

Local community participation manifests sustainable tourism in the Batur Geopark Tourism Area

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ABSTRACT

Batur as one part of the Batur Global Geopark, the urgency of this research is that a sustainable tourism planning and development model is very necessary to maintain the sustainability of culture, community environment, economy and way of life. Good planning and development will produce a good strategy in developing existing tourism resources. This study aims to examine the participation of local communities in the management of Batur Village as a tourist destination in Kintamani, regarding local community participation in the development of the Batur Geopark tourist area, the obstacles faced by local communities in the development of the Batur Geopark tourist area, and the efforts made by the Government in developing the Batur Geopark tourist area. The method in this study uses a mixed method of qualitative and quantitative. In this study, data were collected through interviews, observations, literature studies, documentation studies. The method of determining informants used key informants whose data came from people who were considered to know the research object such as, tourism industry entrepreneurs, community leaders, and the community then the data was analyzed using mixed qualitative descriptive data analysis techniques. The presentation of data analysis in this study was carried out qualitatively through verbal delivery with descriptive interpretative techniques. The results of this study indicate that community participation is divided into three parts, namely in the planning, management and evaluation stages involving community representatives from 15 villages that are included in the core zone of the Batur Geopark Tourism Area, but the development of the Batur Geopark Tourism Area has not been developed well and in accordance with the objectives of the geopark itself, there are still several activities that are contrary to the concept of a geopark that preserves the earth which can be seen from the increasing development of tourism facilities, the occurrence of land conversion, and the continued mining of sand and stone from lava from the eruption of Mount Batur.

1. INTRODUCTION

Tourism has become an integral part of local culture and a vital part of their daily lives. Tourism has proven to bring economic benefits, creating business opportunities and jobs, and its sustainability depends heavily on the sustainability of tourism resources (Intiar et al., 2023;

Sienatra et al., 2023). Tourism planning and development are crucial for achieving sustainable tourism. Cultural shifts and environmental damage resulting from tourism development and the construction of tourism facilities are also important (Santoso & Oktavio, 2024).

Sustainable tourism development, natural resource management, and the environment are directed towards ensuring that utilization continues to demonstrate balance and environmental sustainability (Oktavio et al, 2024). This can provide the greatest possible benefits for the development and welfare of future generations. Existing tourism development policies have prioritized economic benefits, resulting in the neglect of environmental preservation and the marginalization of local populations (Adityaji et al., 2025). These sustainable development ideas were then adopted and translated into the concept of sustainable tourism. Sustainable tourism can be viewed as tourism that exists in a form that can maintain its viability in an area for an indefinite period (Butler, 2011; Mitasari et al., 2022).

As part of the Batur Global Geopark, a sustainable tourism planning and development model is essential to maintain the preservation of culture, the community environment, the economy, and the way of life. Good planning and development will result in a sound strategy for developing existing tourism resources. In the local context of Batur, a sustainable tourism planning model is essential for protecting the natural environment, social, cultural, and economic development within the community. A sustainable tourism planning model will help meet the needs of community members. Sustainable tourism development must also be able to create quality jobs.

Batur Village is a village that is part of the Batur Global Geopark. Batur Global Geopark is a world cultural heritage that is a member of the Global Geopark Network (GGN) network, due to the beauty of the Batur caldera natural area, geological and archaeological sites, and the existence of the culture of its people. Geopark is a concept of preserving nature and community culture with three main objectives, namely education, conservation, and sustainable development. With these three objectives, Batur Global Geopark can become one of the efforts to be a tool to improve the standard of living and the economy in the welfare of the community.

Community participation in every stage of tourism development in a tourism destination is said to be the main requirement for the success of the destination (Pitana, 2005). The designation of Batur as a member of the Global Geopark Network apparently did not have an impact on increasing the income and standard of living of the local community. Therefore, community-based tourism can be used as a solution to increase the participation and involvement of local communities to understand the desires and needs and listen to the aspirations of the community in the planning and development of community-based tourism in Batur Village, which is very fundamental because the community is the driving force and the main aspect in tourism. Asta Cita in this study is in the following table:



Figure 1. Presidential and Vice-Presidential Ideals in this Research

Source: Presidential and Vice Presidential

The primary actors in sustainable tourism development are local communities. They must benefit from the development of the tourism industry in their area (Sadarmayanti, Sastrayuda, Afriza, 2018). Community participation can serve as an agent that can change the structure of economic development by prioritizing the interests of community groups. In other words, this activity will have a potential influence on development planning actors to stimulate social change in the community (Wulandari, Isyandi, Ekowarso, 2022).

The problem formulation is as follows: (a) What are the forms of community participation in managing Batur Village as a tourist destination in Kintamani? (b) What are the obstacles faced by local communities in managing Batur Village as a tourist destination in Kintamani? (c) What efforts has the government made in managing Batur Village as a tourist destination in Kintamani?

Problem Solving Approach

This research uses (a) a qualitative approach, (b) a case study, (c) a qualitative descriptive analysis. The problem-solving strategies in this research are (a) Identification of Community Participation, (b) Assessment of Obstacles, (c) Evaluation of Government Efforts, (d) Preparation of Policy Recommendations, (e) Capacity Building of Local Communities, (f) Collaborative Stakeholder Engagement, (g) Monitoring & Evaluating Program Implementations.

Research Expectations

In the context of research on local community participation in sustainable tourism development, several previous studies have highlighted the importance of community involvement and its positive impacts on environmental sustainability and the local economy. However, this study offers significant novelty with a holistic approach that focuses not only on economic aspects but also considers the social and cultural dimensions of community

participation. By utilizing the Geopark framework as a model for cultural and environmental preservation, this study provides a new perspective on sustainable tourism management.

