



# Accessibility and amenity challenges in the development of ecotourism attractions: an evaluative study of curug kedung kudhu

Novieta Maya Sagita <sup>1</sup>, and Nina Mistriani <sup>2</sup>

<sup>1,2</sup>Department of Tourism, Sekolah Tinggi Ilmu Ekonomi dan Pariwisata Indonesia, Indonesia

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## ABSTRACT

This study evaluates accessibility and facility challenges in the development of Curug Kedung Kudhu ecotourism using an interpretative qualitative approach based on constructivist epistemology. Data were collected through semi-structured interviews, document analysis, and data source triangulation to ensure research credibility. The findings reveal three main challenges: (1) inadequate infrastructure limiting visitor access and sustainable ecotourism growth; (2) insufficient tourism facilities affecting visitor satisfaction; and (3) suboptimal destination management, highlighting the need for institutional strengthening. These challenges collectively emphasize the necessity of a structured and inclusive approach to ecotourism development. Policy recommendations emphasize multi-stakeholder collaboration, community empowerment, and sustainability-based planning. Infrastructure and facility improvements must align with environmental conservation efforts. Enhanced governance is required to integrate local stakeholders and encourage community participation in decision-making. By adopting a community-based ecotourism approach, Curug Kedung Kudhu has the potential to become a sustainable nature tourism destination that balances environmental preservation with economic benefits for local communities.

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## Corresponding Author:

Novieta Maya Sagita,

Pariwisata,

Sekolah Tinggi Ilmu Ekonomi Pariwisata Indonesia,

Jl, Bendan Ngisor Sampangan, Semarang, Indonesia.

Email: [novieta.21530007@student.stiepari.ac.id](mailto:novieta.21530007@student.stiepari.ac.id)

## 1. INTRODUCTION

Ecotourism serves as a tourism development paradigm that emphasizes sustainability principles, environmental conservation, and local community empowerment (Das & Chatterjee, 2020; Indika & Vonika 2016; Thomas 2022). In this context, ecotourism destination development requires a holistic approach that considers various aspects, including accessibility and amenities, to ensure long-term sustainability and optimal benefits for local communities and the environment (Cobbinah, 2015; Das & Chatterjee, 2015). However, ecotourism development often faces numerous challenges, especially in destinations that are still in the early stages of development (Musavengane, 2019; Wondirad et al, 2020).

The development of Curug Kedung Kudhu as a sustainable ecotourism destination holds crucial significance within the context of Indonesian tourism. Curug Kedung Kudhu offers unique and more significant potential compared to other destinations in the surrounding area due to its extraordinary natural beauty, with a stunning waterfall and captivating natural landscapes. This potential not only attracts tourists but also provides opportunities for ecotourism development that focuses on environmental protection and empowerment of local communities (Madhumita Das, 2015). By adopting a holistic community-based ecotourism approach, Curug Kedung Kudhu can become a model for the development of an inclusive and sustainable nature tourism destination, providing optimal benefits for environmental conservation and the welfare of local communities (Juliana, 2023).

Curug Kedung Kudhu is located on Kebangkitan Masyarakat Street, Kalipepe, Pudukpayung, Banyumanik District, Semarang City, Central Java. The waterfall is not far from the Kedung Khudu basecamp. It takes approximately 20-30 minutes of walking to reach the waterfall. The path leading to the site is steep and winding, equipped with bamboo handrails for safety. Additionally, some sections of the path are steep but remain passable. Steps have been made from used car tires arranged as makeshift stairs. Upon arrival at the waterfall, visitors can witness the pristine natural surroundings. The waterfall is about 15-20 meters high, and the water is clear and refreshing. There is also an old *ondo rante* (a type of bridge from the Dutch colonial era) that visitors must pass by walking 1.5 kilometers and crossing a bridge over the Kaligarang River to reach Curug Kedung Kudhu.

