

Analysis of the Potential of the Panatapan Panyabungan Natural Tourism Area, Mandailing Natal Regency

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Abstract: Nature tourism in Mandailing Natal Regency, North Sumatra has promising potential. Statistical data shows an increase in local tourist visits of 6,274 people in the 2023-2024 period. This increase has a positive impact on community and government income, but has the potential to have a negative impact on ecological aspects if it exceeds the carrying capacity of the area. Therefore, the strategy for developing the area is an important factor in realizing sustainable tourism activities. This study was conducted in September-October 2024 with the aim of analyzing the strategy for developing sustainable tourism areas. Data collection was carried out to identify the carrying capacity of each tourist attraction using a SWOT (Strength-Weakness-Opportunities-Threats) analysis through interviews with relevant stakeholders. The results of the carrying capacity analysis show that this area is still able to accommodate tourist activities. The main strategy for sustainable development recommended is optimizing the area by expanding areas that have the potential for beautiful scenery as the main attraction, as well as improving supporting facilities and infrastructure in the future.

Keywords: Analysis of potential tourist areas; Panatapan Payabungan; Sustainable development strategy

Introduction

Indonesia is a country that is blessed with extraordinary natural wealth that stretches from the west to the east one of them is its natural beauty (Sitompul, 2024). Indonesia is an archipelagic country with quite large potential and many islands, with cultural diversity, natural wealth, and ethnic diversity in each region, has many areas that can be developed to support national progress (Qurrotul et al., 2024). Indonesia is a country with abundant natural wealth with abundant tourism making Indonesia one of the world's tourist destinations (Pamungkas et al., 2022; T. U. Rahayu et al., 2020). According to the World Travel & Tourism Council (2023), the tourism sector contributed 7.6% to the global Gross Domestic Product (GDP) in 2022. Similarly, data from the Indonesian Ministry of Tourism and Creative Economy (2023) indicates that the tourism sector contributes 3.76% to

Indonesia's Gross Domestic Product (GPD) (Wati et al., 2023). Indonesia's natural tourism areas are one of the tourist destinations that are popular with foreign and local tourists to visit (R. N. Rahayu et al., 2024).

Ecotourism is a follow-up to sustainable tourism which is included in the sustainable development agenda and in the last few decades has become a development concept in the world (Rohyani et al., 2024). Ecotourism is defined as responsible travel to natural areas to gain knowledge, learn local culture and enjoy natural beauty (Sari et al., 2023). The attraction of a tourist attraction is anything that has beauty, uniqueness, and value in the form of a variety of natural, cultural, and man-made wealth that is the target or destination of tourist visits (Rifanjani et al., 2024). Tourism is one of the strategic sectors in increasing the national economy. The existence of these potentials has the opportunity to become one of the things that can increase economic growth and can also

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be an attraction and tourist destination, both in the form of nature tourism and cultural tourism and community-based creative economic tourism (Olivia et al., 2022; Paramitha, 2022). The tourism sector has been recognized as the largest industry of this century, in terms of several indicators such as contributions to increasing foreign exchange and absorption of labor. With its various characteristics, the tourism sector has become a mainstay sector in economic development in various countries, including Indonesia (Ardiansyah et al., 2022; Gusriza, 2022; Pamularsih, 2020; Putri et al., 2019). The development of the tourism sector is an important component of a country's economic development which aims to spur economic growth (Febrian et al., 2023; Hartono, 2024).

Tourism is an activity that is an important part of people's lives today, not only as a means of recreation but tourism is a significant economic driver (Ramanda et al., 2024; Timoro et al., 2024). The economic contribution refers to the economic significance or importance of nature tourism within a PA region (Majewski, 2024). The tourism industry in Indonesia has experienced quite significant development as evidenced by the increasing trend of domestic tourist travel (Abidin et al., 2024; Rozi et al., 2024). According to data from the Mandailing Natal Regency Tourism Office, the number of tourist visits to this area has shown a significant increase in the last five years, with an average growth of 15% per year (Mandailing Natal Tourism Office, 2022). The potential of natural tourism in Panatapan Panyabungan lies not only in its natural beauty, but also in the biodiversity that exists around it. This area is a habitat for various species of flora and fauna, which is a special attraction for visitors and researchers. This tour is located in Panyabungan City, which is in Mandailing Natal Regency, North Sumatra Province. The location is only 300 meters from the Mandailing Natal Regency Government Office Complex. Panatapan Panyabungan is a tourist area managed by individuals. This natural tour offers various attractions that captivate visitors, including stunning natural scenery, fresh and refreshing air.

