Sustainable Tourism Development in the Mandeh Tourism Area, Padang, West Sumatra

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Abstract: The number of tourist activities in the Mandeh Tourism Area must be supported by the appropriate tourism concept in its development. By paying attention to the potential possessed by the Mandeh Tourism Area, a development concept that is following its potential is needed, namely sustainable tourism development. The purpose of this study is to identify and analyze the conditions and potential of tourism as well as the tourist constraints of the Mandeh Tourism Area in implementing sustainable tourism and to contribute to the development of sustainable tourism in West Sumatra Province. This study uses a mixed - method research approach that combines field observation, documentation, direct interviews and distributing questionnaires to 100 visitors who visited the Mandeh Tourism Area. The results obtained are that the condition of sustainable tourism in the Mandeh Tourism Area is currently still in the process of being developed following the document of the tourism development master plan of West Sumatra Province in the Revision of Planning for Tourism Objects in the Mandeh Region. Where in the development scenario, the Mandeh Tourism Area is at the exploration stage in the form of a tourist area life cycle and is still in a condition for community involvement, tourism activists from business actors and philanthropists in the form of providing the necessary infrastructure and tourism support facilities. The potential for sustainable tourism in the Mandeh Tourism Area, namely marine tourism with a variety of supporting tourist attractions, is expected to increase the interest of tourist visits. However, the current Covid-19 pandemic is a major obstacle in developing tourism in the Mandeh Region. The concept of sustainable tourism development applied by the Mandeh Tourism Area requires a strategy that is based on a small-scale approach, local management, and provides benefits to the community at large.

Keywords: Sustainable Tourism Development, Mandeh Tourism Area

1. Introduction

West Sumatra is one of the provinces in Indonesia that has beautiful natural attractions and interesting cultural attractions so that it is visited by many tourists. There are several districts in West Sumatra Province, one of which is Pesisir Selatan Regency which has an area of 5,749.89 km2 and a population of more than 400,000 people. This district is located on the edge of a coastline of 218 km with a topography of land, mountains ,and hills.¹ Mandeh Tourism Area is an area located in Pesisir Selatan Regency, namely Koto XI Tarusan District. This area can be accessed by road, precisely through the primary artery that connects Padang with Bengkulu Province or often called the western crossing. Apart from road, the Mandeh area can be reached via sea

¹ Padang City Central Statistics Agency – BPS (2020).

transportation from the city of Padang. In addition, the Mandeh Tourism Area has also been designated a National Area in 2015 by BAPPENAS RI.² The Mandeh area consists of 11 clusters of small islands, and each island has a different area and of course, also has different tourist activities.³ Some of the activities that can be enjoyed on these islands are:

- 1. The activity of seeing the Boeloengan Nederland shipwreck in Muaro Mandeh with a depth of 20-15 meters;
- 2. Scuba diving that can be done in the waters around Cubadak Island, Satan Island, Traju Island, Pagang-Pamutusan Island, and Marak Islan;
- 3. Snorkeling that can be done around Cubadak Island, Sironjong Island, Satan Island, Pagang Island, and Marak Island;
- 4. Surfing that can be done in Nibung Island, Marak Island, Batu Kalang;
- 5. Banana boats that can be done on Satan Island and Pagang Island

The number of tourist activities in the Mandeh Tourism Area must be supported by the concept of sustainable tourism in its development. In the development of tourism in an area, it is necessary to pay attention to the potential possessed by the area concerned. The more potential that exists in an area, the more the concept of tourism development is needed in accordance with the potential possessed by the region.

