Poor cleanliness will affect tourist satisfaction (Hao & Omar, 2014).

In economic indicators, it can be seen that tourist responses are also classified as good. The existence of

tourism has had a positive impact on the economy of local communities. In general, many local people have benefited from tourism. Even people have switched professions from being fishermen to becoming tourism service providers. Thus, it is increasingly proven that tourism can improve local communities' economies, especially by developing sustainable tourism. In this case, the government must ensure that it controls foreign people in business so that foreigners do not develop tourism projects, make large investments and make profits so that local people can sit there and do nothing (Horton, 2017).

If we look at the variables studied, there are still some variables whose responses are still lacking, such as the availability of local souvenirs and the prevention of commercialization practices and all forms of exploitation. The availability of souvenirs is indeed a problem. Local people are still not trained to make souvenirs local. It is also proven by the difficulty of tourists finding people selling souvenirs locally. whereas in tourism development, there are three important concepts: something to see, something to do, and something to buy. Things to buy are everything that tourists can buy, such as food, drinks, and items used as souvenirs. The existence of souvenirs purchased by tourists will give a positive impression and be a matter of pride for tourists because they have visited Mandeh island destinations. Besides that, it can also be an event for the promotion of tourism in the Mandeh islands.

Furthermore, tourists' response to the Mandeh islands tourist destinations is classified as good on the socio-cultural indicators. It has been proven by the hospitality of the local people shown to tourists. Local people are at the forefront of tourism development. Local people as hosts will be influenced by the concept of tourism itself (Budeanu et al., 2016). If a host does not provide good service to tourists as guests, then they will not come back. So, it is important to note that local people must be friendly to give a positive impression. In general, if viewed from the social perspective, there are no problems, but related to culture, it is still lacking. The activities of cultural tourism attractions that can be enjoyed by tourists are still very minimal. It is indeed the lack of awareness of the local community in developing culture. It is known that the people of West Sumatra are famous for their culture, but in Mandeh Islands tourist destinations, it is still difficult to find a local culture that attracts tourists to come. Local culture development needs to be developed to support sustainable tourism development. In sustainable tourism, it is not only the

natural and economic environment that is considered related to society and culture. It is also a special concern so that it needs to be improved again.

CONCLUSION

Tourists' perceptions of sustainable tourism development consist of three environmental, economic, and socio-cultural indicators. Overall, tourists have responded well to the development of sustainable tourism in Mandeh island destinations. Environmental indicators such as environmentally friendly local transportation, destination environmental cleanliness, waste management, water quality, protection of marine ecosystems, and building architecture according to local wisdom are considered good. Furthermore, economic indicators such as the welfare of local communities, local communities' involvement in management, conditions of traders around the destination, availability of local souvenirs, prevention of commercialization practices, and all forms of exploitation are also considered good. However, related to souvenirs and local specialties, it is necessary to develop products with local specialties sold to tourists. Socio-cultural indicators such as the local community's character, community interaction with tourists, local people's appreciation for tourists, cultural attraction activities such as music, dance, and others, and cultural preservation is classified as good. Socio-culture is closely related to the local community so that quality human resources will support the development of sustainable tourism, especially the Mandeh islands tourist destinations.

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