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SWOT ANALYSIS OF HOT SPRING TOURISM MANAGEMENT IN LEILEM VILLAGE, MINAHASA REGENCY

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ABSTRACT

Leilem Hot Spring is a popular tourist destination with unique geothermal features and attractions. However, managing this destination requires a targeted approach so that its development runs on target and sustainably. This study identifies and analyses internal and external factors in managing Leilem Hot Springs in Minahasa Regency. A descriptive qualitative method was employed, with data collected through interviews, field observations, and documentation. Respondents were selected by accidental sampling, involving tour managers and visitors. Data analysis was conducted using the SWOT method, supported by the IFAS and EFAS matrices. The results showed an IFAS value of -(0.45), reflecting the dominance of internal weaknesses, and an EFAS of +(2.02), indicating significant external opportunities. Based on these findings, the tourist destination of Leilem Village Hot Springs, Minahasa Regency, is in a suitable position to implement a turnaround strategy through the W-O (Weaknesses-Opportunities) approach. This strategy is directed at strengthening professional management, improving facilities through synergy between stakeholders, involving the community in infrastructure improvements, and integrated promotion to expand market reach, especially in the digital era. Although the threat factor (T) is not prioritised in strategic decision-making, the issues of climate change and natural disaster risks remain critical. Managing these external factors requires integrating adaptive management based on risk mitigation and ecological principles, especially in geothermal tourism. Overall, this approach supports resource conservation, socioeconomic sustainability, and visitor safety, ensuring that natural tourism destinations remain resilient and sustainable over the long term.

Keywords: *SWOT; Tourism Management; Leilem Hot Spring; Internal Factors;*

INTRODUCTION

Tourism is one of the strategic sectors that drives regional economic growth while preserving natural and cultural local resources (Ali et al., 2022). In many developing countries, this sector is a promising alternative for sustainable development, especially if it is developed based on local potential and supported by appropriate management strategies (Herrera-Franco et al., 2020). More than

just an economic activity, tourism strengthens community identity and encourages conservation practices aligning with local wisdom (Sari et al., 2020).

One form of tourism that is relevant to the principle of sustainability is nature-based tourism. This approach aims to increase community income and welfare and pays attention to environmental conservation and the empowerment of local communities. This concept aligns with the geo-tourism and ecotourism paradigms that place natural resource conservation as the main element in developing tourist destinations. Various natural tourism destinations in Indonesia, such as Lake Toba, Bromo-Tengger-Semeru, and Bunaken Marine Park, are clear examples of success in combining landscape attractiveness, ecosystem uniqueness, which supports regional economic growth while preserving culture, to provide authentic experiences that are increasingly sought after by global tourists (Jaya, 2019; Kamagi et al., 2022; Marpaung et al., 2017)

However, tourism development that does not consider the environment's carrying capacity and local socioeconomic capacity often causes various negative impacts. Land degradation, pollution, and social conflict are consequences of unwise management (Emmelia Nadira Satiti, 2022). Considering these potentials and risks, holistic, comprehensive, and inclusive tourism planning is needed. Previous research (Rahmayani et al., 2022; Simorangkir et al., 2024) shows that participatory and sustainable approaches can make tourism a major driver of regional development and poverty alleviation.

Within the framework of nature-based tourism, geothermal tourism is growing and increasingly in demand, especially for hot springs. In Indonesia, tourism diversification through the development of geothermal tourism enriches alternative destinations, contributes to equitable development between regions, and improves the welfare of local communities (Sihombing et al., 2020). Hot spring attractions such as Ciwalini in Ciwidey, Ranoraindang in Leilem, and Pariban in Karo Regency can attract tourists, not only in terms of natural beauty, but also the health and relaxation benefits (Ananda et al., 2016; Iman & Winata, 2024; Nuzulia, 2022).

For geothermal tourism development to run optimally, management must thoroughly consider internal and external factors. Internal factors include human

resource capacity, infrastructure quality, and the effectiveness of local governance, while external factors include government policies, tourist market trends, and collaboration between stakeholders. The resilience and sustainability of a destination are largely determined by the extent to which local actors can manage its potential in a participatory and community-based manner (Maulina et al., 2022). Thus, strengthening local capacity is a key aspect in ensuring the sustainability and quality of tourism services. In addition, emphasised the importance of inter-sectoral synergy as the central pillar in sustainable tourism development. Changes in policy and tourist preferences, as stated by Rosha et al (2022), indicate that destination development must be responsive to external dynamics to remain competitive and resilient.

