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Integrating Green Infrastructure in Green Tourism Development: A Case Study in Keliki Village, Gianyar Regency, Bali, Indonesia

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Abstract

This research investigates the integration of green infrastructure in green tourism development in Keliki Village, Gianyar Regency, Bali, Indonesia. The study explores the perspectives of key stakeholders and examines the benefits, challenges, and strategies associated with integrating green infrastructure into tourism practices. Qualitative research methods, including interviews, focus group discussions, and document analysis, were employed to gather data. The findings highlight the positive impacts of green infrastructure on environmental conservation, community engagement, and tourist experiences. However, financial constraints, coordination issues, and the need to balance development with conservation were identified as challenges. The research contributes to a better understanding of the potential of green infrastructure in sustainable tourism development and offers recommendations for policymakers and practitioners.

Keywords: green infrastructure, green tourism development, sustainable tourism, environmental conservation, community engagement, tourist experiences, challenges, strategies.

1. Introduction

Green infrastructure refers to a network of natural and semi-natural elements designed to provide multiple environmental, economic, and social benefits within urban and rural areas (European Commission. (2013). It encompasses various natural features, such as parks, forests, wetlands, rivers, lakes, green roofs, urban gardens, and other green spaces. The primary objective of green infrastructure is to mimic and restore natural ecosystems, integrating them into built environments to enhance sustainability and resilience. It involves the strategic planning, design, and management of these green elements to provide a range of ecosystem services and address environmental challenges (United States Environmental Protection Agency (EPA). (2015)...

Green infrastructure offers numerous benefits, including improved air and water quality, reduced urban heat island effects, enhanced climate change resilience, increased biodiversity, improved human health and well-being, and economic opportunities. By

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incorporating nature into urban planning and design, green infrastructure plays a vital role in creating sustainable, livable, and resilient communities.

Green tourism, also known as sustainable or eco-tourism, has gained significant attention in recent years due to its focus on preserving the environment and supporting local communities. As the world faces increasing environmental challenges, the need for sustainable practices in the tourism industry becomes more urgent. Green infrastructure plays a vital role in the development of green tourism, contributing to the conservation of natural resources, promotion of biodiversity, and enhancement of visitor experiences (Tan Yigitcanlar and Marta Pascual-Ferrer 2020). This study explores the crucial roles that green infrastructure plays in the development of green tourism.

Green infrastructure is a fundamental component of green tourism development, serving as the backbone for sustainable practices and environmental conservation (Benedict, M. A., & McMahon, E. T. (Eds.). (2006). By prioritizing the conservation and restoration of natural resources, enhancing visitor experiences, supporting local economies, and addressing climate change challenges, green infrastructure ensures that tourism activities leave a positive impact on the environment and local communities. As the demand for sustainable travel continues to grow, the integration of green infrastructure will play an increasingly critical role in shaping the future of the tourism industry, fostering a harmonious relationship between humans and nature (Moore, S. A., & Scott, D. (2014).

The importance of green tourism development in the traditional village of Keliki, Tegal Lalang, Ubud, Gianyar, Bali, Indonesia, is significant for several reasons. Green tourism, also known as sustainable or eco-tourism, focuses on minimizing negative environmental impacts while promoting the conservation of natural resources and cultural heritage. Here are some reasons why green tourism development is essential in this traditional village. The main job of the community is farming, inline with the vision of the village "The realization of a prosperous, and just, Keliki village based on agriculture inspired by tri hita karana (live in harmony with God, people and nature) (www.keliki.desa.id/artikel/2022/9/22/visi-dan-misi-desa-keliki-1)

Keliki, Tegal Lalang, Ubud, Gianyar, Bali, is known for its lush landscapes, terraced rice fields, and rich biodiversity. Green tourism ensures that these natural assets are protected and preserved for future generations. By implementing sustainable practices such as waste management, water conservation, and renewable energy sources, green tourism minimizes the ecological footprint of tourism activities.

The traditional village of Keliki has a unique cultural heritage, including traditional art forms like painting, wood carving, and weaving. Green tourism development can support the preservation of these cultural practices by promoting community-based tourism initiatives. Visitors can engage in cultural activities, interact with local artisans, and contribute to the local economy while respecting the traditions and values of the community.

