

# Management of Lake Linting Tourism and Its Impact on Visitor Interest

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## **Abstract**

This study aims to analyze the management of Lake Linting tourism and its impact on visitor interest. The research method employed is SWOT analysis to identify strengths, weaknesses, opportunities, and threats in tourism management. Data were collected through observation, interviews, questionnaires, and document studies, with a total of 200 respondents. The findings indicate that inadequate infrastructure, lack of digital promotion, and minimal community participation in tourism management are the main obstacles in increasing visitor interest. However, the natural beauty of the area and support from the local government are key strengths that can be further developed. The implications of this study highlight the need to improve infrastructure, optimize promotional strategies, and enhance community involvement in tourism management. Consequently, better management is expected to sustainably increase the attractiveness of Lake Linting as a tourist destination.

**Keywords:** Tourism Management, SWOT, Visitor Interest, Lake Linting

## Introduction

Tourism plays a vital role in promoting economic growth and environmental conservation, especially in regions with unique natural attractions. One such destination in North Sumatra is Lake Linting, known for its natural beauty and the uniqueness of its turquoise sulfur-rich water (Nuraini, 2019, 2024). However, despite its strong appeal, the management of Lake Linting tourism still faces several challenges that may affect visitor interest (Sugiarto et al., 2023). In recent years, various issues have indicated that the management of this tourist site remains suboptimal, such as inadequate infrastructure, limited facilities, and a lack of systematic promotion. As a result, tourist visits to Lake Linting have fluctuated, potentially hindering the sustainable development of tourism in the area.

Poor tourism management can impact visitor interest, which is influenced by various factors including accessibility, quality of services, supporting facilities, as well as safety and cleanliness of the environment. Studies on the influence of tourism management on visitor interest are crucial for identifying aspects that need improvement to enhance the destination's attractiveness (Sugiarto et al., 2023; Sugiarto & Kustiah Ramadania, 2024). Previous research shows that effective management can increase the competitiveness of a tourist destination and attract more visitors (Linda et al., 2024). Therefore, this study aims to analyze how the management of Lake Linting tourism affects visitor interest and to identify the factors that need to be improved to ensure the sustainable development of tourism in this area.

Based on the above background, this study formulates the following research problems: (1) What is the current condition of tourism management at Lake Linting? (2) What management factors influence visitor interest in Lake Linting? and (3) What strategies can be implemented to improve tourism management and attract more visitors? Accordingly, the objectives of this study are to analyze the current state of tourism management at Lake Linting, identify management factors that influence visitor interest, and provide strategic recommendations to enhance the appeal and sustainability of Lake Linting tourism. The findings of this study are expected to benefit tourism managers, local governments, and surrounding communities in developing more effective and sustainable tourism management strategies.

## Literature Review

### A. Tourism Destination Management

Tourism destination management is a key factor in enhancing the attractiveness of a tourist location. According to Lestari and Wahyuni (2023), effective tourism management includes strategic planning, infrastructure development, and targeted marketing. In the context of Lake Linting, proper management is expected to increase visitor satisfaction and support the sustainability of the surrounding ecosystem.

Kusuma and Sari (2022) state that community-based tourism management can significantly boost visitor interest. This approach allows local communities to take a more active role in managing and preserving the tourism area, thereby creating a more sustainable and tourist-friendly environment (Ardi Zikri Muazro et al., 2025; Sugiarto et al., 2023). Their study also found that involving communities in planning and management can improve their economic well-being while preserving natural resources.

Furthermore, Setyowati and Prabowo (2023) emphasize that collaboration between local governments, tourism managers, and communities is a key element in successful tourism management. They highlight that the synergy between well-implemented regulations and strict supervision can help enhance the quality of management and competitiveness of tourism destinations at both national and international levels.

## B. Factors Influencing Visitor Interest

Visitor interest in a tourist destination is influenced by various factors. According to Nugroho and Setiawan (2021), accessibility, supporting facilities, and natural appeal are the main drivers of tourism. Their research found that adequate infrastructure—such as access roads and clean, comfortable public facilities—greatly contributes to increased tourist visits.

