

LOCAL ECONOMY-BASED ECOTOURISM DEVELOPMENT STRATEGY IN MANDAILING NATAL COMMUNITY EMPOWERMENT USING QSPM



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Abstract

Mandailing Natal is an area blessed with abundant natural wealth which is also a source of livelihood for the community. Empowering nature tourism (ecotourism) as part of a strategy to take advantage of natural wealth in the Mandailing Natal area without damaging the environment is one of the right steps. By utilizing natural resources which are a tourist attraction in the Mandailing Natal district. The purpose of this research is to identify the conditions of ecotourism in Mandailing Natal based on an analysis of Strengths, Weaknesses, Opportunities, and Threat (SWOT) and to find out the best marketing strategy based on alternative marketing strategies that have been obtained using Quantitative Strategic Planning Matrix (QSPM). The research method used is to use the SWOT and QSPM method. The results of the study show that the Ecotourism Conditions in Mandailing Natal based on an analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT) have great strengths. This is illustrated by the results of the IFAS and EFAS matrix analysis which describe the position of tourist attractions in Mandailing Natal in quadrant 1-2 positions in the SWOT matrix. Quadrant 2 describes Strategic Diversification, namely Tourism Objects in a stable condition but facing a number of tough challenges. Tourist attractions in Mandailing Natal can carry out several strategies to face the big challenges towards goodness, including (1) increasing the facility of cleanliness, (2) prioritizing traders so that the prices offered are with complete police and sizes, (3) utilizing large areas of land for complete the lacking facilities as well as add new innovations supported by the regional government or the tourism office.

Keywords: Strategy, Local Economy, Ecotourism, QSPM

INTRODUCTION

Today tourism is increasingly existing and becoming the most desirable lifestyle as well as being one of the sectors with the most dynamic and fast growth in Indonesia and the world. The increasing need for travel makes tourism a staple part and lifestyle that moves people to get to know the nature and culture of a country (Agus Dwi Cahya et al., 2021). Tourism is a sector that has the potential to increase regional income and open up employment opportunities for local communities (Nasution et al., 2023). Ecotourism or ecotourism is a term that is relatively new and is still very often discussed in various countries. Even though it is relatively new in Indonesia, there are many studies on the theme of ecotourism. Among them is research on the potential and strategies for regional ecotourism research conducted at the Kambas National Park. Those who conduct research on the potentials that can increase ecotourism and how the strategy for developing ecotourism is to increase tourist visits and competitiveness with similar tourism (Pramono et al., 2020). In addition, there is research on people's perceptions of the Wanchi Ecotourism Association (WETA) and the steps they are taking to develop ecotourism. As a result, the community tends to support the development of ecotourism (Angessa et al., 2022). Then there is research on the impact of ecotourism programs based on local wisdom in increasing people's income, the main factors that hinder ecotourism programs are access to transportation, while the supporting factors are natural potential, cultural potential, animal diversity, and community awareness (Paula et al., 2022).

The development of the tourism sector is one of the leading sectors in the national economy which always needs to be developed and improved. If viewed from the socio-economic aspect, it can increase people's income, expand employment opportunities, increase government revenue, increase foreign exchange earnings, increase national entrepreneurship and can contribute to regional development (Maulana & Aprianto, 2018).

Mandailing Natal Regency is one of the tourist destinations in North Sumatra. The following is data on marine tourism visits in Mandailing Natal Regency (Indriani, 2022):

Table 1
List of Maritime Tourism Visits in the Regency of Mandailing Natal 2020-2021

Month	2020 (Person)	2021 (Person)
January	386	1,437
February	678	2047
March	345	1827
April	318	1,665
May	3,325	138
June	4,847	148
July	4,287	165
August	3,645	283
September	2,525	946
October	2.115	1,120
November	2,687	1,185
December	3,183	206
Amount	28,351	11.167

Source: Report from the Regency Tourism Office Mandailing Natal (2022)

As an area that is blessed with abundant natural wealth which is also a source of life for the people of Mandailing Natal. Empowerment can be nature tourism (ecotourism) as part of a strategy to take advantage of natural wealth in the Mender Natal region without destroying the environment is one of the right steps. By utilizing natural resources, it is a tourist attraction in Mandailing Natal Regency.

