

The Role of Ecotourism in Improving the Economic and Environmental Welfare of Local Communities in Bali

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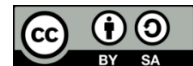
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ABSTRACT

This study investigates the role of ecotourism in enhancing the economic and environmental welfare of local communities in Bali. Using a quantitative research design, data were collected from 150 respondents actively engaged in ecotourism activities through a structured questionnaire with a Likert scale (1–5). The data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS 3) to test the hypothesized relationships. The results show that ecotourism has a positive and significant effect on economic welfare, reflected in increased income, job opportunities, and local business growth. Similarly, ecotourism significantly improves environmental welfare by encouraging conservation practices, sustainable resource management, and environmental awareness. The model explains 26.2% of the variance in economic welfare and 23.6% in environmental welfare, indicating moderate explanatory power. These findings highlight that ecotourism, when integrated with community participation and cultural traditions, can serve as a strategic tool for sustainable development in Bali. This research provides valuable implications for policymakers, tourism stakeholders, and local communities to strengthen ecotourism initiatives that balance economic growth with ecological preservation.

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1. INTRODUCTION

Tourism is one of the most important sectors contributing to Indonesia's economic development, with Bali recognized as the country's leading tourism destination. In recent years, there has been a growing shift toward sustainable tourism practices, particularly ecotourism, which emphasizes environmental preservation, cultural appreciation, and community participation. Unlike mass tourism, which often generates high economic benefits at the cost of

environmental degradation, ecotourism offers a more balanced model by integrating economic growth with ecological sustainability and community empowerment. The shift towards sustainable tourism practices in Bali, Indonesia, particularly ecotourism, is a response to the challenges posed by mass tourism, which often leads to environmental degradation and cultural commodification. Ecotourism offers a balanced model by integrating economic growth with ecological sustainability and community empowerment, and this approach

is increasingly being adopted in Bali, where traditional values and local wisdom play a crucial role in promoting sustainable tourism practices. The implementation of sustainable tourism is supported by the "Decarbonization Roadmap for the Tourism Sector" in Bali, which emphasizes balancing economic growth with environmental preservation and cultural respect, underpinned by traditional values like Tri Hita Karana [1], while green tourism based on local wisdom is promoted through statutory regulations that ensure resource management while maintaining cultural integrity and ecological biodiversity [2]. Despite these efforts, challenges remain, such as uneven distribution of tourism benefits, income inequality, and heavy reliance on tourism for Bali's economy [1], with the dominance of neoliberal economic principles in Indonesian tourism leading to environmental degradation and social inequalities, thereby necessitating a shift towards alternative economic models [3]. In this context, ecotourism plays a vital role by significantly contributing to local economies through sustainable livelihoods, capacity building, and entrepreneurship, particularly in rural and remote areas [4], while community-based ecotourism enhances economic and social welfare and simultaneously promotes environmental conservation through the active involvement of tourists, local communities, and stakeholders [5].

Bali, with its unique natural landscapes, cultural heritage, and strong community traditions, has significant potential for ecotourism development, as local communities are increasingly involved in village-based tourism, agro-tourism, and conservation-based tourism that not only provide additional income and employment opportunities but also encourage the preservation of local culture and natural resources. Ecotourism initiatives, which leverage Bali's distinctive landscapes and cultural heritage, are designed to enhance both economic and environmental welfare, yet their overall impact requires further empirical investigation. Economically,

ecotourism has improved local welfare by creating jobs and new business opportunities, as seen in the Kuta Beach area where ecotourism significantly contributed to local economic growth through employment and entrepreneurship [6], while community-based tourism (CBT) in destinations such as Pandawa Beach and Tanah Lot has empowered local communities by ensuring a substantial portion of tourism benefits remain within the community [7]. From an environmental and cultural perspective, initiatives like Keramas Park integrate ecotourism principles by promoting environmental education and cultural activities to preserve traditions and ecosystems [8], and systematic reviews affirm the role of ecotourism in safeguarding cultural heritage and encouraging sustainable practices [9]. However, challenges persist, as excessive tourism can lead to environmental degradation and cultural shifts, with Kuta Beach experiencing habitat destruction and cultural changes due to growing visitor pressure [6], while broader concerns such as over-tourism and socioeconomic disparities highlight the need for careful management to ensure that Bali's ecotourism contributes to truly sustainable development [9].

