Volume 1 Issue 1 Year 2026 Pages 1-5
ISSN XXXX-XXXX | e-ISSN XXXX-XXXX
https://journal.polteksahid.ac.id/ | DOI:

Innovations And Challenges In Ecotourism Management Toward Green Tourism At Tahura Djuanda Bandung

Velicya Tarisha Cheung[1] ,Budi Setiawan[2]

*P*rogram Studi Pariwisata, Fakultas Pariwisata dan Seni Kuliner, Universitas Pradita

*Correspondence to: *Hospitality and Tourism Department, Universitas Pradita, Tangerang, Banten 15810, Indonesia, 081210214073 and velicyatarisha@student.pradita.ac.id*.

Abstract: This study was motivated by the implementation of sustainable ecotourism management at Ir. H. Djuanda Forest Park, Bandung, which functions as a conservation, educational, and recreational area with high visitor intensity. The urgency lies in maintaining a balance between environmental preservation, community empowerment, and tourist satisfaction. The purpose of this study was to identify forms of innovation in ecotourism management and the challenges faced in achieving green tourism. A descriptive qualitative method was used through field observations, in-depth interviews with site managers, tour guides, micro and small business operators, and tourists, as well as documentation analysis. The results indicate the implementation of several innovations, including digital information systems, educational ecotourism programs, green infrastructure development, empowerment of local micro and small enterprises, wellness tourism activities, and the application of circular economy practices. However, key challenges remain, such as limited supporting facilities, low environmental awareness among visitors, suboptimal community participation, and insufficient coordination among stakeholders. This study contributes practical insights into innovation-based ecotourism management by highlighting integrated strategies that support environmental sustainability while strengthening community roles and enhancing visitor experiences toward the realization of green tourism at conservation-based tourist destinations.
Keywords: challenges, ecotourism, green tourism, innovation, Tahura Djuanda

Article info: Submitted | Revised | Accepted

Recommended citation: APA Style

INTRODUCTION

Bandung, widely known as the "City of Flowers," is one of Indonesia's most prominent tourism destinations, particularly for nature-based tourism, supported by scenic landscapes, pleasant climate, and high biodiversity (Kemenparekraf, 2024; Selano & Suwinarno, 2021). Nature tourism provides cultural and ecological benefits while offering recreational value for visitors. According to Zulfikar and Ernawadi (2024), nature-based tourism encourages environmental conservation and promotes harmonious relationships between humans and nature. Ecotourism, as a tourism approach that integrates environmental preservation, community empowerment, and environmentally responsible travel experiences, is therefore considered an effective model for sustainable tourism development (Nurrahman et al., 2024; Musadad et al., 2020). Through ecotourism, destinations are expected to maintain economic viability while safeguarding environmental sustainability and community welfare.

One of Bandung's key ecotourism destinations is Ir. H. Djuanda Forest Park (Tahura Djuanda), which possesses rich biodiversity, significant ecological functions as an urban green lung, and strong historical and cultural values. In addition to serving as a recreational area, Tahura Djuanda functions as an environmental education and research site that is accessible to the public (Yusuf et al., 2023). Supporting resources such as natural assets, public facilities, management systems, and community participation further strengthen its potential as a sustainable ecotourism destination (Ladjudo et al., 2021). However, despite its high potential, tourism management at Tahura Djuanda has not been fully optimized. Problems related to limited cross-stakeholder coordination and insufficient innovation in developing tourism attractions continue to reduce visitor satisfaction and hinder the achievement of long-term sustainability. Consequently, an integrated and well-directed management approach involving destination managers, local communities, and visitors is necessary to enhance overall performance.

Several innovations have been introduced in the management of Tahura Djuanda, including community involvement initiatives, the promotion of nature-based micro and small enterprises, and the implementation of environmental education programs. Additional innovative practices include the development of digital interpretive tourism trails utilizing Quick Response codes, citizen research tourism programs that enable visitors to conduct simple ecological observations, and the strengthening of environmentally friendly local products through green destination labeling. These innovations are intended to enrich visitor experiences while simultaneously increasing environmental awareness and educational value. Nonetheless, the process of achieving green tourism remains constrained by multiple challenges.