Tourism development is a planning process of the subjects of tourism developers with the aim of boosting economic and social growth. A tourist area requires tourism development that is in accordance with local tourism potential, because through proper tourism development it is hoped that tourism will be able to produce economic growth because it is able to create jobs, contribute to various production sectors, and make a direct contribution to progress in the business of making and improvement of ports, roads, transportation as well as encouraging the implementation of hygiene and health programs, cultural facilities projects, environmental conservation and so on that can provide benefits to local communities and foreign tourists.⁴ The number of tourist activities in the Mandeh Tourism Area must be supported by the appropriate tourism concept in its development. According to the WTO (World Trade Organization), the concept of sustainable tourism puts forward the principles of development that include ecological sustainability; social and cultural sustainability; and economic sustainability, both for current and future generations.⁵ The concept of sustainable tourism pays attention to 3 (three) important dimensions such as environmental, economic and social dimensions. The economic dimension is that it must provide economic benefits to the community through tourism activities in a tourist area/destination, and more importantly, it must maintain its sustainability. The social dimension is

² BAPPENAS. National Mid-Term Plan 2015-2019. (2015). The National Development Plan 2015-2019 Sectoral Development Agenda). II, 1-1-10-81.

³ Department of Tourism, Youth and Sports of Pesisir Selatan Regency. (2020).

⁴ Subagyo. (2012). Tourism Development Strategy in Indonesia, Liquidity Journal, Vol. 1 No.2, p.154.

⁵ I Putu Anom. (2010). Sustainable Tourism in a Global Crisis Vortex, Denpasar: Udayana University Press, p 57.

respecting human rights and providing equal opportunities for all people. The social dimension must also include providing benefits to the community and eradicating poverty as well as preserving local wisdom in an area or tourist destination. While the environmental dimension is to conserve and manage resources that can reduce air, soil ,and water pollution. In addition, the environmental dimension must also preserve biodiversity in a destination or tourist area.

Sustainable development is defined by the UNWTO in the European Commission, Sustainable Tourism for Development Guidebook as "tourism that takes full account of current and future economic, social and environmental impacts, addressing the needs of visitors, industry, the environment and local communities." And in its objectives, it is stated that there are at least 12 sustainable tourism destinations, namely (1) economic viability; (2) local capability; (3) quality of work; (4) social requirements; (5) visitor introduction; (6) local control; (7) community welfare; (8) cultural culture; (9) physical integrity; (10) biodiversity; (11) resource efficiency; and (12) environmental personality.6 The development of sustainable tourism in a tourist area must utilize natural resources optimally according to the potential that exists in the area, so as not to cause damage to the environment, respect the socio-culture of the local community, and can ensure sustainable economic benefits that are distributed equitably to all stakeholders. Sustainable tourism is tourism that is managed referring to quality growth, which means improving the welfare, economy and public health. Improving the quality of life can only be achieved by minimizing the negative impacts of non-renewable natural resources.⁷

The objectives to be achieved in this study are: (1) Identify and analyze the condition of sustainable tourism in the Mandeh Tourism Area in its development as a tourism destination based on sustainable tourism; (2) Identify and analyze the tourism potentials and constraints of the Mandeh Tourism Area in the development of sustainable tourism; and (3) Analyzing how the Mandeh Tourism Area applies sustainable tourism and contributes to developing sustainable tourism in Mandeh Tourism Area.

It is hoped that the Mandeh Tourism Area, as a tourism destination, can have a concept in the development of sustainable tourism, namely in utilizing the potential and understanding the constraints that exist in the tourist area. And the purpose of tourism development in the Mandeh Tourism Area is expected to be able to maintain environmental quality, provide benefits for local communities and tourists, then also maintain the relationship between tourism and the environment, and create dynamic conditions, that are adapted to the potential to realize sustainable tourism development.

⁶ UNWTO. (n.d.). European Commission, Sustainable Tourism for Development Guidebook.

⁷ Pitana, I. Gede and Gayarti, Putu G. (2005). Tourism Sociology. Yogyakarta: Andi.

2. Method

This research is a mixed-method research, which is research by combines qualitative research with quantitative research. Mix method research is defined as a research method that focuses on collecting, analyzing, and mixing qualitative and quantitative data in a single or advanced study (Cresswell, 2010). A mixed - method approach is needed to answer the problem formulations that have been summarized, where the first problem formulation can be answered through a qualitative approach and the second and third problem formulations can be answered through a quantitative approach. This is done to find problems in the field that will provide a new understanding for a tourist area that applies the concept of sustainable tourism.