Previous studies have emphasized that ecotourism positively influences local livelihoods by enhancing income sources, creating jobs, and stimulating small business growth, while simultaneously fostering environmental awareness through conservation practices, reduced resource exploitation, and sustainable land use. Ecotourism has been recognized as a significant contributor to sustainable development by providing economic benefits such as job creation, income generation, and the stimulation of small businesses, alongside promoting conservation and sustainable practices. For instance, ecotourism contributes to economic growth in regions like Kuruva Dweep, Wayanad, and Kit Mikayi, Kenya [10], [11], and offers non-consumptive revenue sources and fundraising for conservation that support local economies without depleting natural

resources [12]. The involvement of local communities further enhances livelihoods through wealth generation and the strengthening of social networks [11]. On the environmental side, ecotourism promotes conservation by funding and raising awareness about protecting natural habitats and wildlife [13], while encouraging sustainable practices such as traveling by non-polluting means and engaging with local communities to minimize ecological impact [12]. Moreover, educating tourists, particularly domestic ones, is vital to ensure adherence to eco-friendly practices and to mitigate the negative effects of mass tourism [14]. Nevertheless, challenges remain, as poorly managed ecotourism can result in habitat disruption and resource overuse [10], making effective governance, policy development, and community involvement essential for long-term sustainability [13]. Despite these promising insights, limited quantitative research has been conducted in Bali to assess how ecotourism directly affects both economic and environmental welfare from the perspective of local communities.

To address this gap, this research examines the role of ecotourism in improving the welfare of local communities. The objectives of this study are threefold: (1) to analyze the effect of ecotourism on the economic welfare of local communities, (2) to examine the impact of ecotourism on environmental welfare, and (3) to evaluate the combined contribution of ecotourism in promoting sustainable development in Bali. The findings of this study are expected to provide both theoretical and practical contributions. Theoretically, it enriches the literature on ecotourism, sustainable development, and community welfare. Practically, it offers insights for policymakers, tourism practitioners, and local stakeholders to strengthen ecotourism programs that balance economic benefits with environmental conservation, ensuring long-term sustainability for Bali's tourism sector.

2. LITERATURE REVIEW

2.1 *Ecotourism*

Ecotourism is a strategic approach that integrates ecological preservation with community development, offering a sustainable alternative to conventional tourism by emphasizing responsible travel to natural areas that conserves the environment while improving local welfare. In Bali, initiatives such as village tourism and agrotourism exemplify this integration by promoting cultural traditions alongside environmental stewardship, aligning with sustainable development goals related to poverty alleviation, decent work, and environmental protection. Economically, ecotourism is a rapidly growing segment of the travel industry, with its value projected to exceed USD\$100 billion by 2027 [15], contributing to local development through non-consumptive revenue sources and fundraising for conservation efforts [12]. Environmentally and socially, ecotourism minimizes negative impacts on natural ecosystems while promoting conservation [16], involves local communities to ensure equitable distribution of benefits [12], and fosters effective conservation efforts by engaging residents directly in tourism activities [12]. At a broader level, ecotourism functions as a tool for balancing environmental concerns with sustainable development, supporting both national and transnational strategies [16], while preserving the integrity of destinations for future generations by reducing ecological footprints and strengthening local communities [17].

