

The Analysis of 4A Components In The Implementation of The Silokek Geopark for Sustainable Tourism in Sijunjung Regency

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Abstract

Silokek is a Geopark area located in Sijunjung Regency, West Sumatra. This area was designated as a national geopark in 2018 by the Komite Nasional Geopark Indonesia. It offers a variety of potential tourist attractions and if managed properly can provide benefits, such as improving the community's economy, preserving the environment, and local culture. This study focuses on understanding the application of the 4A concept (attraction, amenity, accessibility, ancillary) in the context of implementing sustainable tourism in the Silokek Geopark area, Sijunjung Regency. The research method used is descriptive qualitative. Data collection was carried out through literature study, observation, and interviews with various parties, namely, the Badan Pengelola Geopark Ranah Minang Silokek, tourists, local communities in the Silokek Geopark, and the Wali Nagari Silokek. The data that has been obtained is processed using the 4A components and analyzed for the application of sustainable tourism in the Silokek Geopark.

Based on the results of the research, it can be concluded that, Silokek Geopark has been unable to fully implement sustainable tourism practices due to the deterioration of access to the site, which has made it challenging for tourists to reach the location. Additionally, some facilities have been damaged and are not functioning optimally. However, component 4a is still required in order to effectively manage a tourist destination and implement sustainable tourism practices.

Keywords: Tourism, 4A Component, Geopark, Sustainable, Silokek

A. INTRODUCTION

Indonesia is one of the numerous archipelago countries. As indicated by data from the Central Statistics Agency (BPS), the number of islands in Indonesia has reached 17,001 (BPS, 2023). Each region and island possesses distinctive characteristics and beauty, including natural beauty, cultural diversity, flora, fauna, and more. These attributes offer significant potential for the development of the tourism sector, which can positively impact people's lives, the economy, the preservation of nature and local culture.

The development of the tourism industry must consider factors related to sustainability. The fundamental premise of sustainable tourism is the pursuit of a positive impact on the environmental and economic well-being of local communities, as well as a positive impact on the sociocultural milieu of tourist regions over an extended period (Susana et al., 2017). In order to facilitate the development of sustainable tourism, the Indonesian Ministry of Tourism and Creative Economy (Kemenparekraf) has identified four key pillars that are to be addressed, namely, sustainable management (tourism business), long-term sustainable economy (socio-economy), cultural sustainability (sustainable culture), and environmental aspects (environmental sustainability).

Sustainable tourism development addresses the needs of contemporary tourists and host regions while safeguarding future prospects. This approach is designed to ensure the sustainable management of resources, ensuring that both economic, social, and aesthetic needs can be satisfied while maintaining cultural integrity, essential ecological processes and biological diversity, and life support systems.

In order to ensure the sustainability of tourism, it is essential to consider the four main components that underpin the tourism industry: Attraction, Amenity, Accessibility and Ancillary. These components provide a framework for identifying and evaluating tourist attractions, with the aim of ensuring their long-term viability and resilience. The Ministry of Tourism and Creative Economy has made significant strides in promoting sustainable tourism through the development of geopark tourism.

The term "geopark" is derived from the combination of two words, "geology" and "park." In accordance with the Minister of Energy and Mineral Resources Regulation (Permen ESDM) Number 31 of 2021 regarding the Designation of National Earth Parks, a geopark is defined as a single or combined geographic area comprising a geological heritage site (geosite) and a valuable landscape. The development of geoparks is based on four key aspects: geoheritage, geodiversity, biodiversity, and cultural diversity. Geopark development is founded on three main pillars: conservation, education, and local economic development.

West Sumatra is one of the Indonesian provinces located on the western coast of Sumatra Island and is home to a geopark. In 2018, the Ministry of Tourism and Creative Economy designated three natural sites as national geoparks. Silokek Geopark, located in Sijunjung Regency, was among those designated. Silokek is of significant geologic interest, having undergone three epochs of geological time as reflected in the regional stratigraphy of rocks that comprise the area. The oldest rocks in this area were formed in the Paleozoic Age, specifically during the Permian (299 - 252 million years ago) and Carboniferous (359 - 299 million years ago) periods. Silokek Geopark encompasses 14 geological heritage sites, 8 biodiversity sites, 8 cultural diversity sites, 8 intangible heritage sites, and 8 typical Silokek Geopark products.