To respond to the complexity of management, use SWOT analysis as a strategic tool in identifying strengths, weaknesses, opportunities, and threats in developing tourist destinations (Novalia et al., 2023; Sipahutar & Rosdiana, 2024). This approach allows stakeholders to develop management strategies that are adaptive, evidence-based and sustainability-oriented. Therefore, the development of natural and geothermal tourism is an instrument of economic growth and a means of preserving the environment and cultural heritage.

The development of natural and geothermal tourism at the regional level, especially in North Sulawesi Province, is strategically urgent. The region has many tourism resources, ranging from marine and mountain tourism to geothermal tourism potential. Although some leading destinations, such as Bunaken Marine Park and Likupang SEZ, have developed rapidly, some potential destinations have not been optimised, especially in management and marketing.

One such area is Leilem Village in Minahasa Regency, which has geothermal tourism potential in the form of hot springs. This location has a high geographical value because it is in an active volcanic mountainous area that produces natural geothermal sources. Although it has been recognised locally as a tourist spot, its management and development still face various obstacles in internal management, promotion, and a lack of external support (Nuzulia, 2022). This reflects the importance of strategic intervention in designing better destination governance.

Branding and positioning strategies are also aspects that cannot be ignored to strengthen destination competitiveness. Hardy et al (2021) state that effective branding can improve tourist perceptions and strengthen destination attractiveness, especially when supported by authentic and educational tourism experiences. Hot springs can also be developed as part of the increasingly popular geo-wellness tourism and geopark (Chrobak et al., 2020; Mastika et al., 2023).

Furthermore, managing tourist attractions such as hot springs must also be harmonised with spatial policies and adequate infrastructure arrangements. Disconnection between spatial policies and tourism development needs often leads to irregular development or low service standards (Fajriah & Mussadun, 2014). This is seen in a decrease in service quality and visitor satisfaction, as found in a study of tourists at Ciwalini Bath (Ananda et al., 2016).

Although a number of studies have addressed the development of nature-based and geothermal tourism in various locations, studies that explicitly review the dynamics of internal and external factors in the management of geothermal tourism at the village level are still limited, especially in local geographical contexts such as Leilem Village. Previous research generally focuses more on the inventory of tourism potential, landscape mapping, and socioeconomic benefits generated from tourism activities. Studies such as the Marobo Baths in Timor-Leste and the hot springs in Tulehu and Tangga Batu show that weaknesses in management can lead to low competitiveness of destinations, despite their great natural potential. The absence of an integrated management strategy can lead to low-quality tourism experiences and a lack of economic sustainability. However, comprehensive managerial approaches, especially those integrating strategic analysis frameworks such as SWOT (Strengths, Weaknesses, Opportunities, Threats) in understanding the complexities of managing geothermal tourism destinations, specifically in this region, are still rare. Therefore, an innovative and system-based approach is needed so that tourism planning and management can be targeted and sustainable.

In this regard, Leilem Village, one of the areas with geothermal resources in hot springs, holds great potential to be developed as a tourist destination based on education, conservation, and the local economy. This potential can be optimised

through integrated planning and directed cross-actor collaboration, based on the results of strategic analysis of actual conditions in the field. Thus, this research aims to identify and analyse the internal and external factors in managing the Hot Springs tourist attraction in Leilem Village, Minahasa Regency. The results of this analysis are expected to be the basis for formulating effective, participatory and sustainable management strategies.

MATERIALS AND METHODS

This research uses a qualitative descriptive approach to holistically describe, analyse, and understand phenomena through narrative data interpretation (Sudiani et al., 2023). This approach was chosen because the research focuses on exploring internal (management, human resources, infrastructure) and external (government support, promotion, collaboration between stakeholders) factors that influence the management of tourist attractions.

Leilem Hot Springs tourist destination is astronomically located at the coordinates of 1° 15' 58.068“ N and 124° 49' 3.656” E, and administratively located in Leilem Village, Sonder District, Minahasa Regency, North Sulawesi Province (see **Figure 1**). This research was conducted for three months, from January to February 2023.

This research's primary and secondary data sources are primary and secondary data. Primary data were collected through observation and semi-structured interviews. Observations were used to understand tourist attractions' physical and non-physical conditions, including available facilities, accessibility, visitor activities, and stakeholder interactions (Ratnasari et al., 2024). Semi-structured interviews were conducted by preparing a list of main questions and allowing respondents to provide additional responses or explain further (Tobing & Weya, 2022). This method allows the researcher to obtain more in-depth and flexible information according to the field context. In addition, secondary data collection was conducted through literature studies, including official documents, tourist attraction management reports, local government policies, and scientific literature on geothermal tourism management (Parameswari et al., 2019). This secondary data was used to support the context analysis of tourism management

and provide a broader picture of the internal and external factors that influence it.