This study of local community participation in the development of the Batur Geopark tourist area in Kintamani, Bangli Regency, demonstrates how local community involvement is crucial in managing the area. This analysis will generate practical, data-driven recommendations to increase community involvement in tourism development planning. The training program for community members on sustainable tourism management is also an innovation compared to previous studies, which tended to focus on identifying problems without providing concrete solutions. With these advantages, this research not only enriches the literature on community participation but also provides a practical contribution to its implementation in the Batur Geopark Tourism Area through an innovative approach and integrated methodology that can address specific challenges in the field today.

2. METHODOLOGY

The methods used in this research are quantitative and qualitative. Quantitative data is data in the form of numbers that can be classified, while qualitative data is a systematic, up-to-date, and accurate description of existing facts. After all the data has been collected, the researcher will draw conclusions from the entire data, which will then serve as the research conclusions.



Figure 2. Documentation with Sources
Source: Research Data (2025)

Research Approach

This research is qualitative research. Qualitative research is conducted using data collection techniques through direct observation, in-depth interviews, and documentation. Presentation of data analysis results can be done both formally and informally regarding the Development of Batur Village Tourism Potential Based on Sustainable Tourism in Kintamani, Bangli Regency. Local community participation is crucial to achieving sustainable tourism, emphasizing the active involvement of residents in tourism development. This approach

ensures that tourism benefits the community while preserving cultural and natural resources (Ginanjar, 2023). However, power imbalances and limited opportunities can hinder effective participation (Firdausia, & Lestari, 2020). Therefore, empowerment is crucial to enabling communities to be truly involved in tourism planning and management (Zhou X, Wang J, & Zhang S, 2021). Research has shown that community participation in tourism remains a challenge for developing countries, due to operational, structural, and cultural barriers (Reindrawati DY, 2023) Community participation is at the heart of sustainable tourism development. The literature underscores the importance of integrating local knowledge and values into tourism initiatives to ensure long-term success and sustainability (Millner, Peñagaricano, Fernandez, & Snook, 2019). Community participation is recognized as a tool that facilitates a bottom-up approach to the development process (Gutierrez, 2023). This inclusive strategy aims to create tourism products that are aligned with local values and priorities (Tosun, 1999). Local communities need to be empowered, and their needs and capacities emphasized, as tourism is promoted as a tool for conservation and community development (Samuil, & Ionică, 2021).

Research Location

This research was conducted in the Batur Geopark Tourism Area, specifically in several villages within the geopark. Kintamani, Bangli Regency, is located in the center of Bali and is one of the regencies rich in local traditions and culture.



Figure 3. Research Location

Source: Research Data (2025)

Data Types and Sources

Data can be divided into two types: (a) qualitative data and (b) quantitative data. Data can be divided into two types based on their source: (a) primary data and (b) secondary data.

Research Instrument

This research instrument was used to collect data in the form of an interview guide and observation guide. Interview guide which contains interview guidelines to obtain in-depth data from the community, managers, government and tourists and provides opportunities for tourists and the public to answer freely according to their understanding, so that varied data and answers are obtained.

Data Collection Techniques

In accordance with the type of data required in this study, data collection for this study adheres to the "Human Instrument" principle, meaning the researcher is the primary research instrument. However, in its implementation, the study will also utilize several instruments (aids) and data collection techniques, namely:

(a) Interviews

Interviews in this study were conducted in stages with individuals deemed to have in-depth knowledge and experience related to the research object. Key informants were selected using a purposive sampling method. Five key informants were selected: the Head of the Bangli Regency Tourism Office, the Head of the Batur Geopark Museum Management Unit, the Tourism Management Agency, the Batur Village Head, and community leaders. Interviews were also conducted with supporting informants, namely existing tourism business owners and local residents, to determine community involvement and participation in tourism development.

(b) Questionnaires

Questionnaires are a primary data collection method that involves providing respondents with a series of written questions to answer. The respondents were selected using accidental sampling method and encountered by chance at the research location to obtain answers related to the research topic.

(c) Observation

Observation is the primary data collection technique in this study, which involves directly observing and recording objects, phenomena, or events to obtain information at the research location and to understand the characteristics of the objects and the local community. This allows for accurate data collection.

(d) Literature Study

Literature study involves collecting data from books, literature, and brochures relevant to the research, as well as from previous research findings related to this study.

(e) Documentation Study

Documentation study involves taking photographs of the research location and activities undertaken during the research.

Data Analysis Techniques

Data analysis is the process of organizing and sorting data into patterns. In this study, the data was analyzed using qualitative descriptive analysis, categorizing the data into basic descriptive units, allowing themes to be identified and working hypotheses formulated.

Data Analysis Presentation

The data analysis in this study was presented qualitatively through verbal presentation using descriptive interpretive techniques. This means that the analysis results were presented in a specific manner, with certain sections interpreted according to general theories and frameworks.

3. RESULTS AND DISCUSSION

Batur Geopark Tourism Area

One of the important elements in producing tourism products is natural attractions, which include mountains, beaches, caves, fields, and historical sites. Mountains are one of the most visible natural tourist attractions due to their beautiful views and cool, comfortable air. It cannot be denied that mountains are a superior tourism product that a destination relies heavily on. A geopark or earth park is an area or region that has a specific geological heritage, with rare elements and aesthetic value. The term Geopark refers to a protected area consisting of various types of geology, ecology, archeology, culture, and cultural heritage sites (UNESCO, 2015).