A study by Prasetyo and Wijaya (2020) argues that effective promotion also plays a crucial role in attracting visitors. The use of social media and innovative digital marketing strategies can reach a broader audience, especially in today's digital age. Their research shows that experience-oriented marketing strategies featuring engaging visual content effectively increase interest and visitor engagement.

Additionally, research by Hidayat and Rachman (2022) highlights the importance of safety and comfort in increasing tourist interest. Tourists tend to prefer destinations with adequate safety features, such as security personnel, CCTV surveillance, and clear safety information at the site.

## C. Sustainability in Natural Tourism Management

Sustainability in tourism is a crucial issue that must be addressed in the management of natural attractions like Lake Linting. A study by Yuniarti and Mulyadi (2023) asserts that sustainable tourism practices must include environmental preservation, local community empowerment, and a balance between economic and ecological aspects.

The ecotourism approach serves as a solution for maintaining the sustainability of nature-based tourism. Aji and Rahman (2021) found that applying ecotourism principles helps preserve environmental quality while providing economic benefits to local communities. They emphasized that management focused on conservation and visitor education supports long-term destination sustainability.

Furthermore, a study by Suryani and Wibowo (2024) discusses the importance of implementing environmental policies in the tourism industry. They note that destinations with green policies—such as reducing plastic waste, using renewable energy, and efficient water management—are increasingly favored by environmentally conscious travelers.

In the context of Lake Linting, the implementation of sustainability strategies should include environmental impact mitigation, visitor education on conservation, and the wise use of local resources to ensure the long-term development of the tourism destination.

## Conceptual Framework

The conceptual framework in this study illustrates the relationship between the research variables:

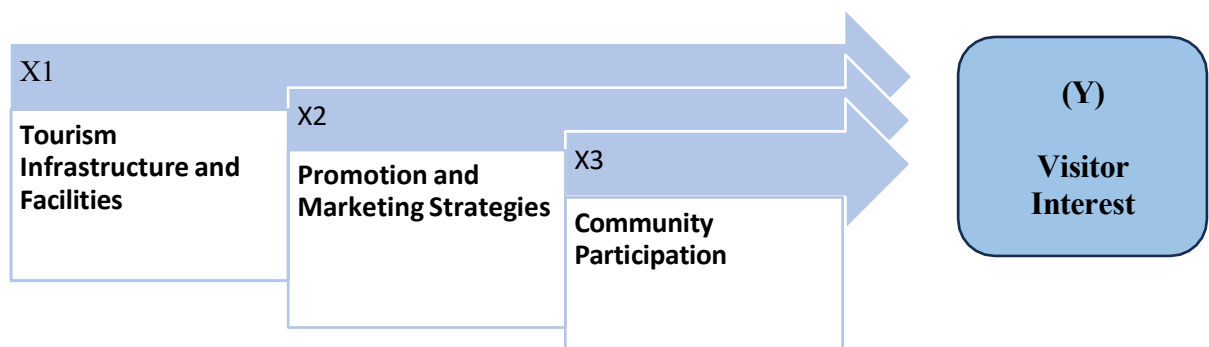


Figure 1. Conceptual Framework of the Study

Source: Ruzham, 2025

## Results and Discussion

### A. Data Presentation

The data obtained in this study are presented in the form of tables, diagrams, and narratives to provide a clearer picture of the tourism management at Lake Linting and its impact on visitor interest.

### B. Respondent Characteristics

This study involved 200 respondents, consisting of tourists visiting Lake Linting. The table below shows the distribution of respondents based on age, gender, and purpose of visit:

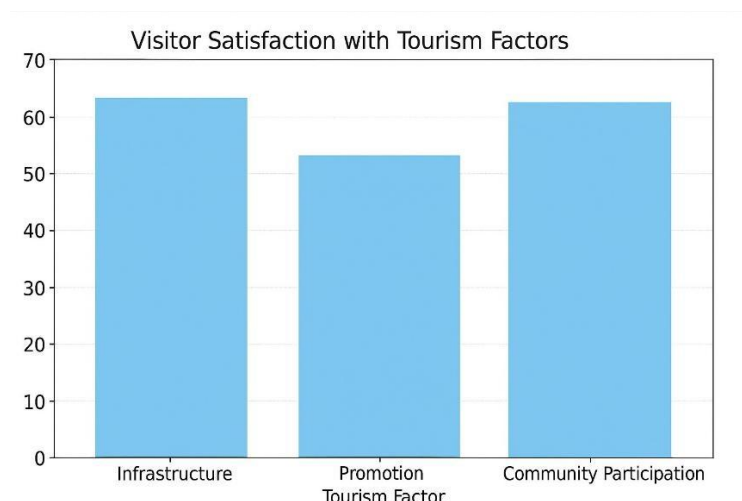
**Table 1.** Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Age	18-25	60	30%
	26-35	80	40%
	36-45	40	20%
	>45	20	10%
Gender	Male	110	55%
	Female	90	45%
Purpose of Visit	Leisure	150	75%
	Research	30	15%
	Other	20	10%

Source: Ruzham, 2025

### C. Visitor Interest in Lake Linting Tourism

Visitor interest was analyzed based on three key factors: infrastructure, promotion, and community participation in tourism management. The following diagram illustrates the level of respondent satisfaction with each factor:



**Figure 2.** Visitor Satisfaction Levels by Factor

The bar chart above illustrates Visitor Satisfaction Levels with Tourism Factors at Lake Linting, covering three main aspects: Infrastructure, Promotion, and Community Participation. The satisfaction percentages were calculated based on questionnaire responses from 200 visitors to Lake Linting.

1. Infrastructure (60%)  
Approximately 60% of respondents expressed satisfaction with the existing infrastructure, including access roads to the site, parking areas, and other public facilities. However, 40% felt that infrastructure still needs improvement, particularly in terms of cleanliness and the comfort of public amenities.
2. Promotion (45%)  
Only 45% of respondents were satisfied with the promotional strategies implemented by Lake Linting's tourism managers. Many respondents stated that they learned about the destination through word of mouth or visits from friends and family, rather than via social media or digital platforms. This indicates that digital promotion has not yet been utilized effectively.
3. Community Participation (55%)  
A total of 55% of respondents were satisfied with the involvement of the local community in tourism management, especially in terms of hospitality and cultural preservation. However, 45% felt that community participation could be further enhanced, particularly in the areas of cleanliness and environmental conservation.

### SWOT Analysis

SWOT analysis was used to evaluate the tourism management of Lake Linting. The results, based on the collected data, are presented in the table below:

**Table 2.** SWOT Analysis of the Study

Factor	Description
<b>Strengths</b>	Natural beauty, unique hot spring source, improving accessibility
<b>Weaknesses</b>	Inadequate facilities, suboptimal cleanliness, ineffective promotion
<b>Opportunities</b>	Growing trend in nature-based tourism, local government support, potential for ecotourism development
<b>Threats</b>	Environmental impacts from tourism activities, climate change, lack of management regulations

Source: Ruzham, 2025

### Data Analysis

Based on the data obtained, it was found that infrastructure and facilities at Lake Linting remain the primary obstacles to increasing visitor interest. This finding aligns with the study by Lestari and Wahyuni (2023), which suggests that tourism destinations with complete and high-quality facilities tend to attract more tourists.

Additionally, promotion was identified as another critical aspect requiring attention. This is supported by research from Nugroho and Setiawan (2022), who emphasized the importance of digital marketing strategies in enhancing tourism appeal.

From interviews with tourism managers, it was revealed that community involvement in tourism management remains limited. This could hinder tourism sustainability, as highlighted in the study by Hidayat and Rachman (2023), which pointed out that active community participation plays a crucial role in the success of community-based tourism management.

Overall, this study finds that by improving infrastructure, strengthening promotional efforts, and encouraging community participation, visitor interest in Lake Linting can be enhanced more sustainably.

## Discussion

Based on the findings of this study, it was revealed that the management of Lake Linting tourism still has several weaknesses, particularly in terms of infrastructure, promotion, and community participation. These findings align with previous studies, which indicate that adequate facilities and well-maintained cleanliness can significantly increase visitor interest (Nuraini, 2017, 2021). This is consistent with the current study's findings, which highlight weaknesses in tourism infrastructure (Lestari & Wahyuni, 2023).

