

Environmental Scanning and Prioritization of Issues in Marine Tourism Development in Ternate City, Indonesia

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Abstract: The management of Hol Sulamadaha Bay in Ternate City remains suboptimal, as reflected in the declining number of tourists visits due to the lack of prioritization in development efforts. This study aims to analyze the strategic environment and identify key strategic priorities for the development of marine tourism in Ternate. Grounded in Wheelen and Hunger's strategic management theory—specifically strategic environmental analysis and employing the Analytical Hierarchy Process (AHP), the research adopts a post-positivist paradigm. Data collection combined qualitative methods, including interviews and documentation, with quantitative analysis through expert-validated questionnaires. Key informants included government officials, private sector representatives, local communities, tourists, and residents from remote areas. The findings reveal four pressing strategic issues: (1) limited involvement of the Tourism Awareness Group (TAG), (2) low levels of tourism literacy, (3) inadequate access, facilities, and infrastructure, and (4) limited community participation in tourism development. Moreover, the study emphasizes the role of mutual trust between government and local communities as a critical factor for encouraging inclusive participation, from policy planning through to implementation and evaluation. The novelty of this study lies in its integration of strategic environmental analysis and AHP to assess marine tourism development while foregrounding the socio-cultural dynamics particularly trust, belief systems, and local values that influence community engagement. This holistic approach offers a new perspective for developing inclusive, culturally grounded strategies to revitalize marine tourism in small island regions like Ternate.

Keywords: Analytical hierarchy process; Environmental scanning; Strategic issues; Decision making

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INTRODUCTION

The tourism sector is an important component of national development, requiring effective management and strategic development to ensure the sustainability of tourism activities. The tourism sector is a cornerstone of economic growth, which increases regional income, empowers the community's economy, expands employment and business opportunities, and promotes product introduction and marketing to improve community welfare (Runtunuwu et al., 2023). To successfully develop and manage the tourism sector, four critical elements must be considered: attractions, amenities, accessibility, and accessibility (Widana et al., 2022). According to Anismar (2023), the main motivation for tourists to visit a destination lies in its, shaped by the quality of its attractions, amenities, accessibility, and marketing strategies. In addition, the Minister of Tourism

has established seven key elements, known as *Sapta Pesona*, as benchmarks for improving the quality of tourism products. These elements include security, orderliness, cleanliness, comfort, beauty, hospitality, and memorable experiences (Mamengko & Kuntari, 2021).

The increase in domestic and foreign tourist visits is in line with increased community empowerment, creating new jobs and enhancing the competitiveness of the sustainable tourism industry (Mahadiansar et al., 2021). However, as Mahadiansar (2021) noted, Indonesia's tourism industry has experienced a significant decline in foreign tourist arrivals, prompting the government to redesign management and development strategies to revive the tourism sector. According to Zaenuri, the government initially carried out Hakim (2019), which is tourism management and development. However, as the demand for tourism services grew and government capacity became increasingly limited, the private sector and local communities became more active in providing these services.

North Maluku Province boasts significant marine tourism potential with its vast marine landscapes and island geography. In 2022, marine tourism accounted for 26.50% of domestic tourist activities in the province, making it the primary attraction for visitors (Local Tourism Agency, 2023). It underscores the need for effective development and management of marine tourism to boost tourist visits further. Ternate City, a key area in North Maluku, has experienced fluctuations in tourist visits from 2018 to 2022. In 2018, the city welcomed 280,561 domestic and international tourists. However, the COVID-19 pandemic caused a sharp decline in 2019–2020, impacting global economies (Atmojo & Fridayani, 2021). While tourist numbers rebounded to over 200,000 in 2021 and saw a significant increase in 2022, they have yet to reach pre-pandemic levels (Local Tourism Agency, 2023).

The slow recovery in tourist visits to Ternate City highlights the need for revised policies to stimulate growth. The Ternate City Government manages only three tourist attractions: Sulamadaha Beach and Hol Sulamadaha Bay, Tolire Lake, and Batu Angus. Hol Sulamadaha Bay is a premier marine tourism destination due to its natural beauty.

Table 1. Local Revenue and Tourism Visitors of Ternate City

Year	Revenue (IDR)	Number of Visitors
2017	181.241.000	38.208
2018	121.526.000	27.196
2019	70.943.000	15.379
2020	61.367.000	12.987
2021	212.030.000	45.049
2022	136.186.000	29.444

Source: Regional Tourism Agency of Ternate City (2023)

However, Hol Sulamadaha Bay has experienced a drastic decline in visitors, from 45,049 in 2021 to 29,444 in 2022 (see Table 1), resulting in a decrease in regional revenue from tourism. Several studies have suggested that increased tourist visits can boost regional income through hotel taxes (Irawan et al., 2024), stimulate small and medium enterprises (Neuts, 2020), and enhance revenue for local businesses (Newing et al., 2013).