Geological heritage is the foundation for the development of the Batur Geopark. This unique, unique, and stunning geological diversity is a non-renewable geological heritage, making its protection crucial. The geopark's development design integrates conservation measures with education about geological diversity and the surrounding environment, as well as local economic development through geotourism and other forms of tourism. The Batur Caldera is located in the northeastern part of Bali, approximately 70 km from Denpasar. Administratively, the Batur Geopark is located in Kintamani District, Bangli Regency, Bali Province.



Figure 4. Batur Geopark Tourism Area

Source: Research Data (2025)

The geological diversity of the Batur Caldera area is closely linked to the geological history of Bali. Structures, processes, and the long history of time have shaped the Batur Caldera area in Bali as we see it today. The diverse geological heritage within the Batur area forms the basis for the development of the area, which implements the Batur Geopark concept.

The entire Buni Park area, which largely comprises the Batur Caldera area, can be viewed from one easily accessible location, Penelokan. This is one of the scenic highlights of the Batur Caldera area, making it a significant geological heritage asset based on the regional landscape, and subsequently recognized as an international geopark. The crescent-shaped lake, illuminated by the morning sun, blends with shades of turquoise, radiating the serenity of Lake Batur. The majestic Mount Batur, surrounded by sheer cliffs derived from older volcanoes, further enhances the beauty of the caldera, one of the most beautiful in the world. This active volcanic region boasts a diverse landscape, both large and small. In addition to producing rocks such as lava flows and pyroclastic material, the region is also characterized by intense volcanic activity during Mount Batur's development.

Naturally, over millions of years or longer, diverse life forms and habitats have emerged and thrived in this varied and unique geological environment. The Batur Caldera Geopark boasts significant biodiversity, both within the Penelokan Nature Tourism Park (TWA) and in other habitats. This biodiversity includes a wide variety of flora and fauna, two of which are endemic species found only in the Batur Caldera area: the Taru Menyan tree and the Kintamani dog. Additionally, Kintamani oranges and Kintamani Arabica coffee are also available. Meanwhile, the Batur Geopark, which covers an area of 100 square kilometers and includes Mount Batur and Lake Batur, illustrates the results and processes of cultural diversity. The cultural diversity surrounding the Batur Geopark includes Trunyan Village, Ulun Danu Batur Temple, Dalem Balingkang Temple, and various activities taking place in the villages within the Batur Geopark area.

The Heritage of the Batur Caldera

The Batur Caldera was formed by the activity of the ancient Mount Batur, also known as Mount Penuilisan. This ancient volcano experienced a powerful eruption, creating a distinctive landform known as a double caldera or caldera-within-a-caldera. The formation of the Mount Batur Caldera began approximately 29,300 years ago, a paroxysmal eruption that ejected pyroclastic material south of Bali. The large amount of material ejected into the sky created a void within the structure of Mount Batur I, leading to the collapse of the mountain's body, forming a caldera measuring approximately 13.8 x 10 km². This event also pushed up part of its parasitic mountain, Mount Abang, which is currently the highest peak in the Batur Caldera area, at 2,152 meters above sea level.

The geological processes of the Batur Caldera exhibit a wide variety of geological features, including lava flows, pillow lava, lava caves, roving or rope lava, lava aa, lava clincers, lava wilderness, bornites/dribblet spires, lava pipes/spiracles, steppe/slab lava, and pressure ridges. This geological diversity, resulting from tens of thousands of years of geological phenomena, makes the Batur Caldera one of the most comprehensive volcanic laboratories in the world. It's no wonder that numerous geologists, both domestic and international, come to study the geological heritage of the Batur Caldera.

A valuable earthly legacy that holds significant significance for how humans can coexist with nature is the 1926 eruption of Mount Batur. This eruption produced andesite lava flows, which now cover the ancient Batur Village. This event serves as a legacy of local knowledge about the geological processes in the Batur Caldera area. In addition, the geological heritage in the Batur Caldera area also supports the ecosystem, both as a foundation for the biodiversity in the Batur Caldera, with all its uniqueness, the geological heritage of Batur since September 20, 2012 has been recognized as a global geopark and a UNESCO cultural heritage, which has caused economic growth and investment in the Kintamani region to develop rapidly with the establishment of various tourism facilities.

Local Community Participation in the Development of the Batur Geopark Tourism Area

Local Community Participation in the Development of the Batur Geopark Tourism Area. The Batur Geopark offers a variety of attractive destinations, both natural and man-made, each with its own unique characteristics. The main attractions of the Batur Geopark include the Mount Batur Caldera and Lake Batur, Penelokan Trunyan, and the Kintamani area. These sites have become very popular among domestic visitors. Kintamani, as part of the Geopark, contributes to the growing tourism sector in the region. Development methods that emphasize the presence and participation of local communities need to be integrated into the tourism development process. This approach must assess and broaden community understanding and

skills regarding tourism, while simultaneously transforming all aspects and perspectives on development.

Local community participation can be said to be one of the important aspects of tourism activities to support improving the standard of living of the local Batur community in particular (Wiramatika & Sumardani, 2024). Local community participation in Kintamani in the development of the Batur Geopark tourist destination plays a crucial role and demonstrates a high level of involvement. Given the high level of community enthusiasm, guidance, knowledge about the Geopark, and training related to the tourism industry are needed. Kintamani's recognition as part of the Global Geopark Network is inseparable from the active role of the community, which supports local participation in maintaining the Kintamani area, thereby achieving the goal of designating it as a Batur Geopark tourist area. The forms of community participation in the development of the Batur Geopark tourist area are: preserving the biodiversity of flora and fauna, building tourism facilities, developing the typical Kintamani major culinary, cultural preservation, taking jobs in the tourism sector, nature conservation, and the formation of security officers (Wiramatika, Sunarta, & Anom, 2021). Several forms of community participation in Kintamani include:

a. Local Community Participation in Planning the Batur Geopark Tourist Area

Participation at this stage includes citizen involvement in determining targets, providing suggestions, proposing alternative ideas, and participating in discussions or meetings. This form of participation is crucial because the community is seen as a key stakeholder in development, understanding the local situation and having the potential to convey the needs and potential of the area (Anggraini, I.D., and Murlianti, S. 2025). The Batur Geopark tourist area is one of the tourist areas being developed into a Geopark. In its development planning, the Batur Geopark tourist area involved community leaders from 15 villages: Batur, Songan, Kedisan, Buahon, Abang, Suter, Sukawana, and Pinggan. They gathered together to decide on their desires. During this meeting, a decision was made to establish the Bintang Danu Foundation. The development of the Batur Geopark tourist area began with the Bintang Danu Foundation, which was well-managed from 1990 to 2010 by the community through collaborative tourism management. In 2008, the Kintamani tourist area was proposed as a Geopark, which was approved in 2012 by UNESCO. Due to its unique cultural heritage, the community agreed to develop the area into a Geopark. The decision-making process involved community leaders in the villages within the Batur Geopark zone. Activities aimed at gathering community aspirations and ideas were conducted through Local Working Groups (LWGs), whose participants were residents of the villages within the core zone of the Batur Geopark.

During the tenure of the Minister of Tourism Jero Wacik, who happened to be a person from Kintamani, precisely in Batur Village, at that time it was explained that the geopark

is a natural tourist attraction that was welcomed enthusiastically by community leaders in the villages that were included in the core zone of the geopark area, by holding meetings discussing the geopark, the second meeting was held centrally at the Kintamani Sub-district Office for villages affected by the geopark area with the aim of seeking agreement from the community and a Focus Group Discussion (FGD) was conducted by the Kintamani Sub-district Head together with the Regent of Bangli, with the Bangli Regional Secretary as the coordinating chair in discussing further about the geopark proposal. Communications continued to be carried out by conducting socialization, Focus Group Discussions (FGD) with community leaders, and also presenting consultants from Udayana University, the Tourism College with the core discussion that the geopark was good, especially this one, concerning world tourism and was accepted to be developed into a Geopark, which was the forerunner to the emergence of a Geopark. One of the community leaders who has a strategic role and provides good direction is Jro Gede Batur Alitan and accepts the Batur area as a geopark area. Viewed from the decision-making aspect, it is carried out through deliberation and consensus from 15 villages that are included in the core zone of the geopark area, namely; South Batur, North Batur, Central Batur, Songan A, Songan B, Kedisan, Buahon, Abang Batu Dinding, Abang Songan, Suter, Pinggan, Sukawana, Trunyan, Bayung, and Bonyoh. From these 15 villages, they agree that decision-making is taken through deliberation and consensus, decision-making is also taken horizontally and vertically well. Community elements in decision-making

It can be seen from the data above that the results of the distribution of questionnaires conducted to several local communities stated that the Batur Geopark Area is famous for its beautiful volcanic landscape with a charming double caldera. The initial idea or concept of establishing the Batur Geopark Area started from community leaders through socialization and Focus Group Discussions (FGD) involving representatives of community leaders and communities in 15 villages that are included in the core zone of the geopark area, with the implementation divided into 3 community groups first there are groups of lay people, ordinary people, and intellectual people because at that time there were still some people who did not understand the geopark itself, it will be appropriate that the community welcomed and was enthusiastic about the development of the geopark in Kintamani. In the implementation of the Focus Group Discussion (FGD) the community was given the opportunity to convey community ideas related to the development of the geopark. Decision-making carried out at that time was carried out through deliberation and consensus and was carried out vertically and horizontally, with the result that the community agreed with the development of the geopark area and Kintamani was proposed to become a geopark area. After going through several stages of feasibility testing and assessment of each aspect

- b. Local Community Participation in the Implementation of the Batur Geopark Tourism Area Participation at the implementation level involves the implementation of the design developed during the planning process (Wibowo & Arviana Belia, 2023). Batur Geopark is a UNESCO-recognized tourism area for its unique geological heritage. Batur is characterized by its stunning caldera, shaped like a trough, beneath which lies the beauty of Mount Batur, Lake Batur, Bukit Abang, and the unique cultures of the villages along Lake Batur's shores. This unique culture, such as the culture of Trunyan Village, is unique and cannot be found anywhere else. Although it exists, it is not as beautiful as the Batur Geopark. On the other hand, we can also see the uniqueness of the Batur Geopark area which has extraordinary natural phenomena and cultural conditions, there are rarely any tourist attractions like this, even though in Indonesia there are many similar tourist attractions, there are mountains, lakes, but from the geographical structure of the Batur Geopark tourist area which has extraordinary uniqueness, there is no other like it. The rest is Mount Batur and Lake Batur which have very high ritual sites with rituals performed by religious communities from various circles. The existence of natural hot springs also greatly supports the uniqueness that is the advantage of the geopark area, besides that, tourists who come can see the 1800 views from this place. Viewed from the tourism product aspect, the community will be invited to generate geoproducts such as shallots, tilapia fish products taken from the community or farmers, seen from the cultural aspect; there is Trunyan, Batur which has a cultural acculturation site between Batur and China. In the arts context, traditional arts and festivals related to local culture will be further revived, utilizing the theater and open-air stages located in the estuary of Lake Batur, the Penelokan Pavilion, and the Kedisian Pier. Tourist attractions in the Batur Geopark area include hiking at Mount Batur, climbing Abang Hill, Toya Bungkah Hot Springs, Lake Batur, Trunyan, the Jeep Sunrise Point, Sukawana Sport Sunrise, educational tours at the Batur Geopark Museum, and Black Lava ATV. In addition to developing tourism products and attractions, the community also contributes significantly to preserving nature, culture, and providing services to visiting tourists. The Batur Geopark branding, with its unique caldera, has encouraged the continued growth of local industries, including restaurants, coffee shops, hotels, and glamping facilities, all owned by locals and employing local people in the tourism sector.