The Silokek Geopark has the potential to become a sustainable tourism destination; however, several obstacles impede the realization of its full potential. The primary challenge pertains to the park's limited accessibility, particularly the narrowness and condition of the road leading to it. These factors render the passage of buses and other vehicles a challenging undertaking. Furthermore, some of the facilities within the geopark are in a state of disrepair and lack proper maintenance, which acts as a deterrent for tourists and discourages them from visiting. This lack of visitor interest hinders the economic benefits that could be derived from increased tourism. In order to address these issues and promote sustainable tourism, it is important to improve the road access and properly manage the facilities in the geopark.

The research aims to identify the necessary measures to implement sustainable tourism by analyzing the components of attraction, accessibility, amenities, and ancillary(4A) Cooper et. al. Attraction contains three key factors that contribute to the appeal of a destination for tourists: These include natural resources, cultural attractions,

and attractions created by humans. Accessibility is a significant factor that influences tourist travel. The availability of various transportation options facilitates tourist visits to a given destination. Amenities is a component that contains the facilities and infrastructure that are in place and are required by tourists when they visit a tourist destination. These facilities and infrastructure include lodging, places to eat, transportation, and travel agents. Ancillary is component encompasses ancillary services provided by local governments or designated organizations and extended to either visitors or those engaged in the tourism industry.

4A component is a fundamental aspect of any tourist destination, as it serves an essential purpose in the development and promotion of the area. 4A Components are mutually reinforcing. If one component is unfulfilled, it will have an impact on the fulfilment of other components, which in turn affects the management of tourist destinations. The objective of a tourist destination is to develop the potential for tourism in the area. The term "tourism destination" is used to describe a location that is specifically designed to attract tourists.

The Silokek Geopark has satisfied the criteria set out in 4A Components in respect of physical facilities and access routes; however, the reality on the ground is a different story. The park has the appearance of a 'dead tourist destination' and this is in part due to a dearth of maintenance and upkeep of the built facilities. Some of the facilities that are supposed to enhance the visitor experience are no longer fit for purpose. Consequently, it can be concluded that a tourist destination that fulfills 4A Components does not necessarily possess the capacity to implement sustainable tourism. This research aims to present a solution that can benefit both the government and managers, enabling the maintenance and implementation of sustainable tourism practices in Silokek Geopark.

The knowledge of merely the 4A components that exist in a destination is insufficient for the conclusion that a destination has implemented sustainable tourism. The aforementioned components serve merely as preliminary indications of the steps taken for the management of a tourist destination, so that said destination may become sustainable in a manner beneficial to both current and future visitors, industry, environment, and society, with regard to both the economic and social impact and the environmental impact of the destination.

B. RESEARCH METHOD

A qualitative research approach is employed in this study to analyze and derive conclusions from data obtained through interviews, aiming to elucidate the underlying significance of a phenomenon. The research focuses specifically on the examination of the 4A element pertaining to the implementation of sustainable tourism in the Silokek Geopark. The research was conducted in the Silokek Geopark Area of Sijunjung Regency, West Sumatra Province of Indonesia. The samples used as sources in this study are the Wali Jorong Tanjung medan, Silokek, the Silokek Tourism Village Manager, and tourists visiting the Geopark. The sampling technique used was snowball sampling.

The snowball sampling technique is a method of collecting data from an informant, but if the data provided does not meet the required specifications, other informants are sought to provide the necessary information. Potential informants may include members of the village government, tourist destination managers, and tourists who have visited the Siloke geopark.

The research process involves several phases, commencing with the delineation of the research themes and issues to be investigated. This is followed by an onsite visit to gain direct insight into the actual situation at the research site and to ascertain information on sources and matters pertinent to the research. The final stage comprises the preparation of a written account. This stage encompasses the processing of data through the triangulation method, resulting in a documented account of the research findings.