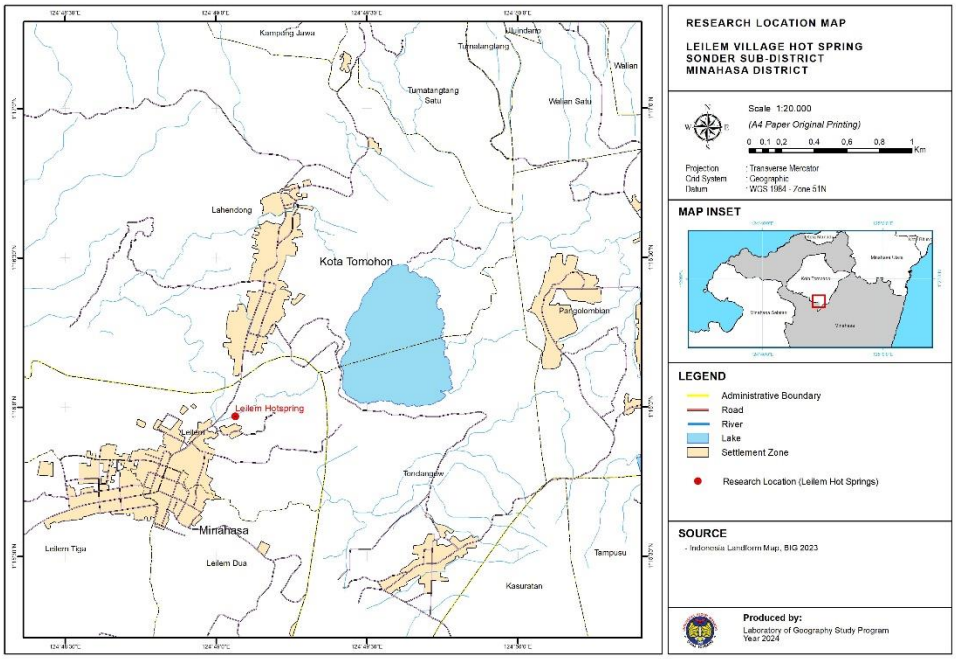

Figure 1. Research Location Map

source: analysis results, 2023

The research respondents totalled 32 people, including two tourist attraction managers and 30 visitors. The researchers used purposive sampling, a technique based on criteria relevant to the research objectives (Waelauruw & Rumalatu, 2023), to select the respondents. The criteria for managers are individuals who actively manage tourist attractions, such as the head of management or field staff. Meanwhile, the criteria used for visitors are individuals who have visited the Leilem Hot Springs tourist attraction, without considering the frequency of visits, but with the condition that they have direct experience at the tourist site (Annisa & Harini, 2017). The characteristics of the respondents consisted of 21 men (65.6%) and 11 women (34.4%). Based on age group, respondents were dominated by the young age group, namely 17-27 years old as many as 10 people (31.3%), followed by the age group 28-38 years old as many as eight people (25%), and 39-49 years old as many as seven people (21.9%). Meanwhile, the 50–60 age group had five people (15.6%), and the 60 age group had

two people (6.3%). In terms of education, the most numerous group of respondents were those with a high school education (14 people, or 43.8%), followed by those with a junior high school education (9 people, or 28.1%) and a college education (9 people, or 28.1%). Most respondents were students (10 people, 31.3%), followed by laborers (7 people, 21.9%), employees and entrepreneurs (5 people, 15.6% each), teachers (3 people, 9.4%), and tourism managers (2 people, 6.3%). Complete data on the characteristics of these respondents can be seen in **Table 1**.

Table 1. Respondent Characteristics

No.	Respondent Characteristics	Category	Number	Percentage (%)
1.	Gender	Male	21	65.6
		Female	11	34.4
		Total	32	100
2.	Age Group	17–27 years	10	31.3
		28–38 years	8	25.0
		39–49 years	7	21.9
		50–60 years	5	15.6
		> 60 years	2	6.3
		Total	32	100
3.	Education Level	Junior High School	9	28.1
		Senior High School	14	43.8
		Higher Education	9	28.1
		Total	32	100
4.	Occupation	Laborer	7	21.9
		Teacher	3	9.4
		Private Employee	5	15.6
		Student	10	31.3
		Entrepreneur	5	15.6
		Tourism Manager	2	6.3
		Total	32	100

Source: Research Analysis, 2023

The data analysis technique in this research consists of two stages. First, descriptive statistical analysis was conducted to organise the field data obtained through observations and interviews. The collected data were sorted, checked, and tabulated in tabular form according to the research needs, and then analysed descriptively to understand emerging patterns and trends (Raraga & Korengkeng, 2021). The data were then categorised based on the four main aspects of the SWOT model, namely strengths, weaknesses, opportunities, and threats. Second, the results of the descriptive analysis were further analysed using SWOT analysis to identify internal and external factors affecting tourism object management (Ihsan et al., 2015). SWOT analysis compares external

factors (opportunities and threats) with internal factors (strengths and weaknesses) through a matrix, so that adaptive and sustainability-oriented management strategies can be formulated (Menajang et al., 2019). This process involved thematic coding of qualitative data to identify key themes from interviews and observations, making the resulting SWOT analysis more measurable and relevant.

