

Assessing Tourism Object Management Towards Sustainable Tourism Development Strategy: A SWOT Analysis



Jef Rudianto Saragih^{1*}, Rahmat Riadi², Ramainim Saragih³, Tioner Purba⁴, Simon H. Sidabukke⁴,
Marulam MT Simarmata⁴, Roeskani Sinaga⁵, Triastuti⁴, Alex Abdu Chalik⁶

¹ Department of Regional and Urban Planning, Postgraduate School, Universitas Simalungun, Pematangsiantar 21139, Indonesia

² Tourism Office of Pematangsiantar City, Pematangsiantar 21146, Indonesia

³ Department of Management, Postgraduate School, Universitas Simalungun, Pematangsiantar 21139, Indonesia

⁴ Department of Forestry, Faculty of Agriculture, Universitas Simalungun, Pematangsiantar 21139, Indonesia

⁵ Department of Agribusiness, Faculty of Agriculture, Universitas Simalungun, Pematangsiantar 21139, Indonesia

⁶ Department of Political Science, Faculty of Social and Political Science, Universitas Siliwangi, Tasikmalaya 46115, Indonesia

*Corresponding Author Email: saragihjef@gmail.com

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<https://doi.org/10.18280/ijstdp.190835>

ABSTRACT

Received: 1 June 2024

Revised: 6 August 2024

Accepted: 16 August 2024

Available online: 29 August 2024

Keywords:

*sustainable tourism development,
strategic planning, stakeholder
engagement, tourism management
practices, SWOT analysis*

Pematangsiantar City is the second largest city in North Sumatra Province and has many potential tourism objects. Tourism is a strategic sector that improves regional development and the welfare of the local community. However, tourism development practices still need to improve, primarily related to implementing comprehensive strategic planning. The study aims to formulate an effective and sustainable tourism development strategy by assessing the strengths, weaknesses, opportunities, and threats to managing local tourism objects. The assessment uses a qualitative approach through SWOT analysis to evaluate the management practices of ten selected tourism objects. Data and information were collected through focus group discussions and in-depth interviews with 60 key respondents. The SWOT analysis results show that the total score of internal factors is superior to external factors. This condition confirms that the development of tourism objects in the future uses an aggressive and competitive strategy. In addition, an assessment of internal conditions reveals that the strengths are less significant than the weaknesses, but the opportunities outweigh the threats. Therefore, the study suggests adaptive strategies to complement aggressive and competitive strategies. The main recommended action strategies are presented in the conclusion. The implications of these results are significant for policymakers, tourism planners, and stakeholders as these findings provide a comprehensive roadmap for improving sustainable tourism development. The study contributes to sustainable tourism development by providing a detailed analysis of the city's direction of tourism object management practices.

1. INTRODUCTION

Tourism is an essential business for the community and a global economic activity [1]. As a worldwide industry, tourism has a multidimensional role [2] and is an economic contributor to tourist destinations in many countries [3]. In developing countries, tourism contributes significantly to gross domestic product [4] and is a strategic sector to reduce poverty [5].

Indonesian tourism is one of the strategic sectors and will make an essential contribution in the future [6]. In 2019, the tourism industry contributed the second-largest foreign exchange in Indonesia [7]. The tourism sector has increased competitiveness, the visits of foreign tourists, growth, and a positive share of the national economy [8]. Tourism is also the most important economic sector and positively affects regional development [9]. According to Kawuryan et al. [10], research on the sustainability of Indonesia's tourism development has

increased significantly in the last ten years.

The tourism sector requires holistic, future-oriented planning measures and directing tourism growth towards sustainable development [11]. Tourism growth is essential in improving people's welfare in tourism destinations [12] because it is the primary income source for local communities [1]. This sector contributes significantly to local community development through the participation of all stakeholders [2]. Participation impacts economic benefits, infrastructure improvement, and cultural development [13]. Therefore, tourism stakeholders must adopt inclusive sustainable development strategies to optimize tourism's positive impact on the local economy [14].

However, tourism development still needs improvement due to insufficient infrastructure and facilities impeding progress. Transportation infrastructure is vital for tourism [15], highlighting the importance of sustainable tourism

development in improving infrastructure, private investment, governance, facilities, and information and communication technology [16, 17]. According to Jufri et al. [18], new facilities and marketing strategies significantly increase tourist visitation rates.

Limited information, promotion, and tourism marketing are problems in tourism development [17]. Location information is one of the weaknesses of tourism development. The primary strategy in tourism development is to formulate a more suitable online travel platform. The framework of digital destination branding [19] and improved marketing communications [20] enhance tourism destination promotion. In this regard, promotional costs are one of the crucial factors in increasing the number of visitors [18].

Community participation in tourism development still needs to be improved. Most local communities believe their participation is essential to ensure the success of ecotourism [21]. Community participation supports tourism sustainability through marketing innovation, entrepreneurial stimulation, and network formation [22]. Community participation in tourism increases if governments and tourism operators can address operational, structural, and cultural issues [17].