One of the optimal resource utilization efforts is to develop tourism with the concept of ecotourism. In this context tourism has an integral part with conservation efforts, empowering the community's economy and encouraging higher respect for cultural or cultural differences. This can happen because the financial benefits derived from travel costs are also used for the needs of nature conservation and improving people's welfare. On the other hand, the concept of ecotourism is also directed at maintaining community culture and demographic movements. Shifting the concept of world tourism to the ecotourism model, caused by the saturation of tourists to visit artificial attractions. Therefore, this opportunity should be utilized optimally to attract foreign tourists to visit objects based on the nature and culture of the local population. In the development of tourism in general, the term sustainable tourism or "sustainable tourism" also appears. Sustainable tourism is seen as a step to manage all resources that can be met socially and economically by maintaining cultural integrity, fundamental ecological processes, biodiversity, and other life-supporting elements. In the

development of tourism in general, the term sustainable tourism or “sustainable tourism” also appears. Sustainable tourism is seen as a step to manage all resources that can be met socially and economically by maintaining cultural integrity, fundamental ecological processes, biodiversity, and other life-supporting elements. In the development of tourism in general, the term sustainable tourism or “sustainable tourism” also appears. Sustainable tourism is seen as a step to manage all resources that can be met socially and economically by maintaining cultural integrity, fundamental ecological processes, biodiversity, and other life-supporting elements (Sukarnoto, 2020).

The ecotourism area of Mandailing Natal has several attractions. Among them is that almost all of the land in the tourist area belongs to the local community but is inseparable from government monitoring. This phenomenon becomes an economic attraction for the surrounding community. Automatically, the increase in tourist visitors has a good impact on the community’s economy, because traders who are land owners and tenants of stalls will get significant benefits from these ecotourism activities.

Therefore, the increasingly mushrooming of nature-based tourism in Mandailing Natal is a challenge in itself for ecotourism in the area so that the management needs to plan the right strategy so that ecotourism in Mandailing Natal can still survive. Therefore, the increasingly mushrooming of nature-based tourism in Mandailing Natal is a challenge in itself for ecotourism in the area so that the management needs to plan the right strategy so that ecotourism in Mandailing Natal can still survive.

REVIEW OF LITERATURE

Strategy

strategy is related to the implementation of ideas and execution of an activity within a certain period of time. Strategy is where the mission of a company is placed, setting organizational goals by binding external and internal forces, formulating policies and strategies to achieve goals and ensuring proper implementation (Viantika et al., 2021).

Ecotourism

Ecotourism was first introduced by the organization The International Ecotourism Society (TIES) in 1990 (Surahman, MM, & Prapdopo, 2020). Ecotourism is a type of tourism that requires nature conservation. Ecotourism is also expected to provide education and

understanding to tourists regarding concern for the environment. In addition, ecotourism is expected to be a tool to improve the local economy. Ecotourism development includes ecotourism planning, utilization and control. Ecotourism is run by the government, the private sector, and the local community (Tambunan, 2020). Ecotourism is tourism with the responsibility to preserve nature with the aim of not only being enjoyed but also having elements of education, understanding, nature conservation, and improving the economy of the community around the ecotourism destination (DTE) (Fitokimia et al., 2018).

The basic principles of ecotourism include: 1. Nature based Putting forward natural elements in tourism development and being wise in their utilization. In addition, the manager is obliged to maintain the preservation of nature so that it is not damaged. 2. Ecologically sustainable Guarantee that nature used for tourism purposes is maintained biologically, physically and socially so that the arrival of tourists does not disturb the ecological functions of nature. 3. Environmentally educative Ecotourism is expected to provide education to the public regarding their concern for and appreciation of nature. 4. Beneficial for local communities Ecotourism is expected to involve the community in its management. As well as providing economic space for people who want to sell around ecotourism. Community involvement in ecotourism management is also useful for introducing the culture of the community so that it becomes an attraction for the community to visit with the hope that the economy of the community around ecotourism will increase. 5. Providing satisfaction for tourists Visitors coming to ecotourism have the hope of being satisfied in terms of comfort, tranquility, and beauty. Therefore, visitor satisfaction must be a priority for ecotourism managers.

Local Community Empowerment

Community empowerment is a strategy in the concept of community-centered development as the subject of development. If you look at the current condition of the village community, they are trapped by poverty and underdevelopment. So there needs to be an increase in dignity so that village communities can be efficient and independent (Endah, 2020). Empowerment is a process of improving living conditions and livelihoods aimed at poor people or groups or individuals. They are human resources with the potential to think and act, which at this time require strengthening in order to be able to utilize the power they have. While the economy is all economic activity and the way people meet their basic needs,

namely clothing, food, shelter, health and education (Harahap et al., 2023). Community empowerment efforts can be carried out through 3 main principles, namely: 1) Involving community members in decision making; 2) There is certainty that local communities receive benefits from tourism activities; 3) Tourism education for local communities. These three principles were then applied to the development of KWE Puspa Jagad in Semen Village in an effort to empower the community (Ridlwan et al., 2017).

