

Packaging Sustainable Camping Tours at Sicike-cike Nature Park

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Abstract

Taman Wisata Alam Danau Sicike-cike is one of the prominent natural tourism destinations in Dairi Regency, offering significant potential for nature-based tourism development. However, accessibility to the site remains relatively challenging, the supporting tourism infrastructure is not yet well structured, and currently no travel agencies are promoting tour packages in this area. This study aims to identify the essential components required for developing a camping tour package and to design a structured travel itinerary for the Camping Tour Package at Taman Wisata Alam Danau Sicike-cike. A descriptive qualitative research method was employed, with data collected through observation, in-depth interviews, and documentation. The findings reveal that the key components necessary for packaging the camping tour include transportation, accommodation or camping facilities, local restaurants, tour guides, tourist activities, entrance tickets, and parking fees. The proposed itinerary is designed for a two-day, one-night program. On the first day, activities include guest pick-up at the Sijinjo intersection, trekking to Lake 1, lunch, trekking to Lae Prada Waterfall, returning to Lake 1, followed by a bonfire and dinner. On the second day, activities include breakfast, trekking to Lake 2 and Lake 3, returning to Lake 1, and transfer back to the Sijinjo intersection. This study recommends that the Tourism Office and the management of Sicike-cike Natural Park (BBKSDA) enhance supporting infrastructure and essential components for camping tour packaging. Furthermore, it is suggested that promotional efforts be strengthened through websites and social media platforms such as Instagram, TikTok, YouTube, Facebook, and others, and that partnerships with travel agencies be established to increase tourist arrivals. This study contributes to the growing body of geotourism literature by providing a practical framework for developing sustainable camping tour packages in protected natural areas.

Keywords: Itinerary, Tour Package, Packaging, Sicike-cike Camping

A. INTRODUCTION

North Sumatra Province, characterized by its mountainous landscapes, lakes, and tropical forests, offers significant opportunities for sustainable tourism development. Among its tourism destinations, Dairi Regency is recognized for its rich ecological and cultural resources. One of its most distinctive attractions is Sicike-cike Nature Park (Taman Wisata Alam Sicike-cike), located in Parbuluan Village. Covering approximately 575 hectares, the park features pristine tropical forests, three freshwater lakes, and the 25-meter-high Lae Prada Waterfall. Situated at an elevation of 1,500–2,000 meters above sea level, the park supports diverse flora and fauna, making it highly suitable for nature-based tourism, particularly camping activities (Azkatoro, 2024).

Nature-based tourism has become an increasingly important component of sustainable tourism because it integrates environmental conservation, visitor experiences, and community participation (Dowling & Newsome, 2018). Among its various forms, camping tourism has attracted growing attention due to its potential to foster environmental

awareness while simultaneously generating economic benefits for local communities (Honey, 2008). In addition, geotourism extends these principles by promoting the conservation and interpretation of geological heritage while strengthening ecological protection, cultural appreciation, and community involvement (Dowling & Newsome, 2018).

Despite its considerable tourism potential, previous studies indicate that natural tourism destinations in Dairi Regency remain underdeveloped due to inadequate infrastructure, limited promotional activities, and the absence of well-designed tour packages (Siregar & Pinem, 2012). Likewise, the management of Sicike-cike Nature Park has not yet fully incorporated sustainability and educational elements into its tourism products, despite the park being part of the Lake Toba UNESCO Global Geopark ecosystem. Consequently, its geological features, biodiversity, and conservation values have not been optimally translated into meaningful tourism experiences.

Previous studies have explored various aspects of camping tourism and tour package development. (Guo, Yang, & Xie, 2024) demonstrated that campsite attributes significantly influence tourist satisfaction and behavioral intentions. (Chandrawati & Ariani, 2024) identified itinerary accuracy, transportation, accommodation, and tour guide services as the main determinants of tourist satisfaction, while (Septiningrum & Soesanto, 2022) emphasized that well-designed itineraries improve travel efficiency and visitor experiences. Although these studies contribute valuable insights, they primarily examine campsite attributes, tourist satisfaction, or itinerary design independently.

To date, limited research has focused on developing integrated camping tour packages for protected conservation areas that combine tourism components, structured itinerary planning, and geotourism principles within a sustainability framework. This represents an important research gap because successful camping tourism products require not only attractive natural resources but also comprehensive planning that integrates visitor services, conservation objectives, and educational experiences.