The existence of stunning natural panoramas, such as mountains, forests, and rivers, makes Panatapan Panyabungan one of the ideal places for nature tourism activities, such as trekking, and other outdoor activities. In addition, the rich local culture and biodiversity are also their own attractions. However, despite its great potential, the development of the Panatapan Panyabungan nature tourism area still faces various challenges. One of the main challenges is inadequate infrastructure, such as road access and other supporting facilities. Infrastructure is needed to improve the accessibility of the tourist area so that

visitors feel comfortable. In addition, sustainable management of natural resources also needs to be considered so that there is no environmental damage that can reduce the attractiveness of the tourist area. While sustainability in tourism focuses on long-term environmental and socio-economic health, resilience explicitly addresses the capacity of destinations and stakeholders to adapt and thrive amid crises, which is increasingly recognized as crucial in a postpandemic world (Mandić et al., 2025). In developed countries, the tourism sector performs well and developing countries also perceive tourism as an opportunity for growth and development (Sgroi et al., 2024). Tourism is a leading force in the global economy (Li et al., 2024). Tourism in protected areas refers to various forms of recreational opportunities within the realm of nature-based tourism (Birendra KC et al., 2024). Around the world, visits to nature parks and protected areas to learn about natural and cultural heritage continue to grow strongly (Zorlu et al., 2023). Thus, the analysis of the potential of the Panatapan Panyabungan natural tourism area is very important to do. Through this study, it is hoped that various factors that support and hinder tourism development in the area can be identified, as well as providing recommendations that can be applied to increase the attractiveness and sustainability of natural tourism in Mandailing Natal Regency. This study is also expected to contribute to the development of better tourism policies at the local and regional levels.

The urgency of this research is supported by three main factors. First, the increasing trend of post-pandemic nature tourism requires a management strategy that can balance economic growth with environmental sustainability. Second, the strategic position of Panatapan Panyabungan as a leading tourist destination in Mandailing Natal requires measurable development planning to optimize its potential. Third, the absence of a comprehensive study on the carrying capacity and sustainable development strategies in this area can threaten the sustainability of natural resources and the sustainability of long-term tourism activities. This research is important to produce data-based policy recommendations in the development of sustainable nature tourism, which is not only economically profitable but also maintains the balance of the ecosystem and the welfare of local communities. The results of this study are expected to be a model for the development of resilient and sustainable nature tourism destinations in Indonesia.

Method

This study uses a descriptive approach with a qualitative method. The descriptive approach aims to

provide a clear picture of the potential of the Panatapan Panyabungan natural tourism area. Descriptive research is conducted to answer questions related to the status of the research object at the time the research was conducted, or in other words, to inform the conditions as they are (Barlian, 2016). The types of data used are primary data and secondary data (Damanik et al., 2023). Primary data were obtained through direct observation with related parties, namely actors who play a role in the management of the Panatapan Payabungan tourist attraction and the local community. State actors are a key player in the political economy of tourism by directly capitalizing on potential land (Li et al., 2024). Primary data consists of interviews using questionnaires. Research respondents focused on key persons/stakeholders through interviews. Secondary data were obtained from various related sources, namely from books, journals, and related agencies that support this research. The flow of the research method is as follows:

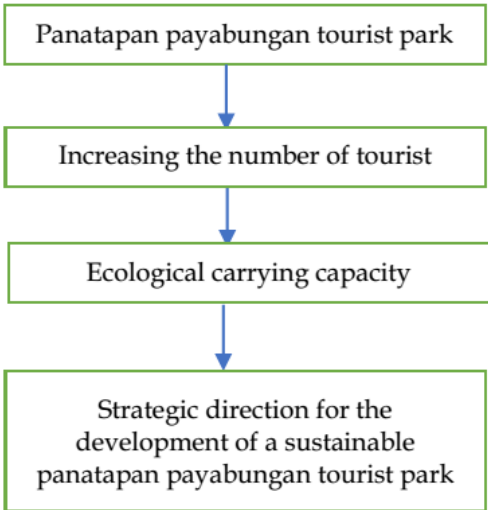


Figure 1. Research method flow

Table 1. Matrix SOWT

IFAS	Strategy (S) determines internal strength factors	Weakness (W) determines internal weakness factors
EFAS		
Opportunity (O) determines external opportunity factors	SO strategy creates strategies that use strengths to take advantage of opportunities.	WO strategy creates a strategy to minimize weaknesses to take advantage of opportunities.
Threat (T) determines external threat factors	ST strategy creates strategies that use strengths to overcome threats.	WT strategy creates a strategy that minimizes strategic weaknesses and avoids threats.

Then the data was analyzed using (SWOT) analysis. SWOT analysis is a process of systematically identifying factors to formulate a strategy. In this study, SWOT analysis was applied to develop a strategy for the development of panatapan payabungan. SWOT compares strengths, weaknesses, opportunities, and threats (Muala et al., 2024). This approach uses logic to optimize strengths, reduce weaknesses, take advantage of opportunities, and overcome threats (Rangkuti, 2018). The SWOT analysis process consists of two stages, namely the input stage and the matching stage. The input stage involves two main components: the internal factor evaluation matrix and the external factor evaluation matrix. Meanwhile, the matching stage includes the internal-external matrix and the SWOT matrix.

Result and Discussion

Administratively, Panatapan Panyabungan is located in the Parbangunana Village area, Panyabungan District, Panyabungan City, North Sumatra Province. Pantapan Panyabungan is located within the Mandailing Natal Regent's office complex. According to the Central Statistics Agency of Mandiling Natal Regency, Panatapan Panyabungan

Nature Tourism is located at 400-750 meters above sea level. Administratively, Payabungan District borders several districts, namely the north borders Bukit Mandailing District, the south borders Payabungan Barat District and Huta Bargout District, the east borders Payabungan Timur District and Tapanuli Selatan District.

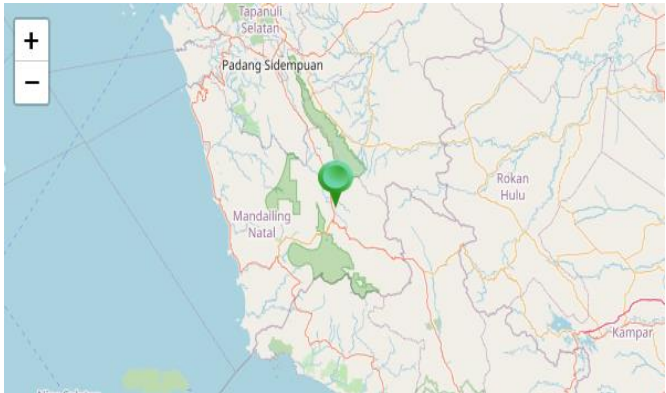


Figure 2. Research location

Panatapan Panyabungan is one of the natural attractions in Mandailing Natal Regency which is easily accessible, located not far from the city center of Panyabungan. In Panatapan Panyabungan, you can enjoy various children's games and the natural beauty

that exists, on the way to Panatapan Panyabungan we pass the Mandailing Natal Regent's Office Complex, and around the road, precisely on the right and left, there are rows of green trees that decorate the street. The distance traveled from the gate of the Mandailing Natal Regent's Office Complex to Panatapan Panyabungan is not too far, only about 1.5 km. According to tourism data, visitors to Panatapan Payabungan in 20223-2024 reached 6274 people.