Based on data from the official website of Pudukpayung Village, the population in this area reaches 25,966 people, consisting of 13,098 males and 12,868 females, spread across 8,178 households. The majority of the population follows Islam (21,072 people), followed by Christianity (1,706 people), Catholicism (1,643 people), Hinduism (31 people), Buddhism (28 people), Confucianism (3 people), and belief in God (15 people). The population distribution by age group shows that there are 1,606 people in the 0-4 age group, 1,902 people in the 5-9 age group, 2,013 people in the 10-14 age group, and so on, with 245 people in the age group of 75 and above (disbudpar, 2024).



Figure 1. The author and the Kedung Kudhu management team at the Curug Kedung Kudhu Waterfall.  
source : (disbudpar, 2024)

The tourist destination of Curug Kedung Kudhu has unique potential that makes it stand out compared to other waterfall attractions. One of its special features is that the flowing water can be consumed directly, as it originates from five natural springs. Its clarity is even said to be comparable to bottled mineral water. Before reaching the waterfall, visitors can explore another interesting attraction: the oldest vihara in the area, which was built and perfected around 1955 and serves as a historical landmark. Surrounding the vihara, there are two meditation lodges that enhance the serene atmosphere, along with a building designated as a resting place for tourists. After visiting the vihara, visitors can continue their journey to *ondo rante*, a Dutch colonial-era relic located approximately 1.5 kilometers away, accessible only on foot. Along the way, they will cross a bridge over the Kaligarang River before finally arriving at the breathtaking Curug Kedung Kudhu.

The visit of 43 Thai Thudong monks to the Kedung Kudhu waterfall area, as they embarked on a spiritual journey from Kassapa Hill at the Sima 2500 Buddha Jayanti Vihara in Puduk Payung, Semarang City, on Thursday (16/5/2024) morning towards Borobudur Temple in Magelang for the upcoming Vesak Day celebration on Thursday (23/5/2024), highlights the potential for increased tourist visits to the destination and underscores the importance of improving access facilities and tourist support amenities in the area, as emphasized by the research on the challenges of accessibility and amenities in developing the Curug Kedung Kudhu ecotourism destination, which becomes even more relevant in light of this recent development, calling for the prioritization of infrastructure enhancements, clear signage and information centers, and the development of essential facilities such as accommodations, restaurants, and souvenir shops, while also emphasizing the critical role of community participation and multi-stakeholder collaboration in ensuring equitable distribution of tourism benefits and preserving the area's cultural and environmental integrity, ultimately positioning Curug Kedung Kudhu as a sustainable and inclusive ecotourism destination that offers a unique blend of spiritual, cultural, and natural experiences for visitors while providing economic benefits to the local community (Fauziyah et al, 2024).



Figure 2. A series of releases of Thai Bhikku Thudong at Kassapa Hill, Curug Kedung Kudhu area, Pudukpayung  
Source:(Fauziyah et al, 2024)

Curug Kedung Kudhu is an example of an ecotourism destination facing challenges in developing its accessibility and amenities. Despite its appealing natural tourism potential, such as a waterfall and beautiful natural landscapes, Curug Kedung Kudhu still encounters various obstacles related to infrastructure, governance, and supporting tourism facilities (Dinas Pariwisata Kota Semarang, 2020). This condition reflects the complexity of ecotourism development in destinations that are still in the early stages, where a deep understanding of local dynamics and context-specific development strategies is essential. (Aas et al; 2005; Jaafar & Maideen, 2012)

Curug Kedung Kudhu is situated within a rural community predominantly consisting of farmers and small business owners. The local population maintains strong traditional values and lives in a communal environment. In managing the Curug Kedung Kudhu tourism destination, local residents have begun to be involved, particularly through tourism awareness groups (pokdarwis) and micro-business activities, such as providing food, beverages, and tour guide services. However, this participation still needs to be strengthened through continuous training and support to ensure the benefits of tourism are more evenly distributed within the local community.

Previous studies have explored various aspects of ecotourism development, including the role of community participation (Scheyvens, 1999; Tosun, 2000a), destination governance (Beaumont & Dredge 2010; Weiler et al, 2021), and the impact of ecotourism on environmental and socio-economic sustainability (Ardoin et al., 2015; Kimengsi et al., 2019). However, there remains a limited understanding of the specific challenges related to accessibility and amenities in the development of early-stage ecotourism destinations, particularly in the context of Indonesia (Aksatan et al, 2020; Thamrin & Badawi 2020).