The data collection technique used is data triangulation, namely the combination of existing data collection techniques, namely observation, interviews and document analysis, with the objective of obtaining the requisite data. Once obtained, the data have been analyzed and processed in order to answer the questions set out in the research report.

The data obtained is subjected to an analytical process to yield data aligned with the research topic. The data analysis employed is based on the model devised by Miles and Huberman, which comprises three phases: data reduction, data display, and conclusion. In this study, the data acquired will be analysed in accordance with the stipulations of component 4a, which represents the theoretical framework underlying the research topic.

C. FINDINGS AND DISCUSSION

One of Indonesia's notable natural and cultural assets is its geopark region. The geopark concept offers a unique opportunity to explore the natural and cultural heritage of an area shaped by geological processes over millennia. As defined by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), a geopark is an area with clearly defined boundaries and a distinct scientific interest, exhibiting rare or unique geological features. The concept of a geopark is not solely limited to the domain of geology; it also encompasses archaeology, ecology, and areas of historical or cultural significance. (Sisharini, Nanik, FEB, Merdeka University Malang). Quoted from the jdih.esdm.go.id page, it is explained that the earth park (Geopark) in the Minister of Energy and Mineral Resources of the Republic of Indonesia Number 31 of 2021 concerning the Determination of the National Earth Park (Geopark) states Chapter I General Provisions Article 1 paragraph 1 explains that Geopark is an area that has extraordinary natural wealth, which is a geological heritage site (Geosite), both in terms of geology or rocks, minerals (Geodiversity), fossils, biodiversity or plants, animals (Biodiversity), as well as cultural diversity, traditions, history (Cultural Diversity).

This area is managed with the specific objective of maintaining its sustainability, while simultaneously facilitating educational, research, and community economic development activities. The primary objective is to enhance public consciousness of the vital importance of environmental protection. West Sumatra boasts nine geoparks, encompassing a wealth of cultural, biological, and geological diversity, rendering these areas of significant value. Silokek Geopark, situated in Sijunjung Regency, represents one such geopark in West Sumatra.

On the 30th of November 2018, Silokek Geopark was designated by the Ministry of Tourism and Creative Economy as one of the Geoparks in Indonesia. In addition to Silokek Geopark, Sawahlunto Geopark and Sianok-Maninjau Geopark were also designated on that date. Silokek Geopark, as designated by the National Committee of Indonesian Geoparks (KNGI), is one of the 15 geopark areas recognized by KNGI. A direct visit was conducted by the author to the Silokek Geopark region, situated approximately 145 km to the east of the city of Padang. Nevertheless, the distance from Muaro Sijunjung, the capital of Sijunjung Regency, is approximately 15 km.

The route to Silokek is both intriguing and arduous. Nagari Silokek has a temperature range of approximately 23-25 degrees Celsius, attributed to the presence of

ancient rock formations that originated hundreds of millions of years ago. These rocks have undergone three eras on a geological time scale, as evidenced by the karst cliffs with a gentle slope that are a distinctive feature of Silokek. According to the information displayed on the noticeboard situated at the entrance to the Silokek Geopark, visitors can obtain insights into the region's historical background and view images of various locations within the geopark.

4A Components of the Silokek Geopark Area

1. Attractions

The most notable attraction for tourists in the Silokek geopark area is the region's remarkable natural beauty, which is particularly evident in the Nagari Silokek area. The natural beauty that extends throughout the region remains a significant attraction for visitors and tourists alike. The impressive rock formations that characterize the Silokek area are a significant source of attraction for visitors. This contributes to the fulfillment of tourist expectations. Nevertheless, the existing infrastructure in the Silokek geopark area may require adjustments to fully accommodate these attractions. In order to maintain and further enhance the area's allure for tourists, the Silokek geopark has implemented conservation measures that prioritize the protection of endemic flora and fauna. This effort has involved collaboration with external parties, including the BCA, which has extended support to Nagari Silokek through the Bhakti BCA program. However, the BCA has recently ceased direct involvement in tourism initiatives within Silokek Nagari. The management of Nagari Silokek Tourism Village has recently proposed the development of a new attraction designed for tourists who seek thrills and adventure, particularly those who appreciate activities involving high altitudes.