Table 2. Tourist Visitor Data 2023-2024

Report and Analysis: Mandailing Natal Regency	
	Number of Domestic Tourists 2023
Land	3421 people
Sea	4132 people
Air	2421 people
Amount	6274 people

Potential of Natural Panorama

A product that is often promoted through public advertising, both by the government and the private sector (Alam et al., 2024). Tourism potential related to natural panoramas includes nature reserves and nature reserves, including flora and fauna, as well as charming views based on the results of observations, the beauty of the Barisan hills in Panapatan Panyabungan shows extraordinary potential. The panorama is the view of the Barisan hills, the expanse of green Bukit Barisan which stretches wide is the main attraction of Panatapan Panyabungan. The existence of beautiful natural scenery, a beautiful environment and adequate resting places is one alternative tourist spot for everyone who travels alone or with family (Mahardhani et al., 2023).



Figure 3. View of the Payabungan

From the heights, visitors can witness the enchanting natural beauty. The cool air and calm atmosphere make anyone who comes feel comfortable. No wonder many people make this place a favorite

tourist destination to relieve fatigue and enjoy the beauty of nature. Then the second panorama is the river that flows under the Barisan hills. One of the main attractions of Panatapan Panyabungan is the beauty of the river that flows under the Barisan Hills. This river is an inseparable part of the stunning natural panorama in this area. The clarity of the water and the beauty of the surrounding nature make this river a favorite destination for nature lovers and photographers. For this reason, twenty-six criteria belonging to seven dimensions have used: tourism resources, accessibility, touristic infrastructure, demand, promotion and marketing, conservation status, and socioeconomic development (Zorlu et al., 2023)

Social and Cultural Potential

The tourism industry is often perceived as an economic engine that generates foreign exchange for economic development in a country, including Indonesia (Prananta et al., 2024). The potential for cultural tourism in Panatapan Panyabungan is actually very large. However, until now, there has been no serious effort to develop and promote the cultural heritage of Mandailing Natal in this tourist area. In fact, by combining natural beauty and cultural richness, the tourist attraction of Panatapan Panyabungan could be further increased. Tourism, when managed sustainably, can contribute positively to environmental protection, conservation of natural areas, and promotion of eco-friendly practices (Guo, 2024). Furthermore tourist educative or also commonly called with edupark is form journey combining tours activity tourist with aspect education (Anjani et al., 2024).

Economic Potential

The economic potential in the Panatapan Panyabungan tourist area is very promising. The existence of restaurants, coffee shops, and street vendors selling various kinds of snacks, from typical Mandailing Natal food to children's toys, has created a mutually beneficial economic ecosystem. These business actors not only meet the needs of tourists, but also help advance the economy of the surrounding community. This potential needs to be supported by the government with various policies that support the growth of micro, small, and medium enterprises (MSMEs). Adequate facilities, training for business actors, and intensive promotion will further increase the competitiveness of local products and attract more tourists.

Facility

Tourist facilities in Panatapan Panyabungan, although fairly complete, unfortunately have not been managed optimally. Several important facilities such as

public toilets look damaged and unclean, indicating a lack of routine maintenance. This condition certainly reduces visitor comfort and gives a bad impression of this tourist attraction. The root of the problem lies in the limited human resources and budget allocated for facility maintenance. In addition, the lack of supervision and awareness of visitors in maintaining environmental cleanliness also contributes to the damage to facilities. Littering in tourist areas, for example, not only damages the natural beauty, but also has the potential to pollute the environment. Of all the facilities in Panatapan Panyabungan, there are several facilities that are lacking or not yet available in this tourist attraction, namely lodging or hotels.

Table 3. Panyabungan Observation Deck Tourist Facilities

Name of Tourist Object	Tourist Facilities	Total	condition
Panatapan payabungan	Musollah	1	Good
	Gazebo	20	Good
	Parking area	1	Good
	Children's playground	8	Good
	Food stall/restaurant	4	Good
	Toilet	1	Phoorly
	Security guard post	1	Phoorly
	Photo spot	4	Good