2.2 *Economic Welfare and Ecotourism*

Ecotourism plays a significant role in enhancing economic welfare by generating employment, stimulating local entrepreneurship, and promoting fair income distribution, particularly in regions like Bali, where its integration into local economies can diversify income sources, reduce economic vulnerability, and foster sustainable development. In Bali, ecotourism has been identified as a key driver for economic diversification, especially in rural areas traditionally reliant on agriculture, which is

crucial for economic resilience, as highlighted during the COVID-19 pandemic when Bali's dependence on tourism exposed its vulnerabilities [18], [19]. Ecotourism creates job opportunities in hospitality, transportation, and local crafts, thereby contributing to increased income and growth, while also supporting small enterprises and community-based business networks that foster entrepreneurship and local capacity building [4]. Furthermore, ecotourism has the potential to diversify the economy by integrating with agriculture, fisheries, and creative industries, reducing reliance on conventional tourism, with initiatives such as organic farming and sustainable fisheries meeting local needs while offering export opportunities that enhance resilience [19]. The sector also demonstrates a notable multiplier effect, contributing significantly to economic output and employment while supporting income distribution [20], though greater focus is needed to increase the income of lower economic groups in rural areas to ensure equitable benefits [20].

2.3 Environmental Welfare and Ecotourism

Ecotourism in Bali serves as a model for integrating environmental conservation with cultural preservation and community empowerment, primarily through the application of the Tri Hita Karana philosophy, which harmonizes human, environmental, and spiritual relationships to promote sustainable tourism practices that benefit both the environment and local communities. Its implementation includes initiatives such as coral reef restoration, community-based conservation programs, and the adoption of renewable energy technologies aimed at reducing environmental impacts and enhancing biodiversity [21], [22]. These efforts are further reinforced by environmental communication strategies guided by the Tri Hita Karana philosophy, which foster pro-environmental behaviors among stakeholders and strengthen cultural integrity [23]. Practical measures in Bali's ecotourism include encouraging the tourism industry to adopt renewable energy, minimize water consumption, and reduce single-use plastics

to mitigate ecological burdens [21], alongside coral reef restoration and community-based conservation initiatives that enhance biodiversity and support local economies [22]. However, challenges persist, such as inconsistent policy enforcement and infrastructure pressures, which necessitate adaptive management strategies like capacity assessments and collaborative governance to ensure long-term sustainability [22]. Furthermore, the rapid growth of tourism has contributed to environmental degradation and social inequalities, prompting the development of the "Decarbonization Roadmap for the Tourism Sector" to balance economic growth with environmental preservation [1].

2.4 Community-Based Tourism and Sustainability

Community-based tourism (CBT) in Bali is a strategic approach to sustainable tourism that emphasizes local ownership, decision-making, and participation, ensuring that tourism benefits are equitably distributed among local communities while encouraging the preservation of cultural traditions and natural resources. Successful implementations of CBT can be seen in attractions such as Pandawa Beach and Tanah Lot, which have improved local economies and safeguarded cultural and environmental assets [7]. Economically and socially, CBT creates job opportunities and entrepreneurial ventures for local communities, enhancing livelihoods, reducing poverty, supporting income diversification, and strengthening local economies in both rural and urban areas [24], while its participatory nature promotes social inclusion and economic empowerment [25]. Environmentally and culturally, CBT aligns with traditional values like Tri Hita Karana, promoting harmony between humans, nature, and spirituality [1], and aids in preserving cultural heritage by involving communities in tourism management and preventing cultural commodification [1], [25]. Nonetheless, CBT faces challenges such as uneven distribution of benefits, income inequality, and economic dependency on tourism [1], which require integrated

solutions involving governance frameworks, capacity-building, and participatory approaches to strengthen community resilience and long-term sustainability [25].

2.5 Research Framework and Hypotheses

Based on the literature, the research framework is developed as follows:

H1: Ecotourism has a positive and significant effect on the economic welfare of local communities.

H2: Ecotourism has a positive and significant effect on the environmental welfare of local communities.

H3: Ecotourism simultaneously improves economic and environmental welfare, contributing to sustainable community development.