Low levels of tourist awareness regarding environmental conservation persist, as reflected in improper waste disposal behavior, coupled with weak waste management systems within natural tourism settings (Febrianti & Akliyah, 2023). Service quality limitations among tour guides also affect visitor perceptions and satisfaction (Syawalina et al., 2022). Furthermore, inter-stakeholder collaboration has not yet been effectively implemented, resulting in fragmented management practices (Ladjudo et al., 2021). Previous studies emphasize that continuous innovation is required to safeguard environmental quality and maintain destination competitiveness, including improvements in eco-friendly waste management, green product labeling, and smart digital infrastructure (Sari et al., 2023). Firman et al. (2023) also argue that strengthening eco-tourism processes plays a critical role in supporting national sustainable tourism development while minimizing negative environmental impacts. Moreover, effective and creative collaboration among government bodies, local communities, tourism operators, and private sectors is essential for sustaining ecotourism competitiveness (Jamil & Bagja, 2021).

Although these studies provide valuable insights, empirical research that simultaneously examines management innovations and practical challenges, particularly within urban forest park

ecotourism destinations such as Tahura Djuanda, remains limited. Most existing studies focus on either community empowerment or environmental conservation independently, without offering an integrated assessment of how innovation initiatives interact with on-site management barriers. This research addresses this gap by providing a comprehensive qualitative analysis of both innovations and challenges affecting ecotourism management at Tahura Djuanda. Accordingly, this study seeks to answer two primary research questions: (1) What types of innovations have been implemented in the ecotourism management of Tahura Djuanda? and (2) What challenges are faced by destination stakeholders in developing sustainable ecotourism toward green tourism? The main objective of this study is to identify and analyze innovations and managerial challenges to support the implementation of green tourism. The findings are expected to contribute theoretically to the development of sustainable tourism management frameworks (Anwari et al., 2024; Malini et al., 2025) and offer practical recommendations for destination managers to improve innovation-based strategies through strengthened stakeholder collaboration.

METHODS

Setting (Research Design, Location, Population, and Sample)

This study employed a descriptive qualitative research design to explore the phenomena of ecotourism management at Ir. H. Djuanda Forest Park (Tahura Djuanda), Bandung (Adiyoso, 2022). A qualitative approach was chosen due to the dynamic and multi-stakeholder nature of ecotourism, involving destination managers, tour guides, local communities, micro and small tourism enterprises, and visitors. This method allows for in-depth exploration of experiences, perceptions, and interactions that cannot be fully captured through quantitative measurements alone. Descriptive qualitative research is particularly suitable for community-based tourism studies, as it effectively describes intangible issues such as community empowerment, conservation efforts, and local wisdom (Prasetyo & Detin, 2023). Qualitative ecotourism research also facilitates understanding of interactions among environmental, social, and cultural management actors within integrated tourism systems (Rizki et al., 2025; Samal & Dash, 2024).

The research location was Tahura Djuanda, located in Bandung, West Java, covering approximately 590 hectares divided into three main zones: conservation, education, and recreation. The target population consisted of all stakeholders directly involved in ecotourism activities within the park, including park managers, tour guides, local micro and small business operators, and tourists. On-site conditions indicated approximately four active micro and small enterprises and an average of 48 visitors per day. As these groups actively participate in ecotourism processes, they were considered relevant research subjects.

The sampling technique used was purposive sampling, defined as the non-probability selection of informants based on specific criteria aligned with research objectives (Sugiyono, 2024; Abubakar, 2021). Informant categories were established to ensure representation of key stakeholder groups, including two representatives of micro and small enterprises (from four active units), thirty-five tourists (from the daily average of forty-eight visitors), two Tahura Djuanda management staff members, and two tour guides (Islahuddin & Ismail, 2024).