Hol Sulamadaha Bay's management system is suboptimal. Several scholars have studied the factors affecting the optimization of tourism management. For example, Iqbal and Ahmed (2022) highlighted that community participation can significantly influence social, tourism, and economic growth in tourism development. Furthermore, stakeholders' attitudes can influence community participation in tourism development (Young-Hoon et al., 2020). In infrastructure and accessibility, Ali et al. (2024) emphasized the importance of transportation and access in enhancing visitor experiences. They also pointed out that tourism websites and supportive policies can bolster local stakeholders' support for tourism development (Young-Hoon et al., 2020). Information and technology further influence tourism development optimization for long-term tourism growth (Zhuang, 2023) and ensuring high-quality tourism services (Sun et al., 2024). The participation of indigenous people, including their leaders, plays a crucial role in boosting national and local revenue through maritime tourism (Akyuwen et al., 2021; Fahmy et al., 2024).

In addition, Khokhar et al. (2024) identified barriers to realizing a blue economy through maritime tourism. Vázquez et al. (2021) recommended community participation to promote a blue

economy and sustainable maritime tourism without hindering local economic growth. While the studies above predominantly discuss factors influencing maritime and coastal tourism development, they often lack pragmatic recommendations for local governments to address these challenges. This study aims to identify local issues in maritime tourism development in Ternate City as a part of a strategy to increase local revenue. It also seeks to prioritize these issues, identified inductively, using the analytical hierarchy process (AHP). This study contributes to the theory of maritime tourism governance while providing practical contributions to the Ternate City regional government to develop maritime-based tourism.

THEORETICAL FRAMEWORK

Marine Tourism Development

The term marine tourism emerged in the 2000s. Although the expert who introduced it has not been identified, Hall et al. (2003), one of the scholars focusing on this field, explored the relationship between tourism and maritime environments. Cardoso et al. (2023) and Spinelli & Benevolo (2022) define marine tourism broadly to include all tourism in and around the sea, such as coastal tourism, cruise tourism, and activities in the sea, such as whale watching and diving. At the same time, Sukran et al. (2025) and Borrego-Balsalobre et al. (2024) defined it more narrowly as tourism that maximizes the potential of the sea without having to damage the ecosystem and the environment around it. Therefore, marine tourism is a favorite of tourists today, especially those from European countries concerned about sustainability issues (Luković, 2007).

As an important sector in global tourism development, marine tourism is closely related to sustainability (Cisneros-Montemayor et al., 2020; Iranita et al., 2024). Therefore, marine tourism is often followed by the concept of sustainability, which emphasizes balancing the economic benefits of tourism with protecting marine ecosystems and preserving cultural heritage (Iranita et al., 2024; Tamanine & Houssas, 2023). This condition is because marine tourism, as mentioned above, is vulnerable to damaging coastal and marine ecosystems, so the management aspects of marine tourism are important (Shekhar, 2024). Even Purwaningsih et al. (2020) said that marine tourism development must consider three main aspects: environmental sustainability, social justice, and economic benefits. Therefore, in the concept of sustainability, marine tourism requires community participation to encourage cooperative initiatives in the formulation of tourism policy (Yustika & Goni, 2020).

Maritime tourism is similar to other tourism types in its tourism development components. Rizaldi et al. (2024) mentioned that tourism development has at least four components: attraction, amenities, accessibilities, and ancillary. Attraction is related to efforts to attract tourists by presenting attractions. Amenities are related to the provision of facilities visitors need in tourist areas. Accessibilities are related to the availability of transportation networks and security for visitors.

Meanwhile, ancillary is related to the assistance or facilities provided by the government, private sector, NGOs, or the community for the smooth running of visitors' traveling activities. Ramesh & Muralidhar (2019) add the accommodation component related to a place to stay. In contrast, Achmad et al. (2023) added activities as the sixth component relating to activities provided to provide experiences to visitors. So, tourism development, both marine and other tourism, is termed the 6A's tourism component. However, the 6A's are still being debated by tourism scholars and academics because the two additional components are still considered part of others. The tourism development components, including the 4A's above, are used as criteria for marine tourism development in determining tourism development priorities, which will be explained in the methods section.