Green tourism development can have positive economic impacts on the local community. By emphasizing community-based tourism, revenue generated from tourism activities can directly benefit the local population. This can lead to increased employment opportunities, improved infrastructure, and the development of local businesses, thus reducing economic disparities. Green tourism provides opportunities for visitors to learn about environmental conservation, sustainable practices, and cultural heritage. By promoting educational programs, guided tours, and interactive experiences, tourists can gain a deeper understanding of the importance of protecting the environment and preserving local traditions. This increased awareness can have a ripple effect as visitors share their experiences and knowledge with others.

Green tourism development can improve the overall reputation of Keliki, Tegal Lalang, Ubud, Gianyar, Bali, as a tourist destination. Increasingly, travelers are seeking sustainable and responsible travel options. By positioning the village as a green tourism destination, it can attract like-minded visitors who value eco-friendly practices. This positive reputation can lead to long-term economic and social benefits for the community.

Green tourism development in the traditional village of Keliki, Tegal Lalang, Ubud, Gianyar, Bali, is crucial for preserving the environment, safeguarding cultural heritage, promoting economic development, fostering education and awareness, and enhancing the destination's reputation. By embracing sustainable practices and engaging visitors in responsible tourism activities, the village can ensure a harmonious balance between tourism growth and the well-being of its natural and cultural resources.

The current situation in the village of Keliki, the green infrastructure has not yet well conceptualized and well planned by both the government and the community. Resources such as water, rice terraces and green lushy vegetations have not yet well managed both for conservation and for the community economic development. The trekking track tracing the beauty of the rice terraces and green plantation made by concrete, it does not match with environmental and cultural environment. Historically the village is strongly dedicated to the environment, the name Keliki is a name of a plant grows in the village, the latin name of the plant is Ricinus communis. The green infrastructure development as the respond of the research finding will integrate the environment, culture and the green based economy of the village.

Research Objectives

The objective of the research is to identify the types of green infrastructure integrated into the tourism practices in the village. The identification of the infrastructure will demonstrate the performance of the green tourism business practices in the tourism village. The research also assesses the challenges and opportunities in integrating green infrastructure in the village's tourism development, then a recommendation will be provided for effectively integrating green infrastructure in green tourism development in Keliki Village.

Research questions

Based on the objective of identifying the types of green infrastructure integrated into the tourism practices in Keliki Village, Gianyar Regency, Bali, Indonesia, and considering the background context provided, here are two research questions for the background:

- 1. What are the existing types of green infrastructure integrated into the tourism practices in Keliki Village?
- 2. How have these types of green infrastructure contributed to the performance of green tourism business practices in Keliki Village?
- 3. How is the model of green infrastructure integration in green tourism business practices in the village of Keliki?

Significance of the study

The significance of the study on integrating green infrastructure in green tourism development in Keliki Village, Gianyar Regency, Bali, Indonesia, lies in its potential to contribute to sustainable development, environmental conservation, and community empowerment, sustainable tourism development, cultural preservation, economic benefits, community empowerment, and knowledge sharing. By highlighting the importance of integrating green infrastructure in green tourism business practices, the study paves the way for a more responsible and sustainable approach to tourism in Keliki Village and beyond.

2. Literature Review

Numerous studies have emphasized the positive environmental impacts of green infrastructure in sustainable tourism. Green infrastructure elements such as green spaces, parks, forests, and protected areas contribute to biodiversity conservation and the preservation of fragile ecosystems (Gössling et al., 2020). These areas not only provide habitats for wildlife but also offer recreational opportunities for tourists to engage with nature and learn about the local environment (Miller & Ritchie, 2018). Moreover, green infrastructure helps mitigate the environmental impacts of tourism activities by reducing carbon emissions, improving air and water quality, and minimizing waste generation (Buckley et al., 2016)

While the benefits of green infrastructure integration in sustainable tourism are evident, several challenges and barriers need to be addressed. One challenge is the lack of comprehensive planning and coordination among stakeholders, including government agencies, tourism operators, and local communities (Marques et al., 2019). Limited financial resources and funding constraints often hinder the implementation of green infrastructure projects (Koens et al., 2018). Additionally, conflicting interests and priorities among different stakeholders can impede the successful integration of green infrastructure into tourism practices (Papp et al., 2020)

Effective planning and collaboration among stakeholders are essential for the successful implementation of green infrastructure projects (Diedrich & Tolkach, 2015). Engaging and involving local communities in decision-making processes promotes a sense of ownership and enhances the sustainability of green infrastructure initiatives (Dredge & Jenkins, 2011). Education and awareness programs targeted at tourists and the local community help foster a culture of environmental responsibility and sustainable tourism practices (Sharpley & Telfer, 2015).