The uniqueness and main contribution of this research lie in its specific focus on the challenges of accessibility and amenities in the development of early-stage ecotourism destinations, particularly within the Indonesian context. While previous studies have explored various aspects of ecotourism development, such as community participation (Tosun, 2000), destination governance (Zhang & Zhu, 2014), and the impact of ecotourism on environmental and socio-economic sustainability (Putri et al., 2022), there remains a limited understanding of the specific challenges related to accessibility and amenities in early-stage ecotourism destinations (Meskele et al., 2018). This research seeks to address this gap by uncovering the complexities of infrastructure, governance, and supporting facility barriers faced in the development of Curug Kedung Kudhu as a sustainable ecotourism destination. By adopting a qualitative interpretive approach grounded in constructivist epistemological principles (Ihalauw et al, 2023), this research provides in-depth insights into the local dynamics and context-specific development strategies required to address accessibility and amenity challenges in early-stage ecotourism destinations.

This research aims to evaluatively examine the challenges of accessibility and amenities in the development of the Curug Kedung Kudhu ecotourism attraction through a qualitative interpretative approach grounded in constructivist epistemological principles (Ihalauw et al, 2023). The study seeks to uncover the complexities of obstacles faced in transforming Curug Kedung Kudhu into an accessible and comfortable nature tourism destination for visitors. The findings from this research are expected to provide theoretical contributions to enrich ecotourism studies, particularly regarding the challenges of developing early-stage destinations. Practically, the research results can serve as a foundation for strategic policy-making in the development of Curug Kedung Kudhu as a sustainable ecotourism destination that offers optimal benefits to the local community and ensures environmental conservation.

## 2. RESEARCH METHOD

This study adopts a qualitative interpretative approach to deeply examine the challenges of accessibility and amenities in the development of Curug Kedung Kudhu ecotourism. This approach is based on constructivist epistemological principles, emphasizing the importance of contextual understanding and interpretation of complex social realities (Lincoln, Y. S., & Guba, 2000). Through this qualitative interpretative approach, the research seeks to uncover organizational dynamics, stakeholder perspectives, and the meanings embedded in collaborative processes within ecotourism destination governance (Abson et al, 2017; Wearing & Mc Donald, 2002).

The interpretive qualitative approach was chosen for this study because of its strong focus on gaining a deep understanding of the perspectives of individuals and the meanings they attach to their experiences. Unlike the phenomenological approach, which primarily focuses on uncovering the subjective experiences of individuals within a specific phenomenon, the interpretive approach emphasizes how individuals or groups interpret their social realities and how context and social interactions shape the meanings constructed. Additionally, the interpretive qualitative approach allows the researcher to explore more complex dynamics in the context of ecotourism development, such as the barriers faced by various stakeholders in accessing or managing tourist destinations, and how they construct their understanding of these challenges. This is particularly relevant in the case of Curug Kedung Kudhu, where social, cultural, and economic factors interact to shape views and actions related to accessibility and tourist amenities. This approach is more flexible compared to the case study approach, which tends to focus on analyzing a single phenomenon or case in depth. The interpretive approach enables the researcher to capture a broader range of perspectives and complexities, leading to more holistic and applicable findings for the development of sustainable ecotourism policies.

The primary data collection strategy in this study involves three main approaches. First, semi-structured interviews were conducted with purposively selected participants using flexible interview guidelines, allowing for an in-depth exploration of participants' experiences, perspectives, and insights related to the development of Curug Kedung Kudhu ecotourism (Flick, 2018). Second, institutional document analysis, including official reports, meeting minutes, and strategic planning documents, was

performed to provide insights into the historical context, institutional framework, and governance dynamics of the destination (Bowen, 2009). Third, triangulation of various data sources was conducted to ensure the credibility of the research (Decrop, 1999), involving cross-checking findings from interviews, document analysis, and field observations to identify patterns, convergence, or divergence in the data (Patton, 2015a).