No	Kind of Attractions				
	Geological Heritage	Biodiversity	Cultural Diversity	Intangible Heritage	Product
1	Konglomerat Brani Ngatau Bataaik Geosite	Amorphopallus hirsutus	Kampung adat Nagari Sijunjung	Marosok	Samba/Gulai Kacau
2	Air Terjun Lubuk Pandakian	Buceros rhinoceros	Lokomotif Uap Silukah	Bakaua	Pandan Mat
3	Air Terjun Granit Bukit Kajai	Amorphopallus Titanum	Surau Simauang	Matrilineal	Tenun Songket Unggan
4	Komplek Intrusi Mambuik	Rafflesia	Makam De Greve	Batobo Kongsi	Batik Ceta Bacorak
5	Granit Sangkiamo	Dipterocarpus Tree	Lubang Kolam Kupitan	Jambu Lipo Kingdom	Eco Print
6	Mata Air Panas Batu Gamping	Trachypithecus cristatus	Makam Raja Jambu Lipo	Khatib Ramadhan	Kopi Carano Ameh
7	Batu Gaping Loguang	Pandanus odoriter	makam Raja Ibadat	Tari Tanduaq	Galamai
8	Air Terjun Timbulun	Chiroptera	Rumah Perjuangan	Tari Jalo	Madu Galo Galo
9	Danau Biru Kunangan				Rendang Belalang
10	Air Terjun Timbulun Tujuh				
11	Sialang Batu Lubuk Tarok				
12	Komplek Karst Silokek				
13	Front Bukik Kupitan				
14	Gua Inyiaq Umpuang				

Table 1 Geopark Silokek's Attractions

Source: Geopark Silokek Ranah Minang, 2023

Table 1 illustrates the potential of the Silokek Geopark. The Silokek Geopark area boasts a plethora of tourist attractions, encompassing natural beauty, cultural and biological diversity, culinary offerings, and handicrafts. This exemplifies the immense potential of the Silokek Geopark to attract tourists, foster regional tourism, and stimulate the economy of the surrounding community.

2. Amenities (Facilities)

In any tourist destination, amenities are necessary to support tourist comfort. A variety of facilities are already available in the Silokek Geopark area, including places of worship, tourism information centers, homestays/cottages,, rest areas, and small shops offering a range of essential tourism-related items. The provision of facilities and services in the Silokek Geopark tourism area is predicated on the active participation of the local community.

Based on interviews with managers, tourists and direct observations by the author that facilities require an increase in toilets, garbage cans by differentiating types of waste because to distinguish waste that can be recycled and not recycled, there are gas stations, ATM machine centers, signal communication and several facilities that can provide comfort for tourists who will visit.



Figure 1. Current Condition of Facilities At Geopark Silokek Area

Source: Author

Figure 1 illustrates the condition of select facilities within the Silokek geopark area. The image depicts a lack of maintenance, evident in the malfunctioning toilets and the unclean, unkempt state of places of worship.

3. Accessibility

The Silokek Geopark tourist area, located approximately 15 kilometers from the center of Muaro Sijunjung in Sijunjung Regency, can be accessed via a challenging journey for tourists. In order to reach the Sijunjung Geopark area, travelers are required to navigate a series of obstacles and travel conditions. It should be noted that the route is characterized by undulating terrain, damaged road surfaces and narrow sections. These factors combine to create a challenging journey for vehicles, particularly when wet weather is a possibility. It is recommended that visitors to Geopark Silokek utilize a suitable vehicle for the prevailing road conditions, and conduct thorough vehicle inspections prior to embarking on the journey. The condition of the infrastructure in a destination area is assessed by tourists according to a number of criteria, including the condition of local buildings, maintenance of the built environment, the state of roads, and other features that contribute to the overall impression of the area. A well-maintained destination offers a comfortable experience for tourists, which in turn encourages them to recommend the area to others.