This research itself uses a gradually mixed technique. According to Creswell (2010: 313), a phased strategy is a strategy in which researchers combine the data found from one method with another. This strategy can be done with interview techniques first to get qualitative data, then followed by quantitative data, in this case using a survey.

Data collection techniques used in this study are as follows:

- 1. Observation: a process that aims to observe a subject and object of research, so that researchers are able to understand the actual conditions. Direct observation at the research site by observing several indicators from the Mandeh Tourism Area.
- 2. Interview: can be interpreted as a meeting between two or more people to then exchange information and ideas through a question and answer, so that meaning can be constructed in a topic. Interviews were conducted with the local government, namely the Tourism Office, the private sector and the community who are part of the management of the Mandeh Tourism Area.
- 3. Questionnaire: this is a data collection technique that is done by giving a set of written statements to respondents to answer. The questionnaire used by the researcher as a research instrument, the method used is a closed questionnaire given to the public and tourists as respondents.
- 4. Documentation: a record of events that have passed. These various documents can be in the form of writing, pictures, or monumental works of someone. Research results from observation or interview will be more credible if it is supported by other relevant documents. The documents used are through recordings, photos, and videos as valid data validity.

Based on the data collected, the data analysis technique carried out is through data sourced from documents, archival records/records, interviews, direct observation and physical evidence that are studied and explained, so to complete and prove the results of case study data analysis, the researcher will use the triangulation technique.

This triangulation technique will combine data from sources related to the research process. The sources of these data are: (1) the Tourism Office; (2) Managers or private parties, and (3) the public and tourists. The data collection technique for the triangulation technique itself uses observation, interviews and questionnaires. The data that is expected to be obtained through field observations and interviews are about their responses to the concept of sustainable tourism development in the Mandeh Tourism Area regarding whether it is appropriate or not.

Then in the data analysis technique related to the potential and constraints of sustainable tourism development in the Mandeh Tourism Area using quantitative data analysis techniques that are sourced from the data from questionnaires or questionnaires distributed to the public and tourists in the Mandeh Tourism Area in their perception and understanding of the potential and constraints faced in the Mandeh Tourism Area in developing sustainable tourism.

For quantitative data, samples are needed in this study. The sample is partly taken from the population, while the population is the whole of the number to be studied or observed (Sugiyono, 2013). The population of the Mandeh Tourism Area is an area in Pesisir Selatan Regency, namely Koto XI Tarusan District. Based on data from the Padang City BPS, the population of Koto District in 2019 was 197,005 people. Meanwhile, the number of tourist visits to the city of Padang according to BPS is 4.686.902. So according to Burhan (2010) to determine the number of samples can use the Slovin formula, which is 99.99 rounded up to 100.

From the calculation above, a sample size of 100 people was obtained, in order to be able to answer questions about understanding the concept of sustainable tourism development. In this study, sampling was used using a purposive sampling technique. As described by Sugiyono (2013), purposive sampling is a sampling technique with certain considerations. Then Arikunto in Sugiyono (2013) also explained that purposive sampling was carried out by taking subjects not based on strata, random or regional but based on certain goals. So it means that each subject taken from the population is chosen intentionally based on certain goals and considerations. The purpose and consideration of taking the subject/sampling of this research are that the sample has understood that the Mandeh area is a tourist area, and with an understanding of tourism it is expected to be able to find out the potential and constraints in the Mandeh Tourism Area applying the concept of sustainable tourism development.

The development of sustainable tourism has quite a number of indicators put forward by some literature, so to avoid confusion and data on sustainable tourism development so that it can be compared for various tourist destinations and countries, in tourism development, there are 3 basic issues which are dimensions of the concept of sustainable tourism, namely economic benefits, socio-cultural benefits and environmental benefits. In this study, the analysis that will be used as a data processing tool is as follows:

1. Measurement Scale: using a Likert scale in the questionnaire distributed in the survey. Where the Likert scale contains statements and systematic questions to determine the attitude of a respondent to the question (Sugiyono, 2013). Likert scale score criteria include a scale of 1 (Strongly Disagree); 2 (Disagree); 3 (Hesitating); 4 (Slightly Agree); 5 (Agree) and 6 (Strongly Agree). This Likert scale will be on the questionnaire or list of questions to be filled out directly by the respondent, where the respondents in this study are tourists and people in the Mandeh Tourism Area.

