



## The Impact of Infrastructure and Accessibility on the Satisfaction Level of Paragliding Sport Tourism Tourists at Salena Hill

Nurlina Ambo<sup>1\*</sup>, Humaedi, Moh Wahyu Firmansyah<sup>1</sup>, Andi Sultan Brilin<sup>1</sup>,  
Susandi Eka Wahyudi<sup>1</sup>

<sup>1</sup>Universitas Tadulako Palu, Indonesia

Corresponding Author  linanurlina538@gmail.com<sup>1\*</sup>

### ABSTRACT

This study aims to determine the impact of infrastructure and accessibility on the level of satisfaction of paragliding sport tourism tourists at Bukit Salena, Palu City, Central Sulawesi. Infrastructure and accessibility are important factors in the development of tourist destinations because they affect the comfort, safety, and experience of tourists during tourism activities. Bukit Salena as one of the sport tourism destinations has great potential for development, so it is necessary to evaluate the condition of the available infrastructure and accessibility. This study uses a quantitative approach with a survey method. The sampling technique used accidental sampling, with a total of 20 respondents who have paragliding activities at Bukit Salena. Data collection was carried out through distributing questionnaires using a Likert scale, observation, and documentation. Data were analyzed using descriptive statistical analysis in the form of percentages to describe the level of tourist satisfaction with infrastructure and accessibility. The results showed that the level of tourist satisfaction with infrastructure and accessibility at Bukit Salena was in the very good category. A total of 13 respondents (65%) gave a very good rating, 6 respondents (30%) gave a good rating, and 1 respondent (5%) gave a poor rating. These results indicate that the existing infrastructure and accessibility provide a sense of safety and comfort, and support tourist activities during paragliding at Salena Hill. However, improvements are still needed in several aspects, such as the quality of the road leading to the site, the completeness of public facilities, and the maintenance of supporting infrastructure to continuously enhance tourist satisfaction.

**Keywords** :I nfrastructure, Accessibility, Tourist Satisfaction, Sport Tourism, Paragliding.

### ARTICLE INFO

Article history:

Received

22 April, 2026

Revised

28 May, 2026

Accepted 30 June,  
2026

Journal Homepage

<https://ojs.staiafurqan.ac.id/IJoASER/>

This is an open access article under the CC BY SA license

<https://creativecommons.org/licenses/by-sa/4.0/>

## INTRODUCTION

Tourism is a strategic sector that plays a vital role in supporting regional economic development, increasing community income, and creating jobs (UNWTO, 2019; Ministry of Tourism and Creative Economy, 2021). In Indonesia, the tourism sector continues to make a significant contribution to the national economy. According to data from the Central Statistics Agency (BPS), the number of domestic tourist trips will exceed 1 billion in 2023, while international tourist visits will show an upward trend in 2024 compared to the previous year (BPS, 2024). This situation indicates that the tourism sector has significant potential for continued development through diversification of tourism products that can attract various tourist segments.

The current development of the tourism sector is not only oriented towards recreational tourism, but has also expanded into various more specific alternative forms of tourism, one of which is sports tourism. Sports tourism is a tourism activity that combines sports activities with tourism experiences, thus providing added value in the form of active experiences, physical challenges, and direct tourist engagement with the natural environment (Gibson, 1998; Weed & Bull, 2004). The development of sports tourism is also considered capable of increasing the competitiveness of destinations, extending the length of stay of tourists, and providing economic impacts for local communities (Hinch & Higham, 2011).

One rapidly growing form of sport tourism is paragliding, which falls under the category of adventure sport tourism (Buckley, 2010). Paragliding offers the thrill of free flight, taking advantage of the topography, wind direction, and natural panoramas that are the main attractions of a destination. This activity is popular not only with extreme sports enthusiasts but also with general tourists seeking new and different experiences (Pomfret & Bramwell, 2016).

Although extensive research on sports tourism has been conducted, most studies still focus on economic impacts, tourist motivations, visitor satisfaction, and destination marketing strategies (Gibson, 1998; Hinch & Higham, 2011). Research on paragliding tourism in Indonesia also generally focuses more on aspects of destination potential or tourism area development. Meanwhile, studies that integrate paragliding destination characteristics, tourist experiences, service quality, and their implications for sustainable destination development are still relatively limited. This condition indicates a research gap, namely the lack of research that comprehensively examines paragliding destination development by considering aspects of tourist attraction, tourist experience, and destination sustainability within a single analytical framework.