3. Methodology

The method employed in this research is qualitative, the data collected trough in depth interviews involving government as a regulator, traditional village leaders, village owned tourism business and community. Focus group discussion with stakeholders of the tourism village development carried out to validate the model of the green infrastructure development in the village. The last method is document analysis provided by the village management. The collected data are analyzed by using QDA lite data mining.

4. Case Study: Keliki Village

4.1 Overview of Keliki Village

Keliki Village is a picturesque village located in the Ubud district of Gianyar Regency, Bali, Indonesia. Nestled amidst lush greenery and terraced rice fields, the village offers a serene and idyllic setting for visitors seeking an authentic cultural experience.

Known for its rich artistic heritage, Keliki Village is renowned for its traditional Balinese painting style. The village is home to a vibrant community of talented artisans who specialize in intricate and detailed miniature paintings, depicting scenes from mythology, nature, and daily village life. These unique artworks have gained recognition both locally and internationally, making Keliki Village a hub for art enthusiasts and collectors.

Beyond its artistic charm, Keliki Village also captivates visitors with its natural beauty. The surrounding landscapes are adorned with verdant vegetation, towering coconut trees, and the soothing sound of flowing streams. The village's location amidst the terraced rice fields provides breathtaking panoramic views, creating a tranquil and serene atmosphere.

As a traditional Balinese village, Keliki embraces the essence of Balinese Hindu culture. Visitors have the opportunity to witness and participate in various religious ceremonies, traditional dances, and cultural rituals. The warm and welcoming locals are eager to share their customs and traditions, providing an immersive cultural experience that showcases the deep-rooted spirituality and hospitality of the Balinese people.

In terms of tourism infrastructure, Keliki Village offers a range of accommodations, from quaint homestays to boutique resorts that blend harmoniously with the natural surroundings. The village maintains a sustainable approach to tourism development, with a focus on preserving the environment and promoting responsible practices. Locally owned businesses and community-based initiatives play a crucial role in sustaining the village's unique character and fostering economic opportunities for the local community.

Keliki Village's proximity to Ubud, the cultural and artistic heart of Bali, further adds to its appeal. Visitors can easily explore Ubud's vibrant art scene, visit traditional markets, indulge in Balinese cuisine, and experience the healing powers of holistic wellness practices. The village's strategic location allows visitors to enjoy the tranquility of rural life while also having access to the cultural and recreational offerings of a nearby town.

Keliki Village in Ubud Gianyar offers a captivating blend of natural beauty, artistic heritage, and cultural richness. Its stunning landscapes, traditional Balinese paintings, and immersive cultural experiences make it a must-visit destination for those seeking an authentic and enchanting Balinese experience. The village's commitment to sustainable tourism practices ensures that visitors can enjoy its beauty while also contributing to the preservation of its unique heritage.

4.2 Integration of Green Infrastructure in Keliki Village

The integration of green infrastructure in Keliki Village demonstrates a proactive approach towards sustainable tourism development. The village has recognized the importance of preserving its natural environment, cultural heritage, and community wellbeing. By incorporating green infrastructure elements into tourism practices, Keliki Village has created a harmonious blend of environmental conservation, cultural preservation, and economic benefits.

One notable aspect of green infrastructure integration in Keliki Village is the emphasis on eco-friendly accommodations. The village offers a range of sustainable lodging options, including eco-resorts and homestays that adhere to eco-friendly practices. These accommodations are designed to minimize their environmental footprint by implementing energy-efficient systems, waste management strategies, and utilizing renewable energy sources. By promoting and supporting such eco-accommodations, Keliki Village showcases its commitment to sustainable tourism and encourages visitors to make responsible choices.

In addition to eco-accommodations, Keliki Village has integrated green spaces and natural landscapes into its tourism offerings. The village's strategic location amidst lush rice fields and greenery allows for the creation of walking trails, scenic viewpoints, and recreational areas that showcase the natural beauty of the surroundings. These green spaces not only provide opportunities for tourists to engage with nature but also contribute to biodiversity conservation and ecosystem preservation.

Furthermore, Keliki Village has leveraged its artistic heritage as a form of green infrastructure. The intricate Balinese paintings produced by local artisans serve as a cultural attraction that connects visitors with the village's rich artistic traditions. By promoting and preserving this artistic heritage, Keliki Village ensures the sustainability of its cultural identity while also generating economic benefits for the local community.