SWOT

SWOT analysis is a comparison between external factors Opportunities and Threats and internal factors Strengths and Weaknesses. SWOT analysis is a classic strategic planning method. By using internal factor analysis, namely Strengths, Weaknesses, and external factors, namely Opportunities and Threats. SWOT analysis is a method that describes the condition of the company and evaluates a problem based on the ability to analyze both internal and external strengths owned by the company compared to competing companies (Pasaribu, 2018).

QSPM

Quantitative Strategic Planning Matrix (QSPM) is a strategic management approach with a function to evaluate the opportunities of a single strategy. QSPM also functions to analyze long-term opportunities from existing alternative strategies. In addition, QSPM can also help choose the best strategy objectively in an easy way (Ling Zhang, 2020). The QSPM matrix helps management to choose the best strategy based on alternative strategies sourced from the EFE and EFI matrices (Yam, 2020). The steps for making the QSPM matrix are as follows: 1. Identification of internal (strengths and weaknesses) and external (opportunity and threat) factors. 2. Give weight to each factor based on. 3. Determine several possible alternative strategies to run. 4. Determine the attractiveness score (AS) by reflecting on all factors for each strategy. The terms of the US value are as follows. Value 1 = Not attractive Value 1 = Slightly attractive Value 1 = Attractive Value 1 = Very attractive 5. Calculate the total attractiveness score (TAS) by multiplying the weight by AS. 6. Calculating all TAS values for each factor in each strategy. 7. Decision making. The highest total TAS value indicates the best recommended strategy to run (S. Riyanto, 2022).

RESEARCH METHOD

This type of research is qualitative research. Qualitative research is research whose results cannot be obtained by statistical methods but the results of this type of research can only be obtained by deepening the name of an object naturally (Isnaini et al., 2022). This research is said to be qualitative research because the results of this research were obtained through in-depth discussion to get an overview of the internal (strengths and weaknesses) and external (opportunity and threat) factors that ecotourism has in the Mandailing Natal area. In qualitative research, do not collect data through tools designed to measure research variables (Alkahfi et al., 2022). Meanwhile, the research method used is the QSPM method (Lubis et al., 2023).

The research object was conducted at three ecotourism locations in the Mandailing Natal area namely, Penatapan, Sampuraga and Natal Beach. The consideration for determining the object of research is based on the consideration that there are many tourist sites that have not implemented a marketing strategy to the fullest.

The researchers started by conducting research by means of a literature study. The data source used is primary data. Primary data is a collection of data obtained directly from the field (Arnold Sultantio Hutabarat, 2020). The data collected comes from interviews and observations. Interviews were conducted with the ecotourism managers of Penatapan, Sampuraga and Natal Beach directly at the location. Observations were made directly at the three locations studied with different time spans.

Data Analysis Method

SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)

In this study, SWOT analysis was used, because SWOT analysis is a suitable tool for developing this ecotourism development strategy. This analysis aims to be used as a basis for the formulation of ecotourism development policies. The SWOT analysis method is an activity to systematically identify various factors that are used to formulate a company strategy. This analysis is based on logic that can maximize strengths and opportunities and simultaneously minimize weaknesses and threats. SWOT analysis provides a simple way to estimate the best way to implement a strategy, helping planners to find out what can be achieved and what things need attention (Tuwo, 2011).

QSPM (Quantitative Strategic Planning Matrix)

The QSPM method is an objective technique designed to determine the relative attractiveness of alternative strategies that are feasible to use. Conceptually, the QSPM analysis method is used to determine the relative attractiveness of several variations of strategies based on external and internal critical success factors, which will later be chosen which strategy is best implemented in ecotourism. The QSPM serves as a tool that enables strategists to evaluate alternative strategies objectively, based on the important external and internal success factors identified previously. QSPM determines the relative attractiveness of the different strategies built in the matching stage (Maulidiya et al., 2020).

RESULTS AND DISCUSSION

Identify Strengths, Weaknesses, Opportunities and Threats (SWOT)

An expert believes SWOT analysis is a strategy that must be achieved to set realistic business goals based on the company's position. SWOT itself has the meaning of strengths (company strengths), weaknesses (company weaknesses), opportunities, and threats (inability to achieve goals). When applying the SWOT analysis technique, companies must analyze before deciding which marketing objectives to achieve by taking advantage of existing opportunities and any obstacles that might occur. SWOT analysis must consider both internal and external factors. SWOT is an opportunity for the internal environment as well as the general environment and the external environment in dealing with the business world (D. Y. Riyanto & Fianto, 2022).

Strengths and Weaknesses

This section describes the internal factors (strengths and weaknesses) obtained from the results of interviews with each ecotourism manager.