Therefore, this study aims to identify the essential components required for developing a sustainable camping tour package and to design a structured travel itinerary for Sicike-cike Nature Park. Unlike previous studies, this research proposes an integrated framework that combines tour package components, itinerary planning, and geotourism principles within a protected conservation area. The findings are expected to provide practical guidance for destination managers and policymakers in developing sustainable camping tourism products while contributing to the growing body of knowledge on geotourism and green tourism in Indonesia.

B. RESEARCH METHOD

This study applied a descriptive qualitative approach to identify the essential components for developing a camping tour package at Sicike-cike Nature Park, Dairi Regency, North Sumatra, and to design a structured travel itinerary for the Camping Tour Package at Taman Wisata Alam Danau Sicike-cike.

Observation was conducted directly at the study site to assess key components for camping activities, including camping grounds, equipment availability, water sources, safety, trekking routes, and supporting services such as transportation and food

supply. The observation also examined local human resources (guides and security staff) and camping-related activities such as tent setup, nature exploration, and campfires. Interviews with tourism managers and local stakeholders were carried out to gather insights on tour package design, management challenges, and itinerary planning to enhance the visitor experience and sustainability. Documentation was used to collect photos, videos, and relevant records as supporting evidence, illustrating field conditions, facilities, tourist activities, and the natural attractions of the area.

Data were analyzed using an interactive analysis model through data reduction, display, and conclusion drawing, with triangulation to ensure data validity.

C. FINDINGS AND DISCUSSION

1. Essential Components for Developing a Camping Tour Package at Sicike-cike Nature Park

Based on field observations, interviews with the management of the Natural Resources Conservation Agency (Balai Besar Konservasi Sumber Daya Alam/BBKSDA), and field documentation, seven essential components were identified for the development of a camping tour package at Sicike-cike Nature Park: transportation, camping facilities, local restaurants, tour guides, tourism activities, entrance tickets, and parking fees. These components collectively address the first research objective by providing the operational foundation for a well-integrated camping product that enhances the visitor experience while supporting environmental conservation.

a. Transportation

Limited public transportation to Sicike-cike Nature Park necessitates the provision of reliable private or rental vehicles. The available options include Avanza, Innova, and Hiace vehicles, which can be rented from local transport operators in Sidikalang. This arrangement is particularly important because visitors must travel from Sitinjo Junction to the park entrance before continuing on foot to the camping area. This finding is consistent with (Nopriana, Valeriani, Kurniawan, & Sugeng, 2024), who found that accessibility contributes significantly to tourist satisfaction. Adequate transportation improves convenience, reduces uncertainty, and enables the destination to accommodate visitors with different travel needs. The finding also supports (Gunn & Var, 2002), who regard transportation accessibility as a fundamental element of destination planning. However, unlike previous studies that primarily examined accessibility in relation to tourist satisfaction, this study demonstrates that transportation also serves a strategic function in the design of sustainable camping tour packages within protected conservation areas.

b. Accommodation / Camping Equipment

The availability of camping facilities within the park remains limited. At present, the management provides only two tents: one dome tent with a capacity of four people and one scout-style tent that can accommodate approximately six to seven people. Visitors who do not have their own camping equipment may obtain tents and other camping supplies from third-party providers, such as Sibayak Adventure. The

equipment can be delivered to Sitinjo Junction before being transported to the park. (Guo, Yang, & Xie, 2024), found that campsite attributes and outdoor accommodation facilities significantly influence tourist comfort, experience quality, and behavioural intentions. Accordingly, the provision of safe, adequate, and well-maintained camping equipment is essential not only for meeting visitors' basic accommodation needs but also for reducing safety risks in a highland conservation area. The present findings extend those of (Guo, Yang, & Xie, 2024) by indicating that camping accommodation should not merely function as temporary shelter. It should also support visitor safety, responsible resource use, and environmental sustainability.

c. Local Restaurants / Food Services

Local food businesses, such as Pondok Santai Sidikalang, can prepare meals and deliver them to the park entrance before visitors enter the conservation area. This arrangement allows meals to be incorporated into the camping package without requiring excessive food preparation within the protected area. It also provides practical benefits for visitors by simplifying logistics and ensuring the availability of adequate meals throughout the trip.