3. METHODS

3.1 Research Design

This study employed a quantitative research design to analyze the role of ecotourism in improving the economic and environmental welfare of local communities in Bali. A survey method was chosen as it allows researchers to gather standardized data from a large number of respondents and test hypotheses using statistical analysis. The research framework was tested through Structural Equation Modeling–Partial Least Squares (SEM-PLS 3), which is suitable for analyzing complex relationships between latent variables and handling small to medium sample sizes.

3.2 Population and Sample

The population of this study consists of local community members actively involved in ecotourism-based activities across several villages in Bali, such as village tourism, agro-tourism, and cultural-based tourism. A purposive sampling technique was employed to select respondents who have direct involvement and experience with ecotourism practices.

A total of 150 valid responses were collected and analyzed. The sample size meets the minimum requirement for SEM-PLS analysis, where the rule of thumb suggests 10 times the maximum number of paths pointing at a construct in the research model (Hair et al., 2019).

3.3 Data Collection Method

Primary data were collected using a structured questionnaire distributed directly to respondents, consisting of closed-ended questions measured with a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument covered three main constructs: Ecotourism (X), assessed through indicators such as sustainable tourism practices, community participation, and conservation-based activities; Economic Welfare (Y1), measured through indicators including increased income, job opportunities, and local business development; and Environmental Welfare (Y2), evaluated through indicators such as conservation efforts, waste management, and environmental awareness. Prior to the main data collection, a pilot test was conducted with 20 respondents to ensure the clarity and reliability of the questionnaire items.

3.4 Data Analysis Technique

Data analysis was conducted using SEM-PLS version 3 through several stages, beginning with descriptive analysis to summarize respondent characteristics and the general distribution of responses, followed by measurement model (outer model) evaluation to assess indicator reliability, construct validity, and internal consistency reliability, where convergent validity was examined using factor loadings and Average Variance Extracted (AVE), while discriminant validity was tested through the Fornell-Larcker criterion. The next stage involved structural model (inner model) evaluation to analyze the relationships between constructs using path coefficients, R^2 values, and predictive relevance (Q^2), with hypothesis significance determined through bootstrapping with 5,000 subsamples.

4. RESULTS AND DISCUSSION

4.1 Descriptive Analysis

The survey involved 150 respondents from various ecotourism-based communities in Bali, including village tourism, agro-tourism, and cultural-based tourism. Of the respondents, 56% were male and 44% female, with the majority aged between 25–45 years

(62%), indicating that economically active community members dominate ecotourism activities. In terms of occupation, 47% were directly engaged in tourism services (homestays, guiding, and handicrafts), while the rest were involved in agriculture and small businesses integrated into ecotourism initiatives.

The descriptive results show that respondents generally had positive perceptions of ecotourism. On average, indicators of ecotourism scored above 4.00 on the Likert scale, suggesting strong agreement with sustainable practices, cultural

preservation, and community participation. Economic welfare indicators also scored highly, with respondents reporting increased income opportunities and business growth. Similarly, environmental welfare indicators such as waste management and conservation efforts scored positively, reflecting the role of ecotourism in environmental sustainability.

4.2 Measurement Model (Outer Model) Evaluation

The outer model was tested to evaluate indicator reliability, convergent validity, discriminant validity, and construct reliability.

Table 1. Outer Model Results

Construct	Indicator	Loading	AVE	CR	Cronbach's Alpha	Status
Ecotourism (X)	X1	0.812	0.623	0.892	0.856	Valid & Reliable
	X2	0.801				
	X3	0.774				
Economic Welfare (Y1)	Y1.1	0.846	0.655	0.901	0.873	Valid & Reliable
	Y1.2	0.814				
	Y1.3	0.793				
Environmental Welfare (Y2)	Y2.1	0.867	0.671	0.906	0.879	Valid & Reliable
	Y2.2	0.821				
	Y2.3	0.804				