The development of the Batur Geopark Area has provided many benefits to the local community, both in terms of economic, social and community life has become more secure with the presence of tourist visits. In the development of the Batur Geopark area, the community is facilitated by the Batur Geopark Museum in the procurement of geosites installed at several points in the Batur Caldera area containing explanations related to geological information related to geological information in the Batur Caldera. With the

development of the Batur Geopark Area, it actually has a positive impact on the local community, for example, during the Covid-19 pandemic, thousands of visitors came to Kintamani, so that the tourism industries in the Batur Geopark Area benefit from the presence of tourists. The community's contribution can be seen from the employment in the tourism sector by recruiting local people as gatekeepers to the Kintamani area, in addition, some of the community are currently entrepreneurs in the tourism industry. The benefits gained by the community from the development of the Batur Geopark Tourism Area are actually enormous, with a multiplier effect. Geopark status brings significant benefits, including the large number of tourist visits, which can have an economic impact on the local community.

The existence of the Batur Geopark Tourism area really provides a very different nuance from other tourist areas, the uniqueness of the very beautiful Batur Caldera is able to provide a new experience to tourists who visit here. The tourist attraction activities in the Batur Geopark Tourism Area are still based on nature and local culture in accordance with the concept of geopark development by glorifying the earth by preserving nature, culture and existing geological heritage, with the presence of 15 villages included in the core zone of the geopark area, each of which has a very unique cultural tradition that supports the development of the Batur Geopark Tourism Area. The existence of the Batur Geopark Tourism Area greatly influences the lives of the community from the economic aspect and the existing tourism industry, with many tourist visits. Local communities are given the opportunity to provide tourism infrastructure, both restaurants and hotels that can support the development of tourism and the local economy, this has caused many local communities to have businesses in the tourism industry. Promotions carried out by the community of industry business owners and tourism services participate in promoting the Batur Geopark Tourism Area. The management body was established directly by the Bangli Regency Government, coordinating directly with the Central Government, without being under the Department of Culture and Tourism. The Batur Geopark Tourism Area management board directly involves members of the community with expertise in their respective fields. The existence of the geopark has led to the emergence of numerous tourism organizations, such as the Tourism Awareness Group (POKDARWIS), which aims to maintain and develop existing tourism potential, with members from the local community. Businesses operating in the tourism sector continue to emerge to support and increase tourism development and tourist visits. One example of widespread development is coffee shops, which significantly support the coffee farmers in Kintamani and employ a significant workforce in the tourism sector. The development of the geopark and tourism has led to a more prosperous community, reliant on tourism.

c. Monitoring and Evaluation

Evaluation is a crucial step in assessing program effectiveness. Community participation in evaluation includes providing feedback, criticism, and suggestions on program progress. This involvement is crucial for determining the program's success and serves as a basis for continuous improvement (Anggraini & Murlianti, 2025). In the development of the Batur Geopark Tourism Area, there are certainly stages that must be completed to ensure proper and proper implementation. In addition to the planning and implementation stages, the monitoring stage is also crucial in the management of the Batur Geopark Tourism Area, involving the contribution of the local community. The monitoring and evaluation stage heavily involves the participation of the local community, community leaders, tourism actors, and stakeholders to ensure the successful implementation of the Batur Geopark development. Activities carried out in the monitoring process involve the community through communication and outreach to gather input from the community, including identifying deficiencies and developing development directions. Monitoring and evaluation are frequently carried out to determine the direction of the Batur Geopark Tourism Area's development, involving the local community. In addition to the local community, supervision is also carried out by the Kintamani Resort Natural Resources Conservation Agency (BKSDA), which monitors community activities daily to maintain the sustainability of the forest and the environment within the conservation area to ensure they align with the Batur Geopark Tourism Area's development vision.

The involvement of local communities in the monitoring and evaluation stages can be seen clearly. Almost all communities feel involved in monitoring that can be seen from the involvement of the community in maintaining the preservation of nature and geological heritage in the Batur Geopark Tourism Area. Supervision carried out by the community under the direction of the Natural Resources Conservation Agency (BKSDA). In the monitoring stage, the community is given the right to express opinions or suggestions in meetings such as Focus Group Discussions (FGD), program socialization according to the circumstances that occur, community opinions or suggestions are very helpful for managers in developing the Geopark area. The development of the Batur Geopark Tourism Area has not fully developed according to the expectations of the local community because there are still many tourism facilities that still need to be arranged to suit the geopark concept that glorifies the earth by maintaining the preservation of nature, culture and geological heritage of the Batur Caldera, besides that, along the green belt along the Batur Caldera Area, many tourism facility buildings have been built that cover the views of Mount Batur, Lake Batur and the Batur Caldera. Apart from the need to organize tourism facilities, environmental cleanliness still needs to be paid attention to by the community so that environmental sustainability can be maintained.

Obstacles and Challenges in the Development of the Batur Geopark Tourism Area

The Batur Geopark tourism area began development in 2012. The surrounding area boasts diverse tourism potential. The Batur Geopark destination is well-known both domestically and internationally. However, the development of this tourism area has not been fully maximized due to several challenges faced by the government, management, and the community. To address these current issues, the involvement of the government and all relevant parties is crucial. All relevant parties, including the government, management, local communities, and stakeholders, must come together to resolve any issues or obstacles related to the development of the Batur Geopark tourism area.