Accessibility, infrastructure to the location of the Silokek Geopark area such as road access, accommodation, accommodation, telecommunication networks, Internet requires detailed study and must be seriously followed up by the management of Nagari Silokek with the regional administration of Sijunjung Regency and the central administration. The Nagari Silokek Tourist Village management has endeavored to enhance accessibility by submitting a proposal to the Sijunjung Regency Government. The proposal primarily sought the restoration of roadways deemed unsuitable for continuous use, including those traversing both tourist and local routes within the village.

In order to ensure the long-term sustainability of the Silokek Geopark area, the Regional Government of Sijunjung Regency has taken the initiative to provide training for managers and offer physical assistance.



Figure 2. Silokek's Accessibility

Source: Geopark Silokek Ranah Minang, 2023

Figure 2 illustrates the geopark's location on a map of West Sumatra, along with a plan of several tourist destinations within the Silokek geopark area.



Figure 3. current condition of road access to Silokek Geopark

Source: Author

Figure 3 illustrates the condition of the road leading to Silokek Geopark. As depicted in the image, the road is in a state of disrepair, posing a challenge for tourist vehicles attempting to access the Silokek Geopark area. This condition may influence tourists' decision-making process regarding whether to visit Silokek Geopark.

4. Ancillary Supporting Services

The Silokek Geopark Tourism Village area has an array of supporting services, including a Tourism Information Center, tour guides, lodging, and souvenir sales and retail establishments. These services were observed during a site visit by the author to be

fully compliant with industry standards and adequately address tourist needs. A notable aspect of the experience for the author and other tourists is the remarkable hospitality of the local residents, who are particularly knowledgeable about the area, namely Nagari Silokek. Nevertheless, there are still considerable improvements to be made in the provision of supporting services for existing tourists. These include the implementation of a reliable and efficient internet network, the introduction of cashless payment options at automated teller machines (ATMs), the enhancement of the operational hours of the Tourism Information Centre (TIC), and the introduction of supplementary supporting services. Ancillary services, supporting services in the Silokek Geopark tourism area are still very limited and simple, so slow and continuous development is necessary.



Figure 4. Current Condition of Silokek Tourism Village Secretariat Office

Source: Author

Figure 4 depicts the condition of an office belonging to a manager of a tourist destination within Silokek Geopark. The office is observed to be in a state of disrepair and appears to have been unused for an extended period. This office was constructed as part of BCA's community service initiatives as a gesture of gratitude towards tourist villages that had been nominated for ADWI.

Sustainable Tourism Implementation

The concept of sustainable development is of paramount importance within the tourism industry. The tourism industry exerts a profound influence on society, the environment, and the economy. In light of the ongoing transformations in the global landscape, the tourism sector must undergo a process of adaptation. One strategy for achieving sustainable development in tourism is the formation of networks of cooperation between businesses in disparate regions. The objective of this network is to achieve common and complementary business goals in order to create greater benefits for all parties (Streimikiene, Dalia et al., 2020).

The Ministry of Tourism and Creative Economy published Regulation of the Minister of Tourism and Creative Economy/Head of the Indonesian Tourism and Creative Economy Agency Number 9 of 2021, which provides guidelines for sustainable tourism destinations. Sustainable tourism is defined as a form of tourism that considers the social, economic, and environmental impacts of current and future practices, strives to meet the needs of visitors, industry, the environment, and local communities, and can be implemented in all forms of tourism activities across all types of tourist destinations,

including mass tourism and various other types of tourism activities. The implementation of sustainable tourism destination standards necessitates the involvement of a diverse range of stakeholders from the private, public, and government sectors to achieve the desired outcomes. In order to qualify as a sustainable tourism destination, as outlined in Permenparekraf No. 9 of 2021, there are four main criteria which must be met. Each of these four criteria can be broken down into further sub-criteria, indicators and supporting evidence, which must be fulfilled in order to meet the various requirements set out in the regulation.