Instruments/Measures (Variables and Methods)

This study focused on two primary analytical variables:
(1) Ecotourism management innovations, covering the development of new programs, educational tourism methods, and the utilization of green and digital technologies (Salsabila et al., 2024); and
(2) Management challenges toward green tourism, including limitations in green infrastructure facilities, workforce constraints, insufficient stakeholder coordination, and visitor pressure.

To measure these variables, semi-structured interview guidelines were developed, supported by systematic observation checklists and document analysis protocols. The semi-structured interview format allowed researchers to follow pre determined thematic questions while enabling probing of emergent issues during field engagement (Ardiansyah et al., 2023). Observations were conducted using standard field note templates to record physical site conditions, visitor activities, and stakeholder interactions.

Data Collection and Analysis

Data Collection Techniques

Data collection was conducted using three primary qualitative techniques: **observation, interviews, and documentation review**, which are standard methods in qualitative tourism research (Sinaga, 2023).

Observation was used to capture real-time conditions of the physical environment, recreational activities, visitor behavior, and inter-stakeholder interactions at Tahura Djuanda. This technique enabled the documentation of naturally occurring phenomena that may not be fully expressed through interviews, thereby increasing data accuracy and credibility (Gabriella et al., 2025; Pradana, 2024).

Semi structured interviews were conducted with destination managers, tour guides, local community members, micro and small business operators, and tourists to explore perceived innovations and management challenges. This approach allowed flexibility to adjust questions according to situational contexts, facilitating in depth and interactive data exploration (Ardiansyah et al., 2023). Immersive interviewer respondent engagement strengthened the understanding of lived experiences relevant to ecotourism development (Kathleen, 2024). The theoretical foundation for qualitative interviews follows the framework of Denzin et al. (2023), which identifies interviews as a central pillar of interpretive qualitative inquiry.

Documentation analysis included official management reports, scientific publications, policy documents, field photographs, and tourism-related media content. These sources were used to corroborate primary data obtained from interviews and observations, enhancing research validity through triangulation (Millah et al., 2023).

Data Analysis Techniques

Data analysis followed the **interactive analysis model of Miles and Huberman**, in which analytical processes occur continuously and iteratively until data saturation is reached (Safarudin et al., 2023). Three main stages were applied:

Data Reduction involved selecting, simplifying, and focusing raw information gathered through observations, interviews, and documents. Relevant data were categorized into thematic clusters aligned with research variables, while irrelevant data were excluded.

Data Display was conducted by organizing reduced data into narrative descriptions, matrices, and tables to facilitate the identification of relationships, patterns, and trends across informant groups. This process enabled systematic comparison of stakeholder perspectives regarding innovation performance and management barriers.

Conclusion Drawing and Verification consisted of synthesizing recurring themes through repeated interpretive processes and cross source validation. Findings were confirmed via data triangulation to ensure scientific reliability, consistency, and representative reflection of field conditions, thereby contributing meaningful insights to sustainable ecotourism development practices.

RESULT AND DISCUSSION

3.1 Results

3.1.1 Participant Characteristics

The findings presented in this section are based on field observations and in-depth interviews conducted at Ir. H. Djuanda Forest Park (Tahura Djuanda) in Bandung. The study involved forty-one informants, consisting of two park managers, two tour guides, two local micro and small enterprise (SME) operators, and thirty-five visitors who had visited Tahura at least once.

Table 1. Respondents' Demographic Characteristics

No	Informant Category	Name(s)	Age Range
1	Park Management	Sonya, Nadira	25–26
2	Tour Guides (Local Community)	Dinantrista, Adam	30–35
3	Local SMEs (Community-Based Ecotourism Actors)	Aini, Sinta	46–55

Source :Research Informants (Researcher, 2025)

Tahura Djuanda is a protected forest and conservation area located in Dago Pakar, Bandung, functioning simultaneously as a **nature conservation site, educational tourism destination, and recreational area**. Main attractions include trekking trails, historical caves (Dutch Cave and Japanese Cave), and Curug Omas waterfall. The area is also used for ecological research, flora–fauna conservation, and local economic development through tourism and SMEs.