Finally, the development budget limitation becomes a classic problem in tourism development. Budget constraints and inappropriate governance are structural problems in tourism development [17]. Kharisma et al. [23] recommended the importance of consistency in planning and budgeting in the tourism sector. Therefore, local governments must evaluate tourism programs in planning and budgeting to obtain optimal results. In implementing tourism development programs, control and coordination functions need to be improved [24].

This study is essential for Pematangsiantar as it centers on the collaborative development of sustainable strategies for tourism objects, as identified by the Tourism Office. It underscores the importance of involving all tourism stakeholders and highlights the city's strategic role in supporting Lake Toba's Super-priority Destinations. The study is distinguished for its comprehensive approach, providing detailed recommendations and action plans for sustainable tourism development. The study's contributions and novelties lie in its comprehensive approach, actionable recommendations, stakeholder engagement, acknowledgment of limitations, and the call for further research to enhance tourism management practices. These contributions can inform policy and decision-making processes to promote sustainable tourism development in Pematangsiantar and similar regions. The study analyzes and addresses strengths, weaknesses, opportunities, and threats to formulate effective strategies for regional tourism objects.

Therefore, the study aims to develop sustainable tourism development strategies by conducting a SWOT analysis of tourism objects. This research identifies the strengths, weaknesses, opportunities, and threats of managing these tourism objects. Furthermore, based on this strategy, this study offers several action programs for local governments and all tourism stakeholders. The action program improves the management practices of the tourism objects.

2. LITERATURE REVIEW

Strategy is essential in tourism development [25], and tourism strategic planning integrates community participation and sustainability practices in optimizing local socio-

economic development. Sustainable tourism development is a strategy to harmonize economic, social, and environmental dimensions [26, 27]. Sustainable tourism strategies have priorities: engaging local stakeholders, identifying community problems, and providing essential services [28]. Policymakers must consider environmental intervention strategies in building sustainable tourism [29].

Destination strategy is critical to future tourism development [30]. Sustainable destination development requires coordinated collective action. The destination management organization is a crucial stakeholder in tourism development [31]. In addition, identifying perceptions of local communities' willingness to participate, identifying community institutions, and discovering how communities participate are important in destination development [21].

Therefore, the government needs to adopt a more proactive urban planning strategy to increase tourism competitiveness through the unique character of local tourism [12, 20, 32, 33], improve infrastructure and service quality, and strengthen cultural experiences in tourism destinations [34]. Tourism planning also requires collaboration between government, universities, business entities, and communities [35]. The attractiveness of a tourism object is affected by local characteristics such as natural conditions, availability of accommodation, communication, and transportation [25].

The tourism sector effectively reduces poverty through participatory tourism development, improvement of tourism institutions, strengthening skills training, and tourism partnerships [36]. Development of skills in tourism is enhanced through investment in tourism education, involving professionals, partnerships between stakeholders, and increasing the capacity of tourism human resources [35]. Sustainable rural tourism development strategies must consider all stakeholders' interests, rural resource potential, infrastructure, and human resource capacity [37].

SWOT analysis is one of the most commonly applied methods in strategic planning [38] and one of the oldest strategy instruments, and it is widely used worldwide [39]. As an essential instrument, SWOT analysis is used in planning to evaluate the organization's strategic position [40]. Broadly, the formulation of development strategies in various fields uses SWOT analysis. SWOT analysis can be used in various fields of science, both at the corporate and government levels [41].

SWOT analysis is used widely for formulating sustainable tourism development strategies. Previous studies in the tourism sector include sustainable tourism in cooperation between Azerbaijan and China [42], tourism utilization strategies for sustainable socio-economic development in Turkey [43], ecotourism development strategies and natural resource protection in Iran [44], and tourism sector development priorities in China [45]. In addition, strategies to increase the effectiveness of the tourism sector on sustainable regional development have been studied in Poland [46].

Similar studies using SWOT analysis are village economic development strategies through community-based tourism in Indonesia [47], ecotourism status in aspects of tourism demand and characteristics in Nepal [48], sustainable cultural tourism in Bucharest and Paris [49], sports tourism in Hainan-China [50], ecotourism development priorities in India [51], sustainable development strategies for mangrove-based ecological tourism in Indonesia [52], and the sustainable development strategies of religious-based tourism in India [53]. In summary, SWOT analysis can be applied to assess strengths, weaknesses, opportunities, and threats in various

fields and levels in the public and private sectors.

3. METHODS

3.1 Study area and tourism objects

This research is located in Pematangsiantar City, North Sumatra Province, Indonesia, as a study area by selecting ten tourism objects (see Table 1 and Figure 1). These tourism objects currently need improved management strategies from all stakeholders in the tourism industry [54].