Strengths

Table 2
Strengths

Penetapan	Code
Cool air	A
Free Entrance Ticket	B
Has a Beautiful Panorama	C
Location near offices	D
Suitable For All Ages	E

Table 3
Strengths

Sampuraga	Code
It is a historical tour of Mandailing Natal	A
Natural therapy (steam bath)	B
Sampuraga hot water	C
The tradition of boiling eggs	D

Table 4
Strengths

Natal Beach	Code
Soft breeze	A
It has a beautiful natural panorama of the beach with lots of Christmas trees growing on it	B
The location is in a residential area and entry is free	C
Suitable for all Ages	D

Weaknesses

Table 5
Weaknesses

Penatapan	Code
Inadequate public facilities	F
Houses of worship are less extensive	G
Access to public transportation is inaccessible to tourist sites	H
Less varied menu options	I
Cleanliness level is still low	E

Table 6
Weaknesses

Sampuraga	Code
Many open spaces are directly exposed to the sun during the day	F
There is no public transportation	G
lack of seating	H
Hygiene level is very low	I

Table 7
Weaknesses

Natal Beach	Code
Inadequate public facilities	F
Access to public transportation is not reachable to tourist sites	G
Less varied menu choices, relatively the same for each seller	H
Hygiene level is very low	I

Opportunities and Threats

This section describes the external factors (opportunities and threats) obtained from the results of interviews with each ecotourism manager.

Opportunities

Table 8
Opportunities

Penetapan	Code
Active dissemination of information	A
There is support from the government by not quoting fees	B
Travel Community Needs	C
Momentum of school holidays and holidays	D

Table 9
Opportunities

Sampuraga	Code
Momentum after Eid	A
Support from the government in improving tourist sites	B
The needs of the traveling community	C
It is an icon of Mandailing Natal	D

Table 10
Opportunities

Natal Beach	Code
Momentum after Eid and school holidays	A
The needs of the traveling community	B
The spread through social media is very fast	C
One of the iconic Christmas City	D

Threats

**Table 11
 Threats**

Penatapan	Code
The storm winds caused tree branches to break	F
The continuous rain made the roads slippery	G
Visitor satisfaction sometimes decreases because it does not match expectations	H
No updates regarding food trends	I

**Table 12
 Threats**

Sampuraga	Code
The location is far from residential areas	F
Food is not updated	G
Prolonged summer makes tourist sites deserted	H
Visitor satisfaction sometimes decreases because it does not match expectations	I

**Table 13
 Threats**

Natal Beach	Code
If the tide rises, it causes seawater to reach the shoreline where the location is relaxing	F
Rainy weather causes visitors to be quiet because they are worried about rain and hurricane winds	G
Visitor satisfaction sometimes decreases because it does not match expectations	H
There is a threat of a tsunami	I

SWOT Analysis

After identifying and classifying the internal and external factors of ecotourism, the writer then conducts a SWOT analysis which aims to obtain alternative strategies based on the internal and external factors that have been identified. The following are the stages of the SWOT analysis:

Internal Strategy Factor Analysis (IFAS)

IFAS scores were obtained through interviews with tour managers both for weighting and rating. here are the results:

Penatapan

Table 14
IFAS Matrix

Code	Weight	Rating	Score
A	0.170	4	0.68
B	0.127	4	0.508
C	0.191	4	0.764
D	0.127	4	0.508
E	0.127	4	0.508
Total			2,968
F	0.085	1	0.085
G	0.021	1	0.021
H	0.085	1	0.085
I	0	2	0
J	0.063	1	0.063
Total			0.254
SW			2,714

In table 14, an IFAS score of 2.714 is obtained. This score shows that Ecotourism is in a strong condition.

Sampuraga

Table 15
IFAS Matrix

Code	Weight	Rating	Score
A	0.241	4	0.964
B	0.172	4	0.688
C	0.172	4	0.688
D	0.103	3	0.309
Total			2,649

E	0.172	1	0.172
F	0.068	1	0.068
G	0.068	2	0.136
H	0	2	0
Total			0.376
SW			2,273

In table 15, an IFAS score of 2.273 is obtained. This score shows that Ecotourism is in a strong condition.

Natal Beach

Table 16
IFAS Matrix

Code	Weight	Rating	Score
A	0.269	4	1,076
B	0.115	4	0.46
C	0.230	4	0.92
D	0.153	4	0.612
Total			3,068
E	0.038	1	0.038
F	0.038	2	0.076
G	0.115	2	0.23
H	0.038	2	0.076
Total			0.42
SW			2,648

In table 16, an IFAS score of 2.648 is obtained. This score shows that Ecotourism is in a strong condition.