2. Testing Simple Regression Analysis: all approach methods for modeling the relationship between one dependent variable and one independent variable. In the regression model, the independent variable explains the dependent variable. A simple regression model is used to predict the effect of sustainable tourism development on the changes that occur to tourists and especially the community as a component in the environment before tourism activities and after tourism activities and the application of the concept of sustainable tourism development in the Mandeh Tourism Area.

3. Analysis or Discussion

Mandeh Tourism Area is an archipelago that has an area of 579,495 hectares with a coastline length of 234.2 km. Mandeh Tourism Area is located in Koto XI District, Pesisir Selatan Regency, West Sumatra Province, which is directly adjacent to Padang City, which is only 56 Km from Padang City, and takes about 60 minutes. The Mandeh Tourism Area has also become the main destination for maritime tourism sector policies that are included in the National Tourism Development Master Plan (RIPPNAS) with Biak and Bunaken. In its tourism development, the Mandeh Tourism Area is also known as "The Paradise of the South", which is a paradise in the southern part of West Sumatra Province, where the islands in the area also have white sand with gentle waves, with exotic underwater charm. Then in the tourism development master plan document of West Sumatra Province for 2014-2021, the Mandeh Tourism Area is mentioned as a leading destination so that in the future it requires proper planning so that the community gets great benefits in accordance with development goals.

3.1. The condition of sustainable tourism in the Mandeh Tourism Area

The Mandeh Tourism Area in the development of sustainable tourism is also supported by various parties who are also the managers, one of which is the Pesisir Selatan Regency government trying to realize the Mandeh Tourism Special Economic Zone or Kawasan Ekonomi Khusus (KEK) located in Bukit Ameh Pesisir Selatan, besides the existence of the Mandeh Tourism Area is expected encourage the development of tourism supporting facilities and infrastructure and attract tourist visits, both domestic and foreign tourists.

The Mandeh Tourism Area Destinations in the Revised Mandeh Tourism Object Planning (Mandeh Masterplan) are said to have had a development scenario described in the form of a tourist area life cycle with several stages. However, at this time, the Mandeh Tourism Area is at the stage of exploration and community involvement, where at this stage community readiness, involvement of tourism activists from tourism businesses and philanthropists who cares about and facilitation from the government in the form of providing the necessary infrastructure and tourism supporting facilities.

3.2. The tourism potentials and constraints of the Mandeh Tourism Area

The development of sustainable tourism (sustainable tourism) in the Mandeh Tourism Area, still requires several efforts, including:

- a) Developing attractions and tourist objects. The Mandeh area is currently likened to a tourist attraction that is already known by tourists because of word of mouth promotion, but there are still various things in the development of tourism destinations in the Mandeh Tourism Area, namely showing the superior attraction of marine tourism with various attractions including potential tourism activities. which includes:
 - 1) Water tourism activities such as diving, snorkeling, boating, surfing, water skiing, banana boating, swimming, fishing and others.
 - 2) Shipwreck tourism.
 - 3) Mangrove tourism.
 - 4) Underwater photography
 - 5) Nature tourism such as rock climbing, hiking, tracking, camping, beautiful waterfalls, beautiful panoramic views of mountains and sea coasts and small islands.
 - 6) Cultural tourism such as fishing activities, culinary based on local raw materials and regional peculiarities, arts crafts, traditional arts and local saga (folklore) and others.
- b) Conducting basic tourism infrastructure and facilities. In infrastructure development in the Mandeh Tourism Area, this area is located only about 56 Km from the Minangkabau International Airport or at least takes approximately 1-hour drive if taken by road via the Pesisir Selatan highway. In terms of accessibility, every road section to the Mandeh Tourism Area is very good and neatly arranged. Alternative travel access to the Mandeh Tourism Area is also being planned through being able to use the train via Pulau Aia Station and continued by sea via the Marina Muaro Padang area.
- c) Prepare the community for managing tourist attractions and businesses. The people of the Mandeh Tourism Area, especially the Pesisir Selatan Regency, currently number 514,444 people.