Table 1. Tourism objects

Tourism Objects	Type
Pulo Batu (PB)	Water tourism
Simalungun Museum (SM)	Historical tourism
Statue of Dewi Kwan Im-Vihara Avalokitesvara (SDVA)	Religious tourism
Siantar Zoo (SZ)	Zoo tourism
Merdeka Park (MP)	Park tourism
Beo Park (BP)	Park tourism
Tirta Wira Yudha Pool (TWY)	Pool tourism
Siantar Water Park (SWP)	Water park tourism
Martoba Water Park (MWP)	Water park tourism
Detis Sari Indah Pool (DSI)	Pool tourism

Source: Tourism Office of the Pematangsiantar City [54]

3.2 Research respondents

Table 2. Research respondents

Respondents	Person	Gender
City Tourism Office		
Head	1	male
Secretary	1	male
Head of Tourism Division	1	male
Tourism Object Analyst	1	male
Urban Tourism Development Planner	1	male
Tourism Information Officer	1	male
Sub-district head in the area of the tourism object	4	Four males
Tourism object manager	10	Five females and five males
Tourist/tourism object visitors	20	14 females and six males
Community around the tourism object	20	Ten females and ten males
Total	60	29 females, 31 males

Research respondents are tourism stakeholders who can provide knowledge and views on managing objects in Pematangsiantar. Respondents are determined based on two main components. Firstly, the primary respondents from the local government include the Tourism Office and the head of the sub-district. Secondly, the critical respondents from the tourism object are the site manager, visitors, and the local

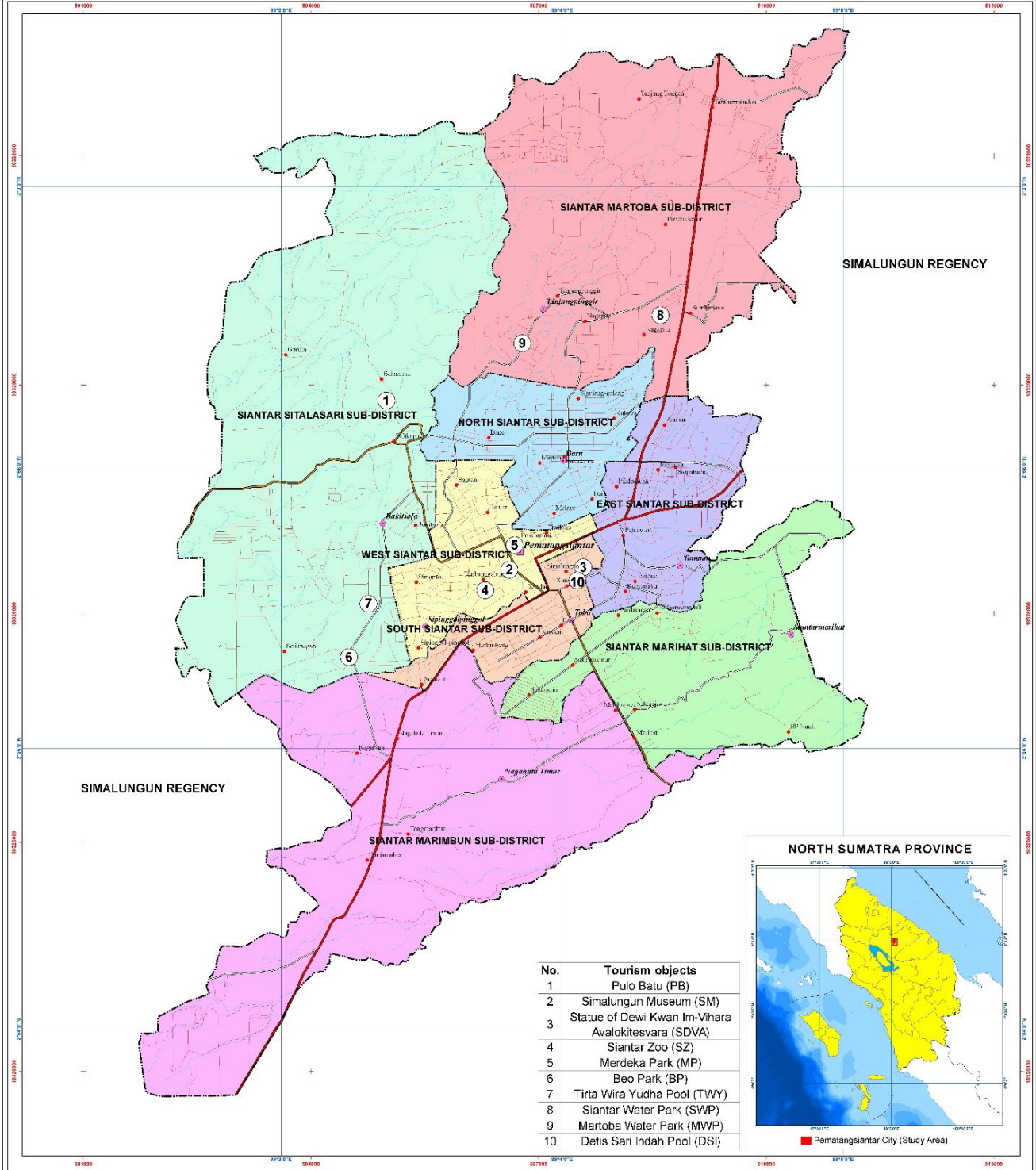
community surrounding the object. The research respondents were determined based on stakeholders' understanding, experience, and knowledge regarding tourism objects of Pematangsiantar City. We use purposive sampling to determine the respondents. The respondents, each playing a crucial role in the tourism objects, are six people from the Tourism Office, four heads of sub-districts, ten tourism object managers, 20 visitors, and 20 local people (see Table 2 above).