Based on these gaps, this study offers a novelty in the form of a more comprehensive analysis of the development of paragliding-based sport tourism destinations by integrating natural potential, tourist experience, service quality, and stakeholder support to enhance the competitiveness of tourist destinations. This approach is expected to provide theoretical contributions to the development of sport tourism studies and provide practical recommendations for local governments and destination managers in formulating sustainable paragliding tourism development strategies. Sport tourism is considered to have great potential for development because it can attract special interest tourists and extend the length of stay of tourists in an area. In addition, sport tourism also contributes to promoting the natural and cultural potential of the region, as well as encouraging the development of supporting tourism infrastructure. One form of sport tourism that is growing rapidly, both at the national and regional levels, is paragliding, which is included in the category of adventure sport tourism.

Paragliding offers a unique tourist experience, the sensation of flying freely through the air, utilizing natural features such as hills, wind conditions, and panoramic views. This activity is popular not only with extreme sports enthusiasts but also with general visitors seeking a new experience and enjoying the beauty of nature from above. However, paragliding is a sport with a relatively high level of risk, requiring professional and well-planned tourism destination management. This management must be supported by adequate facilities and good accessibility to ensure tourist safety, comfort, and satisfaction.

Salena Hill, located in Palu City, Central Sulawesi Province, is a paragliding sports tourism destination with immense natural potential. This location offers a beautiful panorama of Palu Bay, a topography conducive to paragliding, and its relatively close proximity to the city center. This potential makes Salena Hill a significant opportunity to be developed as a leading paragliding sports tourism destination in Central Sulawesi. This destination is expected to increase the region's tourism appeal and positively impact the local economy.

Despite its significant potential, paragliding tourism development at Salena Hill has not yet been fully optimized. Based on initial observations and information from tourists, various issues remain related to the condition of facilities and accessibility at the destination. Tourist facilities are a crucial factor in the success of a tourist destination, particularly in sports tourism, which demands high safety and comfort standards.

In the context of paragliding sport tourism, facilities include not only supporting facilities such as parking, restrooms, rest areas, and information boards, but also key facilities directly related to paragliding activities, such as take-off areas, landing areas, and safety equipment. Inadequate, poorly maintained, or substandard facilities can reduce tourists' sense of safety and comfort. These conditions have the potential to impact tourists' travel experiences and directly impact their satisfaction with the paragliding destination of Bukit Salena.

Besides facilities, accessibility is another crucial factor in developing a tourist destination. Accessibility encompasses how easily tourists can reach a destination, including road conditions, transportation availability, directions, and travel time. Good accessibility will provide convenience for tourists, reduce travel obstacles, and create a positive impression from the outset. Conversely, inadequate accessibility can be a major barrier to visiting, even if the destination is highly attractive.

Access to Salena Hill still faces several obstacles, such as suboptimal road conditions, limited public transportation, and a lack of directions to the tourist site. These conditions can make it difficult for tourists, especially those from outside the area, to reach the site. These accessibility barriers have the potential to reduce interest in visiting and affect tourists' perceptions of the overall quality of the tourist destination.

Tourist satisfaction is a key indicator in assessing the success of a tourist destination's management. Satisfied tourists are more likely to return and recommend the destination to others. In the context of paragliding sport tourism, tourist satisfaction is significantly influenced by the effectiveness of facilities and ease of access to the destination, as these two factors directly impact the safety, comfort, and quality of the tourist experience. Therefore, efforts to improve tourist satisfaction are inseparable from continuous improvements to facilities and accessibility.

Tourist satisfaction is an important indicator of the success of a tourist destination. Satisfied tourists tend to have a desire to revisit and recommend the destination to others. Therefore, understanding the factors that influence tourist satisfaction, especially facilities and accessibility, is crucial for tourism managers and local governments in formulating sustainable tourism development policies. Based on this description, this study is important to conduct to determine the extent of the influence of facilities and accessibility on the satisfaction of paragliding sport tourism tourists at Bukit Salena. The results of this study are expected to provide evaluation material and input for tourism managers and local governments in improving the quality of paragliding destinations at Bukit Salena to make them more competitive and sustainable.

## **METHOD**

This study employs both descriptive and verification approaches. The descriptive approach was used to objectively describe the condition of facilities and accessibility, as well as the satisfaction level of paragliding sport tourism tourists at Bukit Salena, based on data obtained from respondents. Meanwhile, the verification approach was used to test the validity of the research hypothesis regarding the influence of facilities and accessibility on tourist satisfaction.

Based on the research objectives, this study is included in explanatory research, namely research that aims to explain the causal relationship between independent variables and dependent variables. The independent variables in this study are facilities (X1) and accessibility (X2), while the dependent variable is tourist satisfaction (Y). This study aims to determine the extent to which facilities and accessibility are effective in influencing the satisfaction of paragliding sport tourism tourists at Bukit Salena.