The interpretation of the assessment results in the IFAS and EFAS matrices by referring to the predetermined total score classification to facilitate the analysis of the strategic position of tourist destinations (Windi, 2021). In the IFAS matrix, the total score ranges from 1.00 to 4.00, reflecting the destination's internal condition. A score between 1.00 and 1.99 indicates a relatively weak internal condition, with internal weaknesses dominating and requiring serious attention for improvement. A score between 2.00 and 2.99 reflects a moderate condition, meaning there is a balance between internal strengths and weaknesses. In this case, a strategy is needed to maintain strengths and improve weaknesses. A score of 3.00 to 4.00 indicates a strong condition where internal strengths dominate and have the potential to become a competitive advantage for the destination. In the EFAS matrix, scores in this range describe the extent to which the destination responds to external factors. A score between 1.00 and 1.99 reflects an unresponsive condition. This indicates that the destination has low adaptability to external opportunities and threats. A score between 2.00 and 2.99 indicates a moderately responsive condition. This means the destination can respond to changes in the external environment, but not optimally. A score of 3.00 to 4.00 signifies a highly responsive condition, reflecting the destination's ability to utilise opportunities and deal with threats strategically.

RESULTS AND DISCUSSION

1. Potential and Attractiveness of Leilem Hot Springs Nature Tourism

Leilem Hot Springs is located in Leilem Village in the Sonder District of Minahasa Regency. It is one of the natural tourist areas with significant physical and socioeconomic potential for development as a leading destination in North Sulawesi. The area boasts (see **Figure 2**) supportive biophysical characteristics, including varied topography, active geothermal sources, and a diverse array

of vegetation and fauna typical of tropical rainforests.

Leilem Hot Springs is one of the most promising geothermal-based natural tourist destinations in North Sulawesi. Its location on the border of Lahendong Village (Tomohon City) and Leilem (Minahasa Regency) and its proximity to the Tomohon-Kawangkoan Highway make it easily accessible. It is only about 1.5 hours from Manado City and 30 minutes from Tomohon.

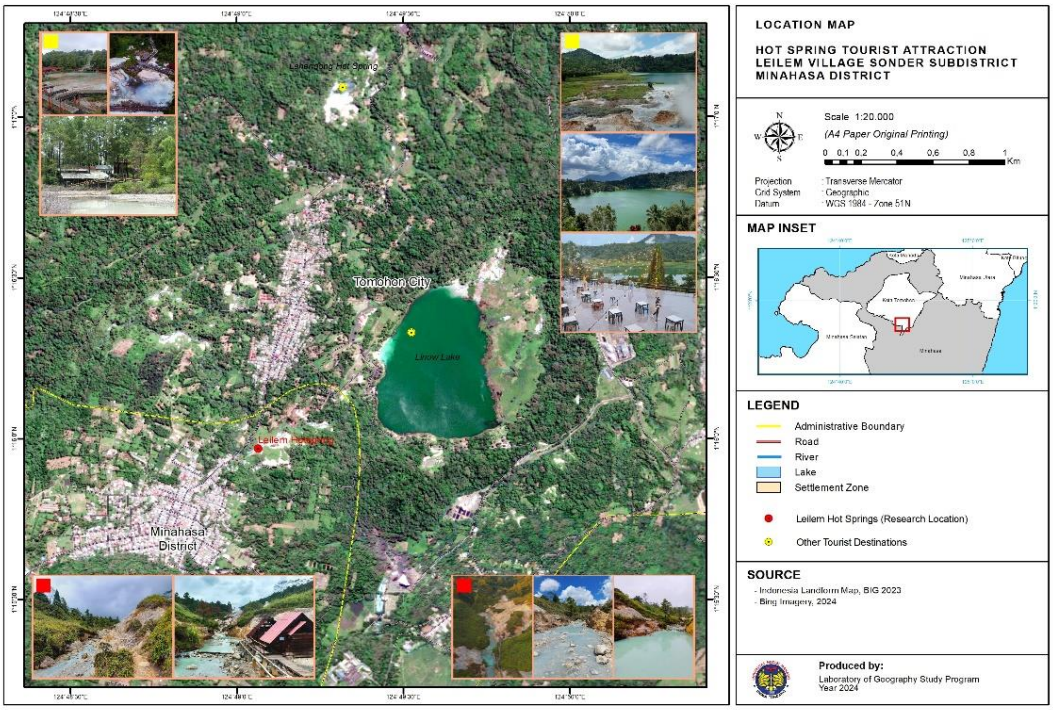

Figure 2. Map of Leilem Hot Spring Tourism Location
source: analysis results, 2023