Internal Strategy Factor Analysis (EFAS)

EFAS scores were obtained through interviews with tour managers both for weighting and rating. Here are the results:

Penetapan

Table 17
EFAS Matrix

Code	Weight	Rating	Score
A	0.107	4	0.428
B	0.142	4	0.568
C	0.25	4	1
D	0.214	4	0.856
Total			2,852
E	0.071	2	0.142
F	0.178	1	0.178
G	0.035	2	0.07
H	0	1	0
Total			0.39
OT			2,462

In table 17 an EFAS score of 2.462 is obtained. This score shows that ecotourism is in a condition of opportunity because the EFAS score shows a positive number.

Sampuraga

Table 18
EFAS Matrix

Factor	Weight	Rating	Score
A	0.259	4	1.036
B	0.111	3	0.333
C	0.222	4	0.888
D	0.148	4	0.592
Total			2,849
E	0.037	2	0.074
F	0.037	2	0.074
G	0.148	4	0.592
H	0.037	3	0.111

Total	0.851
OT	1,998

In table 18 an EFAS score of 1.998 is obtained. This score shows that ecotourism is in a condition of opportunity because the EFAS score shows a positive number.

Natal Beach

Table 19
EFAS Matrix

Code	Weight	Rating	Score
A	0.148	4	0.592
B	0.185	4	0.74
C	0.111	3	0.333
D	0.222	4	0.888
Total			2,553
E	0.037	2	0.074
F	0.259	1	0.259
G	0.037	2	0.074
H	0	2	0
Total			0.407
SW			2,146

In table 19, an EFAS score of 2.146 is obtained. This score shows that ecotourism is in a condition of opportunity because the EFAS score shows a positive number.

SWOT Diagrams

The results of the IFAS and EFAS analysis are input to the SWOT diagram, with the reduction between the scores of strengths and weaknesses as coordinates on the X axis, while the reduction between scores of opportunities and threats as coordinates on the Y axis. Determination of the coordinate axes on the SWOT diagram shows that ecotourism is in one of quadrant of the following four quadrants:

Quadrant 1

This quadrant has the best position, because ecotourism is in a strong condition and has opportunities. The company's condition is in quadrant 1 if the IFAS and EFAS scores are positive.

Quadrant 2

This quadrant has advantages from the internal side, but faces several obstacles from external threats. The company's condition is in quadrant 2 if the IFAS score is positive while the EFAS score is negative.

Quadrant 3

Even though it has potential, on the other hand ecotourism has some drawbacks from the internal system. The company's condition is in quadrant 3 if the IFAS score is negative and the EFAS value is positive.

Quadrant 4

This quadrant shows that ecotourism is in weak condition, on the other hand it is facing big challenges. The company's condition is in quadrant 4 if the IFAS and EFAS scores are negative