1. Sustainable Management
 - a. Management structure and framework
 - b. Stakeholder engagement
 - c. Managing global pressures and change
2. Social and Economic
 - a. The existence of economic benefits to the local community of tourist destinations
 - b. The welfare of the local community has increased and can reduce unfavorable social impacts on the local community
3. Culture
 - a. Cultural heritage in existing tourist destinations must always be protected and maintained so that the cultural heritage is not extinct and eroded by developments that occur globally.
 - b. The management of cultural sites that have been recorded and determined by the Ministry of Culture and related international institutions is made so attractive that these sites can be visited and studied by tourists so that they do not disappear over time.
4. Environment
 - a. Conservation of natural heritage in the destination is very important to be carried out in a sustainable manner to maintain the beauty of nature in tourist destinations.
 - b. Good resource management through the management of tourist destinations by continuing to provide education related to tourist destinations is very meaningful to maintain all sustainability for tourist destinations
 - c. The management of waste and emissions is well managed by experts in the environmental field, it is intended that the waste in the tourist destination area can be managed properly.

The implementation of sustainable tourism by applying the above criteria will indirectly be able to keep the destination sustainable in the long term, besides that, destination development can be carried out which if implemented properly will have an overall impact on improving the environment around tourist destinations.

D. CONCLUSION

Silokek Geopark area presents a wealth of natural beauty and diverse attractions that have the potential to significantly enhance regional tourism and stimulate the local economy. However, to fully realize this potential, there are critical areas that require attention, including the improvement of infrastructure, accessibility, and supporting services. The current state of facilities and road conditions poses challenges for visitors, which could deter tourism if not addressed.

Efforts to implement sustainable tourism practices are essential for the long-term viability of the geopark. This includes engaging local communities, enhancing cultural heritage preservation, and ensuring environmental conservation. The collaboration between

local management and regional authorities is vital to develop a comprehensive strategy that meets the needs of tourists while benefiting the local population.

The implementation of sustainable tourism practices is crucial for the long-term viability of the Silokek Geopark. Sustainable tourism not only considers the economic benefits of tourism but also emphasizes the importance of social and environmental impacts. Engaging local communities in tourism development ensures that the benefits of tourism are equitably distributed, fostering a sense of ownership and pride among residents. Furthermore, protecting and preserving cultural heritage sites is vital to maintaining the unique identity of the region, allowing tourists to connect with the local culture while ensuring that these treasures are not lost to globalization.

The collaboration between local management, regional authorities, and external stakeholders will be instrumental in developing a comprehensive strategy that addresses these challenges. By prioritizing sustainable management practices, the Silokek Geopark can create a framework that balances the needs of tourists, the local community, and the environment. This includes ongoing training for local managers, investment in infrastructure, and the establishment of networks that promote cooperation among businesses in the tourism sector.

The potential of the Geopark Area is a subject of great interest to researchers, who perceive it as an area of truly extraordinary potential. It is hoped that experts from academia will conduct a sustainable and attractive tour package study of the potential of tourist destinations in the Silokek Geopark Area. This tour package study can be carried out with the support of tourism managers, who can facilitate cultural certainty, environmental conservation, and economic improvement for the community around the Silokek Geopark Area, Sijunjung Regency.

E. ACKNOWLEDGEMENT

We would like to express our gratitude to all parties involved in the initial process until the conclusion of this research, without whom the research would not have been able to proceed as smoothly and successfully as it did. This research was conducted in the Silokek Geopark Area, Sijunjung Regency, West Sumatra Province.

1. Local communities and destination managers of the Silokek Geopark Area
2. The local government of Sijunjung Regency, West Sumatra Province
3. The Ministry of Tourism and Creative Economy, through Poltekpar Medan, is the organizing body of the "2nd GTIC (Geo Tourism International Conference)."
4. Fort De Kock University, Bukittinggi, and Polteknik Negeri Padang, West Sumatra
5. The authors of this paper are Lucky Adhitya and Naifatul Fadhillah, who will be presenting the findings.
6. The family and all other parties who provided assistance throughout the process.

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