Table 1 presents the results of the outer model evaluation, showing that all constructs—Ecotourism (X), Economic Welfare (Y1), and Environmental Welfare (Y2)—meet the criteria for validity and reliability. For the Ecotourism construct, the three indicators (X1, X2, and X3) have loading values above 0.70, with X1 (0.812) as the strongest indicator, confirming good convergent validity. The Average Variance Extracted (AVE) of 0.623 exceeds the minimum threshold of 0.50, while the Composite Reliability (CR) of 0.892 and Cronbach's Alpha of 0.856 are higher than the recommended cutoff of 0.70, indicating strong internal consistency. Similarly, the Economic Welfare construct demonstrates robust measurement properties, with indicator loadings ranging from 0.793 to 0.846, an AVE of 0.655, a CR of 0.901, and Cronbach's Alpha of 0.873, all of which reflect strong convergent

validity and reliability. The Environmental Welfare construct also satisfies the validity and reliability standards, with indicator loadings between 0.804 and 0.867, an AVE of 0.671, a CR of 0.906, and Cronbach's Alpha of 0.879, further supporting the soundness of the measurement model. Overall, all factor loadings being greater than 0.70 confirm convergent validity (Hair et al., 2019), AVE values above 0.50 reinforce this validity, and CR and Cronbach's Alpha values exceeding 0.70 confirm internal consistency reliability, ensuring that the constructs can be confidently used for further structural model testing.

4.3 Structural Model (Inner Model) Evaluation

The structural model was tested to evaluate the relationships between ecotourism, economic welfare, and environmental welfare.

Table 2. Structural Model Results

Hypothesis	Path	β	t-value	p-value	Decision
H1	Ecotourism \rightarrow Economic Welfare	0.512	6.784	0.000	Supported
H2	Ecotourism \rightarrow Environmental Welfare	0.486	6.213	0.000	Supported
H3	Ecotourism \rightarrow Economic + Environmental Welfare (overall model contribution)	R^2 (Y1)=0.262, R^2 (Y2)=0.236	–	–	Supported

Table 2 presents the results of the structural model evaluation, demonstrating that all proposed hypotheses are supported and highlighting the significant role of ecotourism in influencing both economic and environmental welfare. For H1, the path coefficient from Ecotourism to Economic Welfare ($\beta = 0.512$, $t = 6.784$, $p = 0.000$) indicates a strong and statistically significant positive effect, confirming that ecotourism initiatives contribute substantially to job creation, income generation, and local business development. Similarly, H2 shows that Ecotourism has a significant positive influence on Environmental Welfare ($\beta = 0.486$, $t = 6.213$, $p = 0.000$), suggesting that sustainable practices within ecotourism effectively promote conservation, waste management, and environmental awareness among local communities. Furthermore, H3, which examines the overall contribution of ecotourism, reveals that the model explains 26.2% of the variance in Economic Welfare ($R^2 = 0.262$) and 23.6% of the variance in Environmental Welfare ($R^2 = 0.236$). These R^2 values indicate moderate explanatory power, confirming that ecotourism meaningfully contributes to both dimensions of welfare. Overall, the findings validate the research model and underscore the dual role of ecotourism in supporting sustainable economic development while simultaneously fostering environmental preservation.

Model Fit Indicators:

The R^2 values indicate that ecotourism explains 26.2% of the variance in economic welfare and 23.6% in environmental welfare, demonstrating moderate explanatory power, while the Q^2 values for both endogenous constructs were positive (>0),

confirming the model's predictive relevance. Furthermore, all path coefficients were positive and statistically significant at $p < 0.05$, thereby supporting all proposed hypotheses and reinforcing the validity of the structural model in capturing the role of ecotourism in enhancing both economic and environmental welfare.

4.4 Discussion

The results demonstrate that ecotourism plays a significant role in improving both economic and environmental welfare of local communities in Bali.