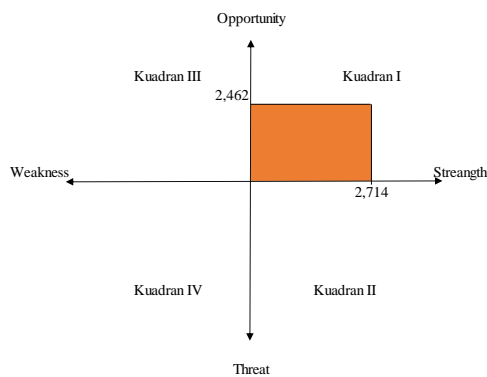


Figure 1
SWOT Diagram Penatapan

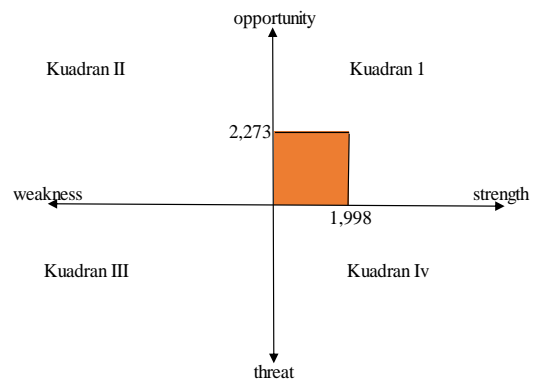


Figure 2
SWOT Diagram Sampuraga

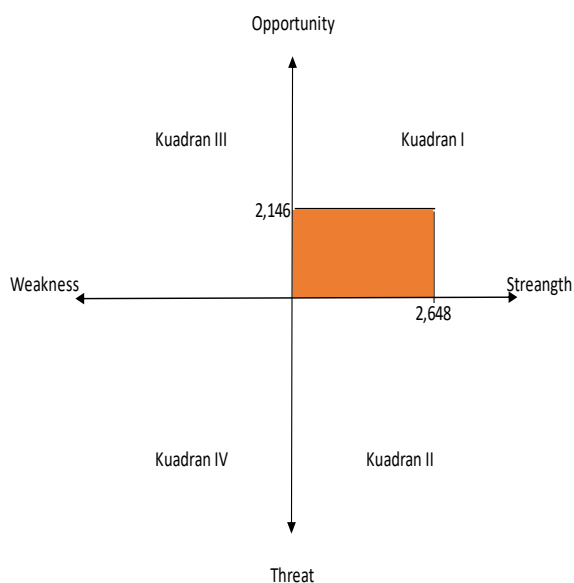


Figure 3
SWOT Diagram Natal Beach

Figures 1, 2 and 3 in the SWOT diagram above show that ecotourism is in quadrant I because the IFAS and EFAS values are positive. Where, quadrant I is the best quadrant so that it can be said that currently ecotourism is in good condition, strong and has opportunities.

SWOT Matrix

The SWOT Matrix serves to describe alternative strategies that allow Ecotourism to be implemented based on the identified internal and external factors. The SWOT Matrix produces four types of alternative strategies that represent the four quadrants in the diagram, namely SO strategy (utilizing strengths and opportunities), ST (utilizing strengths to minimize threats), WO (improving weaknesses to take advantage of opportunities), and WT (overcoming threats and weaknesses). Alternative strategies for each type of strategy can be seen in Tables 20, 21 and 22:

Table 20
The SWOT Matrix

<p>IFAS</p> <p>Efas</p>	<p>STRENGTH (S)</p> <ol style="list-style-type: none"> 1. Cool air 2. Free admission 3. has a beautiful panorama because it is at the foot of the mountain 4. Location near the Office 5. Suitable for all ages 	<p>WEAKNESS (W)</p> <ol style="list-style-type: none"> 1. MCK is inadequate 2. Houses of worship are inadequate 3. Access to public transportation is inaccessible to tourist sites. 4. Menu choices are less varied. 5. the level of cleanliness is still low
	<p>OPPORTUNITIES (O)</p> <ol style="list-style-type: none"> 1. Active dissemination of information 2. There is support from the government by not charging fees 3. The needs of the traveling community 4. Momentum of school holidays and holidays 	<p>STRATEGY (SO)</p> <ol style="list-style-type: none"> 1. Make better branding regarding Ecotourism services both to visitors and stakeholders. 2. Maintain sustainable tourism by managing products, customers and stakeholders, and social.
<p>THREATS (T)</p> <ol style="list-style-type: none"> 1. A storm wind causes a tree branch to break 2. Continuous rain causes slippery roads 3. Visitor satisfaction sometimes decreases because it doesn't match expectations 4. No updates related to food trends 	<p>STRATEGY (ST)</p> <ol style="list-style-type: none"> 1. renovating facilities to attract tourists 2. Create a mitigation strategy during rain and hurricane winds 3. Cooperate with the local government and surrounding communities regarding community empowerment and disaster mitigation. 	<p>STRATEGY (WT)</p> <ol style="list-style-type: none"> 1. Optimizing communication between user managers so that visitor complaints that arise can be resolved immediately 2. Create a mitigation strategy during rain or hurricane winds 3. Improve service facilities and visitor comfort

Table 21
Sampuraga SWOT Matrix

<p>IFAS</p> <p>Efas</p>	<p>STRENGTH (S)</p> <ol style="list-style-type: none"> 1. Is a historical tour of Mandailing Natal 2. The tradition of boiling eggs 3. Hot water therapy 4. Not too far from the Stain Panyabung campus 	<p>WEAKNESS (W)</p> <ol style="list-style-type: none"> 1. Lots of open space that is directly exposed to the sun during the day 2. There is no public transportation 3. Lack of seating 4. Hygiene level is very low
	<p>OPPORTUNITIES (O)</p> <ol style="list-style-type: none"> 1. Momentum after Eid 2. Support from the government in improving tourist sites 3. the needs of the tourism community 4. One of the icons of Mandailing Natal 	<p>SO STRATEGY</p> <ol style="list-style-type: none"> 1. Maintain sustainable tourism by managing products, customers and stakeholders, and social. 2. Create better branding regarding Ecotourism products and services to both visitors and stakeholders.
<p>THREATS (T)</p> <ol style="list-style-type: none"> 1. The location is far from residential areas 2. Food is not updated 3. Prolonged summer makes tourist sites deserted 4. Visitor satisfaction sometimes decreases because it doesn't match expectations 	<p>STRATEGY ST</p> <ol style="list-style-type: none"> 1. Doing renovations and adding visitor facilities so that tourists feel comfortable 	<p>WT STRATEGY</p> <ol style="list-style-type: none"> 1. Improve facilities and services to increase visitor satisfaction and comfort. 2. Strengthen branding to attract tourists.