Field observation was conducted in depth through an interpretative qualitative approach that focuses on understanding the context and social dynamics surrounding the development of ecotourism at Curug Kedung Kudhu. Data were collected through source triangulation, which included semi-structured interviews with purposively selected participants, institutional document analysis, and direct field observations. This process allowed the researchers to capture various perspectives and the complexities of the challenges faced regarding accessibility and amenities at the site. Additionally, data analysis was carried out iteratively and reflectively, comparing initial findings with the original data to ensure the consistency and reliability of the research results.

Triangulation of various data sources—including semi-structured interviews, analysis of up-to-date institutional documents, and field observations—was conducted to ensure research credibility and comprehensively capture the dynamics of accessibility and amenities (Decrop, 1999; Patton, 2015b). The processes of interpretive synthesis and theoretical abstraction involve iterative and reflexive analysis, constantly comparing emerging interpretations with the original data to ensure consistency and groundedness (Charmaz, 2014). Preliminary findings are shared with participants for member checking, allowing them to provide feedback and validate the interpretations (Lincoln, Y. S., & Guba, 1985). Potential conflicts of interest, such as those involving government officials or local business actors, are carefully assessed and mitigated through transparent disclosure, maintaining participant anonymity in published findings, and focusing the research on aggregate patterns rather than individual cases.

The participants in this study were selected using purposive sampling based on the following criteria:

Table 1. List of Research Participants

Participant Code	Position/Role	Institution
P1	Head of Tourism Division	Semarang City Tourism Office
P2	Head of POKDARWIS Kaliber	Curug Kedung Kudhu Management Organization
P3	Ecotourism Manager	Local Community of Curug Kedung Kudhu
P4	Environmental Advocate	LSM Semarang Nature Conservation
P5	Local Entrepreneur	Tourism UKM Sector

Source: Primary Data, 2025

The number of participants was determined based on the principle of data saturation, where data collection was stopped when no significant new information emerged from additional interviews (Guest et al, 2006). The five purposively selected participants are considered sufficient to represent diverse perspectives in destination management, encompassing government officials, community leaders, ecotourism managers, environmental advocates, and local entrepreneurs. While additional participants could potentially provide further insights, the point of theoretical saturation was reached when no significant new themes emerged from the final interviews (Guest et al., 2006). The selection of five participants is deemed sufficient to represent diverse perspectives in the management of Curug Kedung Kudhu, particularly given that this tourist attraction has only recently begun to be managed and that the formation of the tourism awareness group (pokdarwis) is set for 2024. Effective tourism governance requires individuals who possess a deep understanding of the local conditions and dynamics of the area, making the insights from these participants particularly valuable as they reflect the emerging needs and challenges of this developing ecotourism destination.

This study purposively selected participants to ensure that all relevant key stakeholders in the development of Curug Kedung Kudhu ecotourism were represented. The selected participants included destination managers, visitors, local community members, and relevant government officials, in order to gain diverse perspectives on the challenges faced. Although the number of participants is relatively small, this study relies on a qualitative, in-depth approach to gain a comprehensive understanding of the complexities of the issues. By using semi-structured interviews and data triangulation, the study ensures that various important viewpoints related to accessibility, tourist amenities, and destination governance are considered. Thus, despite the limited sample size, the findings provide a rich and informative picture of the challenges at Curug Kedung Kudhu.

The data analysis in this study adopted the qualitative coding methodology developed by Mile et al (2014), consisting of four main stages. The first stage is open coding, where units of meaning in the data are identified and labeled, resulting in descriptive codes that reflect the essence of the data (Corbin, J., & Strauss, 2015). The second stage involves thematic categorization, grouping the initial codes into broader thematic categories based on conceptual similarities and relationships between codes (Saldaña, 2021). The third stage is interpretive synthesis, which integrates thematic categories into a coherent narrative that describes patterns, relationships, and complex dynamics within the data (Charmaz, 2014). The fourth stage involves theoretical abstraction, developing a higher-level theoretical understanding by linking the findings to relevant theories and concepts, thus expanding knowledge about the phenomenon under study (Gioia et al, 2013). The coding process was conducted iteratively and recursively, involving constant comparisons between the data, codes, and categories to ensure the robustness and consistency of the findings (Neale, 2021).