Year	Domestics Tourists	Overseas Tourists
2016	1.980.000	1.707
2017	2.350.000	1.700
2018	2.479.841	1.715
2019	2.065.863	3.650
2020	177.033	250

 Table 1. Number of Tourist Visits to Pesisir Selatan Regency (2016-2020)

Source: Tourism, Youth and Sports Office of Pesisir Selatan Regency (2021)

The decline in the number of tourist visits to the Pesisir Selatan Regency was due to the Covid-19 pandemic. Because at the beginning of March 2020, the Mandeh Tourism Area was not operational until the end of 2020. This also had an impact on the community's economy, where after 2019 the community began to have an understanding of the positive economic impact of tourism which was able to open new jobs, namely in the tourism sector. , as a result of the pandemic that still exists today, the community has returned to being fishermen and their original profession. Tourism in the Mandeh Tourism Area, which is expected to have an impact in providing long-term economic benefits for the community, as a result of the Covid-19 pandemic makes people need to be given more understanding and fostered.

In the context of realizing sustainable tourism development in the Mandeh Tourism Area through community empowerment, various community groups have now been empowered to manage tourism businesses. Various human resource development programs to present good tourism products have been carried out, including training that is routinely carried out in the last three years which is attended by various groups and regions, namely Tourism Destination Governance Training, Ecotourism Training, Snorkeling Training, Diving Training, Training Rafting, Paragliding Training, Outbound Training, Culinary and Shopping Training, History Training, Cultural Heritage Training, Homestay/Tourism Lodge Management Training, TVC Making Training, Brochure Making Training, Cost Supporting Training, Disaster Mitigation Training, Business Governance and Marketing Training, Tourism Village Training, as well as Culinary Service Innovation and Hygiene Training and Marketing and Sales Branding Digitalization Training.

d) Promote and bring the area into the national and international tourism market network. The tourism market potential in the Mandeh Tourism Area is known that the average tourist destination for visiting is marine tourism. Marine tourism provides recreational activities such as boating, swimming, or enjoying the sea view. In addition to marine tourism, the Mandeh area also has the potential for nature tourism and cultural tourism, hiking, folklore, dance, and so on. In accordance with the pattern of tourist visits to West Sumatra Province, foreign tourist visits generally experience a peak season from July to October. Meanwhile, domestic tourists tend to visit for recreational activities on weekends and national holidays. The tourist market is expected to come from countries that usually visit West Sumatra Province, namely Malaysia; Singapore; Dutch; Japan; and New Zealand; also from other European countries, such as Italy, England, and France; America; and Australia. In addition, there are potential markets from the Middle East and China. For this reason, it is necessary to plan national and international travel connectivity to the Mandeh area by making travel links from potential markets such as Kuala Lumpur - BIM Padang, Singapore - BIM Padang and Batam - Padang by paying attention to travel time.

3.3. Mandeh Tourism Area from the Tourist Perspective

From the perspective of tourists, the Mandeh Tourism Area is increasingly recognized, due to promotions, both carried out by the Provincial Government of West Sumatra and the Ministry of Tourism and Creative Economy. One of the promotions carried out was through a working visit to West Sumatra, by the Minister of Tourism and Creative Economy, Mr. Sandiaga Uno, namely on April 21, 2021. Through a press release (kemenparekraf.go.id), it was explained that Menparekraf Sandiaga reviewed the development of the tourism sector and creative economy, especially the application of health protocols and the readiness of destinations in West Sumatra in entering the era of adaptation to new habits, and the Mandeh Tourism Area is one of the destinations in West Sumatra that invites quite a lot of tourist visits.