The increasingly intensive development of tourism facilities threatens the existence of geoh heritage sites in the Batur caldera. Furthermore, the public is increasingly unaware of geoh heritage, and economic demands are accelerating land conversion in the Batur Geopark tourism area, which should be a conservation area dedicated to preserving the surrounding natural landscape. Currently, the green belt in the Kintamani area has been overgrown with coffee shops, obscuring the panoramic view of the Batur Caldera. Tourists and locals are now barely able to enjoy the beauty of the Batur Caldera without visiting a coffee shop. Frequent management changes have prevented the Batur Geopark Tourism Area from being fully developed, in line with the geopark's stated objectives, which emphasize education, conservation, and sustainable development.

The Mount Batur area is within the Mount Batur-Bukit Payang Nature Tourism Park (TWA) conservation area and borders the Panelokan Nature Tourism Park (TWA). As a conservation area designated for tourism and limited production forest, this area faces several issues, including mining and sand extraction (type C excavation) by local residents, and the use of Mount Batur for climbing activities, which are part of the Batur Geopark's tourist attraction. Although located outside the conservation area of the Mount Batur – Bukit Payang Nature Tourism Park (TWA), sand mining and excavation activities in Songan A and B Villages attracted attention in the process of designating the Batur Caldera area as part of the Global Geopark Network (GGN) in 2012. This is because it is indicated that continued stone mining and sand excavation can threaten the sustainability of geological sites in the Batur Geopark area and contradict the conservation objectives of the area itself as a Geopark. This C excavation activity has a negative impact on the environment around Mount Batur; excavation scars on the hillsides around the mountain reduce the beauty of the Mount Batur landscape and increase the risk of landslides due to high rainfall. This is because the excavation scars and sand dredging generally form depressions and cliffs, which produce water puddles and weaken the soil structure, thus potentially dangerous for residential areas around the excavation site.

Government Efforts in Developing the Batur Geopark Tourism Area

The development of the Geopark tourism area cannot be separated from the participation of stakeholders (government), in this case the Bangli Regency government, which acts as a facilitator and facilitates everything to support the development of the Batur Geopark tourism area by providing assistance to the community (Wiramatika, Sunarta, & Anom, 2021).

The development of the Batur Geopark Tourism Area is inseparable from the involvement of stakeholders (the government), including the Bangli Regency Government, the Geopark Management Agency, in collaboration with the Culture and Tourism Office, and other relevant agencies in Bangli Regency. The Bangli Regency Government acts as a facilitator and facilitates all aspects of supporting the development of the Batur Geopark Tourism Area.

In the development of the Batur Geopark Tourism Area, road access is one of the infrastructure facilities that requires serious attention to facilitate tourist access and improve comfort. Given the condition of the roads within the geopark and the roads leading to it, the government still needs full attention to repair damaged roads. Roads, as the main access point, are a key factor in ensuring tourists can comfortably and safely access the Batur Geopark Tourism Area. The management agency, in collaboration with the Culture and Tourism Office and the Bangli Regency Public Works Office, can allocate funds for road infrastructure improvements. In this regard, the Regency Government has begun repairing damaged roads to ensure safe access to the Batur Geopark.

The ongoing mining of sand and black stone from Mount Batur's eruptions, carried out by local communities to boost their economy, clearly contradicts the geopark's stated goal of preserving the forest within the area. Mining activities in the Batur Geopark occur on private land within the local community. The Bangli Regency Government has taken a strong stance by restricting daily sand mining activities on private land. Officers are on duty at the mining site and are taking firm action against sand miners who violate established regulations. Meanwhile, stone mining has been halted by the Natural Resources Conservation Agency (BKSDA), as the stone mining area is under the supervision of the Agency, and strict action is taken against any miners who continue to engage in mining activities. In addition to road repairs and monitoring mining activities in the Batur Geopark Tourism Area, the government is collaborating with the Batur Geopark Museum to provide information boards or geosites within the geopark area. Procurement of information boards or geosites is crucial in providing information at each location related to the Kintamani geopark and tourism sites. During their visit, tourists can read explanations related to the geopark while enjoying the views of the Batur Caldera. The government has already widely provided information boards or geosites for the Kintamani geopark and tourism, but this still needs to be improved at locations where there are geopark-related sites so that information can be found in each location containing geopark sites.

4. CONCLUSION

Geological heritage serves as the foundation for the development of the geopark. This unique and distinctive geological diversity is a non-renewable geological heritage, making its protection crucial. The Batur Caldera was formed by the activity of the ancient Mount Batur, which experienced a very powerful eruption, creating a distinctive landform known as a double caldera, or a caldera within a caldera. This event serves as a legacy of local knowledge about the geological processes in the Batur Caldera area. Furthermore, the geological heritage in the Batur Caldera area also supports the ecosystem that served as the foundation for the application for Geopark status. From the planning stage, the Batur Geopark Tourism Area involved community leaders and residents from 15 villages within the core zone of the geopark: South Batur, North Batur, Central Batur, Songan A, Songan B, Kedisan, Buahon, Abang Batu Dinding, Abang Songan, Suter, Pinggan, Sukawana, Trunyan, Bayung, and Bonyoh. Representatives from the 15 villages gathered for a Focus Group Discussion (FGD), first held at the Kintamani District Office. The event was attended by the Bangli Regent and the Bangli Regional Secretary, who served as the Geopark Development Coordinator. Consultants from Udayana University and the Tourism College were also present. The purpose of the FGD was to provide an understanding of the geopark by seeking agreement from the local community. Decisions were made through deliberation and consensus within the community. The community enthusiastically welcomed and welcomed the development of the Kintamani area as a geopark. After several stages of evaluation and assessment by a team from the Global Geopark Network (GGN) and UNESCO, in conjunction with the 11th European Geopark Network Conference in September 2012 at Geopark Arouca, Portugal, the Batur Caldera was certified and recognized as part of the UNESCO GGN under the name Batur Global Geopark.