3.3 Data analysis method

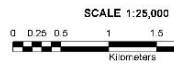
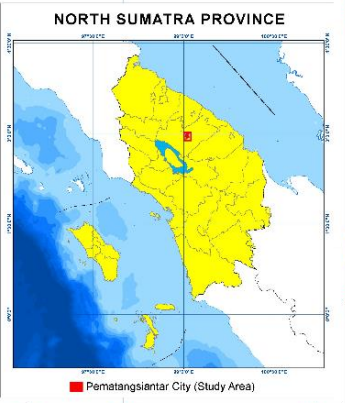
The SWOT factors were obtained through a Focus Group Discussion (FGD), which involved all the key stakeholders in tourism development. Additionally, data regarding the respondents' assessment of each SWOT factor was compiled through in-depth interviews with the key respondents. The respondents' assessment of SWOT factors was analyzed with a SWOT framework. In detail, the SWOT analysis procedure is as follows [41, 44, 45, 51]:

- 1) Identify 60 critical respondents to ten tourism objects development.
- 2) Conduct focus group discussions (FGD) to identify strengths, weaknesses, opportunities, and threats. The FGD enables the obtaining of in-depth and direct data and information.
- 3) The answers of each key respondent were asked separately over the SWOT components. Through interviews, the respondent answers the SWOT component in the five-score system. Strength factors consist of main strength (5), first strength (4), second strength (3), third strength (2), and fourth strength (1). Weakness factors consist of main weakness (5), first weakness (4), second weakness (3), third weakness (2), and fourth weakness (1). Opportunity factors include main opportunity (5), first opportunity (4), second opportunity (3), third opportunity (2), and fourth opportunity (1). Threat factors include main threat (5), first threat (4), second threat (3), third threat (2), and fourth threat (1).
- 4) Determine weights, scores, and final scores (see Table 3).
- 5) Determine the weight of each item (the sum of scores of all respondents' answers to each item divided by the sum of scores of all respondents' answers to all items, $w = si/Qt$).
- 6) Determine the average score of each item, namely the sum of all respondents' answer scores to each item divided by the number of respondents, $s = si/n$.
- 7) Calculate the final score, which results from multiplying weights and average scores (ws), then add for each SWOT component (internal and external).
- 8) Determine the primary strategy based on the strategy matrix: If the final score of the IFE is greater than the EFE, then an aggressive strategy is recommended. Conversely, if $IFE < EFE$, a defensive strategy is recommended [49].
- 9) Establish a strategy matrix: aggressive strategy (SO strategy), competitive strategy (ST strategy), adaptive strategy (WO strategy), and defensive strategy (WT strategy) [45, 51].
- 10) Develop and propose sustainable tourism strategies, focusing mainly on the ten tourism objects.

STUDY AREA IN PEMATANGSIANTAR CITY NORTH SUMATRA PROVINCE



No.	Tourism objects
1	Pulo Batu (PB)
2	Simalungun Museum (SM)
3	Statue of Dewi Kwan Im-Vihara Avalokitesvara (SDVA)
4	Siantar Zoo (SZ)
5	Merdeka Park (MP)
6	Beo Park (BP)
7	Tirta Wira Yudha Pool (TWY)
8	Siantar Water Park (SWP)
9	Martoba Water Park (MWP)
10	Detis Sari Indah Pool (DSI)



SPATIAL REFERENCE SYSTEM:

Projection : Universal Transverse Mercator (UTM)
 Grid System : Geographic Grid and UTM Grid
 Datum : World Geodetic System 1984 (WGS 84)
 Zone : 47 South

DATA SOURCE:

1. Earth Shape Map of Indonesia Scale 1:50,000, BIG 2020
2. Village Administrative Map of Indonesia, Geospatial Information Agency 2022

LEGEND

- Sub District
- Village/Urban Village
- District Boundary
- Sub District Boundary
- Village Boundary
- Primary Road
- Local Road
- Village Road
- Footpath
- River

SUB DISTRICT

- EAST SIANTAR
- NORTH SIANTAR
- SIANTAR MARIHAT
- SIANTAR MARIMBUN
- SIANTAR MARTOBA
- SIANTAR SITALASARI
- SOUTH SIANTAR
- WEST SIANTAR