Table 22
The Natal Beach SWOT Matrix

<p>IFAS</p> <p>Efas</p>	<p>STRENGTH (S)</p> <ol style="list-style-type: none"> 1. Light breeze 2. It has a beautiful natural panorama of the beach with lots of Christmas trees growing on it 3. The location is in a residential area and entry is free 4. Suitable for all ages. 	<p>WEAKNESS (W)</p> <ol style="list-style-type: none"> 1. Inadequate MCK 2. Access to public transportation is not reachable to tourist sites 3. Menu options are less varied 4. the level of cleanliness is still low
	<p>OPPORTUNITIES (O)</p> <ol style="list-style-type: none"> 1. Momentum after Eid and school holidays 2. the needs of the traveling community 3. Spread through social media is very fast. 4. One of the iconic Christmas City 	<p>STRATEGY (SO)</p> <ol style="list-style-type: none"> 1. Maintain sustainable tourism by managing products, customers and stakeholders, and social. 2. Create better branding regarding ecotourism services to both visitors and stakeholders.
<p>THREATS (T)</p> <ol style="list-style-type: none"> 1. If the tide rises, it causes sea water to reach the shoreline where the location is relaxing 2. Rainy weather causes visitors to be quiet because they are worried about rain and storm winds 3. Visitor satisfaction sometimes decreases because it does not match specifications 4. There is a threat of a tsunami 	<p>STRATEGY (ST)</p> <ol style="list-style-type: none"> 1. Make a mitigation strategy during a rainstorm or when a tsunami occurs so that it eliminates the worries of visitors 2. cooperate with the local government regarding community empowerment and disaster mitigation 3. Conduct routine evaluation of complaints from visitors 	<p>STRATEGY (WT)</p> <ol style="list-style-type: none"> 1. The construction of ecotourism support facilities by the surrounding community, village government and managers must really touch the community and visitors in order to avoid threats. 2. Create a mitigation strategy during rain, storm or tsunami. 3. Strengthen branding to attract tourists.

QSPM (Quantitative Strategic Planning Matrix) Analysis

QSPM (Quantitative Strategic Planning Matrix) analysis is the final part to determine the best strategy from several alternative strategies obtained at the SWOT analysis stage. The strategy that will be analyzed at this stage is an alternative SO strategy because ecotourism is in quadrant 1 (strong and likely) based on the results of the SWOT analysis. The QSPM matrix compares alternative strategies with internal and external factors obtained at the SWOT analysis stage. This comparison will produce AS (attractiveness score) where AS shows the relative attractiveness of each strategy to internal and external factors. Scores for AS are 1 = irrelevant, 2 = somewhat relevant, 3 = moderately relevant, 4 = very relevant. Then the AS value is multiplied by the factor weight obtained at the SWOT analysis stage which will produce the TAS (total attractiveness score). Then all the TAS values for each strategy are added up which will produce the total TAS. The highest TAS total value is the most recommended strategy to implement (Harisudin & Qurtubi, 2023). The results of the QSPM analysis can be seen in the following table:

Table 23
QSPM Matrix of Determination

Internal and External Factors	Weight	Alternative Strategy			
		Sustainability		Branding	
		US	BAG	US	BAG
Strength					
Cool air	0.170	4	0.68	4	0.68
Free Entrance Ticket	0.127	4	0.508	4	0.508
It has a beautiful panorama because it is at the foot of the mountain	0.191	4	0.764	4	0.764
Location near offices	0.127	4	0.508	4	0.508
Suitable For All Ages	0.127	4	0.508	4	0.508
Weaknesses					
Mck is inadequate	0.085	4	0.34	1	0.085
Houses of worship are also inadequate	0.021	4	0.084	1	0.021
Access to public transportation is not reachable to tourist sites	0.085	4	0.34	1	0.085
Less varied menu options	0	4	0	1	0
cleanliness level is still low	0.063	4	0.252	1	0.063
Opportunities					
Active dissemination of information	0.107	1	0.107	4	0.428

There is support from the government by not collecting fees	0.142	4	0.568	3	0.426
the needs of the traveling community	0.25	1	0.25	2	0.5
the momentum of school holidays and holidays	0.214	1	0.214	1	0.214
Threats					
a hurricane caused a tree branch to break	0.071	4	0.284	1	0.071
The continuous rain made the roads slippery	0.178	4	0.712	1	0.178
Visitor satisfaction sometimes decreases because it does not match expectations	0.035	4	0.14	4	0.14
No updates regarding food trends	0	4	0	3	0
TOTAL			6,259		5,179