The main attraction of this tour is the exotic hot river known as “Rano Raindang”, complemented by a landscape of brownish-white sulfurous rocks that create a natural and photogenic atmosphere. Tourists can soak their feet or bathe in natural or artificial pools along the river. One of the best spots is a bathing pool upstream, about the size of a quarter of a soccer field, built by the local community through a hot spring dam. A mini waterfall near this pool adds to the area's aesthetic value and visual uniqueness.

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The beautiful natural scenery, fresh mountain air, and atmosphere make this location suitable for nature tourism and relaxation. It has high aesthetic value as a shooting location, such as for prewedding and landscape photography. The visual beauty presented makes this place popular among social media lovers because it presents many Instagrammable spots.

The Leilem Hot Springs area spans lowlands to hillsides, creating an aesthetically pleasing and natural landscape. This elevation variation creates an attractive landscape for tourists and affects the nature of the soil and drainage system around the area. The soils in the lowlands, which are more fertile due to the deposition of organic material from the slopes, support the growth of dense tropical vegetation, enriching the area's beauty and making an ecological contribution. The area has active geothermal potential, characterised by natural hot springs, hot steam spots and boiling mud. The temperature of the hot water in this location can even reach 90°C. The content of minerals such as sulfur, magnesium, calcium, and sodium makes the water not only visually appealing (greenish or yellowish colored water), but also provides health benefits such as muscle relaxation, skin therapy, and detoxification. The combination of hot springs and hot river flow creates a unique attraction and has the potential to be developed as an educational location for geotourism and geothermal energy studies. The vegetation in this area is dominated by typical tropical rainforest plants, including candlenut, meranti, teak, pine, and cypress, as well as understory plants such as ferns and orchids. This ecosystem is also home to birds, reptiles,

and amphibians, which indicates that the area's ecology is still quite natural. This vegetation supports the area's ecological function and provides a calm, beautiful atmosphere for relaxation and nature tourism.

Management of the area is still self-help by local youth groups who provide basic services such as parking, information and cleaning. Although it does not yet have an official tariff structure and complete facilities, community involvement shows collective awareness and the potential for strengthening the local economy through tourism. It is hoped that the Village and District Governments will be able to develop the Leilem Hot Springs area professionally and sustainably. Support from the government is very important to encourage this area to become one of the leading tourist destinations, while still prioritising the principles of environmental preservation, empowerment of local communities, and integrated management and oriented towards the quality of the tourist experience.

Leilem Hot Springs shows excellent potential to be developed as a natural tourism destination based on ecotourism, geotourism, and wellness tourism. The main attractions are physical advantages such as attractive landscapes, hot springs with high mineral content, and relatively unspoiled tropical ecosystems. More than just a recreational object, this area has educational value in water resource conservation, geothermal energy utilisation, and environmental conservation. Therefore, the management and development of this area needs to be carried out sustainably by prioritising the active involvement of local communities, conservation-based governance planning, and facility planning that supports visitor comfort and safety. With proper management, Leilem Hot Springs can be an example of a nature-based tourism development model that improves the community's welfare and preserves natural resources for future generations.

2. Strategic Factors in the Management of Leilem Hot Spring Tourism Destination

Internal factor analysis is the initial stage to determine the position of strengths and weaknesses of tourist destinations. This assessment is based on the questionnaire data tabulation results, which are then calculated through the IFAS (Internal Factor Analysis Summary) Matrix. Each factor is given a weight and rating value, where the weight indicates the level of importance of the factor to the success of

management and the rating reflects the factual condition of each factor.