3.1.2 Overview Of Ecotourism Management Context

Field observations and interviews indicate that Tahura Djuanda is gradually integrating the principles of green tourism through several dimensions, including digitalization of services and information, environmental education programs, community-based economic initiatives, wellness-oriented nature activities, and progressive improvements in waste management. These elements reflect an emerging management orientation that seeks to balance conservation, visitor experience, and local community welfare. At the same time, the data also reveal a number of constraints, such as limited facilities, uneven digital infrastructure, relatively low visitor awareness regarding conservation, and weak coordination among multiple stakeholders involved in the area.

One park manager described the main difficulty of managing Tahura as both a conservation and tourism site. She explained that the biggest challenge is raising visitor awareness because many people still perceive the forest only as a recreational site rather than a conservation area. This is evident from the fact that some visitors continue to litter, smoke or vape in sensitive zones, and feed wild monkeys. According to her, such behavior not only damages facilities and the natural environment but also changes the animals' behavior and can make them more aggressive and dependent on humans. This statement illustrates the core tension between conservation objectives and tourism pressures, which becomes a key theme for the subsequent discussion.

3.2.1 Innovations In Ecotourism Management Toward Green Tourism

The results show that Tahura Djuanda has initiated a series of innovations aligned with green tourism principles. These innovations can be grouped into several main aspects, namely smart tourism and digitalization, green infrastructure and renewable energy, edu-ecotourism, local creative economy and community-based tourism, wellness and mindfulness tourism, as well as waste management and circular economy.

In terms of smart tourism and digitalization, Tahura Djuanda has begun to adopt digital solutions such as an e-ticketing system and the use of Quick Response (QR) codes on information boards. E-ticketing is used to integrate booking, verification, and digital payment, which helps to accelerate services, reduce the use of paper, and provide more accurate digital records of visitor numbers. The use of QR codes on information boards enables visitors to access additional explanations about flora, fauna, or specific sites through their mobile devices. These efforts are still in a transitional phase, but they demonstrate a clear direction toward smart tourism, consistent with the literature that emphasizes the role of digital technology in enhancing environmental literacy, supporting paperless management, and improving destination efficiency.



Figure 1:Public Toilet Facilities Developed in the Tahura Djuanda Area as Part of Green Infrastructure (Researcher, 2025)

Regarding green infrastructure and renewable energy, management has tried to gradually introduce environmentally friendly facilities. Among the planned measures are the installation of solar-powered lighting along trekking routes and in public areas, the development of eco-toilets with water recycling systems, and the construction of trekking paths using recycled materials. The development of public toilets within the forest shows how the park seeks to provide basic facilities without damaging the ecological balance. Simple building designs that blend with the surrounding environment support sustainability principles while maintaining visitor comfort. These efforts echo previous studies that highlight the importance of zoning and green infrastructure in ensuring the long-term sustainability of nature-based tourism destinations.

Edu-ecotourism has also emerged as an important innovation dimension at Tahura Djuanda. The park positions itself as a nature-based environmental education center by organizing interpretive guiding programs, especially for school groups and young visitors. Through guided walks, visitors are introduced to local flora and ecosystems, with the help of interpretive boards attached to trees and specific spots. Plans for developing structured programs such as Green Workshops, Forest School activities, and historical-conservation interpretation tours further reinforce this vision. These

programs are designed to combine recreation with learning so that visitors not only enjoy the scenery but also acquire new knowledge and pro environmental attitudes. This finding is in line with the view that integrating environmental education into nature-based recreation can significantly improve tourists' environmentally responsible behavior.

The development of local creative economy and community-based tourism also forms a core part of innovation at Tahura Djuanda. Local communities are involved as food vendors, souvenir sellers, and local guides. They offer products that reflect local identity and green tourism values, such as forest honey, organically grown coffee, and herbal teas derived from non-timber forest products. These activities provide additional income opportunities for surrounding residents while enriching the tourist experience with local culture and stories. This condition supports arguments that community participation in ecotourism can strengthen cultural preservation, improve visitor experience, and increase local support for conservation.