The involvement of local restaurants contributes to local economic empowerment by integrating community businesses into the tourism supply chain. This finding is consistent with (Sosa, Aulet, & Mundet, 2021), who emphasized that the involvement of local food providers can strengthen community-based tourism in rural destinations. Therefore, local restaurants should not be regarded merely as external suppliers, but as important stakeholders whose participation can distribute the economic benefits of camping tourism to surrounding communities.

d. Tour Guides

Official and experienced guides from BBKSDA are available to accompany visitors during camping and trekking activities. Their responsibilities include ensuring visitor safety, communicating park regulations, guiding visitors along trekking routes, and preventing activities that could damage the protected environment. The presence of trained guides is particularly important because the routes to the lakes and Lae Prada Waterfall vary in distance, terrain, and level of difficulty. (Üzülmez, Ercan İştin, & Barakazı, 2023) found that tour guides' environmental awareness and perceptions of ecotourism positively contribute to sustainable tourism practices. In the context of Sicike-cike Nature Park, guides perform a broader function than simply directing visitors along the route. They also provide environmental interpretation, explain the ecological importance of the area, and encourage responsible visitor behaviour. This interpretive function reflects one of the central principles of geotourism, namely improving visitors' understanding and appreciation of natural heritage (Dowling & Newsome, 2018).

e. Tourist Activities

The primary activities included in the camping tour package are trekking to Lake 1, Lake 2, and Lake 3; trekking to Lae Prada Waterfall; camping; nature interpretation; and observing wildlife and rare plant species, including orchids and *Rafflesia*, when

present. Each location offers different characteristics and levels of difficulty, allowing the itinerary to combine recreation, exploration, and environmental learning.

Lake 1 was selected as the recommended camping site because it is located closest to the main access trail. Its location facilitates the transportation of camping equipment and reduces visitor fatigue before the main activities begin. Lake 2 offers attractive natural scenery and provides habitat for wild ducks and other waterbirds. However, the presence of algae limits the suitability of its water for drinking or cooking. Lake 3 is more remote and can only be reached through a more demanding trekking route. This characteristic provides visitors with a more secluded nature experience while also requiring stricter safety and conservation measures.

Lae Prada Waterfall is another major attraction included in the package. The route to the waterfall is relatively steep and challenging; therefore, visitors are advised to leave heavy equipment at the Lake 1 campsite before undertaking the trek. This arrangement reduces physical burden and improves safety during the journey.

These activities are consistent with geotourism principles, which emphasize nature interpretation, environmental appreciation, education, and responsible interaction with natural landscapes (Dowling & Newsome, 2018). The proposed camping package therefore differs from conventional camping products because it does not focus solely on overnight recreation. Instead, it incorporates biodiversity observation, environmental interpretation, and conservation awareness, transforming camping into an educational and experiential tourism product.



Figure 1 Lake 1

Source: Field Observation, 2025



Figure 2 Lake 2

Source: Field Observation, 2025



Figure 3 Lake 3

Source: Field Observation, 2025



Figure 4 Lae Prada Waterfall

Source: Field Observation, 2025

f. Entrance Fees

Entrance fees range from IDR 10,000 to IDR 15,000 for domestic visitors and approximately IDR 150,000 for international visitors. Within the proposed tour package, these fees should be clearly included in the package price to ensure transparency and simplify visitor transactions.

Entrance fees can also function as a conservation financing mechanism because the revenue may be allocated to site maintenance, visitor management, and environmental protection. (Rani, et al., 2025) demonstrated that tourism entrance fees can contribute to the conservation management of environmentally sensitive destinations. Therefore, entrance fees at Sicike-cike Nature Park should not be viewed solely as an admission charge, but also as a potential instrument for supporting long-term conservation.

g. Parking Fees

Parking fees range from approximately IDR 10,000 to IDR 30,000 per day, depending on the type of vehicle and the duration of parking. Although parking fees represent a relatively small component of the overall package, they should be incorporated into the tour price to prevent unexpected additional costs for visitors.