The Batur Geopark tourism area offers a unique experience unlike any other. Community involvement in the development of the Batur Geopark Tourism Area is highly diverse, as evidenced by the diverse range of tourism products offered. The community is encouraged to develop geoproducts such as shallots and tilapia fish sourced from local farmers. In the arts, the community is encouraged to develop local arts and crafts related to culture. Community involvement is also evident in the formation of tourism organizations aimed at maintaining and developing existing tourism potential. The existence of the geopark also significantly supports the community's contribution to the development of tourism businesses, attracting tourists and providing employment opportunities for local residents. This, in turn, benefits the community economically and contributes to a more prosperous lifestyle reliant on tourism.

During the evaluation and monitoring phase, nearly all members of the community are involved in overseeing the development of the Batur Geopark Tourism Area. This is evident

in the community's involvement in preserving the natural, cultural, and geological heritage. This oversight is carried out by the community, who adhere to the guidance of the Natural Resources Conservation Agency (BKSDA). During the oversight phase, the community was also given the opportunity to submit suggestions and opinions in meetings related to the ongoing development of the Batur Geopark Tourism Area.

The development of the Batur Geopark Tourism Area has not yet been properly developed and aligned with the objectives of the geopark. Several activities continue to conflict with the geopark's concept of preserving the earth. First, the increasing number of tourism facilities threatens the geological heritage sites of the Batur Caldera. Second, land conversion around the green belt along the caldera has occurred. Many tourism facilities have obscured the views of the Batur Caldera, preventing tourists from directly enjoying the scenery. Third, the ongoing mining of rocks and stones in the Batur Caldera, which has caused environmental and natural damage in the conservation area. Fourth, frequent changes in management have also significantly hindered the development of the Batur Geopark Tourism Area to its full potential.

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6. REFERENCES

- Adityaji, R., Indrianto, A. T. L., Nugroho, A., & Oktavio, A. (2025). Training to improve the skills and professionalism of museum tour guides in Mojokerto, East Java. *Gandrung: Jurnal Pengabdian kepada Masyarakat*, 6(1), 2060-2070.
- Amin, S. B., Khandaker, M. K., Samia, B. I., Khan, F., & Taghizadeh-Hesary, F. (2025). Fostering sustainable tourism through digital innovation and green tourism initiatives in Bangladesh. *Sustainable Futures*, 10.
- Anggraini, I. D., & Murlianti, S. (2025). Bentuk-bentuk partisipasi masyarakat dalam pengelolaan ekowisata hutan mangrove di Kampung Teluk Semanting Kecamatan Pulau Derawan Kabupaten. *eJournal Pembangunan Sosial*, 13(3), 220–234.
- Arcana, K. T. P., & Arcana, I. W. (2017). Pengembangan produk wisata alternatif berbasis edukasi di Geopark Batur, Kintamani. *Jurnal Sains Terapan Pariwisata*, 2(3), 262–286.
- Bennett, J., Gillette, M. B., & Jernsand, E. M. (2025). Angling for change? A study of a Swedish public-private partnership for sustainable rural fisheries tourism. *Journal of Rural Studies*, 119.
- Bramwell, B., & Lane, B. (2009). Sustainable tourism and the evolving roles of government planning. *Journal of Sustainable Tourism*, 18(1), 1–5.
- Butler, R. W. (2011). *Tourism area life cycle*. Goodfellow Publishers.
- Firdausia, S., & Lestari, Y. D. (2020). The level of community participation in developing tourism sustainability: Impact of locals' perception and opportunity. *International Journal of Business and Globalisation*, 26, 165. <https://doi.org/10.1504/IJBG.2020.109826>