Table 24
QSPM Matrix Sampuraga

Alternative Strategy					
Internal and External Factors	Weight	Sustainability		Branding	
		US	BAG	US	BAG
Strength					
It is a historical tour of Mandailing Natal	0.241	4	0.964	3	0.723
The tradition of boiling eggs	0.172	4	0.688	4	0.688
Hot water therapy	0.172	4	0.688	4	0.688
Not too far from the Stain Panyabung campus	0.103	4	0.412	4	0.412
Weaknesses					
Many open spaces are directly exposed to the sun during the day	0.172	2	0.344	4	0.688
There is no public transportation	0.068	2	0.136	1	0.068
lack of seating	0.068	4	0.272	1	0.068
very low level of cleanliness	0	1	0	2	0
Opportunities					

Momentum after Eid	0.259	1	0.259	1	0.259
Support from the government in improving tourist sites	0.111	4	0.444	3	0.333
the needs of the traveling community	0.222	1	0.222	2	0.444
is one of the icons of Mandailing Natal	0.148	4	0.592	4	0.592
Threath					
The location is far from resident settlers	0.037	2	0.074	1	0.037
Food is not updated	0.037	1	0.037	4	0.148
Prolonged summer makes tourist sites deserted	0.148	4	0.592	1	0.148
Visitor satisfaction sometimes decreases because it does not match expectations	0.037	4	0.148	4	0.148
TOTAL			5,872		5,444

Table 25
QSPM Matrix Natal Beach

Internal and External Factors	Weight	Alternative Strategy			
		Sustainability		Branding	
		US	BAG	US	BAG
Strength					
Soft breeze	0.269	4	1,076	4	1,076
It has a beautiful natural panorama of the beach with lots of Christmas trees growing on it	0.115	4	0.46	4	0.46
The location is in a residential area and entry is free	0.230	4	0.92	4	0.92
Suitable For All Ages	0.153	4	0.612	4	0.612
Weaknesses					
Mck is inadequate	0.038	4	0.152	1	0.038
Access to public transportation is not reachable to tourist sites	0.038	2	0.076	1	0.038
Less varied menu options	0.115	4	0.46	1	0.115
cleanliness level is still low	0.038	2	0.076	4	0.152
Opportunities					
Momentum after Eid and school holidays	0.148	1	0.148	1	0.148

The needs of the traveling community	0.185	1	0.185	2	0.37
The spread via the internet is very fast	0.111	1	0.111	4	0.444
one of the Iconic Natal Beaches	0.222	4	0.888	4	0.888
Threats					
If the tide rises, it causes seawater to reach the shoreline where the location is relaxing	0.037	4	0.148	1	0.037
Rainy weather causes visitors to be quiet because they are worried about rain and hurricane winds	0.259	4	1.036	1	0.259
Visitor satisfaction sometimes decreases because it does not match expectations	0.037	4	0.148	4	0.148
There is a threat of a tsunami	0	1	0	1	0
TOTAL			6,496		5,705

In Tables 23, 24 and 25, it can be seen that for strategy 1 namely “sustainability” gets a total TAS of 6.259 in table 23. TAS is 5.872 in table 24 and TAS is 6.496 in table 25 while strategy 2 namely “branding” obtains a total TAS of 5.179 in table 23. TAS is 5.444 in table 24 and TAS is 5.702 in table 25. From the overall highest score, strategy 1 is obtained, namely “sustainability” so that this strategy is recommended to be carried out by ecotourism managers.

CONCLUSION

Based on the results of the total IFAS and EFAS matrices, it was found that Natal Beach had the highest score. this means that Natal Beach has more potential than the other tours studied. Overall, the condition of ecotourism in Mandailing Natal based on strength, weakness, opportunity and threat (SWOT) analysis has great strength. This is illustrated by the results of the analysis of the IFAS and EFAS matrices which describe the position of tourism objects in Mandailing Natal in quadrant 1-2 positions in the SWOT matrix. Quadrant 2 describes strategy diversification, namely tourism objects in stable condition but facing a number of formidable challenges. On the 23rd, 24th and 25th, it can be seen that for strategy 1, namely “sustainability”, a total TAS of 6.259 is obtained in table 23. TAS is 5.872 in table 24 and TAS is 6.496 in table 25 while strategy 2, namely “branding”, obtained a total TAS of 5.179 in table 23. TAS was 5.444 in table 24 and TAS was 5.702 in table 25. From the overall highest score, strategy 1 was obtained, namely “sustainability” to be run by ecotourism managers. Tourist attractions in Mandailing Natal carry out several strategies to

face the big challenges towards good, including (1) Adding cleanliness facilities, (2) Prioritizing traders so that the prices offered are in complete portion sizes, (3) Utilizing a large area of land to complement lacking facilities and adding new innovations supported by the local government or the tourism office.

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