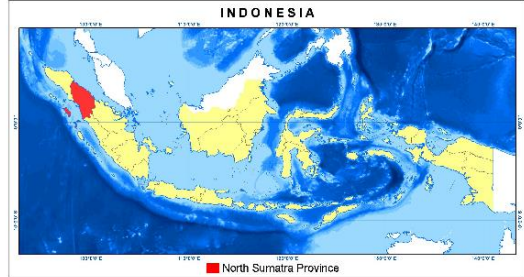


Figure 1. Pematangsiantar City as the study area

Table 3. Score, weight, and final score calculation procedure

Respondent	SWOT Factors						Total Score
	1	2	3	4	5	6	
1							Q1
2	Respondents' answers (in scores 1-5) on each item (indicator)						Q2
...							...
n							Qn
Total	s1	s2	s3	s4	s5	s6	$\Sigma Q_i = Q_t$
Weight (w)	(s1/Qt)	(s2/Qt)	(s3/Qt)	(s4/Qt)	(s5/Qt)	(s6/Qt)	
Average score (s)	(s1/n)	(s2/n)	(s3/n)	(s4/n)	(s5/n)	(s6/n)	
Final score	(ws)	(ws)	(ws)	(ws)	(ws)	(ws)	

Notes: n = number of respondents, si = total answer scores of all respondents to each item, Qi = number of answer scores of each respondent for all items, Qt = total amount of Qi (ΣQ_i). Source: Formulated by the Authors (2024)

4. RESULT AND DISCUSSION

4.1 SWOT analysis

Internal and external factors have been identified, with five strengths, weaknesses, threats, and six opportunities. Furthermore, we prepare the IFE and EFE matrix of tourism

object management. Based on the IFE matrix of tourism objects (see Table 4), the final score was 3.7562. Based on the EFE matrix (see Table 5), the final score was 3.5057. In the comparison of internal and external factor analysis (IFE>EFE), it was found that tourism objects are developing aggressive and competitive strategies.

Table 4. Internal factors evaluation matrix of tourism objects

Internal Factors	Weights	Average Score	Final Score
Strengths			
S1. Strategic city location to Lake Toba Super-priority Destination.	0.1021	3.7083	0.3785
S2. Suitable climate and environment support the development of tourism.	0.0966	3.5083	0.3388
S3. The second largest city in the province with adequate facilities.	0.0979	3.5583	0.3485
S4. Accessibility of city transportation by rail, toll road, and highway.	0.1037	3.7667	0.3905
S5. Advantages of tourism objects ¹ .	0.0998	3.6250	0.3617
Subtotal	0.50		1.8179
Weaknesses			
W1. Lack of facilities at the location of tourism objects.	0.1034	4.0083	0.4146
W2. Inadequate tourism promotion, information, and marketing.	0.1004	3.8917	0.3908
W3. Limitations of tourism development.	0.0985	3.8167	0.3759
W4. Lack of infrastructure at tourism sites.	0.1000	3.8750	0.3875
W5. Weaknesses of tourism objects ² .	0.0976	3.7833	0.3694
Subtotal	0.50		1.9383
Total	1		3.7562

Notes: ¹The most complete and best zoo (SZ) in the province; The most prominent and tallest statue of SDVA in Indonesia; Good quality PB spring water; SM collection is diverse and well-maintained; The location of MP is strategic in the city center; BP is strategic in the sub-district; and SWP, DSI, MWP, and TWY are good quality pool and water park tourism. ²Limited parking locations at the SZ; Lack of road infrastructure to PB; Durability and quality of SM building; MP creates congestion and informal sector problems; and BP is narrow and close to the body of the road.

Table 5. External factors evaluation matrix of tourism objects

External Factors	Weights	Average Score	Final Score
Opportunities			
O1. Construction of Medan, Kualanamu International Airport Toll Road, Pematangsiantar, Lake Toba Super-priority Destination.	0.0890	4.2250	0.3759
O2. Employment opportunities, community income, and encouraging local activities.	0.0835	3.9667	0.3314
O3. Increased private investment supports tourism development.	0.0883	4.1917	0.3700
O4. Pematangsiantar Tourism Development Master Plan of 2018-2025.	0.0828	3.9333	0.3258
O5. Information and communication technology support tourism promotion and marketing.	0.0853	4.0500	0.3454
O6. Increasing public interest and demand for diversification of tourism objects.	0.0711	3.3750	0.2399
Subtotal	0.50		1.9885
Threats			
T1. Increased development of superior tourism in other regions.	0.1042	3.1583	0.3290
T2. Lack of effective and comprehensive programs in tourism development.	0.0959	2.9083	0.2790
T3. The social capital of local communities does not support the development of tourism objects.	0.1028	3.1167	0.3204
T4. Lack of participation of experts and communities in tourism planning and development.	0.0984	2.9833	0.2936
T5. Lack of training in tourism skills for tourism object managers.	0.0987	2.9917	0.2952
Subtotal	0.50		1.5172
Total	1		3.5057

Tourism objects have many strengths and can take advantage of opportunities. However, based on the assessment of the internal conditions, the strength of the tourism object has a total final score (1.8179) that is slightly smaller than the weakness (1.9383). The aggressive and competitive strategy should coincide with the adaptive strategy. More excellent opportunities (1.9885) than threats (1.5172) support the strategy.