Environmental Scanning as a part of Strategic Management

Environmental scanning is the first step in connecting strategy development with the environment (Mokhtar, 2021). The result is information about the environment that can externally affect the organization (Mashingaidze et al., 2021; Mokhtar, 2021). Environmental observation is the initial part of the strategy formulation cycle before strategy formulation, implementation, evaluation, and monitoring (Wheelen & Hunger, 2012). Some experts divide environmental scanning into two types: the internal environment and the external environment. The internal environment includes the organization's vision, mission, work culture, and resources

(Mashingaidze et al., 2021; Valinezhad & Nourbakhsh, 2014). Furthermore, communication, authority, and work processes are also internal environments (Wheelen & Hunger, 2012). On the other hand, the external environment is seen from uncertainty, world war, and global conditions, including volatile, complex, and ambiguous (VUCA) (Bhandari, 2024). Furthermore, Wheelen & Hunger (2012) add this external environment to include economic, social, political, and legal forces. Many management experts reveal that environmental observations determine the success of strategy formulation in organizations (DuCoin & Kuo, 2024), so uncertainty management is necessary (Kornelius et al., 2020).

Environmental scanning was used in this research to identify marine tourism development issues in the research location as part of developing an organizational strategy. After the issues were identified, the prioritization of issues to be intervened in the form of government policies related to marine tourism development was carried out.

RESEARCH METHOD

This study consists of two major sequential steps. The first step adopts a post-positivist paradigm with a qualitative data collection method. The post-positivist paradigm requires a quantitative approach that uses theory as an analytical tool (Creswell & Creswell, 2023). Consequently, as Wheelen and Hunger (2012) outlined, this study employed environmental scanning to identify environmental issues in maritime tourism development. The second step utilized a pragmatic paradigm, which focuses on formulating issues priorities. This phase applied the analytical hierarchy process (AHP) introduced by Saaty (1987).

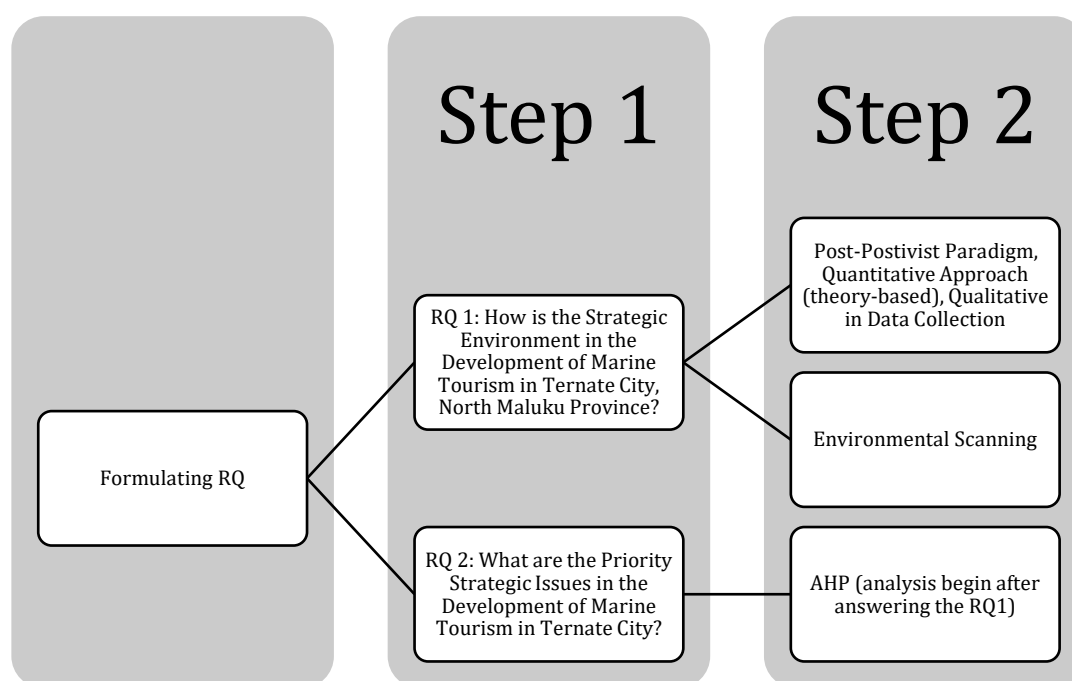


Figure 1. Research Procedures
Source: Processed by Authors, 2024

In step 1, the study adopted a post-positivism paradigm to address research question (RQ) 1. This study utilized Wheelen and Hunger's theory of environmental scanning, focusing on physical resources, climate, wildlife, and the natural physical environment to identify the strategic environment in maritime tourism development. Data collection was conducted qualitatively through interviews with key stakeholders in Ternate City, selected using criterion sampling (Marton, 2013). In addition, two respondents were involved in the AHP process (see Figure 2).