In addition, Tahura Djuanda has potential to develop wellness and mindfulness tourism that has become increasingly popular after the pandemic. Observations show that trekking activities are widely used by visitors for exercise, relaxation, and mental restoration. Clean air, cool temperature, and the calming forest atmosphere make Tahura an ideal place for nature based wellness activities. The park has the opportunity to formalize wellness packages such as forest yoga, forest bathing, guided mindfulness walks, riverside meditation, and digital detox experiences. These activities would promote physical health and mental well-being while encouraging a deeper connection between visitors and nature.

Finally, waste management at Tahura Djuanda is being developed with reference to circular economy principles. Management has tried to encourage waste reduction, sorting, and recycling by providing separate bins for different types of waste, planning composting programs, and testing eco-reward schemes that incentivize environmentally friendly behavior among visitors. For example, during certain events, refillable water gallon stations are provided to reduce reliance on single-use plastic bottles. The effectiveness of these programs depends heavily on environmental education, clear signage, and active supervision by guides and staff. When implemented consistently, circular economy-based waste management can reduce the volume of waste sent to landfills, increase recycling rates, and support the image of Tahura as a model green tourism destination that delivers both recreational and educational benefits.

Taken together, these innovation dimensions demonstrate how green tourism theory is being operationalized at Tahura Djuanda. Digitalization and smart tourism act as enablers of paperless services and environmental education; green infrastructure and renewable energy address resource optimization and emission reduction; edu-ecotourism provides a mechanism for learning and conservation-oriented behavior change; community empowerment and creative economy ensure social justice and local economic value; wellness and mindfulness tourism contribute to visitor well-being; and circular waste management reduces ecological footprints.

3.2.2 Challenges In Ecotourism Management Toward Green Tourism

Alongside the innovations, the study reveals several key challenges that hinder the realization of fully sustainable green tourism at Tahura Djuanda. These challenges can be grouped into five main categories, namely limitations of infrastructure and technology, visitor awareness and behavior, local capacity and community engagement, management and coordination, and environmental conservation and carrying capacity.

First, limitations of infrastructure and technology appear in the uneven distribution of eco-friendly facilities and digital systems. Although e-ticketing has been introduced at the main entrance, supporting facilities such as eco toilets, waste collection points, and interpretive boards remain scarce in certain trekking corridors, especially along the route to Japanese Cave and areas further from the main gate. This situation reduces the comfort of visitors, weakens in situ educational functions, and limits the potential to integrate field data into comprehensive digital management systems. The condition reflects that Tahura is still in a transitional phase toward fully implemented smart sustainable tourism and requires additional investment in green infrastructure.

Second, visitor awareness and behavior pose persistent challenges. Interviews with managers and guides indicate that some visitors still engage in behaviors that are not compatible with conservation goals, such as littering, smoking or vaping in conservation zones, and feeding wild monkeys. Such actions not only pollute the environment and damage facilities but also threaten wildlife by changing their natural behavior and making them dependent and sometimes aggressive. This situation shows that infrastructure improvements must be accompanied by stronger environmental interpretation, clear regulations, consistent enforcement, and interactive educational campaigns to shape long-term responsible behavior among visitors.

Third, local capacity and community engagement are still limited in the context of formal destination management. While local residents have been involved as vendors and tour guides, their roles in decision making processes, conservation programs, and strategic planning remain partial. The community is largely positioned as service providers rather than full partners in ecotourism governance. To move toward a more robust model of community-based ecotourism, there is a need for systematic capacity-building programs, including training, mentoring, and better access to eco-friendly innovation and financial support. Strengthening local roles would help ensure that social and economic benefits are distributed more fairly and that local communities develop a stronger sense of ownership over conservation efforts.