Accessibility

Accessibility is an indication of how easy it is to reach an object (Trisbiantoro et al., 2020). The distance that must be traveled from Panyabungan City, as the capital of Mandailing Natal Regency, to the Panatapan Panyabungan tourist location is around 9.3 km. The trip from Panyabungan City takes around 19 minutes, considering its location is not far from the city center. The route to Panatapan Panyabungan is very easy and can be accessed by both private vehicles and public transportation. To use public transportation, visitors can depart from Pasar Lama by taking public transportation number 4, 5 or 6, and get off at the Kompel Kantor Bupati motorcycle taxi base. Furthermore, the journey is continued by motorcycle taxi to Panatapan Panyabungan. Although the journey can be done on foot, the route to this tourist attraction involves quite high hills, so it requires extra energy to reach it. With private vehicles, visitors can go directly to the Panatapan Panyabungan tourist location. Along the way to the location, visitors will be treated to street views surrounded by shady trees, so that the journey to Panatapan Panyabungan feels cool. Good road conditions, paved, and not bumpy, coupled with a strategic location, will make tourists feel comfortable when visiting the tourist attraction. The more tourists who visit, the faster the development of Panatapan

Panyabungan tourism. In the development of tourism, transportation plays a central role as a link between tourists and destinations. Underlined that transportation is an important factor in the development of tourism, because transportation is a means that connects tourists with tourist attractions (Octanisa, 2023). However, in the development of tourism, transportation plays a central role as a link between tourists and destinations (Octanisa, 2023).

Socio-economic Conditions of the Community around the Panyabungan Observation Post Tourism Area

Based on the results of interviews with the community, the majority of local residents agree with the development of Panatapan Panyabungan tourism, considering the many positive impacts that can be caused. The development of this tourist attraction has the potential to open up employment opportunities, reduce unemployment rates, and increase the income of the surrounding community, which in turn can improve their standard of living. However, behind these various benefits, the possibility of negative impacts cannot be ignored. Changes in community behavior and morals due to tourist visits are one of the concerns related to the development of the Panatapan Panyabungan tourist attraction. This is starting to be apparent, seen from the many young couples who visit this location to date. In addition, a number of tourists also come from urban areas. Interaction between rural and urban communities often causes changes in one party, both in terms of dress, language use, and culture. Changes that occur among the community around the tourist attraction are a consequence of the impact of tourism development or development. Conceptually, these changes are the result of the acculturation process between local community culture and foreign culture brought by visiting tourists. Modernization is an external factor triggering the transformation, including the development of a rural area into tourism village (Vitasurya et al., 2018).

Analysis of Natural Tourism Potential

Tourism involvement is a psychological state of understanding, enjoyment, and interest in tourism (Suhartanto et al., 2018). Analysis of the potential of Panatapan Panyabungan nature tourism is carried out using SWOT analysis by analyzing internal and external factors. Internal factors are strengths (Strengths), namely stunning natural beauty, easy accessibility, potential for developing nature tourism. Weaknesses, namely inadequate facilities, lack of accommodation facilities such as lodging, lack of clean water and lack of security, lack of promotion of Panatapan Payabungan tourism, no social and cultural potential that is developed. External factors are

opportunities (Opportunities), namely it can be a tourist destination, the location of the tourist attraction is strategic and easy to reach, the income of the community around Panatapan Payabungan increases, opening up employment opportunities so as to reduce unemployment. Threats, namely the influence of community behavior and morals with tourist visits, the existence of more attractive tourist attractions, visitor safety and comfort. After the internal and external factors are identified, the next step is to create a table of

internal strategy factors (Internal Factor Analysis Summary/IFAS) and external strategy factors (External Factor Analysis Summary/EFAS).

Internal Strategy Factor Matrix (IFAS)

We can determine the compilation of the IFAS table using the factors that are the strengths and weaknesses of Pantapan Panyabungan Tourism, previously the weight/score of each factor was determined.