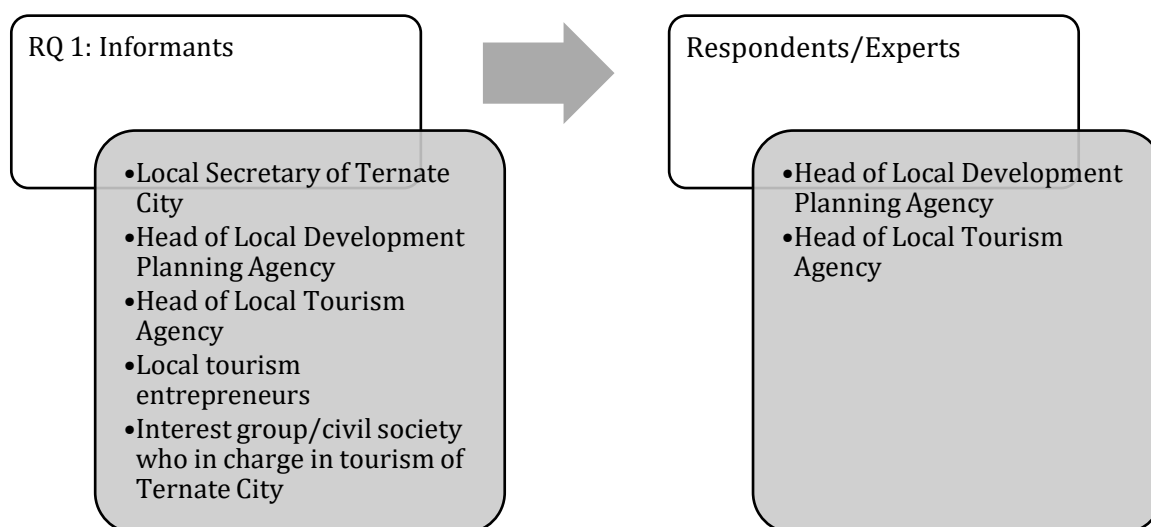


Figure 2. Informants and Respondents

Source: Processed by Authors, 2024

In step 2, research question (RQ) 2 was addressed using a pragmatic paradigm. This study utilized the AHP method, assisted by Expert Choice v.11 software, to identify the priority issue in maritime tourism in Ternate City. Data were collected through questionnaires distributed exclusively to local maritime tourism policy experts. This study defines an expert with extensive knowledge and decision-making authority in Ternate City's tourism policies. The respondents included the Head of Regional Tourism Agency and the Head of Regional Development Planning Agency. The AHP technique uses a hierarchical or multilevel model to determine alternative strategies. The hierarchical model used in this study is illustrated below:

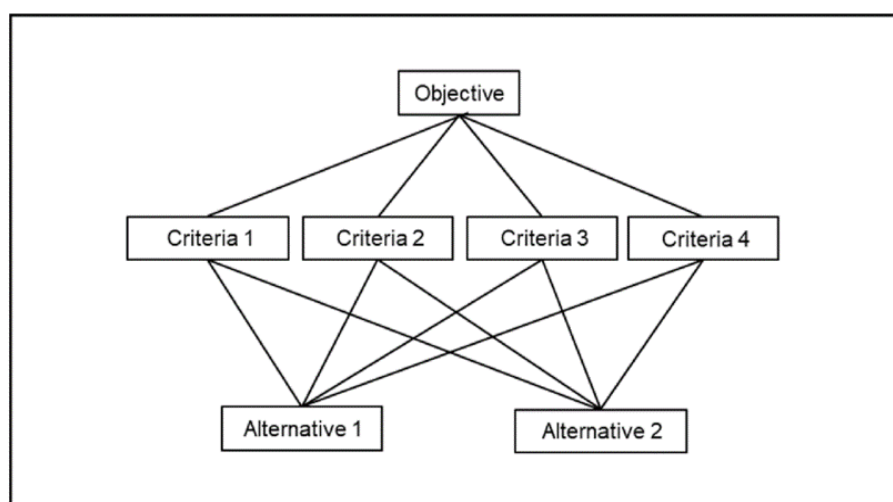


Figure 3. AHP Hierarchy Model

Source: Saaty (1987) and Sartika et al (2015)

Determining strategic issue priorities using the AHP technique involved the following stages:

- 1) Several strategic issues, as alternative strategies, were prioritized using the AHP method.
- 2) The prioritization of strategic issues for marine tourism development in Ternate City is based on the 4A framework: accessibility, attractions, amenities, and ancillary (Rizaldi et al., 2024).
- 3) Pairwise comparisons were conducted between aspects and alternative strategies. This process generated weights or contributions of each element toward achieving the goal, with

the highest-weighted element becoming the top priority. These priorities were derived from a pairwise comparison matrix of elements at the same hierarchical level.