The profiles of 107 respondents obtained in this study can be seen in the following table:

No.		Description	Total	Percentage (%)
1	Gender	Male	44	41,12
		Female	63	58,88
		Total	107	100
2	Age	< 18 Years Old	6	5,61
	-	19-28 Years Old	47	43,93
		29-38 Years Old	27	25,23
		39-48 Years Old	19	17,76
		> 49 Years Old	8	7,48
		Total	107	100
3	Place of Origin	Padang City	47	43,93
		Outside of Padang City	24	22,43
		Outside Province of	36	33,64
		West Sumatra		
		Total	107	100
4	Source of Information	Travel Agency	11	10,28
		Oral Information:	48	44,86
		Family/Relatives/Friends, etc.		
		Social Media / Electronic Media	42	39,25
		Information		
		Others Information	6	5,61
		Total	107	100
5	Frequency of visits	First time	65	58,88
		2 – 5 times	38	35,51
		More than 5 times	6	5,61
		Total	107	100

 Table 2. Characteristics of Respondents

Source: Primary data, 2021 (Edited).

Data on the characteristics of respondents in this study include gender, age, occupation and income of respondents. The data on the characteristics of the respondents are described as follows:

- a) The gender of the respondents was 44 respondents or 41.12% were men and the rest were women, 63 respondents or 58.88%.
- b) Then in terms of age, the majority of respondents were aged 19 28 years,

namely 47 respondents or 43.93%. In terms of age and gender, respondents who are not far from each other explain that many Mandeh Tourism Areas as a tourist destination can be visited by all ages.

- c) The area of origin of the respondents in this study is the majority from within the city of Padang itself, namely a number of 47 respondents or as much as 43.93%. From outside the Province of West Sumatra, there were 36 respondents or as much as 33.64%, and from outside the City of Padang or the City of Bukittinggi and its surroundings but still in the Province of West Sumatra were 24 respondents or as much as 22.43%.
- d) The sources of information obtained by respondents so that they visit the Mandeh Tourism Area, it is known that a number of 48 respondents or the equivalent of 44.86% answered that the information obtained was verbal information from family, relatives or friends and so on, from social media and electronic media information, a total of 42 respondents or the equivalent of 38.25% answered. This proves that although the Ministry of Tourism and Creative Economy has marketed it enough, the role of verbal information is still high enough to attract visits to a destination.
- e) The respondents with the majority of answers that their visit to the Mandeh Tourism Area was their first visit were 63 respondents (58.88%), then respondents who answered that their visit was between the second and fifth visits were 38 respondents. (35.51%), and those who answered their visit more than 5 times were 6 respondents (5.61%).

Questionnaires in this study were distributed to tourists who had visited the Mandeh Tourism Area, so that 107 respondents answered each question item. The average value of respondents' answers to each of the questionnaire questions is as follows:

No.	Questions	Average
1	The natural scenery in the Mandeh Tourism Area is interesting to visit.	5,41
2	Access to the Mandeh Tourism Area is easy and adequate for visitors.	5,06
3	Facilities and infrastructure in the Mandeh Tourism Area are complete and	5,14
	adequate for visitors.	
4	The price offered to travel to the Mandeh Tourism Area is affordable.	5,15
5	Local people in the Mandeh Tourism Area are friendly to visitors	5,25
6	Local communities in the Mandeh Tourism Area are directly involved in	5,44
	tourism activities.	
7	I feel satisfied visiting the Mandeh Tourism Area.	5,51
8	I am interested in returning to the Mandeh Tourism Area.	5,48
9	I will recommend to others about tourism in the Mandeh Tourism Area.	5,40
10	In my opinion, the existence of the Mandeh Tourism Area has had an	5,33
	economic impact on the local community.	
11	In my opinion, the existence of the Mandeh Tourism Area has provided a	5,36
	good socio-cultural impact for the community.	
12	In my opinion, the existence if the Mandeh Tourism Area has provided a	5,38
	good environmental impact fot the area.	
C	D_{1}	

 Table 3. Average Value of Respondents' Answers

Source: Primary data, 2021 (Edited).