Table 2. IFAS Matrix of Leilem Hot Spring Tourism Destination

Internal Factors	Indicators	Weight	Rating	Score
Strengths	1.Natural hot spring water source	0,14	5	0,72
	2.Mineral-rich hot water quality	0,14	5	0,68
	3.The beauty of the surrounding nature (hilly landscape, water flow, and tropical forest)	0,15	5	0,73
	Sub Total	0,43		2,13
Weaknesses	1.There is no professional management from the local, district and provincial governments	0,14	5	0,72
	2.Limited facilities (changing rooms, bathrooms and rest areas, and a lack of recreation areas)	0,14	5	0,72
	3.Inadequate accessibility at the location (poor roads and lack of directions/security)	0,14	4	0,57
	4.Lack of widespread promotion	0,14	4	0,57
	Sub Total	0,57		2,58
	Total IFAS	(S-W)		-0,45

Source: Research Analysis, 2023

Based on the calculation results in **Table 2**, a total strength score of 2.13 was obtained, which illustrates that the main attraction of Leilem Hot Springs lies in its natural potential, such as the existence of natural hot springs, the quality of mineral-rich hot water, and the beauty of the surrounding natural landscape (see **Figure 3**). This shows that the strength factor is in the medium category (2.0 - 2.99), with the main contribution coming from the beauty of the landscape and the attractiveness of hot water therapy.

Figure 3. Natural Hot Springs in Streams and Open Baths
Source: processed from Google data and field observation, 2023

In addition, this destination faces significant weaknesses, as seen from the total weakness score of 2.58, which is also in the moderate category (2.0 - 2.99). The main weaknesses include the absence of professional management, limited public facilities (such as changing rooms, bathrooms, and recreation areas), unoptimized accessibility, and a lack of promotional efforts (see **Figure 4**).

Figure 4. Suboptimal Readiness of Supporting Infrastructure
Source: processed from Google data and field observation, 2023

When viewed as a whole, the total IFAS is -(0.45), with a negative value indicating that internal factors are still weak, because they are more dominated by weaknesses than strengths. This indicates that the management of Leilem Hot Springs tourist destination is still at an early development stage that is not yet optimal, and strategic intervention is required to strengthen internal factors as a whole, especially in terms of professional management and development of supporting facilities. Furthermore, the EFAS (External Factor Analysis Summary) Matrix is used to analyse external factors and identify opportunities and threats that could affect the management of tourist attractions.

The analysis results (**Table 3**) show that the total opportunity score of 3.35 is in the high category (3.0–4.0), indicating that the external environment strongly supports the development of this tourist destination. The most significant opportunities lie in strengthening partnerships among the government, the community, and the private sector, increasing promotion and developing supporting infrastructure. Conversely, the total score for threats is 1.33, which is in the weak category (1.0-1.99). The main issues are competition with similar

destinations and tourism in the surrounding area (compare to the map in **Figure 2**), such as Lahendong Hot Springs and Linow Lake, as well as risks from climate change and natural disasters (see **Figure 5**). Compared to the opportunities, the threats have a relatively low risk weight. The final EFAS result is obtained by subtracting the value of threats from opportunities.

Table 3. EFAS Matrix of Leilem Hot Spring Tourism Destination

External Factors	Indicators	Weight	Rating	Score
Opportuni-ties	1. Development of supporting facilities	0,17	5	0,84
	2. Cooperation with local, district and provincial governments	0,17	5	0,84
	3. Cooperation with surrounding communities (local participation for empowerment and sustainability)	0,17	5	0,84
	4. More intensive promotion campaign	0,17	5	0,84
	Sub Total	0,67		3,35
Threats	1. Competition with similar destinations and surrounding tourism (Lahendong Hot Spring and Linow Lake)	0,17	5	0,84
	2. Climate change and natural disasters	0,16	3	0,49
	Sub Total	0,33		1,33
	Total EFAS	(O-T)		2,02

Source: Research Analysis, 2023

Figure 5. The Threat of Climate Change and Natural Disasters
Source: processed from Google data and field observation, 2023

This results in a positive score of +2.02, reflecting that the external strategic environmental conditions highly support the sustainability and development of tourist attractions. These opportunities can provide a solid foundation for developing sustainable destination strategies.

3. Management Strategies for the Leilem Hot Spring Tourism Destination

The combination of the IFAS and EFAS analysis results is then mapped in a SWOT diagram to determine the strategic position of the Leilem Hot Springs tourist destination. The IFAS value of -(0.45) places this tourist attraction on the negative X-axis (showing the dominance of weaknesses). In contrast, the EFAS value of +(2.02) shows a positive Y-axis (showing the dominance of opportunities). From this total, a SWOT quadrant matrix reference point will be formed, so that the position of the management direction can be known.

Based on these results, the position of the tourist attraction is in Quadrant III in the SWOT Matrix (**Figure 6**), namely the Weaknesses-Opportunities (W-O) quadrant, which indicates that the main strategy that needs to be applied is Turnaround Strategy in the direction of survival strategy, by minimising internal weaknesses to maximise available external opportunities.