- 4) After completing the pairwise comparisons, the results facilitate the determination of strategic issue priorities. These priorities guide the Ternate City Government in developing marine tourism destinations, ranked according to the AHP method's outcomes.

This study utilized a pairwise comparison scale to carry out comparative judgments. The scale values and their qualitative interpretations, as defined by Saaty, are presented in Table 2.

Table 2. Pairwise Comparison Scale

Scale	Understanding	Information
1	Equal importance	Criterion/Alternative A is as important as B
3	Moderate importance	A is slightly more important than B
5	Strong importance	A is more important than B
7	Very strong importance	A is strongly more important than B
9	Extreme importance	A is absolutely more important than B
2,4,6,8	Intermediate values	Used when compromising between two values

Source: Sartika et al. (2015) and Islam et al. (2020)

(Sartika et al., 2015) explained that "the possible values for pairwise comparisons are drawn from the set: {9, 8, 7, 6, 5, 4, 3, 2, 1, 1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8, 1/9}". The pairwise comparison must still be tested for its consistency ratio. In practice, perfect consistency rarely occurs after pairwise comparisons. Pairwise comparisons are considered to meet the criteria of being fairly consistent if the consistency ratio (CR) is less than 10% (0.1). The consistency index (CI) was first calculated using the formula:

$$CI = \frac{\lambda_{\max} - n}{n - 1} \quad (1)$$

The consistency ratio (CR) was then calculated using the formula:

$$CR = CI/RI \quad (2)$$

RI (Random Index) is a random index value issued by Oakridge Laboratory, as shown in the table below.

Table 3. RI Values (Random Index)

n	1	2	3	4	5	6	7	8	9	10	11	12
RI	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49	1.51	1.56

Source: Sartika et al. (2015)

Based on theoretical studies and discussions with respondents, the framework for prioritizing marine tourism development programs in Ternate City is structured as follows:

- a) Goal: Marine Tourism Development Program in Ternate City
- b) Criteria: 4A (Attractions, Accessibility, Amenities and Ancillary)
- c) Alternative: Strategic issues identified through environmental scanning

RESULTS AND DISCUSSION

Environmental Scanning Analysis in the Development of Marine Tourism in Ternate City, North Maluku Province

The government should give marine tourism in Ternate City special attention to develop it into a leading tourist destination. As an archipelagic region with a larger sea area than land area, Ternate City boasts natural marine beauty that rivals other marine tourism destinations. Its remarkable underwater landscapes make marine tourism the most popular visitor activity, accounting for 26.50% of tourist visits (Local Tourism Agency, 2023). Given this preference, marine tourism development must align with contemporary trends, visitor interests, and comfort. This section is divided into two subsections: (a) Environmental Analysis, covering internal and

external factors (Wheelen & Hunger, 2012), and (b) Strategic Issues for Marine Tourism Development in Ternate City.

a. External Environmental Analysis

Hol Sulamadaha Bay, a marine tourist attraction in Ternate City, is renowned for its extraordinary underwater natural resources. However, its appeal is influenced by weather and climate conditions, which follow a cyclical pattern throughout the year. As the Head of the Tourism Destination Sub-Section at the Regional Tourism Agency noted, "Weather conditions in Ternate Sea and bay are natural phenomena that cannot be controlled; they can only be accepted". These conditions influence tourist visits, with higher activity typically observed in the year's first six months. Gössling et al. (2012) highlighted that visitor behavior often adapts to weather conditions. During the latter half of the year, visitors tend to avoid swimming due to safety concerns, opting instead to relax in gazebos or food stalls. This shift reduces the length of stay and local tourism revenue (Chen et al., 2017).

The Ternate City Tourism Office has utilized technology to enhance tourism management and promotion, as evidenced by its official website and social media presence (e.g., Instagram: Ternate Tourism Information Center). Information Technology (IT) enables effective marketing strategies, such as e-commerce and content marketing, which help promote tourism destinations and services (Dr. A. Sharma & Rishi, 2018). However, the lack of public knowledge and digital literacy hinders the optimal use of these tools. Topsakal et al. (2022) stated that IT and active community involvement can accelerate tourism development and significantly improve tourism management. Thus, continuous training and development are necessary to update the skills and knowledge of employees to enhance organizational commitment and job performance (Carlisle et al., 2023).