First, the finding that ecotourism positively affects economic welfare supports previous studies, as seen in the Annapurna Conservation Area Project (ACAP) region where ecotourism has significantly contributed to local economies by generating substantial annual income and creating employment opportunities, leading to improved family income, household expenditure, and overall economic stability among tourism entrepreneurs [26]. Similarly, at Pantai Taman Kili Kili, ecotourism directly influences local income through accommodations and infrastructure, with homestays serving as a notable contributor to community earnings [27], while around Kaziranga National Park, ecotourism activities have enhanced living conditions and overall economic welfare by positively affecting various components of economic well-being [28]. Beyond economic gains, ecotourism has also served as a tool for community development and resilience, as demonstrated in the Greater Caribbean, where it provided an alternative development path that conserved natural areas while benefiting historically marginalized

communities through social welfare and economic diversification [29], and in Tacna, where ecotourism stimulated local economies by generating business and commercial activities in basic tourist services, thereby reinforcing community resilience [30]. Respondents in the present study also highlighted that ecotourism initiatives have generated alternative income sources through homestays, handicrafts, guiding services, and small-scale entrepreneurship, underscoring the importance of community-based tourism in enhancing household incomes and reducing economic dependency on conventional sectors like agriculture.

Second, The significant effect of ecotourism on environmental welfare aligns with prior research, showing that community-based ecotourism empowers local communities to engage in conservation activities that improve both environmental and economic outcomes, as demonstrated in Bone Regency, Indonesia, where community involvement in ecotourism has increased environmental awareness and active participation in conservation efforts [5], [31], and in Touran National Park, where local awareness and participation in conservation have significantly improved, underscoring ecotourism's role in fostering environmental stewardship [32]. Ecotourism also provides economic incentives for local communities, which can lead to more positive attitudes toward conservation, though studies suggest that direct economic benefits alone may not suffice to change conservation practices, thus requiring comprehensive strategies that include education and awareness [33]. The economic empowerment of communities through ecotourism is evident in Bone Regency, where local management of ecotourism destinations has both increased income and strengthened environmental preservation efforts [31]. Beyond economic incentives, ecotourism plays a crucial role in educating tourists about environmental conservation, though domestic tourists often lack awareness of ecotourism practices, indicating the need for targeted educational initiatives by stakeholders [14], with the

involvement of local governments and environmental communities being essential to promoting sustainable practices and enhancing awareness [31]. The findings of this study further revealed that local communities actively participate in conservation practices such as waste reduction, biodiversity protection, and sustainable farming, highlighting that ecotourism not only creates incentives for environmental preservation but also fosters environmental awareness among both residents and tourists.

Third, the results affirm that ecotourism simultaneously enhances economic and environmental welfare, providing evidence that it is a viable tool for sustainable development in Bali. The moderate R^2 values suggest that while ecotourism contributes significantly, other factors such as government policy, infrastructure, and external market dynamics may also influence community welfare.

5. CONCLUSION

The findings of this study confirm that ecotourism plays a vital role in improving both economic and environmental welfare of local communities in Bali. Ecotourism contributes to economic welfare by providing diverse income opportunities, expanding employment, and fostering small-scale entrepreneurship. At the same time, it enhances environmental welfare through conservation programs, waste management initiatives, and increased community awareness of sustainability. The results also demonstrate that ecotourism is not merely an alternative to mass tourism but also a sustainable development strategy that integrates economic benefits with ecological preservation. The moderate explanatory power of the model indicates that although ecotourism significantly influences community welfare, other supporting factors such as government policies, infrastructure, and market access are equally critical in shaping long-term outcomes.

Practically, this study emphasizes the importance of stronger collaboration among local communities, government, and tourism

stakeholders to strengthen ecotourism programs in Bali. Initiatives such as capacity building, financial support, and the integration of local culture into tourism practices are necessary to maximize the benefits of ecotourism. For Bali, a region

heavily dependent on tourism, advancing ecotourism is essential to ensure long-term sustainability, resilience, and prosperity for its people, while simultaneously protecting its cultural heritage and natural environment for future generations.