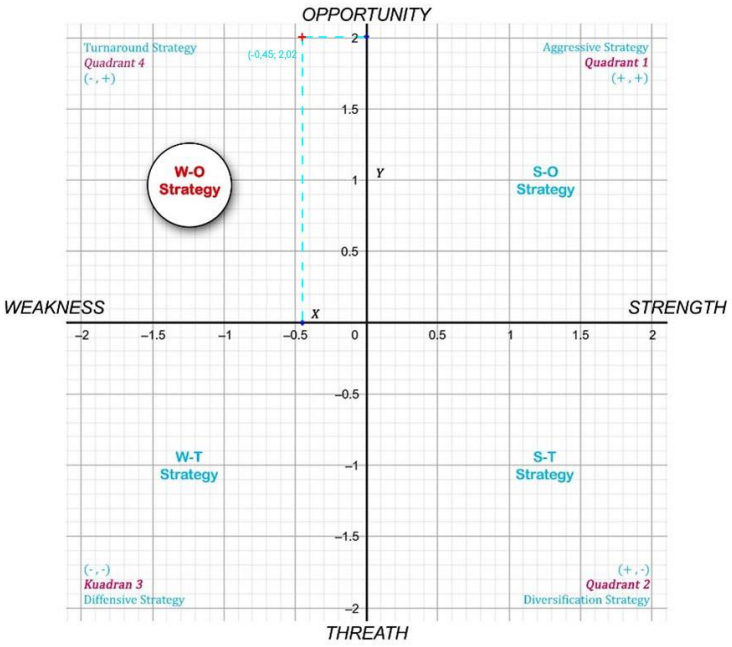

Figure 6. SWOT Analysis Result Matrix
source: Research Analysis, 2023

In the context of a survival strategy, Bayu et al (2023) explain that two main approaches are relevant to be applied, namely the Turn Around Strategy and Guerrilla Strategy (Ckristin & Dewantara, 2021; Novalia et al., 2023). Turnaround Strategy emphasises the importance of improving weak factors, such as improving facilities, accessibility, and destination governance. Meanwhile, the Guerrilla Strategy encourages changes in function or a more innovative management approach, for example, through the active involvement of local communities in promoting and managing community-based tourism.

The SWOT matrix developed based on internal and external factors produces a combination of strategies. Details about the results of this SWOT analysis can be seen in **Table 4**.

The results of the analysis of the management of the Leilem Hot Springs tourist destination indicate that the most suitable strategy to implement is the Turnaround strategy. This strategy emphasises leveraging internal weaknesses to seize external opportunities, thereby supporting the growth of the tourist destination in a sustainable manner.

The recommended strategy based on the combination of weaknesses and opportunities (W-O) is as follows: First, collaboration between local governments, regencies, and provinces is essential in formulating adaptive and professional management regulations and policies. This involves improving management, training human resources, and developing better tourism management programs and standards. The benefits of this collaboration (Berliandaldo et al., 2021) include improving existing facilities and adding better changing rooms, bathrooms, and recreational areas (Asmini Budi et al., 2019; Windi, 2021), thereby enhancing visitor comfort and experience.

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Table 4. SWOT Analysis Results Matrix on Natural Resources of Leilem Hot Springs

IFAS / EFAS	STRENGTHS (S)	WEAKNESSES (W)
	• Natural hot spring water source. • The quality of hot water is rich in minerals. • The beauty of the surrounding nature, namely mountains, tropical forests and rivers.	• No professional management from local, district and provincial governments. • Limited facilities for changing rooms, bathrooms and a lack of recreation areas and rest areas. • Limited accessibility, namely, poor road access and a lack of signs leading to the location. • Lack of widespread promotion of tourist attractions.
OPPORTUNITIES (O) • Development of supporting facilities such as additional changing rooms, bathrooms and varied recreational areas. • Cooperation with local, district and provincial governments. • Cooperate with surrounding communities to improve accessibility and road improvements. • More intensive promotional campaigns at the local level.	**STRATEGI S-O** • Utilise the natural beauty of mineral-rich natural hot springs by developing supporting facilities such as additional changing rooms, bathrooms and varied recreational areas. • Collaborate with the surrounding community, local, district, and provincial governments to develop infrastructure and supporting facilities, including improved accessibility and road improvements. • Conduct more intensive promotional campaigns at the local level.	**STRATEGI W-O** • Improve professional management in developing existing supporting facilities by collaborating with local, district, and provincial governments. • Involve surrounding communities in development and promotion to assist and improve road access and provide clear directions. • Organise a widespread promotional campaign.
THREATS (T) • Competition with similar destinations, namely, Lahendong Hot Springs. • Climate change and natural disasters.	**STRATEGI S-T** • Strengthening differentiation through the uniqueness of natural hot spring sources and the quality of mineral-rich hot spring water to face competition with similar destinations. • Developing innovations and service improvements to face climate change and natural disasters.	**STRATEGI W-T** • Managing professionally to face competition with similar destinations. • Developing existing supporting facilities and adding changing rooms, bathrooms, and better recreational and resting areas. • Improving accessibility and providing clear instructions to face competition, climate change, and natural disasters. • Intensifying the promotion and marketing of tourist attractions widely.