Table 4. Internal Strategy Matrix

Internal Factors (Strenght & Weakness)				
	Strategic Factors	Weight	Rating	Score
Strenght	The stunning beauty of nature	0.17	4.50	0.77
	Easy accessibility	0.14	4.50	0.64
	Potential for developing natural tourism	0.14	3.00	0.43
	Sub Total	0.46		1.84
Weakness	Inadequate facilities	0.11	2.50	0.29
	Lack of accommodation facilities (lodging and clean water)	0.17	2.00	0.34
	Lack of tourism promotion	0.17	1.50	0.26
	There is no socio-cultural potential that is developed	0.09	1.00	0.09
Sub Total		0.54		0.97
Total		1.00		2.81

Based on the table above, the Internal Strategy (IFAS) obtained results stating that the strength (Strength) has a value of 1.84 and the weakness (Weakness) is worth 2.81. The strength and weakness figures that have been obtained will be used as a reference in determining the grand strategy matrix

which is then entered as a strength value (Strength) in quadrant II and weakness in quadrant III.

Matrix Factor Strategy External (EFAS) External Strategy Factor Matrix (EFAS)

The steps in compiling the EFAS table are by determining the factors that are opportunities (Opportunities) and threats (Threats) for Panatapan Tourism.

Table 5. External Strategy Matrix (EFAS)

External Factors (Opportunities & Threats)				
	Strategic Factors	Weight	Rating	Score
Opportunities	Can be a tourist area	0.18	4.00	0.73
	Strategic and easy to reach tourist location	0.18	4.50	0.82
	The income of local people around the tourist area increases	0.12	3.00	0.36
	Opening up employment opportunities	0.12	4.00	0.48
Sub Total		0.61		2.39
Threats	The influence of moral behavior on society	0.12	2.50	0.30
	There are more interesting tourist attractions	0.12	2.50	0.30
	Visitor safety and comfort	0.15	2.90	0.44
Sub Total		0.39		1.05
Total		1.00		3.44

From the EFAS matrix in the table above, the results obtained state that opportunities (Opportunities) are worth 2.39 and threats (Threats) are worth 3.44. The opportunity and threat figures obtained through this EFAS matrix will later be used as a reference in determining the grand strategy matrix where the opportunity value (Opportunities) will enter quadrant I and the threat value (Threats) will enter quadrant IV.

Matrix SWOT

The next step is to analyze the results of the Internal Factor Analysis System (IFAS) and External Factor Analysis System (EFAS) by utilizing the SWOT matrix. The tool used to formulate strategic factors in the tourism sector is the SWOT matrix. This matrix clearly describes how external opportunities and threats faced in developing tourism potential can be aligned with existing strengths and weaknesses. SWOT analysis compares internal factors, namely strengths

and weaknesses, with external factors, namely opportunities and threats. From this analysis, strategic decisions can be taken, where this matrix produces four sets of possible alternative strategies. For a more detailed SWOT matrix, see the table 6.

Table 6. Matrix SWOT

All data			
Opportunities (O) 1. Can be a tourist area 2. Strategic and easily accessible tourist location 3. Increased income for local people 4. Opens up employment opportunities	Strenght (S) 1. Stunning natural beauty 2. Easy accessibility 3. Potential for developing natural tourism		Weakness (W) 1. Inadequate facilities 2. Lack of accommodation facilities (lodging &n clean water) 3. Lack of tourism promotion 4. No social and cultural potential is developed
	Strategi SO 1. Developing nature-based tourism packages (S1O1) 2. Utilizing strategic locations to attract tourists from surrounding areas (S1O2) 3. Involving communities in tourism management (S2O3) 4. Providing training for communities to fill job vacancies (S2O4)		Strategi WO 1. Improve the quality and quantity of tourism facilities such as toilets, parking lots, clean water, etc. (W1O1). 2. Utilize strategic locations to attract investors in tourism development (W1O2) 3. Facilitate the construction of accommodation, provision of clean water to meet tourism needs (W2O3) 4. Conduct intensive promotions through various media to increase public awareness (W3O4)
	Threats (T) 1. Influence of community moral behavior 2. The existence of more interesting tourist attractions 3. Safety and comfort of visitors		Strategi WT Increase supervision of visitors to maintain cleanliness and environmental sustainability (W1T1) 2. Provide adequate security facilities to ensure visitor comfort (W2T3) Increase tourism promotion to attract more visitors (W3T3)
	Strategi (ST) 1. Conducting environmental conservation and tourism education campaigns (S1T1) 2. Offering uniqueness and advantages that competitors do not have (S1T2) 3. Improving security and providing security facilities (S2T3)		

Determination of the Grand Strategy Matrix

The obtained figures are calculated through IFAS and EFAS analysis, then entered into the Grand Strategy matrix to determine the position of Panatapan Panyabungan nature tourism development, which is indicated by the X and Y coordinates in the matrix. The steps that need to be taken are to place the total factors S, W, O, and T in their respective positions, in order to determine the position of Panatapan Panyabungan tourism appropriately.

