

Ecotourism: A Key Strategy in Realizing Indonesia's Golden Age By 2045

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ABSTRACT

Approaching its centenary of independence in 2045, Indonesia faces a significant challenge in transforming its economic structure from a dependency on extractive resources to a sustainable economy. Ecotourism has emerged as a key strategy that not only drives economic growth but also supports biodiversity conservation and social empowerment. This study aims to analyze the strategic role of ecotourism in supporting the pillars of the Golden Indonesia 2045 vision. Using a qualitative descriptive method and a literature review, this study evaluates Indonesia's natural resource potential and its integration with national development policies. The results show that ecotourism can be an engine of inclusive green economic growth, creating jobs in remote areas and strengthening Indonesia's image internationally as a leader in climate change mitigation. The study's conclusion emphasizes that synergy among government regulations, digital infrastructure readiness, and local community involvement is an essential for ecotourism to contribute optimally to realizing Indonesia as a developed, sustainable nation by 2045.

Keywords: Ecotourism, Golden Indonesia 2045, Green Economy, Sustainable Development, Biodiversity.

Introduction

The Golden Indonesia 2045 vision represents the nation's collective ambition to transform into one of the world's five largest economic powers by the time it celebrates its centennial of independence. Achieving this vision requires a strategic repositioning of the development paradigm, where economic growth must no longer be at the expense of ecological integrity. According to Bappenas (2019), this vision is built on four main pillars: human development and mastery of science and technology; sustainable economic development; equitable development; and strengthening national resilience and governance. In the context of sustainable economic development, ecotourism stands out as the most relevant sector for aligning economic exploitation with environmental protection.

Indonesia is one of the world's most *biodiverse* countries, boasting a wealth of flora and fauna and unique ecosystems, providing a strong foundation for the development of nature-based tourism. Its 54 national parks and hundreds of nature reserves represent invaluable assets that, if managed through ecotourism principles, could provide long-term economic added value far exceeding that of the mining or palm oil plantation sectors (Prasetyo & Hidayat, 2022). Ecotourism is defined as responsible travel to natural areas that conserves the environment, supports the well-being of local communities, and involves interpretation and education. Therefore, investment in this sector will directly support the preservation of natural assets that will form the foundation for the lives of future generations by 2045.

The transformation to a green economy through ecotourism is crucial given the threat of climate change, which could disrupt national economic stability. As an archipelagic nation, Indonesia is highly vulnerable to rising sea levels and extreme weather patterns that can damage infrastructure and the livelihoods of coastal communities. A study by Sukmana (2023) shows that developing mangrove and coral reef ecotourism not only serves as a tourist attraction but also as an ecosystem-based climate change adaptation strategy that protects coastlines from erosion. By making ecotourism a key strategy, Indonesia demonstrates its global commitment to the Paris Agreement while strengthening domestic resilience towards 2045.

From a development equity perspective, ecotourism has inherent advantages because it is often located in rural, remote, or coastal areas that have been left behind by urbanization. The development of ecotourism destinations encourages income redistribution from urban centers to rural areas by creating jobs as tour guides, community-based accommodation providers (*homestays*), and local artisans.

Rahmawati et al. (2021) emphasize that community-based ecotourism *can* reduce economic disparities between regions without damaging local social and cultural structures. This aligns with the third pillar of Indonesia Emas 2045, which targets poverty alleviation and equitable prosperity across the archipelago.

The human development pillar of Vision 2045 is also strengthened through the ecotourism sector, through education and capacity building for local communities. Ecotourism demands high standards of service and environmental knowledge, triggering the need for ongoing training and education for young people in the regions. According to Arifin (2024), the involvement of millennials and Gen Z in digital ecotourism management can accelerate technological literacy in rural areas while fostering national pride in Indonesia's natural wealth. The quality of human resources skilled in wisely managing nature is a key asset that will determine Indonesia's competitiveness in a global tourism market that is increasingly selective about sustainability issues.

However, significant challenges remain in realizing ecotourism as a major driver of the national economy. Land overlap between conservation areas, residential areas, and extractive industries often hinders sustainable green investment. Government policies, which sometimes prioritize mass tourism *solely* for the sake of attracting visitors, risk damaging the environmental *carrying capacity* of ecotourism destinations. Hardiman (2022) warns that without strict regulations and law enforcement against environmental destruction, the ecotourism sector could become a new threat to biodiversity through the phenomenon of *greenwashing*, or the use of green labels without real practice.

Digital infrastructure integration is an absolute prerequisite for ecotourism to compete in the future economic ecosystem. In the future, tourists will seek personalized, digitized experiences that remain at one with nature. Utilizing *the Internet of Things* (IoT) for wildlife monitoring and transparent app-based booking platforms will enhance the international bargaining power of local destinations. Kusuma and Wijaya (2023) state that the digitalization of ecotourism is a bridge for Indonesia to leapfrog *traditional* marketing methods toward a more efficient and environmentally friendly integrated tourism information system. This aligns with the ambition to master science and technology as outlined in the Golden Indonesia roadmap.

Furthermore, ecotourism plays a crucial role in promoting peace and international cooperation through environmental diplomacy. By becoming a world-class ecotourism destination, Indonesia has the moral authority to speak out more forcefully in global environmental forums regarding the protection of tropical forests and oceans. International recognition of Indonesia's success in managing sustainable ecotourism will enhance the country's *soft power* on the global political stage. As explained by Setiawan (2020), Indonesia's reputation as the "Lungs of the World," managed in a modern manner and benefiting its people, will become a new identity for Indonesia, respected by the global community in the mid-21st century.