Parking revenue can support the maintenance of parking areas, cleanliness, and vehicle security around the destination entrance. This finding is consistent with (Uyarra, Gill, & Côté, 2010), who noted that visitor-related fees can contribute to the financial sustainability and management of nature-based tourism areas. Nevertheless, transparent fee management is necessary to ensure that visitors understand the purpose of the payment and that the revenue contributes to destination services and conservation.

The findings demonstrate that transportation, camping facilities, local food services, tour guides, tourism activities, entrance fees, and parking fees are

interdependent components of a sustainable camping tour package. Transportation provides access to the destination; camping facilities ensure safety and comfort; food services meet visitors' basic needs; guides support interpretation and risk management; activities shape the tourism experience; and entrance and parking fees support operational and conservation-related functions.

These findings are broadly consistent with (Chandrawati & Ariani, 2024), who identified vehicle condition, itinerary accuracy, punctuality, attraction quality, driver competence, guide skills, accommodation services, and food provision as important determinants of tourist satisfaction. However, the present study extends its findings by examining these components within a protected natural area, where tourism services must be balanced with conservation requirements.

The integration of the seven components provides the basis for a comprehensive camping product at Sicike-cike Nature Park. The destination has strong potential for geotourism and green tourism because its lakes, forest landscape, biodiversity, trekking routes, and waterfall can be combined with environmental interpretation and responsible visitor management. Similar to geotourism development in Batur UNESCO Global Geopark, which emphasizes the relationship between geological resources, visitor education, and sustainable destination management (Samodra, 2018), camping tourism at Sicike-cike should be developed with careful consideration of ecological sensitivity and local community involvement.

From an academic perspective, the findings indicate that camping tour package design requires a balance among accessibility, facility readiness, visitor experience, local economic participation, and environmental stewardship. Unlike mass tourism products, geotourism-based camping should minimize environmental impacts while maximizing educational, ecological, and community benefits. The contribution of this study therefore lies in its integrated approach, which combines tourism services, infrastructure, visitor activities, and conservation management within a protected-area setting.

Overall, the seven components are not merely operational requirements. They also function as strategic instruments for advancing sustainable geotourism practices. Their integration into a structured camping package can support the development of nature-based tourism in Indonesia that prioritizes visitor safety, environmental education, conservation, and community well-being.

2. Structured Travel Itinerary for the Camping Tour Package at Taman Wisata Alam Danau Sicike-cike

The field observation conducted at Taman Wisata Alam (TWA) Danau Sicike-cike, Dairi Regency, produced a structured 2D1N camping tour itinerary designed to promote sustainable and educational tourism experiences. The itinerary was developed based on direct field data, including estimated travel times, rest periods, and nature-based activities.

The first stage involved the development of a Distribution of Time (DOT) table, which presents the estimated time required for each activity. This time distribution ensures that the itinerary is both efficient and enjoyable for visitors.

Table 1. Distribution of Time (DOT) to TWA Sicike-cike

Day	Activity Description	Time	Duration
Day 1	Simpang Tiga Sitinjo – TWA Gate	09:00–09:30	30 mins
	Gate – Lake 1	09:30–10:00	30 mins
	Tent setup at Lake 1	10:00–11:30	90 mins
	Lunch at Lake 1	11:30–12:30	60 mins
	Trekking to Lae Prada Waterfall	12:30–13:30	60 mins
	Activities at Lae Prada Waterfall	13:30–15:30	120 mins
	Return to Lake 1	15:30–16:20	50 mins
	Cleaning up	16:20–16:40	20 mins
	Campfire preparation	16:40–17:00	20 mins
	BBQ & Dinner	17:00–19:00	120 mins
	Briefing for next day	19:00	-
Day 2	Breakfast	08:00–09:00	60 mins
	Trekking: Lake 1 – Lake 2	09:00–10:00	60 mins
	Exploration at Lake 2	10:00–11:30	90 mins
	Lunch	11:30–12:30	60 mins
	Lake 2 – Lake 3	12:30–12:50	20 mins
	Exploration at Lake 3	12:50–13:50	60 mins
	Return to Lake 1	13:50–15:20	90 mins
	Tent packing	15:20–16:00	40 mins
	Lake 1 – TWA Gate	16:00–16:30	30 mins
	Gate – Simpang Tiga Sitinjo	16:30–17:00	30 mins
	End of tour	17:00	-

Source: Field Observation, 2025

To improve visitor understanding and enhance communication, the itinerary was transformed into a detailed structured travel plan (Table 2), which includes both timing and short descriptions of each activity.