4.1.1 Aggressive strategy (SO strategy)

The development of tourism objects is carried out aggressively through several strategies (see Table 6). As a strategically located city, Pematangsiantar can improve its function as a tourism destination and frame the development of Lake Toba as a Super-priority Destination in Indonesia. Tourism support facilities available in the second-largest city in North Sumatra Province drive this strategy.

In addition, accessibility and mobility support the improvement of Pematangsiantar as a tourism destination. The toll road of the Medan, Kualanamu International Airport, and

Pematangsiantar sections is an excellent opportunity to develop Pematangsiantar tourism. The development of toll roads connecting these sections to Lake Toba has also become a priority on the central government's agenda. The distance and travel time from Pematangsiantar to Parapat (the nearest strategic city in Lake Toba) is 50 km or 60 minutes. Rail transportation has also connected Pematangsiantar and Medan (the capital of North Sumatra Province).

Infrastructure limitations are overcome by collaborating with the central government and the private sector to invest in infrastructure and facilities for tourism objects. Potential tourism strategies include human resource development, infrastructure, marketing, and capital facilitation [55]. Local government support is also essential in tourism development through infrastructure improvement [17]. Therefore, to advance sustainable tourism in Pematangsiantar City, the local government must provide essential support to increase human resource capacity, improve infrastructure, enhance tourism marketing, and facilitate financing.

Table 6. Strategy matrix of tourism objects development

Strengths: S₁, S₂, S₃, S₄, S₅		Weaknesses: W₁, W₂, W₃, W₄, W₅
Opportunities: O₁, O₂, O₃, O₄, O₅, O₆	SO strategy (Aggressive)	WO strategy (Adaptive)
	Improve the city's unique tourism destination within Lake Toba's Super-priority Destinations.	Increase the quantity and quality of supporting facilities in all tourism objects: clean water, toilets, parking, cafes, souvenir galleries, marking, and information centers.
	Collaboration should be built with the central government and the private sector to invest in infrastructure and management of tourism objects.	Improve planning consistency with the implementation of the development of tourism objects.
	Optimize tourism development to increase employment opportunities and community income.	Increase the quantity and quality of tourism information, promotion, and marketing through the Tourism Office website, social media, tourism activities, and other relevant platforms.
	Build partnerships with the private sector in the development of professional travel agents.	Build a new city park in Siantar Sitalasari Sub-district to reduce the density of BP.
	Build tourism stakeholders' partnerships to implement the Tourism Development Master Plan.	Build new city parks in each sub-district as an alternative to minimize problems in MP.
Threats: T₁, T₂, T₃, T₄, T₅	ST strategy (Competitive)	WT strategy (Defensive)
	Developing regional tourism types as a response to the excellence of facilities, city accessibility, and community mobility.	Implement policies and programs for the development of tourism objects.
	Improve data management and information on the advantages of tourism objects to invite private investors in tourism development.	Strengthening the institution of the Tourism Office as a facilitator of tourism development.
	Improve community empowerment and capacity in attractiveness, comfort, accessibility, and stakeholder support in tourism development.	Increase the regional budget for the development of tourism objects.
	Invite experts to participate in the planning, implementing, and evaluating tourism development.	
Improve professional thematic training programs for managers and communities around objects.		

The following explanation provides a detailed overview of the aggressive strategy. First, increasing employment opportunities and income of local people should be the primary goal of developing tourism objects. The development of tourism activities will increase community income, employment opportunities, and resilience of the family economy [47]. The development of the tourism sector will increase the number of tourist visits, consistently improve household welfare, and reduce poverty [56].

Another strategy is facilitating financial viability [32]. Correspondingly, the priority of developing tourism activities is the diversification of livelihoods and participation of local

communities [33]. Therefore, the participation of local communities is crucial in planning and strategizing tourism development, including the decision-making process and management of tourism activities [1]. Policymakers, businesses, and tourism marketers are critical to understanding tourists' perspectives on seasonal tourist visits. This understanding can help formulate the right strategy to increase tourist visits [57].

Second, building partnerships with the private sector is a strategic aspect of tourism development. This strategy includes the development of a professional travel agency. Appropriate public and private sector investment mechanisms

are essential to tourism development [45]. Third, stakeholder partnerships implement the Tourism Development Master Plan. Tourism planning and development requires integrated collaboration between government, universities, business entities, and communities [58].

The fourth strategy is to improve information management and expand tourism promotion based on segments and visitors' requests from outside the city. Limited information has become one of the obstacles to tourism development [17]. Improving the information quality through social media affects tourists' travel intentions [59, 60]. Digital marketing and online platforms through social media affect tourism promotion strategies [19, 61]. Quality of information through social media positively influences tourists' travel interests [60]. For example, short video platforms (such as TikTok) will help with more effective tourism marketing among young travelers [62]. Mobile applications are becoming a tool for searching for travel information online through social media [63]. Digital marketing aims to improve product and service quality and encourage tourists to share their experiences and satisfaction through digital marketing channels [57]. Tourism managers develop digital tools and design effective online platform content [64].