From the results of the average value, it is found that each respondent's answer to the question item is that all question items have an average value of more than 5.00. This proves that each respondent agrees and even tends to strongly agree that there is an influence of sustainable tourism development on the changes that occur to tourists and especially the community both in terms of economic, socio-cultural and environmental benefits. Respondents also felt that the existence of the Mandeh Tourism Area as a sustainable tourism destination had an economic and socio-cultural impact on local communities, as well as environmental impacts for the area.

Table 4. Value of Valuety and Reliability of Respondents Answers					
N of Items	Nilai Corrected Item/ Total Correction	Sig	Cronbach's Alpha	Criteria	
	Relation				
1	0.774	.001	.911	Valid	Reliable
2	0,629	.001	.911	Valid	Reliable
3	0.922	.001	.911	Valid	Reliable
4	0.623	.001	.911	Valid	Reliable
5	0.422	.001	.911	Valid	Reliable
6	0.630	.001	.911	Valid	Reliable
7	0.721	.001	.911	Valid	Reliable
8	0.718	.001	.911	Valid	Reliable
9	0.642	.001	.911	Valid	Reliable
10	0.773	.001	.911	Valid	Reliable
11	0.855	.001	.911	Valid	Reliable
12	0.853	.001	.911	Valid	Reliable

Table 4. Value of Validity and Reliability of Respondents' Answers

Source: Primary data, 2021 (Edited).

From the results of the validity test on the research instrument, namely the question items on the questionnaire, it was found that the value of count (Corrected Item-Total Correlation) > table was 0.1528, for df = 107-2 = 105; = 0.05 then the question items are valid. In addition, based on the significant value (Sig.) of each question item <0.05, then each question item is declared valid.

Then, from the results of the reliability test on the research instrument, namely the question items on the research instrument, namely the questionnaire, the results obtained 0.911 > 0.600, so it can be stated that the question items on the instrument are declared variable or reliable because the respondents' answers to the statements are always consistent.

A simple linear regression analysis test was conducted to show the effect of sustainable tourism development on the changes that occur in the Mandeh Tourism Area that is felt by both tourists and the community. The changes are in the form of the economic impact of tourism for the local community of the Mandeh Tourism Area, the socio-cultural impact for the local community of the Mandeh Tourism Area, as well as the environmental impact of the Mandeh Tourism Area itself. Simple linear regression has the equation that is Y = a+bx.

Table 5.	Simple	Regression	Test Results

Coefficients ^a						
	Unstandardized Coefficients Standardized Coefficients					
Model	В	Std. Error	Beta	t	Sig.	
1 (Constant)	65.462	5.474	-	11.959	.001	
XX	021	.073	027	281	.779	
a. Dependent Variable: XY						

Source: Primary data, 2021 (Edited).

The equation Y = 65,642 + 11,959 shows that there is a positive influence of sustainable tourism development on the changes that occur in the Mandeh Tourism Area. Then, from the T-test, namely 11.959 > 1.65950 and a significant value (Sig.) 0.001 < 0.10 so that the results of the analysis can be proven that the existence of sustainable tourism development affects the changes that occur and are felt by tourists and the community.

Table 6. R Test Results

Model Summary ^b					
Adjusted R Std. Error of the					
Model	R	R Square	Square	Estimate	
1	.627ª	.471	.409	6.629	
a. Predictors: (Constant), XX					
b. Dependent Variable: XY					
Source: Drimany data 2021 (Edited)					

Source: Primary data, 2021 (Edited).

Based on the R test table, the magnitude of the coefficient of determination R Square between variables is 47%, this shows that 47% of sustainable tourism development has influenced the changes that occur in the Mandeh Tourism Area.

3.4. How the Mandeh Tourism Area applies sustainable tourism and contributes to developing sustainable tourism in Mandeh Tourism Area.

Mandeh Tourism Area as a destination that has a lot of tourism potential, of course, requires the existence of a tourism development concept that is in accordance with its tourism potential. Through the existence of an appropriate tourism development concept, it is hoped that the Mandeh Tourism Area will be able to generate economic growth, not only for the local community in terms of employment but also can contribute to contributing to various other sectors and especially environmental conservation. Through this research, it was found that in the development of sustainable tourism in the Mandeh Tourism Area, at least the government has tried to provide an impact on the environmental, economic and socio-cultural dimensions for the community.