Fourth, management and coordination among stakeholders are still fragmented. The limited number of park staff constrains effective supervision, especially during weekends and public holidays when visitor numbers spike. In addition, collaboration between park management, local government, private actors, academic institutions, and community organizations has not yet been fully institutionalized. As a result, many initiatives remain project-based and are not supported by long-term integrated planning. To improve governance, it is necessary to establish regular multi-stakeholder forums, formal partnership agreements, additional staff or volunteer schemes, and clear coordination mechanisms that integrate tourism, conservation, and community development agendas.

Fifth, environmental conservation and carrying capacity are increasingly pressing issues due to the growth of visitor numbers. Observations reveal signs of trail erosion, disturbances to flora and fauna, and river pollution from litter in certain areas. If left unmanaged, these impacts may degrade the very environmental qualities that attract visitors in the first place. Therefore, carrying capacity-based policies are essential. Such policies may include limiting visitor numbers in sensitive zones, implementing a reservation or quota system during peak periods, establishing zoning for different types of activities, and regularly monitoring ecological indicators. Enhanced coordination among stakeholders is required to ensure that conservation and tourism development move in a balanced and mutually reinforcing direction.

3.3 Synthesis Of Results And Implications

In synthesis, the results indicate that Tahura Djuanda is undergoing a gradual transformation toward a green tourism–oriented ecotourism destination. The park has initiated meaningful innovations in smart tourism, green infrastructure, environmental education, community empowerment, wellness-oriented activities, and circular waste management. These efforts are consistent with contemporary sustainable tourism discourse and provide a concrete example of how theoretical concepts of ecotourism and green tourism can be applied in a real conservation-based destination.

At the same time, the study underscores that innovation alone is not sufficient to guarantee long-term sustainability. Structural challenges related to infrastructure gaps, limited digital integration, low visitor awareness, insufficient local capacity, fragmented governance, and increasing ecological pressure must be addressed systematically. The findings suggest that the success of Tahura Djuanda as a green tourism destination will depend on its ability to strengthen environmental education, enhance visitor management, empower local communities, invest in green and digital infrastructure, and implement carrying capacity–based conservation policies.

Through this combination of innovations and strategic improvements, Tahura Djuanda has the potential to serve not only as a flagship ecotourism area for Bandung but also as a reference model for other conservation-based destinations in Indonesia that aim to integrate environmental sustainability, community welfare, and high-quality visitor experiences within a coherent green tourism framework.

CONCLUSION

Based on the results of field observations and in-depth interviews, this study confirms that Ir. H. Djuanda Forest Park (Tahura Djuanda) represents an important ecotourism area that continues to develop management practices oriented toward green tourism. Management innovations have been progressively applied, including the adoption of smart tourism through information digitalization, the development of eco-friendly infrastructure, the design of edu ecotourism programs integrating recreation and environmental education, the involvement of local communities through micro and small enterprises (SMEs), the initiation of wellness and mindfulness tourism activities, and the implementation of waste management systems based on circular economy principles. Collectively, these initiatives demonstrate a clear transformation toward a destination that emphasizes sustainability, environmental awareness, educational value, and social inclusivity.

However, the study also identifies significant challenges that hinder the optimal realization of green tourism practices. These challenges include limited supporting facilities and partial utilization of digital technology, low levels of environmental awareness among some visitors, restricted participation of local communities in decision-making and management roles, weak inter-stakeholder coordination, and increasing pressure on the environmental carrying capacity due to high visitation intensity. These constraints indicate that technological and programmatic innovations alone are insufficient without strengthened governance mechanisms and broader stakeholder engagement. The long-term success of Tahura Djuanda as a green tourism destination therefore depends on the ability of managers and related stakeholders to collaboratively address these challenges through integrated planning, consistent policy enforcement, and sustained community empowerment.