Fifth, new tourism objects should be developed based on public tourism demand and interest surveys. The region's typical flora and fauna should be preserved and integrated into developing appropriate tourism objects. According to Andayani et al. [6], Indonesia is one of the most critical biodiversity countries in the world. Indonesia has an abundance of flora and fauna, making it one of the most attractive tourist destinations in the world [7].

4.1.2 Competitive strategy (ST strategy)

Competitive strategies drive the development of tourism objects. Through this strategy, tourism stakeholders develop distinctive and superior types of tourism to maximize the advantages of facilities, accessibility, and community mobility. Tourism competitiveness can be increased through local uniqueness in developing tourism objects [12, 32]. The following strategy is to compile profiles of tourism objects to invite private investors in tourism development. Public-private cooperation in improving tourism infrastructure constitutes a sustainable tourism development strategy [65]. The collaboration of tourism stakeholders aims to create competitive tourist destinations [66]. Priority programs in tourism development are infrastructure improvement and private sector investment [58].

The other strategy is to increase the community's capacity to understand objects, comfort, marketing, and tourism facilities. Improving professional thematic training for tourism managers of tourism objects is also essential. The priority of a sustainable tourism development strategy is human resource development [55]. Lack of education is one of the structural obstacles in tourism development [17]. Assisting with education and skills training [36, 67] enhances capacity building. Lack of access to planning experts is one of the structural obstacles in tourism development [17]. The ultimate strategy entails skilled professionals who meticulously plan, implement and appraise tourism development programs.

4.1.3 Adaptive strategy (WO strategy)

Increasing the number and quality of supporting facilities in all tourism areas improves tourism object weaknesses. Based on the needs of each tourism object, clean water, toilets,

parking, a café, a souvenir gallery, signage, and an information center are essential facilities provided. Cooperation between local governments, the private sector, and other tourism stakeholders overcomes infrastructure limitations. Facilities that need to be improved are parking arrangements at SZ, improved road access to PB, revitalization of SM buildings and areas, and arrangement of parking and informal sectors in MP. Building a new environmentally friendly city park in Siantar Sitalasari Sub-district is a strategy to improve BP's weaknesses. Furthermore, constructing new city parks in each sub-district is a solution to overcome the problems and density of visitors to city center parks (MP).

The next adaptive strategy is social media to improve the weaknesses of information, promotion, and tourism marketing. In this case, it is essential to consider the involvement of content writers and copywriters. In addition, the quality of information about tourist objects on the websites of the City Government and the Tourism Office contributes to improving tourism information and marketing.

4.2 The study limitations, implications, and contributions

The study has several limitations that could impact its findings, including a limited number of stakeholders involved in interviews, resulting in a narrow range of perspectives and potentially overlooking critical insights from diverse community members. The small sample size of respondents from local communities and visitors may hinder the generalizability of the results. At the same time, focusing on specific tourism objects may need to account for broader regional contexts that influence tourism dynamics. Additionally, potential biases in data collection methods and the lack of comparative analyses with other destinations could affect the reliability and applicability of the findings. These limitations may lead to conclusions that only partially represent the complexities of tourism management in Pematangsiantar, thereby reducing the effectiveness of the proposed strategies for sustainable development.

Given the current state of research on sustainable tourism development in the city, there is a clear need for future studies to address specific areas. These areas include expanding the sample size and diversity of stakeholders, such as local community members, the tourism industry, and environmental experts. The expanded stakeholders would provide a more comprehensive perspective on tourism management practices. Additionally, conducting comparative analyses with other similar destinations could provide valuable insights into best practices and innovative strategies for sustainable tourism. Longitudinal studies that track changes in tourism dynamics over time help assess the long-term effectiveness of implemented strategies. Finally, exploring the impact of external factors, such as economic fluctuations and global events, on local tourism development could provide a more nuanced understanding of the challenges and opportunities faced by the sector. With these future research directions, we can be optimistic about the possibilities for sustainable tourism development in the city.

The findings from the SWOT analysis inform policymakers and tourism planners in the city to develop targeted strategies that address the specific needs and conditions of the local tourism sector. The strategy can lead to more effective resource allocation and better outcomes for sustainable tourism development. In summary, the implications of the SWOT analysis results emphasize the need for a balanced

approach that leverages strengths and opportunities while addressing weaknesses and threats. This comprehensive and balanced strategy is essential for fostering sustainable tourism development in the city and similar regions, providing reassurance and confidence in effectiveness.

The practical implications of the study findings provide a roadmap for stakeholders to enhance sustainable tourism development. The region can create a thriving tourism sector that benefits visitors and the local community by focusing on strategic planning, community engagement, infrastructure investment, and sustainable practices. The study's findings, with their comprehensive coverage of strengths, weaknesses, opportunities, and threats, are invaluable for developing and implementing sustainable tourism strategies. They provide actionable insights that can lead to a more sustainable and prosperous regional tourism sector, empowering stakeholders with the knowledge they need to make informed decisions.

The SWOT analysis results, which identified the city's strengths, weaknesses, opportunities, and threats in the context of tourism development, contribute practically to the sustainable tourism strategy in the city. The strategy, informed by these results, focuses on strategic planning, community engagement, infrastructure investment, and sustainable practices so that the region can create a thriving tourism sector that benefits visitors and the local community.