The integration of green infrastructure in Keliki Village has not been without its challenges. Limited financial resources, coordination among stakeholders, and balancing

the needs of tourism development with environmental conservation have been important considerations. However, the village has successfully navigated these challenges by fostering partnerships with local communities, government agencies, and tourism operators. Through collaboration and community involvement, Keliki Village has been able to overcome barriers and implement sustainable practices effectively.

Overall, the integration of green infrastructure in Keliki Village demonstrates a comprehensive and forward-thinking approach to sustainable tourism development. By incorporating eco-friendly accommodations, preserving green spaces, and leveraging its artistic heritage, the village has created a model that showcases the benefits of green infrastructure integration. Keliki Village serves as an inspiration for other destinations seeking to balance tourism growth with environmental conservation and community well-being.

4.3 Stakeholder Perspectives on Green Tourism Development

Stakeholder perspectives in green tourism development in Keliki Village are diverse but interconnected. The local community seeks economic benefits while preserving their cultural heritage, government agencies focus on sustainable development and regulation, tourism operators aim to meet market demands for sustainable experiences, and tourists prioritize environmentally friendly and culturally immersive experiences. Balancing these perspectives and fostering collaboration among stakeholders is key to achieving a sustainable tourism model that benefits all parties involved. By incorporating stakeholder perspectives into decision-making processes, Keliki Village can create a holistic and inclusive approach to green tourism development that respects the environment, preserves local culture, and ensures the well-being of the community.

4.3 Challenges and Opportunities in Integrating Green Infrastructure

The integration of green infrastructure in Keliki Village's tourism development presents both challenges and opportunities. Understanding and addressing these factors is crucial for the successful implementation of sustainable practices. While financial constraints, limited awareness, and the need for balancing development and conservation pose challenges, the growing market demand for sustainable tourism, opportunities for community resilience, and the alignment with environmental conservation and cultural preservation provide significant opportunities. By addressing these challenges and leveraging the opportunities, Keliki Village can successfully integrate green infrastructure, fostering sustainable tourism practices that benefit the environment, the local community, and visitors alike.

5. Findings and discussion

5.1 The existing types of green infrastructure integrated into the tourism practices in Keliki Village

Keliki Village in Gianyar Regency, Bali, Indonesia, has successfully integrated various types of green infrastructure into its tourism practices. These green infrastructure elements are designed to enhance sustainability, promote environmental conservation, and provide a unique and immersive experience for tourists. The following are some of the existing types of green infrastructure integrated into the tourism practices in Keliki Village:

It offers eco-friendly accommodation options such as eco-lodges and guesthouses that are built using sustainable materials, employ renewable energy sources, and incorporate low-impact design principles. These accommodations blend harmoniously with the natural surroundings and provide a comfortable yet environmentally conscious experience for visitors.

To minimize the environmental impact of transportation, Keliki Village promotes sustainable transportation options for tourists. This includes encouraging the use of bicycles and electric vehicles for local transportation within the village, as well as providing designated walking paths and trails to explore the natural beauty of the area.

Green tourism in Keliki Village emphasizes organic farming practices and the use of locally sourced produce. The village promotes sustainable agriculture methods, including permaculture and agroforestry, to ensure the production of fresh and chemical-free food for tourists. Visitors have the opportunity to engage in farm-to-table experiences, such as participating in organic farming activities, harvesting fruits and vegetables, and enjoying meals prepared with locally sourced ingredients.

The village has designated nature conservation areas where the natural environment is preserved and protected. These areas include lush forests, rivers, and rice terraces that provide opportunities for ecotourism activities such as nature walks, bird watching, and wildlife observation. The conservation areas are managed in a sustainable manner, promoting biodiversity conservation and educating tourists about the importance of environmental preservation.

Effective waste management practices are implemented in Keliki Village to minimize the environmental impact of tourism. The village promotes recycling initiatives, waste segregation, and composting to reduce the amount of waste generated by tourists. Additionally, educational programs are conducted to raise awareness among visitors about responsible waste disposal and the importance of preserving the natural beauty of the village.

5.2 Types of green infrastructure contributed to the performance of green tourism business practices in Keliki Village

The integration of green infrastructure into tourism practices in Keliki Village has contributed significantly to the performance of green tourism business practices. These green infrastructure elements have resulted in several positive outcomes for the village's tourism industry. The incorporation of green infrastructure has allowed Keliki Village to establish itself as a sustainable tourism destination. The use of eco-friendly accommodations, sustainable transportation options, and organic farming practices has reduced the ecological footprint of tourism activities, leading to the conservation of natural resources and the preservation of the village's cultural and environmental heritage.