All research protocols were reviewed and approved by the institutional ethics committee to ensure the protection of participants' rights and well-being. Ethical research principles, including confidentiality, autonomy, and informed consent, were upheld at every stage of the research (Guillemin & Gillam, 2004). Participants were provided with comprehensive information about the purpose, procedures, and implications of the study before being asked to provide written consent to participate. The collected data was kept confidential and only accessible to the core research team. Any publication or dissemination of the research findings was conducted in a way that safeguarded the anonymity of the participants (Neale, 2021).

### 3. RESULTS AND DISCUSSIONS

This section presents a comprehensive overview of the research findings and provides an in-depth discussion of the main themes that emerged from the data. Through an interpretive analysis of the qualitative data collected, this study uncovers three central themes that represent the challenges of accessibility and amenities in the development of the Curug Kedung Kudhu ecotourism destination.

#### 3.1 Inadequate Infrastructure Accessibility: Barriers to Sustainable Ecotourism Development.

The first theme that emerged from the data analysis is infrastructure limitations as a significant barrier to the development of Curug Kedung Kudhu ecotourism. Participants consistently highlighted the narrow, rocky, and poorly maintained roads as the main challenge to the destination's accessibility. As one participant stated:

*"The access road to Curug Kedung Kudhu is still in very poor condition. The road is narrow, full of potholes, and becomes slippery when it rains. This discourages visitors, especially those traveling with private vehicles."* (P3, Ecotourism Manager)

These findings align with previous research emphasizing the importance of infrastructure in sustainable ecotourism development (Sulistiyadi et al, 2019). Infrastructure limitations not only hinder physical accessibility but also affect visitors' perceptions of the destination (Handriana & Ambara, 2016). In the context of Curug Kedung Kudhu, improving road infrastructure is a top priority to enhance the appeal of ecotourism. Activities available at Curug Kedung Kudhu are mainly limited to enjoying the water at the waterfall area. Visitors can unwind after traversing the steep path by relaxing and playing in the waterfall.

Access to the site is relatively difficult. The current path was voluntarily opened by local residents, so it is not yet fully developed. In terms of safety, some sections have makeshift steps made from old tires and sandbags, with bamboo railings to assist visitors.

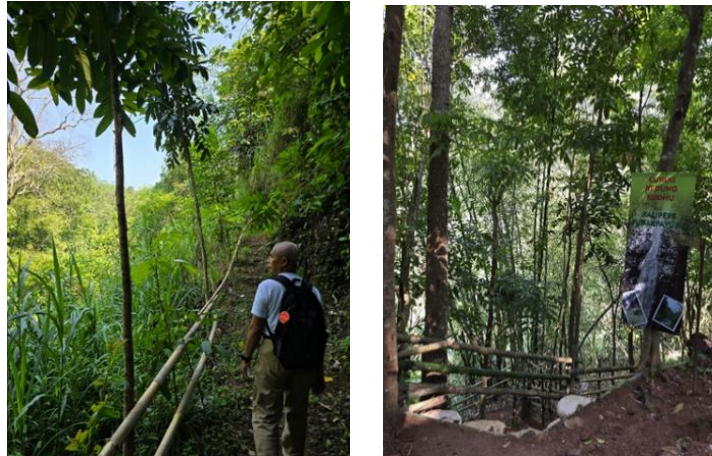


Figure 2. Access to Curug Kedung Kudhu

In addition, the lack of supporting tourism facilities, such as information centers, signage, and rest areas, was also identified as an infrastructure challenge. One participant stated:

*"Visitors are often confused when they arrive at the location because there is no information center or clear signage. They also struggle to find a comfortable place to rest after a tiring journey."* (P2, Head of POKDARWIS)

The availability of supporting facilities is an important aspect in creating a satisfying tourism experience. The absence of these facilities not only reduces visitor comfort but also hinders the economic potential of ecotourism for the local community (Snyman, 2017). A holistic infrastructure development approach, including improved accessibility and the provision of supporting facilities, is key to realizing sustainable ecotourism at Curug Kedung Kudhu.