Table 2. Itinerary

Day	Location/Route	Time	Activity Description
1	Simpang Tiga Sitinjo – TWA Gate	09:00–09:30	Pick-up and transfer to TWA Gate
	TWA Gate – Lake 1	09:30–10:00	Trekking to Lake 1
	Lake 1	10:00–11:30	Tent setup and basic camping instruction
	Lake 1 (Pondok)	11:30–12:30	Lunch at the lakeside hut
	Lake 1 – Lae Prada Waterfall	12:30–13:30	Trekking through the forest trail
	Lae Prada Waterfall	13:30–15:30	Enjoy the scenery and natural pool
	Return to Lake 1	15:30–16:20	Trek back to campsite

Day	Location/Route	Time	Activity Description
	Lake 1	16:20–19:00	Cleaning up, campfire prep, BBQ dinner
	Lake 1	19:00	Evening briefing and free time
2	Lake 1 – Lake 2	09:00–10:00	Trekking with nature interpretation
	Lake 2	10:00–11:30	Explore local flora and fauna
	Lake 2 (Pondok)	11:30–12:30	Lunch and short rest
	Lake 2 – Lake 3	12:30–12:50	Short trekking
	Lake 3	12:50–13:50	Observation of orchids and wildlife
	Return to Lake 1	13:50–15:20	Trek back
	Lake 1	15:20–16:00	Tent packing and site cleanup
	TWA Gate – Simpang Tiga Sitinjo	16:00–17:00	Return trip and closing

Source: Field Observation, 2025

The developed itinerary directly responds to the research objective of designing a structured and sustainable camping package at TWA Danau Sicike-cike. Both the DOT (Table 1) and the itinerary (Table 2) demonstrate efficient time management, balanced activity scheduling, and the incorporation of eco-education components— fulfilling the principles of geotourism and green tourism (Dowling & Newsome, 2018).

The integration of trekking, flora-fauna interpretation, and campfire sessions supports environmental education and experiential learning. According to (Tilden, 1977), interpretation through direct experience enhances visitors' understanding of nature and fosters conservation values. This supports sustainable practices as outlined by (Gunn & Var, 2002), emphasizing the importance of structured itineraries to manage visitor flow and minimize ecological impact.

The findings align with (Chandrawati & Ariani, 2024), who highlighted that the travel itinerary variable is stated to have a simultaneous effect on tourist satisfaction. Similarly, (Septiningrum & Soesanto, 2022) emphasized that tourists must plan their schedules when visiting destinations with multiple attractions, as structured itineraries help manage time effectively and enhance the overall travel experience. Together, these studies reinforce the importance of a well-organized and accurate itinerary in reducing confusion, optimizing destination visits, and increasing tourist engagement and satisfaction.

However, unlike previous studies, this research provides empirical timing data obtained through direct observation, offering more precise planning tools for similar destinations.

The study introduces a field-based Distribution of Time (DOT) model—rarely applied in Indonesian eco-tourism studies—making the proposed itinerary highly adaptable and practical. The inclusion of participatory learning (e.g., tent setup, local storytelling) also distinguishes this itinerary from conventional eco-tours, integrating green tourism principles of education, conservation, and local involvement (Honey, 2008).

D. CONCLUSION

This study identified seven essential components for developing a camping tour package at Taman Wisata Alam (TWA) Danau Sicike-cike in Dairi Regency: transportation, camping facilities, local restaurants, tour guides, tourism activities, entrance tickets, and parking fees. These components are vital for ensuring visitor comfort, safety, and satisfaction while supporting sustainable and community-based tourism.

A two-day, one-night structured itinerary was also developed to optimize visitor experiences through activities such as trekking, environmental interpretation, and cultural appreciation. The itinerary enhances time efficiency, reduces confusion, and strengthens tourist engagement, demonstrating the site's potential as a geo tourism and green tourism destination.

It is recommended that the Dairi Tourism Office and BBKSDA improve supporting infrastructure, promote the destination digitally through social media, and collaborate with tour operators to attract more visitors. Future studies may examine visitor satisfaction after implementation and evaluate digital-based itinerary management to promote sustainability and educational value at TWA Danau Sicike-cike.

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