Sociocultural factors in Sulamadaha Village present both opportunities and challenges. While the community is generally friendly and well-mannered, occasional egos hinder the government's and residents' effective collaboration. As stated by the Head of Tourism Destination Sub-Section (2023):

Local people often feel that tourism spots belong to them. So, when the government or other actors try to intervene, they resist. It makes cooperation difficult to realize.

Collaboration requires conscious involvement from all actors and self-views significantly influence the choice of partners (Srivastava & Banaji, 2011). In Ternate City, collaboration in marine tourism development remains nascent, with the government predominantly handling policies and management (Head of Sub-Section of Tourism Destination, 2023) due to the lack of initiative by other actors to initiate maritime tourism development programs in Ternate and always waiting for the local government to act first (Head of Local Development Agency, 2023). Research conducted by Hakim et al. (2019) produced different conditions where local governments find it difficult to intervene in zoo tourism because it is already a tourist attraction managed with established conditions. This condition requires a strong and binding legal basis between actors who are members of the tourism development collaboration to avoid opportunistic behavior of the parties involved (Ansell, 2020). Legal frameworks for tourism management are guided by local regulations of Ternate City Number 11 year 2009 regarding the Master Plan of Local Marine Tourism Development and technical directives from the Ministry of Tourism and Creative Economy through Regulation of the Minister of Tourism and Creative Economy/Head of the Tourism and Creative Economy Agency No. 9 of 2021 concerning Guidelines for Sustainable Tourism Destinations. However, operational rules for Tourism Awareness Group (TAG) remain underdeveloped, limiting their roles to cleaning and security duties. This condition is due to the absence of formal regulations governing the scope of duties of the TAG. Furthermore, until now the duties of TAG members are now only based on verbal instructions from the Head of the Ternate City Tourism Office (TAG member, 2023).

In the creative economy sector, the Tourism Office focuses on 17 sectors outlined in the Minister of Tourism and Creative Economy (MoTCE) Regulation No. 24 of 2019. These include game development, architecture, interior design, music, fine arts, product design, fashion, culinary, film, animation and video, photography, visual communication design, television and radio, crafts, advertising, performing arts, publishing, and applications. However, only a few sectors, such as culinary, music, architecture and game development, have seen initial implementation. The lack of community self-initiative and reliance on government support, such

as funding or infrastructure development, have slowed progress (Head of Sub-Section of Tourism Destination, 2023). In addition, cultural beliefs in Ternate City further hinder maritime tourism development. As noted by the (Head of Sub-Section of Tourism Destination, 2023):

Some people believe that there are certain days, dates, and times for people to reduce activities outside the home. For example, the majority of Ternate residents are Muslim, and in Islam, there is a teaching to enter the house and close the door when it is Maghrib time. On the other hand, Maghrib time is the most appropriate time to enjoy maritime tourism attractions such as sunset.

Cultural and belief systems can significantly hinder tourism development (Ebrahimi & Khalifah, 2014). Fatehi (2012) and Wheelen & Hunger (2012) related them to environmental observations, where culture can be an external environment in the form of local community culture and an internal environment in the form of work culture in the organization.

b. Internal Environmental Analysis

As outlined in its organizational chart, the Ternate City Tourism Office operates under a hierarchical administrative structure. This chain of command has proven effective in managing and developing tourism in Ternate City, ensuring that all directives and decisions are focused and targeted. Such a structure is particularly advantageous in addressing urgent issues, such as emergency policies responding to climate change impacts on tourism spots (Towner, 2016). However, the involvement of non-state actors is essential to accelerate the development of key attractions like Hol Sulamadaha Bay (Head of Local Development Agency, 2023).

The Tourism Office emphasizes discipline, adherence to regulations, trust in leadership, and teamwork to achieve shared goals. Leadership's role in tourism governance is vital in maintaining employee relations and fostering communication with the public, private sector, and higher government bodies (Valente et al., 2015). The trust placed in leaders, and the disciplined approach of employees reflect positive organizational values that contribute to the agency's improvement.

Despite these strengths, infrastructure development remains suboptimal. Several facilities and infrastructure supporting community services are inadequate (Head of Local Tourism Agency, 2023). Public complaints highlight issues such as insufficient road access to Hol Sulamadaha Bay and inadequate lighting after dark (Head of Sub-Section of Tourism Destination, 2023).