The integration of green infrastructure has provided tourists with unique and authentic experiences. The eco-friendly accommodations and farm-to-table experiences enable visitors to connect with nature, immerse themselves in the local culture, and gain insights into sustainable living practices. These experiences enhance visitor satisfaction and contribute to positive word-of-mouth recommendations, attracting more eco-conscious tourists to Keliki Village.

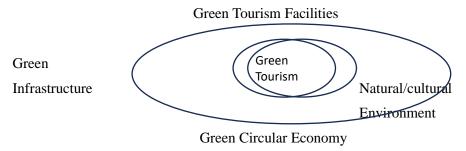
The green infrastructure has created economic opportunities for the local community in Keliki Village. Sustainable tourism practices have generated income for local farmers, artisans, and service providers involved in eco-friendly accommodation, organic farming, and local produce sales. This economic benefit has improved the livelihoods of the villagers, reducing dependency on unsustainable practices and supporting community development initiatives.

The types of green infrastructure integrated into the tourism practices have played a vital role in environmental conservation. By preserving nature conservation areas, implementing effective waste management systems, and promoting sustainable agriculture, Keliki Village has contributed to the protection of biodiversity, the reduction of pollution, and the overall well-being of the natural environment. These conservation efforts not only benefit the immediate surroundings but also contribute to global sustainability goals.

The integration of various types of green infrastructure in Keliki Village's tourism practices has resulted in enhanced sustainability, unique and authentic experiences, economic benefits for the local community, and environmental conservation. These positive outcomes have contributed to the overall performance of green tourism business practices in the village, making it an attractive and responsible tourism destination in Gianyar Regency, Bali, Indonesia.

5.3 The model of green infrastructure integration in green tourism business practices in the village of Keliki

The model of green infrastructure integration in green tourism business practices in the village of Keliki is a comprehensive and innovative approach that harnesses the unique cultural and environmental assets of the village to promote sustainable tourism. This model is designed to enhance visitor experiences, support the well-being of the local community, and preserve the village's natural and cultural heritage.



One of the key aspects of the model is the development of sustainable accommodations that seamlessly blend with the natural surroundings and reflect the local culture. These accommodations are constructed using eco-friendly materials, incorporate renewable energy sources, and employ low-impact construction techniques. By integrating the accommodations into the landscape, visitors are offered breathtaking views and a sense of harmony with nature. Moreover, these sustainable accommodations aim to engage guests in responsible practices, such as water and energy conservation, waste management, and interactions with the local community.

The model also prioritizes green mobility and connectivity within Keliki Village. Pedestrian-friendly infrastructure, cycling paths, are established to encourage visitors to explore the village on foot or by bicycle, minimizing carbon emissions and fostering a more immersive and sustainable experience. Interpretive signage along the paths provides information about the village's rich cultural and environmental heritage, enabling visitors to gain a deeper understanding of the local context.

Another integral element of the model is community-based agriculture and farm-to-table experiences. The model supports the establishment of organic farming cooperatives where villagers cultivate diverse crops using sustainable techniques such as permaculture and agroforestry. Visitors are invited to participate in farming activities, harvest fresh produce, and engage in culinary experiences that highlight locally sourced ingredients. These initiatives not only offer visitors a taste of sustainable food systems but also promote the preservation of traditional agricultural practices and support the livelihoods of local farmers.

Ecological restoration and conservation are also key priorities in the model. Efforts are made to rehabilitate degraded areas, reforest critical ecosystems, and establish designated conservation areas. These conservation areas serve as habitats for wildlife and provide opportunities for nature-based activities such as guided hikes and birdwatching. Education and awareness programs are integral to the model, allowing visitors to learn about the significance of environmental conservation and empowering them to become advocates for sustainability.

Furthermore, waste management and circular economy practices are integrated into the model. Emphasis is placed on waste reduction, segregation, recycling, and composting. Visitors are encouraged to minimize waste generation and actively participate in recycling initiatives. Local artisans and entrepreneurs are supported in creating upcycled products, fostering a sustainable local economy and reducing waste.