Source: Research Analysis, 2023

Second, the local community's active involvement in the destination's development, whether through cooperative activities to improve access, providing directional information, or participating in tourism awareness groups (pokdarwis). This is in line with the Community-Based Tourism (CBT) approach that has been successfully implemented in several areas (Bagasta et al., 2021; Budiani et al., 2018), such as Sembungan Village (Central Java) and Nglanggeran (Yogyakarta). Third, develop a broad and integrated promotional campaign. In the current digital era, promotions must leverage social media platforms, tourism websites, and collaborations with travel agents. Promotional activities can also be linked to the organisation of cultural events or sport tourism that highlight local uniqueness. Collaboration across sectors (government, community, and private) is essential for building a positive image and reaching a broader tourism market. Social media and local events can significantly increase tourist visits quickly, as found in a study on destination marketing in Bali (Tirtayani et al., 2024).

Furthermore, the formulation of long-term tourism management strategies must also consider external factors such as the threat of climate change and the potential for natural disasters, given the geographical characteristics of the Leilem area, which is prone to extreme rainfall, landslides, and other geological disturbances. If not anticipated, these factors can disrupt infrastructure and reduce tourist interest. Therefore, managers need to integrate sustainable tourism management and environmental mitigation approaches. This can be realised through developing climate-resilient infrastructure, preparing disaster preparedness plans, and conservation-based spatial planning (Munfarida et al., 2022; Sørensen & Grindsted, 2021). Additionally, educating visitors and involving the community in conservation and disaster programs are strategic steps in strengthening the socio-ecological resilience of the destination and fostering awareness of the importance of natural resource preservation.

Thus, the management strategy for Leilem Hot Springs needs to be directed towards creating a resilient, inclusive, and sustainable system that is responsive to development opportunities and prepared to face long-term environmental change dynamics. An integrated

approach that combines institutions, communities, promotion, and climate resilience will be the key to the successful transformation of this tourist destination towards a more productive and sustainable direction.

CONCLUSIONS

The management of the Leilem Hot Springs tourist attraction is at a strategic crossroads influenced by the interaction between internal and external factors. Identifying strengths, weaknesses, opportunities, and threats indicates that this destination has the potential for further development through targeted strategies. Specifically, the results of the analysis place this destination strategically positioned to implement a turnaround strategy approach, which emphasises utilising internal weaknesses to capture external opportunities optimally. The W-O (Weaknesses Opportunities) combination strategy is recommended as the main policy direction for future development.

The implementation of this strategy can be realised through several concrete steps, including the improvement of management quality in a professional manner and the provision of adequate supporting facilities through cross-stakeholder collaboration. Additionally, the active involvement of local communities in infrastructure improvement and accessibility enhancement around tourist areas is crucial, as it not only supports socioeconomic empowerment but also strengthens management legitimacy. In the context of promotion, strengthening the destination's image through digital media and a vast tourism network will support a sustainable increase in the number of visits.

Furthermore, long-term issues such as climate change and the potential for natural disasters are challenges that cannot be ignored in managing this geothermal-based nature tourism. Therefore, the development of the destination needs to be supported by adaptive management approaches based on risk mitigation principles and ecological insights. This approach is important to ensure the sustainability of natural resources, maintain tourist attractions, and guarantee the safety and comfort of tourists. Thus, sustainable management not only focuses on the economic dimension but also encompasses the environmental and social dimensions in a balanced manner.

However, it should be noted that this research has several methodological limitations. The scope of the study, which is descriptive-qualitative through SWOT analysis, provides a systematic initial understanding, but is not yet fully capable of quantitatively measuring the relative influence between factors. Additionally, the data used primarily comes from interviews and subjective field observations, and the limited number of informants and the duration of the research also affect the depth of the analysis. These limitations impact the formulation of strategy recommendations, which remain general and require further verification through field feasibility tests. Therefore, further research is highly recommended to adopt a more diverse methodological approach, such as the Analytical Hierarchy Process (AHP), SWOT-QSPM, or integration with spatial analysis based on Geographic Information System (GIS). Wider involvement of stakeholders in a participatory manner is also important to enrich perspectives and enhance the implementability of the strategy. With a more measured and comprehensive approach, it is hoped that future studies can make a tangible contribution to the sustainable development and management of the Leilem Hot Springs tourist attraction.

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