To enhance destination marketing, the Tourism Office demonstrates proficiency in promotional capabilities by leveraging technology, including barcodes and social media platforms (Instagram, Facebook, Twitter/X, and websites). Scholars have emphasized the role of social media in destination promotion (Seal, 2024; Ulfa & Pribadi, 2021) and its potential to create viral engagement (Paiano et al., 2017; Rathore et al., 2017). However, public outreach is needed to ensure broader awareness of these platforms and innovations, making it easier for the community to access promotional information (Head of Local Tourism Agency, 2023).

c. Strategic Issues for Marine Tourism Development in Ternate City

Based on the external environment and internal environment analyses, several strategic issues were formulated to develop Hol Sulamadaha Bay as a marine tourism attraction. The issues are summarized in Table 4.

Table 4. Emerging Issues in Tourism Development in Ternate City	
Strategic Environment	Issues
External Environment	Lack of community involvement
	Uncontrolled climate and weather
	Lack of public tourism literacy
Internal Environment	Suboptimal performance of Tourism Awareness Group (TAG)
	Inadequate access and facilities/infrastructure

Source: Processed by Authors, 2024

Table 4 highlights the key challenges in Ternate City's tourism development, derived from the strategic environment analysis. While five issues were identified, the issue of uncontrolled climate and weather are excluded from further analysis as they fall outside the scope of

government policy intervention. Consequently, this study focused on four tourism issues for in-depth analysis.

Suboptimal Performance of Tourism Awareness Group (TAG)

The Sulamadaha TAG focuses primarily on safety and cleanliness management, with limited innovation in developing coastal tourism at Hol Sulamadaha Bay. A significant challenge is the absence of formal regulations from the Ternate City Tourism Office outlining the main tasks and functions of TAGs, which could serve as a framework for planning and target-setting. Additionally, TAG members lack sufficient knowledge and skills, hindering their ability to guide and empower the community to leverage tourism for economic improvement. Compounding this issue is conflicting interests among local business actors in Hol Sulamadaha Bay, underscoring the need for TAGs to mediate and foster collaboration.

Lack of Public Tourism Literacy

The community's limited digital literacy hampers their ability to utilize digital media effectively. Even though the Tourism Office has used several platforms as promotional media, many residents struggle to navigate these tools due to unfamiliarity with relevant keywords. Furthermore, public knowledge of creating souvenirs or crafts remains inadequate, stifling the growth of the local creative economy. Due to insufficient awareness and training, many individuals with potential arts and crafts skills cannot capitalize on these opportunities. This gap represents a missed opportunity to enhance local income by selling craft products at tourist sites.

Lack of Community Involvement

Community involvement is crucial for attracting tourists, yet many talented individuals outside TAGs—such as musicians, dancers, and artisans—remain underutilized. Even though facilities such as a hall or stage for music and other artistic performances have been provided, public participation in cultural and artistic activities is minimal. Greater government intervention is needed to empower the community and TAGs.

Inadequate Access, Facilities, and Infrastructure

Accessibility—encompassing ease of information access, travel to destinations, and availability of supporting facilities—remains a critical issue. Immediate concerns include poor road access to Hol Sulamadaha Bay and insufficient street lighting after dark. Noor et al. (2022) and Ramesh & Muralidhar (Ramesh & Muralidhar, 2019) revealed that the accessibility component in infrastructure generally determines tourism development. Additionally, the community's limited technological proficiency highlights the need for user-friendly information access systems to ensure visitors can easily obtain tourism-related information. Failure to address these issues may deter potential visitors. Furthermore, the Tourism Office lacks adequate infrastructure, such as workspaces, desks, chairs, computers, and laptops.

Priority Issues in Marine Tourism Development in Ternate City

Based on the questionnaire assessment data provided by two experts, the data were processed and combined in stages to obtain the overall results. These results include the priority order of the criteria and the combined alternative priority order across all criteria. The following are the priority rankings of the criteria, along with their respective eigenvectors:

Table 5. Priority Order of Combined Criteria

No	Criteria	Eigenvectors
1.	Ancillary	0.462
2.	Accessibility	0.281
3.	Attractions	0.177
4.	Amenities	0.080

Source: Processed by Authors, 2024

Table 5 shows that the top priority criterion for developing marine tourism in Ternate City is Ancillary, with an eigenvector of 0.462. Ancillary has the highest score due to expert justification, which reveals several reasons, including marine tourism, which is not determined by its natural beauty alone. Still, more important is the involvement of the community and government to actively develop this potential (Head of Local Development Agency, 2023). In eastern Indonesia, many natural attractions are beautiful beaches that are not exposed and dirty because there is no community involvement to manage them. In addition, the Amenities component will develop if the

ancillary component is intervened first (Head of Local Tourism Agency, 2023). Previous research explains the importance of empowering local communities to be involved in marine tourism development compared to other components (Hamzah et al., 2024; Untari, 2024) because it is related to the sustainability of tourist areas. Human aspects are important in sustainable tourism governance (Fahmy et al., 2024; Hamzah et al., 2024).