This study employed a survey method as the primary data collection technique, with a questionnaire distributed to tourists participating in paragliding sports tourism at Salena Hill. The data obtained were then analyzed using quantitative statistical analysis techniques to determine the influence of each variable, both partially and simultaneously. Therefore, this type of research is deemed appropriate for answering the research problem formulation and achieving the stated research objectives.

This research employed a case study design with a qualitative descriptive approach.

The case study was chosen because it focused on an in-depth assessment of infrastructure and accessibility conditions and their impact on the satisfaction level of paragliding sport tourism tourists at Salena Hill, Palu City, Central Sulawesi.

According to Yin (2023), a case study is a research method used to deeply understand a phenomenon within a real-life context, especially when the boundaries between phenomenon and context are not clearly visible. In this research, Salena Hill is used as a single case study because of its unique characteristics as a developing paragliding sports tourism destination in Central Sulawesi.

## RESULT AND DISCUSSION

### RESULT

The data observed in this study concerns the paragliding sports tourism area of Salena Hill, with 20 respondents. Data collection was conducted using a Likert-scale questionnaire consisting of 30 questions. This research was conducted at the Salena Hill paragliding sports tourism destination in Palu City, Central Sulawesi Province. Salena Hill is a sports tourism location with natural potential in the form of hills with a beautiful panorama of Palu Bay and geographical conditions that support paragliding activities.

### Respondent Data Description

The research data was obtained by distributing questionnaires to 20 respondents. The research instrument used a Likert scale with 30 valid items.

| NO | Category   | Frequency | Percentage |
|----|------------|-----------|------------|
| 1  | Very good  | 13        | 65%        |
| 2  | Good       | 6         | 30%        |
| 3  | Enough     | 0         | 0%         |
| 4  | Not enough | 1         | 5%         |
| 5  | Amount     | 20        | 100%       |

### Respondent Score Calculation Results

Based on the results of data processing using a Likert scale, the scores for each respondent were obtained as follows.

| NO | Name          | Score | Percentage | Category   |
|----|---------------|-------|------------|------------|
| 1  | Prio H        | 102   | 85.00      | Very good  |
| 2  | Tono          | 111   | 92.50      | Very good  |
| 3  | Akub Zainal A | 114   | 95.00      | Very good  |
| 4  | Mr. Joko      | 104   | 86.67      | Very good  |
| 5  | Amik          | 100   | 83.33      | Very good  |
| 6  | This          | 99    | 82.50      | Very good  |
| 7  | Indra         | 105   | 887.50     | Very good  |
| 8  | Muh. Anri     | 99    | 82.50      | Very good  |
| 9  | Andi Pratama  | 99    | 82.50      | Very good  |
| 10 | Supardi       | 120   | 100.00     | Very good  |
| 11 | Andre         | 99    | 82.50      | Very good  |
| 12 | Adit          | 98    | 81.67      | Very good  |
| 13 | Anang         | 105   | 87.50      | Very good  |
| 14 | Iwan          | 95    | 79.17      | Good       |
| 15 | Reza          | 91    | 75.83      | Good       |
| 16 | RW            | 87    | 72.50      | Good       |
| 17 | Ari           | 91    | 75.83      | Good       |
| 18 | Ripal         | 85    | 70.83      | Good       |
| 19 | Doyon         | 93    | 77.50      | Good       |
| 20 | Aco           | 44    | 36.67      | Not enough |

### Percentage Analysis

The results of the analysis show that most respondents obtained a score of 80%,

So it is included in the very good category.

## DISCUSSION

The research found that tourist satisfaction with paragliding at Bukit Salena was very good, with 65% of respondents rating it very good, 30% rating it good, and only 5% rating it poor. These results indicate that tourists are generally satisfied with the facilities and accessibility available at Bukit Salena.

These conditions indicate that supporting facilities such as parking areas, road access to the site, cleanliness of the area, and the availability of public facilities have provided a sense of comfort for tourists. Adequate infrastructure plays a crucial role in increasing tourist satisfaction by facilitating access to tourist sites and supporting paragliding activities. Furthermore, good accessibility allows tourists to reach locations easily, making the travel experience easier and more enjoyable. Facilities are a crucial element in developing tourist destinations because they can increase tourists' sense of safety, comfort, and convenience during their activities. For sports tourism such as paragliding, the availability of complete facilities is a primary requirement because the activity carries a relatively high level of risk. Therefore, tourists will feel more confident and comfortable if safety facilities and supporting infrastructure are well-established.