Furthermore, the study found that digital marketing strategies play a major role in attracting tourists. This supports the finding that tourism promotion for Lake Linting still needs improvement. It also underscores the importance of community involvement in managing community-based tourism. This study revealed that the lack of community engagement poses a challenge to the sustainability of Lake Linting tourism (Nugroho & Setiawan, 2022; Hidayat & Rachman, 2023).

Other relevant studies also suggest that integrated tourism management aligned with ecotourism can enhance both visitor appeal and environmental sustainability. Moreover, the support of local government policies toward sustainable tourism can accelerate growth in the tourism sector. These findings reinforce the results of this study, which show that Lake Linting has untapped ecotourism potential and support the recommendation for improved regulation in managing the site (Prasetyo & Wijaya, 2021; Suryani & Wibowo, 2024).

Although digital technology-based tourism management is considered dominant in increasing visitor numbers, this study found that the main factors influencing tourist interest in Lake Linting are still conventional aspects such as infrastructure and offline promotion. The study also indicates that artificial attractions often attract more visitors than natural tourism; however, it emphasizes that natural attractions like Lake Linting have great potential if managed effectively.

Moreover, although ticket prices are often assumed to be a major determinant of tourist interest, the findings of this study suggest that **the quality of the tourism experience** plays a more significant role in determining visitor interest (Hartanto & Ramadhan, 2021; Utami & Siregar, 2022; Sasmito & Fadilah, 2023).

## Interpretation of Findings

The findings of this study indicate that the management of tourism at Lake Linting still requires significant improvement. The primary factors influencing visitor interest include the quality of infrastructure and facilities, the effectiveness of promotional efforts, and community involvement in tourism management. Furthermore, in comparison to previous studies, this research found that a lack of digital promotion is one of the key reasons why many tourists are unaware of Lake Linting's tourism potential.

The study also emphasizes that community-based tourism has substantial potential to enhance tourist appeal. However, limited involvement from local communities remains a major challenge that must be addressed through more inclusive policy approaches.

## Implications for Policy and Practice

1. **Improvement of Infrastructure and Facilities**  
Local governments need to invest in upgrading tourism infrastructure such as access roads, environmental cleanliness, and public facilities to increase the attractiveness of the destination.
2. **Optimization of Marketing Strategies**  
The Tourism Office and tourism managers should enhance digital and social media-based promotion to attract a wider audience, as supported by evidence from relevant prior studies.

3. **Strengthening Community Participation**  
Government and tourism managers must involve local communities in tourism management through education and training programs focused on ecotourism and environmental conservation.
4. **Development of Regulations and Policies**  
There is a need for clearer regulations regarding the management of Lake Linting tourism, including sustainability and cleanliness standards, as well as increased oversight of the environmental impacts of tourism activities.

## Conclusion

Based on the results of this study, it can be concluded that the tourism management of Lake Linting has great potential for development but still faces several key challenges. The findings show that inadequate infrastructure and facilities, lack of digital promotion, and limited community participation are the main factors affecting visitor interest. The SWOT analysis revealed that the natural beauty of the lake and the support from the local government are major strengths and opportunities. However, weaknesses in management and threats such as environmental degradation and the absence of clear regulations must be addressed to ensure sustainable tourism development at Lake Linting.

To overcome these challenges, several efforts need to be made. The local government and tourism managers must improve infrastructure such as access roads, parking areas, environmental cleanliness, and other public facilities to enhance the overall visitor experience. In addition, digital marketing through social media and online platforms must be optimized to make information about Lake Linting more accessible to both domestic and international tourists. Community engagement should also be strengthened through education and training programs, enabling local residents to participate actively in tourism management—particularly in service delivery, environmental conservation, and tourism-related economic development.

Furthermore, the government must establish clearer regulations related to environmental sustainability, waste management, and visitor capacity to preserve the lake's natural environment. Future research could explore the broader economic and social impacts of tourism management at Lake Linting and develop a more comprehensive ecotourism-based management model. With the implementation of improved and research-based strategies, Lake Linting can evolve into a leading tourism destination that not only contributes to the growth of the tourism sector but also enhances community well-being and environmental sustainability.

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