A comparison of alternatives for each criterion was conducted to determine the priority of strategic issues, as shown in Table 6.

Criteria	Order of Priority of Strategic Issues	Eigenvectors
Ancillary	1. Community involvement is still lacking	0.504
	2. TAG is not yet optimal	0.335
	3. Inadequate access/facilities and infrastructure	0.090
	4. Public knowledge is still lacking	0.072
Accessibility	1. Inadequate access/facilities and infrastructure	0.510
	2. Public knowledge is still lacking	0.259
	3. TAG is not yet optimal	0.141
	4. Community involvement is still lacking	0.090
Attractions	1. Community involvement is still lacking	0.387
	2. Inadequate access/facilities and infrastructure	0.314
	3. TAG is not yet optimal	0.176
	4. Public knowledge is still lacking	0.122
Amenities	1. Inadequate access/facilities and infrastructure	0.522
	2. TAG is not yet optimal	0.253
	3. Community involvement is still lacking	0.150
	4. Public knowledge is still lacking	0.076

Source: Processed by Authors, 2024

Table 6 highlights the top strategic issues for each criterion. For ancillary, the primary reason is the lack of community involvement (eigenvector: 0.504). For accessibility, the main concern is inadequate access/facilities and infrastructure (eigenvector: 0.510). Under attractions, the leading issue is community involvement (eigenvector: 0.387). Finally, the top priority for amenities is inadequate access/facilities and infrastructure (eigenvector: 0.522).

Based on the combined criteria and strategic issue prioritization results, the overall priority order of strategic issues is presented in Table 7.

Table 7. Overall Priority Order of Strategic Issues for Hol Sulamadaha Bay Marine Tourism Development

No.	Strategic issues	Eigenvectors
1.	Community involvement is still lacking	0.343
2.	Inadequate access/facilities and infrastructure	0.282
3.	TAG is not yet optimal	0.243
4.	Public knowledge is still lacking	0.132

Source: Processed by Authors, 2024

The priority order of strategic issues results from a synthesis of priority criteria and alternative priorities. The top priority is community involvement, with the largest eigenvector of 0.343. The second priority is inadequate access, facilities, and infrastructure, with an eigenvector

of 0.282. The third priority is the suboptimal performance of TAG with an eigenvector of 0.243. Finally, the fourth priority is the lack of public knowledge, with an eigenvector of 0.132.

Community involvement, as the highest-priority issue, holds significant importance. Scholars have emphasized that community involvement in maritime tourism has an impact on reducing negative social impacts (Roberts, 2011), increasing support for tourism policies (Roberts, 2013), and distributing direct benefits of tourism to the community (Lindstrom & Larson, 2016; A. Sharma & Arora, 2024). While the priority requires immediate attention, the subsequent issues should not be overlooked. Instead, they should be addressed systematically, with solutions implemented in stages according to their priority level. This approach ensures a structured and effective resolution of all strategic issues.

CONCLUSION

The development of maritime tourism in Ternate City faces a range of strategic challenges stemming from both internal and external environments. This study identifies key issues such as limited public awareness and community involvement rooted in the external environment as well as insufficient access, inadequate infrastructure, and the underperformance of Tourism Awareness Groups (TAG) as internal obstacles. By focusing on environmental scanning, the research provides valuable insights into the strategic landscape influencing tourism development, particularly in understanding factors that affect community participation and the sustainability of programs. However, the study is limited by its scope, which centers exclusively on the environmental scanning phase of the strategic management process. It does not extend to the crucial stages of strategy formulation, implementation, or evaluation. This narrow focus restricts the study's ability to demonstrate how the identified strategic issues could be translated into actionable strategies, implemented effectively, and assessed for impact. As a result, while the research provides a diagnostic framework, it stops short of delivering a comprehensive and integrated strategic plan for marine tourism development. Moreover, the study acknowledges the pivotal role of cultural and religious values in shaping community engagement. Field observations and qualitative interviews suggest that aligning tourism initiatives with local belief systems enhances public acceptance. Nevertheless, this cultural dimension was not rigorously quantified or assessed through empirical measures. Therefore, future research should explore the formulation of culturally sensitive tourism strategies and empirically examine their impact on community participation and program outcomes. Expanding the analysis to include strategy formulation and execution, along with a deeper exploration of socio-cultural influences, will be essential for developing a holistic and contextually grounded model for sustainable marine tourism in Ternate and similar regions.

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