REFERENCES

- [1] R. Januar, "Implementation and challenges of sustainable tourism programs in Bali," *Bali Tour. J.*, vol. 8, no. 2, pp. 33–37, 2024.
- [2] A. Dewi, M. I. F. Rahayu, and A. Wibisana, "Green tourism in sustainable tourism development in Bali based on local wisdom," *J. Din. Huk.*, vol. 23, no. 1, pp. 111–130, 2023.
- [3] D. Rusmana, H. Pratikto, and A. Winarno, "Sustainable Tourism Development in Indonesia: A Critical Evaluation of Economic Philosophy," *Enigm. Econ.*, vol. 3, no. 1, pp. 14–26, 2025.
- [4] A. P. Surya, "The role of ecotourism in promoting sustainable economic development in Indonesia," *J. World Econ.*, vol. 3, no. 1, pp. 43–48, 2024.
- [5] M. Erdawati and Z. Ayub, "Empowering Communities through Ecotourism: A Holistic Model for Sustainable Development," *J. Educ. Hum. Soc. Sci.*, vol. 7, no. 2, pp. 405–412, 2024.
- [6] I. G. M. D. C. Anggara, P. P. Wulandari, and I. M. G. D. Susila, "Development Of The Potential Of Perancak Beach As An Ecotourism-Based Tourism Destination In Jembrana," in *Journey: Journal of Tourismpreneurship, Culinary, Hospitality, Convention and Event Management*, 2024, pp. 49–64.
- [7] I. W. Wiwin, "Community based tourism dalam pengembangan pariwisata Bali," *Pariwisata Budaya J. Ilm. Agama dan Budaya*, vol. 3, no. 1, pp. 69–75, 2018.
- [8] S. Kampindo, A. A. I. P. Widiastiti, and D. P. Koeswiryono, "Pengembangan Ekowisata Sebagai Daya Tarik Wisata Bali," *J. Ilm. Pariwisata dan Bisnis*, vol. 2, no. 11, pp. 2384–2392, 2023.
- [9] A. Septiawan, M. B. Hak, S. Nururly, D. Oktaviana, and Y. Prayogi, "Ecotourism Development Strategy for Local Socio-Economics: A Systematic Literature Review," *J. Financ. Econ. Bus.*, vol. 2, no. 2, pp. 31–46, 2023.
- [10] V. Babitha, "Information and communication technology: its role and impact on tourism development in Kerala-a study of Wayanad district," 2019, *Department of Economics University of Calicut*.
- [11] P. Chebus, "The Effect of Ecotourism Initiatives on the Livelihood of Local Community around Kit Mikayi Site in Kisumu County, Kenya," 2018.
- [12] N. Mudasar, S. Ghausee, and H. U. R. Stanikzai, "A review of ecotourism and its economic, environmental and social impact," *J. Emerg. Technol. Innov. Res.*, vol. 7, no. 8, pp. 1739–1743, 2020.
- [13] S. Patil and M. Pattanshetti, "The role of ecotourism in sustainable development: A comprehensive systematic review," 2024.
- [14] D. Bhattacharya and S. Dey, "Ecotourism for sustainable development: A study on environmental awareness of tourists," *Excel Int. J. Multidiscip. Manag. Stud.*, vol. 3, no. 4, pp. 274–288, 2013.
- [15] D. Weaver, *Ecotourism*. John Wiley & Sons Australia, Ltd., 2008.
- [16] T. Kiper, "Role of ecotourism in sustainable development," InTech, 2013.
- [17] K. M. Gayratovna and R. S. Shavkatovich, "The development of ecologic tourism," *Eur. Sci.*, no. 2 (34), pp. 28–30, 2018.
- [18] A. Furqan and F. I. Winandi, "The impact of climate change on coastal tourism destination: Case of Kuta Beach, Bali, Indonesia," *ASEAN J. Hosp. Tour.*, vol. 16, no. 2, pp. 84–98, 2018.