The model also focuses on community empowerment and cultural exchange. Capacity-building programs, entrepreneurship training, and cooperative networks are established to empower the local community. Villagers actively participate in the tourism industry, offering authentic cultural experiences such as traditional arts and crafts workshops, cultural performances, and homestays. This approach ensures that the benefits of tourism are equitably distributed, leading to improved livelihoods and strengthened cultural preservation efforts.

The model of green infrastructure integration in green tourism business practices in the village of Keliki presents a holistic and innovative approach to sustainable tourism development. By combining sustainable accommodations, green mobility, community-based agriculture, ecological restoration, waste management, and community empowerment, this model positions Keliki Village as a beacon of sustainable tourism in Bali. It not only enhances visitor experiences but also supports the well-being of the local community and preserves the village's unique cultural and environmental heritage for future generations.

6. Conclusion

The integration of green infrastructure in the tourism practices of Keliki Village, Gianyar Regency, Bali, Indonesia, has demonstrated a proactive and comprehensive approach to sustainable tourism development. The village has successfully incorporated various types of green infrastructure, including eco-accommodations, green spaces, natural landscapes, and cultural heritage, into its tourism offerings. These efforts have contributed to environmental conservation, cultural preservation, economic benefits, and community empowerment. Despite challenges such as limited financial resources and coordination among stakeholders, Keliki Village has overcome these obstacles through collaboration and community involvement. The integration of green infrastructure in Keliki Village serves as a model for other destinations seeking to balance tourism growth with environmental sustainability and community well-being.

6.1 Recommendation

Based on the findings, it is recommended that Keliki Village further strengthens and expands the integration of green infrastructure in its tourism practices. The following recommendations can help enhance the effectiveness and sustainability of green tourism development in Keliki Village:

- a. Keliki Village should create a detailed plan that outlines the integration of various green infrastructure elements, including eco-accommodations, green spaces, cultural attractions, and sustainable transportation. This plan should consider the village's unique natural and cultural assets and prioritize environmental conservation and community well-being.
- b. Effective collaboration among government agencies, tourism operators, local communities, and other stakeholders is crucial for the successful implementation of green infrastructure projects. Regular communication, joint decision-making, and shared responsibilities can help address challenges and ensure the long-term sustainability of tourism development in Keliki Village.
- c. Keliki Village should actively promote sustainable tourism practices among tourists and provide educational programs and materials that highlight the importance of

environmental conservation and cultural preservation. This can be done through guided tours, workshops, and interactive experiences that engage visitors in responsible and respectful tourism activities.

- d. Securing adequate financial resources is essential for the successful implementation of green infrastructure projects. Keliki Village should explore funding opportunities from government grants, private investors, and tourism-related initiatives to support the development and maintenance of green infrastructure elements.
- e. It is important to regularly monitor and evaluate the impact of green infrastructure integration on the environment, community well-being, and visitor experiences. This data can inform future decision-making, identify areas for improvement, and showcase the positive outcomes of sustainable tourism practices in Keliki Village.

6.2 Limitation of the research

The research on integrating green infrastructure in green tourism development in Keliki Village, Gianyar Regency, Bali, Indonesia, has several limitations that should be acknowledged. These limitations may affect the generalizability and comprehensiveness of the study's findings. The following narrative highlights the limitations.

One limitation of this research is the focus on a specific case study in Keliki Village, which may limit the generalizability of the findings to other contexts. The unique characteristics of Keliki Village, including its natural landscapes, cultural heritage, and community dynamics, may not be representative of all tourism destinations. Therefore, the findings and recommendations derived from this research should be interpreted within the context of Keliki Village and may not be directly applicable to other locations.

Another limitation is the qualitative nature of the research methodology. While qualitative research provides valuable insights and in-depth understanding of the subject matter, it may be limited in terms of generalizability and statistical representativeness. The findings are based on interviews, focus group discussions, and document analysis, which rely on the perspectives and experiences of a limited number of participants. The research could benefit from complementing the qualitative approach with quantitative methods to obtain a more comprehensive understanding of the integration of green infrastructure in green tourism development.

Additionally, the research acknowledges the challenges and opportunities in integrating green infrastructure but does not extensively explore the potential barriers and limitations faced during the implementation process. While the study identifies financial constraints, coordination issues, and balancing development with conservation as challenges, a more detailed analysis of these barriers and potential solutions would enhance the practicality and applicability of the research findings. Further research could delve deeper into the specific barriers and limitations encountered in integrating green infrastructure in tourism development and provide practical strategies to overcome them.

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