### 3.2 Limited Tourist Amenities: Challenges in Meeting Visitor Expectations

The second theme identified is the limited availability of tourist amenities, which poses a challenge in meeting visitor expectations at Curug Kedung Kudhu. Participants highlighted the lack of accommodations, restaurants, and souvenir shops

near the destination. One participant stated:

*"Visitors who wish to stay near Curug Kedung Kudhu face difficulties finding suitable accommodations. Restaurants and souvenir shops are also very limited, making their tourism experience less than optimal."* (P5, Local Entrepreneur)

The presence of adequate amenities is a critical factor in enhancing visitor satisfaction and encouraging longer stays. The lack of amenities not only reduces the quality of the tourism experience but also hampers the economic multiplier effect for the local community (Ronald, 2005). Developing amenities aligned with ecotourism principles, such as ecolodges, restaurants offering local cuisine, and souvenir shops selling locally crafted products, is an important strategy to enhance the destination's competitiveness.

Currently, there is a small reception booth and toilets available for visitors who wish to clean up after enjoying the waterfall. Additionally, a simple resting area is provided for tourists.



Figure 3. Rest Facilities for Visitors

The development of tourism amenities at Curug Kedung Kudhu must carefully consider both the environmental carrying capacity and the socio-cultural dynamics of the local community. As emphasized by one participant:

*"In developing tourism amenities, we must maintain equilibrium with nature and local community wisdom. The development of tourism facilities must not compromise environmental integrity nor erode local cultural values."* (P4, Environmental Observer)

This perspective emphasizes the significance of implementing a holistic ecotourism approach, wherein tourism amenity development must be harmoniously aligned with environmental conservation and local cultural preservation (Ronald, 2005). The planning and management of amenities that actively incorporates community participation, considers ecological carrying capacity, and adopts sustainable architectural principles becomes paramount in establishing a balanced and sustainable ecotourism destination at Curug Kedung Kudhu.

### 3.3 Suboptimal Destination Governance: The Urgency of Institutional Strengthening

The Three theme that emerged is the suboptimal destination governance, which poses a challenge in the development of ecotourism at Curug Kedung Kudhu. Participants highlighted the lack of coordination among stakeholders and the ineffective role of POKDARWIS in managing the destination. One participant explained:

*"Coordination between government entities, POKDARWIS, and local communities remains inadequate. Each stakeholder appears to operate independently without clear synergistic integration. This significantly impedes ecotourism development."* (P1, Head of Tourism Division)

This finding underscores the critical importance of collaborative governance in ecotourism development (Keyim 2018; Ngo, Lohmann & Hales, 2018). The insufficient coordination and synergy among key actors impedes effective decision-making processes and the implementation of coherent strategies. Within the context of Curug Kedung Kudhu, institutional strengthening through the establishment of multi-stakeholder forums and enhancement of POKDARWIS capacity emerges as a crucial intervention to optimize destination governance.

Furthermore, the limited community participation in ecotourism management emerges as a significant governance challenge. One participant highlights:

*"Local communities have not been fully integrated into the decision-making processes and ecotourism management frameworks. Yet, active community participation remains essential to ensure ecotourism benefits translate effectively into community welfare."* (P4, Environmental Observer)

Community participation represents a fundamental principle in community-based ecotourism development (Masud et al, 2017; Mensah, 2017). Community engagement not only ensures equitable benefit distribution but also fosters a sense of ownership and responsibility towards destination sustainability (Archabald & Naughton-Treves 2001). Strengthening community participation through

empowerment initiatives, capacity enhancement programs, and the development of transparent benefit-sharing mechanisms emerges as a key imperative in optimizing ecotourism governance at Curug Kedung Kudhu.

### **3.4 Policy Recommendations: Multi-stakeholder Collaboration, Local Community Empowerment, and Destination Planning and Management Based on Sustainability Principles.**

The findings of this research reveal the complex nature of accessibility and amenity challenges in ecotourism development at Curug Kedung Kudhu. Infrastructure limitations, suboptimal destination governance, and restricted tourism amenities are interrelated factors influencing the sustainability of ecotourism development. A holistic, participatory approach grounded in ecotourism principles becomes imperative in addressing these challenges.