In addition to facilities, accessibility also influences tourist satisfaction. Based on the research results, most respondents stated that access to Salena Hill is relatively easy, although some road sections still require improvement. Ease of access to tourist locations makes it easier for tourists to plan their trips, save travel time, and reduce obstacles during their visits. Conversely, damaged road access, lack of directions, and limited transportation can reduce tourist comfort and thus affect their satisfaction. Overall, the research results show that facilities and accessibility are two complementary factors in increasing the satisfaction of paragliding sport tourism tourists at Salena Hill. Tourists not only require beautiful natural panoramas but also expect adequate facilities and easy access to tourist locations.

The 65% of respondents in the "very good" category indicate that the majority of tourists have a positive perception of the destination's service quality. This indicates that the facility management and accessibility at Bukit Salena are adequate, providing a pleasant tourist experience.

However, 5% of respondents still gave it a poor rating. This indicates that several aspects still need improvement, particularly in improving the quality of road infrastructure, adding directional signs, upgrading public facilities, and maintaining safety features to ensure a better experience for all tourists.

## CONCLUSION

Based on the results of research on the influence of infrastructure and accessibility on the level of satisfaction of paragliding sport tourism tourists at Bukit Salena, it can be concluded that the level of tourist satisfaction is generally in the very good category. The results showed that 65% of respondents gave a very good rating, 30% gave a good rating, and only 5% of respondents gave a poor rating. These findings indicate that the majority of tourists were satisfied with their travel experience at Bukit Salena. The condition of the infrastructure and facilities available at Bukit Salena is considered to be able to support paragliding tourism activities by providing a sense of safety, comfort, and convenience for tourists during their visit. The availability of adequate facilities and infrastructure provides a positive tourism experience, thus contributing to increased levels of tourist satisfaction.

Furthermore, accessibility to the Bukit Salena tourist area was also considered good by the majority of respondents. Ease of access, relatively adequate road conditions, and access to the tourist area are supporting factors that provide a more comfortable travel experience and increase tourist satisfaction. Overall, the study results indicate that infrastructure and accessibility are important factors influencing the satisfaction level of paragliding sport tourism tourists at Bukit Salena. The better the quality of the infrastructure

and the easier access provided, the higher the level of tourist satisfaction. Therefore, continuous improvement of infrastructure quality, facility maintenance, and accessibility improvements are necessary to increase the competitiveness of the destination and encourage the sustainable development of paragliding tourism at Bukit Salena.

## REFERENCES

- Agusbushro. (2014). *Tourism Facility Development and Tourist Satisfaction*. Yogyakarta: Deepublish.
- Buckley, R. (2010). *Adventure Tourism Management*. Oxford: Elsevier.
- Cooper, C., Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2019). *Tourism: Principles and Practice* (6th ed.). London: Pearson Education.
- Fitriantono, MR, Suryani, I., & Hidayat, A. (2018). Developing sports tourism as a strategy to increase regional tourism. *Journal of Sports*, 6(2), 145–154.
- Gibson, H. J. (2017). *Sport tourism: Concepts and theories*. Routledge Handbook of Sport Tourism. London: Routledge.
- Gammon, S., & Robinson, T. (2003). Sport and Tourism: A Conceptual Framework. *Journal of Sport Tourism*, 8(1), 21–26.
- Gibson, H. J. (1998). Sport Tourism: A Critical Analysis of Research. *Sport Management Review*, 1(1), 45–76.
- Hinch, T., & Higham, J. (2011). *Sport Tourism Development* (2nd ed.). Bristol: Channel View Publications.
- Isnaini, F., Suryadi, A., & Rahman, A. (2021). Sport tourism and regional economic development. *Journal of Applied Tourism*, 5(1), 22–33.
- Kotler, P., Bowen, J. T., & Makens, J. C. (2016). *Marketing for Hospitality and Tourism*. New Jersey: Pearson Education.
- Kotler, P., & Keller, K. L. (2018). *Marketing Management*. New Jersey: Pearson Education.
- Ministry of Tourism and Creative Economy of the Republic of Indonesia. (2021). *Strategic Plan of the Ministry of Tourism and Creative Economy 2020–2024*.
- Pomfret, G., & Bramwell, B. (2016). *The Characteristics and Motivations of Outdoor Adventure Tourists*. Routledge.
- Pendit, NS (2022). *Tourism Science: An Introductory Introduction*. Jakarta: Pradnya Paramita.
- Putra, AR (2020). The effect of accessibility on tourist satisfaction at natural tourism destinations. *Indonesian Tourism Journal*, 14(1), 33–42.
- Saputra, R. (2020). Sport tourism as a strategy for sustainable tourism development. *Journal of Physical Education and Sports*, 5(2), 88–96.
- Soekadijo, RG (2003). *Anatomy of Tourism*. Jakarta: Gramedia Pustaka Utama.
- Sugiyono. (2014). *Educational Research Methods (Quantitative, Qualitative, and R&D Approaches)*. Bandung: Alfabeta.