Through the efforts that have been maximized despite being hindered by the COVID-19 pandemic, the local government of the Mandeh Tourism Area continues to try to carry out every development scenario from the Revision of the Mandeh Tourism Object Planning (Masterplan Mandeh) so that the Mandeh Tourism Area, as a tourism destination, can have a concept in the development of sustainable tourism, namely in utilizing the potential and understanding the constraints that exist in the tourist area. In this case, the concept of sustainable tourism applied by the Mandeh Tourism Area has been running, but in its implementation, an appropriate strategy is needed, namely an approach to sustainable tourism as described by France in Sutiarso (2018), it is recommended that small scale, local management, and provide benefits to the community. many. The strategy is emphasized on three dimensions, namely as follows:

- a) Economics, where planning for sustainable tourism development must take into account every stakeholder involved, each stakeholder is expected to have varying responsibilities, and planning must be with the cooperation and agreement of all relevant stakeholders so that economically, the benefits are felt equally for the community and stakeholders.
- b) Socio-cultural, where planning and implementation in tourism development in the Mandeh Tourism Area must include the local sociocultural conditions of the community that can be developed in tourism activities and still takes into account the possible negative impacts that will be received, including how to overcome these impacts.
- c) Environmentally, or ecologically, tourism development planning must pay attention to the carrying capacity of the environment, such as things that support tourism activities, namely the arrangement of land and biodiversity owned by the Mandeh Tourism Area as well as other matters such as the provision of clean water and the provision of environmentally-friendly facilities. It should be emphasized that tourism in the Mandeh Tourism Area will be related to the number of tourists who can visit, and the possibility of waste problems arising from tourism activities needs to be analyzed in terms of management in order to preserve the environment.

4. Conclusion

Based on the research that has been done, it can be concluded that:

- a) The condition of sustainable tourism in the Mandeh Tourism Area is currently still in the development process in accordance with the document of the tourism development master plan of West Sumatra Province for 2014-2021 and in the Revised Mandeh Area Tourism Object Planning (Mandeh Masterplan) it is stated that it has a development scenario. Currently, the Mandeh Tourism Area is at the exploration stage in the form of a tourist area life cycle and is still in a condition for community involvement, where at this stage community readiness, involvement of tourism activists from tourism businesses and philanthropists who care and facilitation from the government in the form of providing infrastructure and necessary tourism support facilities.
- b) The potential for sustainable tourism in the Mandeh Tourism Area is to display the superior attraction of marine tourism with various attractions

including potential tourism activities which include water tourism such as diving, snorkeling, boating, surfing, water skiing, banana boating, swimming, fishing. and others. Nature tourism such as rock climbing, hiking, tracking, camping, beautiful waterfalls, beautiful panoramic views of mountains and sea coasts and small islands. And cultural tourism such as fishing activities, culinary based on local raw materials and regional peculiarities, arts crafts, traditional arts and local saga (folklore) and others. Then there are shipwreck tours and mangrove tours, as well as underwater photography activities that are interesting for visitors to the Mandeh Tourism Area. And the obstacle to the development of sustainable tourism in the Mandeh Tourism Area is the Covid-19 pandemic, namely a decrease in the number of tourist visits to the Pesisir Selatan Regency. At the beginning of March 2020, the Mandeh Tourism Area was not operational until the end of 2020. This also had an impact on tourism development and the community's economy.

c) The concept of sustainable tourism development in the Mandeh Tourism Area is to remain in the initial plan that has been initiated by the stakeholders to be able to realize the sustainable tourism concept applied by the Mandeh Tourism Area so that the concept of sustainable tourism continues as planned, but in implementation, it is necessary a suitable strategy i.e. an approach to sustainable tourism is suggested to be small scale, local management, and provide benefits to the community at large. The purpose of this is so that the development of sustainable tourism can be completed on a small scale first and also invites every stakeholder to work together to continue everything that has been planned.

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