REFERENCES

Abubakar, R. (2021). *Pengantar metodologi penelitian* (1st ed.). Suka Press UIN Sunan Kalijaga. https://digilib.uin-suka.ac.id/id/eprint/42716/1/PENGANTAR%20METODOLOGI%20PENELITIAN.pdf

Adams, K. M. (2024). Tourism ethnography and tourism geographies. *Tourism Geographies, 27*(3), 713–724. https://doi.org/10.1080/14616688.2024.2402985

Adiyoso, M. (2022). Analisis strategi pengembangan destinasi wisata Taman Hutan Raya Ir. H. Djuanda Dago. *Warta Pariwisata, 20*(1), 11–15. https://doi.org/10.5614/wpar.2022.20.1.03

Anwari, P. J., Kurnia, I., & Bonanza, O. (2024). Motivasi pengunjung di Taman Hutan Raya Ir. H. Djuanda Bandung Jawa Barat. *Jurnal ALTASIA, 6*(1), 1–32. https://doi.org/10.37253/altasia.v6i1.7358

Ardiansyah, Risnita, & Jailani, M. S. (2023). Teknik pengumpulan data dan instrumen penelitian ilmiah pendidikan pada pendekatan kualitatif dan kuantitatif. *IHSAN: Jurnal Pendidikan Islam, 1*(2), 1–9. https://ejournal.yayasanpendidikandzurriyatulquran.id/index.php/ihsan/article/view/57

Bian, D., Yang, X., Wu, F., Babuna, P., Luo, Y., Wang, B., & Chen, Y. (2022). A three-stage hybrid model investigating regional evaluation, pattern analysis and obstruction factor analysis for water resource spatial equilibrium in China. *Journal of Cleaner Production, 331*, 1–10. https://doi.org/10.1016/j.jclepro.2021.129940

Chenmei, L., Zuo, Y., Xu, S., Law, R., & Zhang, M. (2023). Dimensions of the health benefits of wellness tourism: A review. *Frontiers in Psychology, 13*, 1–23. https://doi.org/10.3389/fpsyg.2022.1071578

Gabriella, A., Marion, G., Windiana, E., Syabina, Z. L., & Setiawan, B. (2025). PKM pendampingan marketing UMKM Pecel Lele OMA. *Jurnal Ikraith Abdimas, 9*(2), 59–67. https://doi.org/10.37817/ikra-ithabdimas.v9i2

Gianna, M. (2023). Rethinking interpretation to support sustainable tourist experiences in protected natural areas. *Tourism Interpretation Journal, 28*(1), 76–94. https://doi.org/10.1177/10925872231158988

Gumede, T. K., & Nzama, A. T. (2021). *Approaches toward community participation enhancement in ecotourism* (11th ed.). IntechOpen. https://doi.org/10.5772/intechopen.100295

Hanum, F., Suganda, D., Muljana, E. B., Endyana, C., & Rachmat, H. (2020). Konsep smart tourism sebagai implementasi digitalisasi di bidang pariwisata. *Journal of Sustainable Tourism Research, 3*(1), 14–17. https://doi.org/10.24198/tornare.v2i2.25787

Hidayat, H., Hamzah, A. H. P., & Hasrianti, H. (2024). Implementasi konsep ekonomi sirkular untuk mewujudkan industri karet remah berkelanjutan. *Jurnal Green Growth dan Manajemen Lingkungan, 14*(1), 1–15. https://doi.org/10.21009/jgg.141.001

Islahuddin, & Ismail, W. N. A. T. (2024). Challenges and opportunities for implementing innovative green tourism practices: Evidence from Indonesia. *Planning Malaysia Journal, 22*(6), 467–482. https://doi.org/10.21837/pm.v22i34.1642

Jamil, R. S., & Waluya, B. (2021). Pengaruh elemen ekowisata terhadap keputusan berkunjung wisatawan ke Taman Hutan Raya Ir. H. Djuanda. *Jurnal Geografi GEA, 16*(1), 1–15. https://doi.org/10.17509/gea.v16i1.3471.g2457

Kurniawan, R. (2024). Sustainable tourism development: A systematic literature review of best practices and emerging trends. *International Journal of Multidisciplinary Approach Sciences and Technologies, 1*(2), 97–119. https://doi.org/10.62207/8qsmcg37

Ladjudo, N. F. I., Rachman, I., & Muis, H. (2021). Strategi pengembangan wisata Tahura. *Jurnal Pasca Untad, 9*(1), 45–61. https://doi.org/10.22487/ms26866579.2021.v9.i1.pp.45-61

Malini, L. H., Natalia, D., & Choules, M. A. (2025). Pengaruh fasilitas glamping dan elemen ekowisata. *Jurnal Ilmiah Ilmu Pendidikan, 8*(2), 1901–1907.