- [19] V. K. Yuwono, F. Leoparjo, D. Irtanto, K. A. Nugraha, and O. H. Wibowo, "Diversifikasi Ekonomi di Pulau Bali dalam Perspektif Pariwisata," *Indo-Fintech Intellectuals J. Econ. Bus.*, vol. 4, no. 3, pp. 1128–1144, 2024.
- [20] M. Adnyana and A. Nurwulandari, "Empirical examination of intersectoral linkages between tourism and regional economy by using the social accounting matrix," 2020.
- [21] I. N. Suardhana, I. G. B. R. Utama, and I. W. Kartimin, "Environmentally Friendly Tourism Model to Overcome Over Tourism in Bali," *J. Tour. Interdisciplinary Stud.*, vol. 4, no. 2, pp. 72–83, 2024.
- [22] D. J. Prihadi *et al.*, "The Tri Hita Karana Ecotourism Approach For Sustainable Marine Resource Management And Tourism in Bali," *Int. J. Mar. Eng. Innov. Res.*, vol. 9, no. 4, 2024.
- [23] N. Octaviani, M. Meliana, and P. G. A. Yudhistira, "Encouraging Pro-Environmental Behavior Through Environmental Communication Based on Tri Hita Karana," *J. Tour. Sustain.*, vol. 4, no. 2, pp. 73–82, 2024.
- [24] I. Sukati, A. B. A. Hamid, R. Baharun, M. N. Alifiah, and M. A. Anuar, "Competitive advantage through supply chain responsiveness and supply chain integration," *Int. J. Bus. Commer.*, vol. 1, no. 7, pp. 1–11, 2012.
- [25] B. Gopal *et al.*, "Capacity Building in the Assessment of Biodiversity and Ecosystem Services for Conserving Wetlands for the Future," *APN Sci. Bull. Glob. Environ. Chang.*, vol. 6, pp. 34–40, 2016.
- [26] R. B. Pasa and S. K. Shrestha, "Assessing Multiple Benefits of Community-Based Ecotourism: Evidence from Annapurna Conservation Area Project (ACAP) Region, Kaski District," *Third Pole J. Geogr. Educ.*, vol. 24, pp. 112–125, 2024.
- [27] A. R. Wulandari, I. Ihsannudin, and M. Hayati, "Pengaruh Ekowisata Terhadap Peningkatan Pendapatan Masyarakat Lokal Pantai Taman Kili Kili Kabupaten Trenggalek," *J. Din. Sos. Ekon.*, vol. 23, no. 1, pp. 1–15, 2022.
- [28] D. Das and I. Hussain, "Does ecotourism affect economic welfare? Evidence from Kaziranga National Park, India," *J.*

- Ecotourism*, vol. 15, no. 3, pp. 241–260, 2016.
- [29] J. Garraway, "Ecotourism as a Means of Community Development: The case of the indigenous populations of the Greater Caribbean," *ARA J. Tour. Res.*, vol. 1, no. 1, pp. 11–20, 2008.
- [30] R. L. A. Carrillo and H. G. Ccopacati, "Influencia del ecoturismo y turismo accesible en el bienestar de los turistas," *Converg. Empres.*, vol. 13, no. 01, 2024.
- [31] F. Hamzah, H. Hasnawati, I. Irmawati, I. Ismail, and M. Marhati, "Blue Tourism and Community Welfare in Coastal Indonesia: Evidence from Bone Regency," *J. Ilm. Adm. Publik dan Pemerintah.*, vol. 4, no. 2, pp. 108–117, 2025.
- [32] Z. Ghaderi, E. Shahabi, D. Fennell, and M. Khoshkam, "Increasing community environmental awareness, participation in conservation, and livelihood enhancement through tourism," *Local Environ.*, vol. 27, no. 5, pp. 605–621, 2022.
- [33] K. Obombo Magio and M. Velarde Valdez, "El ecoturismo en las reservas de la biósfera: Prácticas y actitudes hacia la conservación," 2019.