The theoretical implications of this research underscore the importance of adopting a multi-dimensional perspective in understanding ecotourism development challenges. These findings expand our understanding of the complex factors influencing ecotourism success, encompassing infrastructure, governance, and amenity aspects. This research also emphasizes the centrality of community participation and multi-stakeholder collaboration in realizing sustainable ecotourism.

From a practical perspective, this research highlights the urgency of strengthening partnerships between government entities, local communities, and the private sector in ecotourism development. Close and mutually beneficial collaboration is essential to address resource limitations and capacity constraints of individual actors. This research also underscores the importance of holistic ecotourism planning and management, where infrastructure, governance, and amenity aspects are integrated while considering the environmental and socio-cultural carrying capacity of local communities.

The limitations of this research include its focus on a specific case study and the qualitative approach employed. Further research could explore similar challenges across other ecotourism destinations to gain broader comparative insights. Quantitative approaches or mixed methods could also be considered to strengthen findings and measure related variables more systematically.

Nevertheless, this research provides a crucial foundation for more holistic and sustainable ecotourism development at Curug Kedung Kudhu. By addressing accessibility challenges, strengthening destination governance, and developing tourism amenities aligned with ecotourism principles, Curug Kedung Kudhu has the potential to become a model of ecotourism development that optimally benefits local communities and environmental conservation. Lessons from this case study can also be applied to other ecotourism destinations facing similar challenges, while considering the specific context of each destination.

This study contributes to the existing body of literature on ecotourism by specifically addressing the challenges of accessibility and amenities in early-stage ecotourism destinations, particularly within the Indonesian context, which has been relatively underexplored in previous research. While earlier studies have examined various aspects of ecotourism development, such as community participation and destination governance, they often lacked a focused analysis on the specific barriers related to infrastructure and visitor amenities. By employing a qualitative interpretative approach, this research not only highlights the unique challenges faced by Curug Kedung Kudhu but also emphasizes the importance of a holistic understanding of local dynamics and context-specific strategies. This nuanced perspective enhances the theoretical framework surrounding ecotourism development and provides practical insights that can inform future studies and policy-making efforts aimed at fostering sustainable tourism practices in similar contexts.

## **4. CONCLUSION**

This research successfully reveals the complexities of accessibility and amenity challenges in the development of ecotourism at Curug Kedung Kudhu through a qualitative interpretive approach grounded in constructivist epistemological principles. The study identifies three main themes

representing critical barriers: infrastructure limitations, restricted tourism amenities, and suboptimal destination governance. These findings emphasize the multidimensional nature of ecotourism challenges, encompassing physical, institutional, and experiential aspects. The research also highlights the importance of adopting a holistic perspective in understanding ecotourism dynamics, the role of community participation in sustainable tourism development, and the urgency of multi-stakeholder collaboration in addressing complex challenges. From a practical standpoint, the study calls for strengthening partnerships between government entities, local communities, and the private sector, as well as integrated planning and management that considers local environmental and socio-cultural factors. Recommended strategies include establishing regular stakeholder meetings, creating joint action plans, and developing shared resource management frameworks. The insights gained from this case study can be applied to other ecotourism destinations facing similar issues while considering their unique contexts. Aspects of infrastructure development, collaboration strategies, or policy impact evaluation are crucial for enhancing the overall effectiveness of ecotourism initiatives and ensuring sustainable development in the region. Future research should prioritize innovative strategies to address critical infrastructure limitations, the most pressing barrier to sustainable ecotourism at Curug Kedung Kudhu, encouraging scholars to explore public-private partnerships, community-based infrastructure management, and sustainable financing options. Additionally, effective collaboration strategies and governance frameworks are essential for improving stakeholder coordination in ecotourism management, while longitudinal studies assessing the impact of specific policies and management strategies will provide valuable insights into the long-term success of ecotourism initiatives, contributing to the development of informed and practical strategies for sustainable management.

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