Musadad, N., & Saeroji, A. (2020). Penggunaan istilah wisata alam dan ekowisata. *Journal of Tourism Destination and Attraction, 8*(2), 147–154. https://doi.org/10.35814/tourism.v8i2.1664

Nurrahaman, R. M., Surman, W. R., Budiarti, T., Fatimah, S., Raditya, D. D., & Veranita, M. (2024). Implementasi strategi pengembangan wisata alam Kawah Kamojang. *Journal of Governance and*

Public Administration, 1(2), 213–219.
https://doi.org/10.59407/jogapa.v1i2.631

Rizki, A. H., Cheung, V. T., Karangan, A. Y., Fernando, D., & Setiawan, B. (2025). Implementasi studi kualitatif. *Journal of Tourism and Interdisciplinary Studies, 5*(1), 203–214.
https://doi.org/10.51713/jotis.2025.5178

Safarudin, R., Zulfamana, Kustati, M., & Safarudin, N. (2023). Penelitian kualitatif. *Journal of Social Science Research, 3*(2), 1–15.

Salsabila, E., Wulandari, G. A., & Riski, G. A. A. (2024). Peluang dan tantangan ekowisata. *Jurnal Bisnis dan Manajemen, 18*(1), 40–51.
https://doi.org/10.19184/bisma.v18i1.47447

Samal, R., & Dash, M. (2024). Stakeholder engagement in advancing sustainable ecotourism. *Discover Sustainability, 5*(3), 1–21.
https://doi.org/10.1007/s43621-024-00233-2

Sari, A. F. F., Agustin, D. T., Lavenia, Andari, R., & Khosihan, A. (2023). Pengaruh elemen ekowisata terhadap motivasi berkunjung. *Journal of Tourism Research, 5*(2), 383–398.
https://doi.org/10.53050/ejtr.v5i02.712

Selano, L. A., & Nadjamuddin, S. (2021). Aplikasi pencarian objek wisata Bandung Raya berbasis mobile. *Jurnal Informatics, 8*(2), 35–47.
https://doi.org/10.57103/informatics.v8i2.59

Sinaga, D. (2023). *Metodologi penelitian kualitatif*. Uki Press.

Soepardi, A. N., S. W., G. H., & M., A. D. (2025). Analisis produk wisata Tahura Ir. H. Djuanda. *Jurnal Mekar, 4*(1), 1–6.
https://doi.org/10.59193/jmr.v4i1.382

Sugiyono. (2024). *Metode penelitian kuantitatif, kualitatif, dan R&D* (2nd ed.). Alfabeta.

Syawalina, L., Satriadi, Y., & Basarah, M. F. (2022). Persepsi wisatawan terhadap layanan Tahura Djuanda. *Jurnal Kajian Bahasa dan Pariwisata, 9*(2), 129–143.
https://doi.org/10.34013/barista.v9i2.276

Yusuf, M., Nursa, M., & Aji, I. M. L. (2023). Potensi pengembangan ekowisata pada kawasan Tahura Nuraksa. *Journal of Forest Science Avicennia, 6*(1), 1–15.
https://doi.org/10.22219/avicennia.v6i1.22046

Zulfikar, M. Z., & Ernawadi, Y. (2024). Natural soundscape dan destination loyalty wisatawan Tahura Djuanda. *Jurnal Administrasi dan Manajemen, 14*(3), 359–367.
https://doi.org/10.52643/jam.v14i3.3839