- Galluccio, C., Beccherle, P., & Petrucci, A. (2025). The narrative on tourism sustainability in Italian news: A text mining approach. *Big Data Research*, 41.
- Ginanjar, R. (2023). Community empowerment in tourism development: Concepts and implications. *The Eastasouth Management and Business*, 1, 111. <https://doi.org/10.58812/esmb.v1i03.82>
- Gutierrez, E. L. M. (2023). Re-examining the participation and empowerment nexus: Applications to community-based tourism. *World Development Perspectives*, 31, Article 100518. <https://doi.org/10.1016/j.wdp.2023.100518>
- Inmor, S., Na-Nan, K., Phanniphong, K., Jaturat, N., & Kũstka, M. (2025). The role of smart green tourism technologies in shaping tourist intentions: Balancing authenticity and sustainability in natural tourism. *Environmental Challenges*, 19.
- Intiar, S., Sirait, E., Wijaya, V., Adityaji, R., & Oktavio, A. (2023). Sport tourism as tourism development in the Lake Toba Area in the Aquabike Jetski World Championship 2023. *INNOVATIVE: Journal of Social Science Research*, 4(1), 1026–1036. <https://doi.org/https://doi.org/10.31004/innovative.v4i1.7645>
- Millner, N., Peñagaricano, I., Fernandez, M., & Snook, L. K. (2019). The politics of participation: Negotiating relationships through community forestry in the Maya Biosphere Reserve, Guatemala. *World Development*, 127, Article 104743. <https://doi.org/10.1016/j.worlddev.2019.104743>
- Mitasari, R., Adityaji, R., Widyawati, C., Oktavio, A., Wijaya, V., & Nugroho, A. (2022). Pelatihan penerapan protokol cleanliness, health, safety, and environment sustainability di Desa Wisata Peniwen pada tatanan normal baru. *SELAPARANG: Jurnal Pengabdian Masyarakat Berkemajuan*, 6(1), 448–455. <https://doi.org/10.31764/JPMB.V6I1.7653>
- Nurjani, N. P. S., & Firdiyansyah, A. (2020). Landasan pembentukan spasial kawasan Taman Bumi Global Batur (Batur Global Geopark, Kintamani, Bangli, Bali). *Jurnal Ilmiah Vastuwidya*, 3(2), 23–31.
- Oktavio, A., Indrianto, A.T.L., Susilo, C.L., Nugroho, A., Hendra, & Wibowo, O.H. (2024). Blue economy dan pariwisata: Sebuah analisis bibliometrik. *Semin. Nas. FMI 2024 Manado Prosiding 2*, 1676–1688.
- Pitana, I. G., & Gayatri, P. G. (2005). *Sosiologi pariwisata*. Andi.
- Prastyadewi, M. I., & Saitri, P. W. (2017). Persepsi wisatawan terhadap kawasan Batur Global Geopark di Kecamatan Kintamani Kabupaten Bangli. *JPEKBM (Jurnal Pendidikan Ekonomi, Kewirausahaan, Bisnis dan Manajemen)*, 1(2).
- Raihan, A., Rahman, S. M., Sarker, T., Ridwan, M., Sahoo, M., Dhar, B. K., et al. (2025). Tourism-energy-economy-environment nexus toward sustainable and green development in Malaysia. *Innovation and Green Development*, 4(4).
- Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation*, 141(10), 2417–2431.
- Reindrawati, D. Y. (2023). Challenges of community participation in tourism planning in developing countries. *Cogent Social Sciences*, 9. <https://doi.org/10.1080/23311886.2022.2164240>
- Samuil, I., & Ionică, A. (2021). Business model based on community for a sustainable tourism development. *MATEC Web of Conferences*, 342, Article 09004. <https://doi.org/10.1051/matecconf/202134209004>
- Sangnak, D. (2025). Sustainable tourism development in Thailand: The role of agricultural tourism and government support for SMEs. *Sustainable Futures*, 9.
- Santoso, A. A., & Oktavio, A. (2024). Pengaruh kesakralan dan placeness terhadap kepuasan berkunjung dengan perceived value sebagai variabel mediasi pada pengunjung upacara Sekaten Yogyakarta. *Jurnal Ilmiah Edunomika*, 8(2). <https://doi.org/10.29040/jie.v8i2.13251>
- Scheyvens, R., & Russell, M. (2012). Tourism and poverty alleviation in Fiji: Comparing the impacts of small- and large-scale tourism enterprises. *Journal of Sustainable Tourism*, 20(3), 417–436.
- Sedarmayanti, Sastrayuda, G. S., & Afriza, L. (2018). *Pembangunan dan pengembangan pariwisata*. PT Refika Aditama.

- Sienatra, K. B., Henryanto, A. G., Oktavio, A., Wijayadne, D. R., Sudyasjayanti, C., & Santoso, W. (2023). Akselerasi digitalisasi sentra wisata kuliner Wiyung Kota Surabaya dalam rangka meraih keunggulan kompetitif pasca Covid-19. *Madaniya*, 4(2), 712–719
- Sun, J., & Chen, D. (2025). Green credit, tourism technology innovation, and sustainable development of tourism. *International Review of Economics & Finance*, 99.
- Suresh, A., Wartman, M., Rifaee Rasheed, A., & Macreadie, P. I. (2025). Tourism and recreation in blue carbon ecosystems: Exploring synergies, trade-offs and pathways to sustainability. *Ocean & Coastal Management*, 266.
- Tosun, C. (1999). Towards a typology of community participation in the tourism development process. *Anatolia*, 10, 113. <https://doi.org/10.1080/13032917.1999.9686975>
- UNESCO. (2015). *Global network of national geoparks*. <http://www.globalgeopark.org>
- Wibowo, M. S., Arviana Bella, L. (2023). Partisipasi masyarakat dalam pengembangan pariwisata berkelanjutan. *Jurnal Manajemen Perhotelan dan Pariwisata (JMPP)*, 6(1), 25–32.
- Wiramatika, I. G., Sunarta, I. N., & Anom, I. P. (2021). Partisipasi masyarakat lokal dalam pengembangan kawasan wisata Geopark Batur di Kintamani Kabupaten Bangli. *Jurnal Master Pariwisata (JUMPA)*, 8, 107.
- Wiramatika, I. G., & Sumardani, R. (2024). Local community participation in management of Batur Natural Hot Spring as a Tirta tourist attraction in Kintamani, Bangli Regency. *Jurnal Manajemen Pelayanan Hotel*, 8(1), 386–399.
- Wulandari, A. D., Isyandi, B., & Ekowarso, H. (2022). Analisis tingkat partisipasi dalam pembangunan desa di Kabupaten Indragiri Hulu. *Jurnal Niara*, 15(1).
- Yang, L., & Ning, W. (2025). Mechanisms and effects of the sustainable integration of digital-driven rural cultural tourism from the perspective of symbiosis. *Sustainable Futures*, 10.
- Zhou, X., Wang, J., & Zhang, S. (2021). Evaluation of community tourism empowerment of ancient town based on analytic hierarchy process: A case study of Zhujiajiao, Shanghai. *Sustainability*, 13, 2882. <https://doi.org/10.3390/su13052882>