The proposed strategy is also expected to benefit the community and the environment. The strategies proposed in the study are designed to create a balanced approach to tourism development that benefits both the community and the environment. Central to these strategies is community engagement, which ensures that local voices are heard and that the benefits of tourism are shared equitably. By emphasizing economic empowerment, cultural preservation, environmental conservation, and community engagement, these strategies ensure that tourism has a positive impact on the long-term sustainability and resilience of the city.

Promoting sustainable tourism development can enhance local economic opportunities. Increased tourism can lead to job creation in various sectors, including hospitality, transportation, and local crafts, thereby improving the livelihoods of community members and reducing poverty. By integrating environmental considerations into tourism planning, such as promoting eco-friendly accommodations, implementing waste management systems, and supporting local conservation efforts, the strategies promote long-term stewardship of the environment.

5. CONCLUSION

SWOT analysis identifies the strengths, weaknesses, opportunities, and threats to formulate a sustainable development strategy. The comparison of IFE and EFE confirms that developing tourism objects is carried out with an aggressive and competitive strategy. Nevertheless, based on the internal factor analysis, the final score on strengths is slightly less on weaknesses. An aggressive and competitive strategy must coincide with improvements in weakness factors (adaptive strategy).

The study suggests strategies to improve sustainable tourism management practices: (1) Increase tourism information, promotion, and marketing quantity and quality. Utilize various platforms such as the Tourism Office website, social media, tourism activities, and other relevant channels to

enhance the dissemination of tourism information and attract more visitors. (2) Develop new city parks. Build new city parks in different sub-districts, including Siantar Sitalasari Sub-district, to alleviate issues related to population density in a park located in the center of the city and provide alternative recreational spaces for residents and tourists from suburban. (3) Develop unique regional tourism types. Respond to the excellence of facilities, city accessibility, and community mobility by diversifying regional tourism offerings to cater to different preferences and interests of visitors. (4) Improve tourism data management and information. Enhance data management practices and provide detailed information about the advantages of tourism objects to attract private investors in tourism development projects.

The other strategies are (5) Enhance community empowerment and capacity building. Empowering local communities by involving them in decision-making is crucial. The strategy will not only improve the attractiveness and accessibility of tourism sites but also garner stakeholder support for sustainable tourism development, making them active participants in our tourism initiatives. (6) Engage experts in tourism planning and implementation. Invite experts to participate in the planning, implementing, and evaluating tourism development initiatives to ensure best practices and effective strategies are employed. (7) Offer professional thematic training programs. Train managers and community members around tourism objects to enhance their skills and knowledge in effectively managing and promoting tourism activities. (8) Implement policies and programs for tourism development. Establishing and enforcing policies and programs that support the sustainable development of tourism objects in the region is essential. This structured approach will ensure that our tourism development is sustainable and beneficial for all stakeholders. (9) Strengthen the role of the Tourism Office. Enhance the capacity and role of the Tourism Office as a facilitator of tourism development by providing necessary support and resources for effective management. (10) Increase regional budget allocation for tourism development. Allocate more resources from the regional budget towards developing tourism objects to improve infrastructure, services, and overall visitor experience.

The study acknowledges several limitations, including a limited number of stakeholders involved in interviews. The small sample size of respondents from local communities and visitors may hinder the generalizability of the results. Additionally, potential biases in data collection methods and the need for comparative analyses with other destinations could affect the reliability of the findings. However, these limitations also present opportunities for future research. Future studies should involve a broader range of stakeholders, including the local community, visitors, the tourism industry, and environmental experts, to provide a more comprehensive understanding of tourism management practices. Conducting comparative analyses with similar destinations would find valuable insights into best practices for sustainable tourism development, ultimately enhancing the effectiveness of proposed strategies in the city and similar regions.

The finding contributes significantly to sustainable tourism development by comprehensively assessing tourism management practices. It highlights the importance of stakeholder engagement and offers actionable recommendations for enhancing tourism object management, which can inform policy and decision-making processes. These recommendations provide a clear path for stakeholders

to make a positive impact on sustainable tourism. The study emphasizes community empowerment and capacity building, ensuring the local community participates in tourism development. This holistic approach aims to improve the local tourism sector and foster long-term sustainability and resilience within the community.

The study's implications are multifaceted, providing a roadmap for stakeholders to enhance sustainable tourism development. The SWOT analysis results inform policymakers and tourism planners about the specific needs and conditions of the local tourism sector, enabling more effective resource allocation. Additionally, the study underscores the importance of integrating environmental considerations into tourism development. This emphasis on environmental responsibility promotes economic empowerment, cultural preservation, and community engagement, making stakeholders committed to sustainable tourism.

ACKNOWLEDGMENT

We sincerely thank the Tourism Office of Pematangsiantar City and the tourism object managers for their invaluable technical assistance during the focus group discussions (FGD) and data collection process. Their expertise and support were instrumental in the successful completion of this study.

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