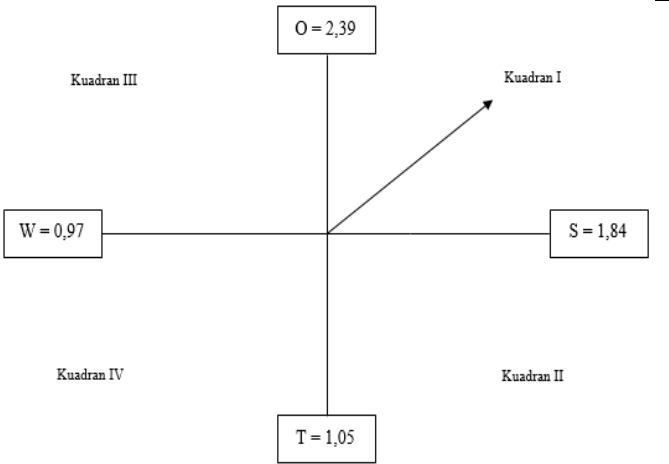


Figure 4. Grand strategy matrix

Decision Making Stage

Next, at this stage, review the four strategies that have been formulated and make decisions in determining the most profitable, effective and efficient strategy for the Panatapan Panyabungan tourism development plan. Based on the SWOT matrix, a strategic plan can finally be prepared which will be used as a guideline in carrying out further activities.

From the results of the SWOT matrix analysis, 4 possible alternatives and strategies for developing Panatapan Panyabungan tourism were produced as follows (1) SO Strategy (Strengths - Opportunities) where this strategy utilizes strengths to seize opportunities, namely SO1 and SO2 Strategies: This strategy focuses on developing tourism facilities and utilizing strategic locations. By improving the quality and quantity of facilities, as well as utilizing the potential of natural tourism, this tourist attraction can attract more visitors. Then SO3 Strategy: Involving the community in tourism management is a very good step. This will not only increase the income of the surrounding community, but also create a sense of ownership and shared responsibility for the sustainability of tourism. (2) WO (Weakness-Opportunities) Strategy where this strategy overcomes weaknesses by utilizing opportunities, namely WO1, WO2, and WO3 Strategies: This strategy focuses on overcoming the lack of facilities and promotions. By improving existing facilities and conducting more intensive promotions, tourist attractions can increase their appeal. Then WO4 Strategy: Providing training to the community can improve the quality of local human resources and open up new job opportunities. (3) ST (Strength - Threats) Strategy where this strategy utilizes strengths to overcome threats, namely ST1 Strategy: Environmental conservation campaigns are very important to maintain the beauty of nature and the sustainability of tourism. Then ST2 Strategy: Offering uniqueness and advantages that competitors do not have will make this tourist attraction more attractive and different. (4) WT (Weakness - Threats) Strategy where this strategy overcomes weaknesses and prevents threats, namely WT1, WT2, and WT3 Strategies: This strategy focuses on increasing security, comfort, and promotion. By providing a sense of security and comfort to visitors, as well as conducting effective promotions, tourist attractions can compete with competitors

Conclusion

Based on the results of research that has been conducted on the Panatapan Panyabungan Nature Tourism in Mandailing Natal Regency in 2024, it was concluded that the Panatapan Panyabungan tourist attraction has enormous potential to be developed into an attractive tourist destination. However, serious and integrated efforts are needed to overcome various existing obstacles and take advantage of open opportunities. With careful planning and good cooperation between various parties, the development of Panatapan Panyabungan tourism can be successful.

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Author Contributions

A.R.A preparation of original draft, results, discussion, methodology, conclusions; N.S, I.U, H; analysis, review, proofreading and editing.

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