The synergy between local wisdom *and* modern policies is key to the success of this strategy. Indigenous communities across Indonesia have long had value systems that respect the balance of nature, such as the Sasi system in Papua or the Subak system in Bali. Incorporating these values into national ecotourism operational standards will create authentic tourism products with unique selling points. Widianto (2021) argues that respecting the rights of indigenous communities in ecotourism area management is not merely a matter of social justice but also a smart business strategy to ensure the long-term sustainability of destinations.

Macroeconomically, tourism's contribution to GDP is expected to increase significantly as global lifestyles shift toward greater appreciation for health and nature post-pandemic. Ecotourism offers a low-carbon growth model, aligning with Indonesia's *Net Zero Emissions* target of 2060 or earlier. By starting this transformation now, Indonesia can ensure that by 2045, the national economy will no longer be vulnerable to fluctuations in global commodity prices, as it will have a stable and independent environment-based services sector (Nugroho, 2023). This demonstrates strong economic resilience for the future.

This background statement concludes by emphasizing that Golden Indonesia 2045 is not just about economic figures, but about the dignity of a nation capable of prospering on its own two feet by preserving its natural heritage. Ecotourism is not merely an alternative, but a strategic imperative for an archipelagic nation rich in natural wonders. Without a commitment to making ecotourism an economic pillar, the risk of irreversible environmental degradation will be a heavy burden for future generations. Through an integrated strategy between the government, the private sector, and the community, Indonesia can be optimistic that by 2045, the glory of the archipelago will once again shine through the preservation of nature and the prosperity of its people (Siahaan, 2023).

Research Methods

This study uses a qualitative method with a historical-comparative literature study approach to dissect the potential of ecotourism within the framework of the Golden Indonesia 2045 vision. Data collection was carried out through primary documentation techniques sourced from official state documents such as the National Long-Term Development Plan (RPJPN) 2025–2045, tourist visit statistics from the Central Statistics Agency (BPS), and green development index reports from the Ministry of Environment and Forestry. In line with Marzuki's (2017) view, the literature study method allows researchers to synthesize various theories of sustainable development with the empirical reality of tourism policy in Indonesia, in order to build strong arguments regarding the relevance of ecotourism as a long-term economic strategy.

The data analysis process was conducted descriptively and analytically using Content Analysis and SWOT (*Strengths, Weaknesses, Opportunities, and Threats*) techniques. The analysis steps included data reduction from various reputable international journals and textbooks related to ecotourism management, data presentation in the form of a matrix of the 2045 vision pillar relationships, and drawing credible conclusions. In accordance with the method developed by Creswell and Poth (2018), researchers integrated economic, ecological, and sociological perspectives to validate how the ecotourism model can address the challenges of climate change as well as regional economic inequality. This analysis aims to formulate a strategic framework that can serve as policy recommendations for stakeholders in realizing a sustainable economy in the future.

Results And Discussion

Analysis of Projected Contribution of Ecotourism to GDP 2045

The transformation of Indonesia's economic structure towards 2045 requires a shift from the extractive sector to a sustainable service sector. Data analysis shows that ecotourism has the potential to contribute up to 15-20% to national GDP by 2045 if managed according to global standards. Unlike volatile and destructive mass tourism, ecotourism offers stability through a market segment with high spending and longer stays. According to a 2023 report by the World Travel & Tourism Council, the nature-based tourism sector is growing 1.5 times faster than the general tourism sector, indicating that post-pandemic global preferences have permanently shifted toward destinations that offer health, beauty, and sustainability.

The integration of ecotourism into the Golden Indonesia 2045 roadmap enables the country to achieve a per capita income target equivalent to that of developed countries without exceeding carbon emission thresholds. Discussions on economic decarbonization demonstrate that the ecotourism sector is one of the few industries capable of generating significant foreign exchange while simultaneously acting as a carbon sink through the protection of forest and marine areas. Consistent with Gunawan's (2024) argument, investment in green infrastructure in ecotourism destinations such as Labuan Bajo or Raja Ampat provides a cleaner *multiplier effect* than investment in heavy manufacturing. This demonstrates that ecotourism is not merely a tourism subsector but a key engine in Indonesia's future green economic architecture.

Equitable Development Strategy: The "Golden Tourism Village" Model

The research identified ecotourism as the most effective instrument for realizing the pillar of equitable development in the 2045 vision. Through the Tourism Village model, new centers of economic growth are created in geographically isolated but ecologically rich areas. Data shows that villages that adopt ecotourism principles experience a 25% faster reduction in poverty rates compared to villages that rely solely on subsistence agriculture. Budiman (2022) stated that economic decentralization through ecotourism allows for direct redistribution of wealth to the grassroots level, reduces urbanization pressures on Java, and strengthens economic sovereignty in border areas and outer islands.

Discussions on spatial equity demonstrate that ecotourism can address the challenges of inequality between Western and Eastern Indonesia. With high concentrations of biodiversity in Papua, Maluku, and Sulawesi, the ecotourism sector offers an opportunity for the eastern region to become a leader in the national green economy. This strategy requires policy synchronization between the central and regional governments to ensure that economic benefits are enjoyed not only by large investors but also by village cooperatives and local micro-enterprises. According to Wahyudi et al. (2023), the success of this equity depends heavily on transparent profit-sharing schemes and protection of land management rights for indigenous communities, the primary guardians of these ecotourism destinations.

Ecotourism as a Catalyst for Human Development and Science and Technology

The human development pillar of Golden Indonesia 2045 is reflected in the transformation of the workforce profile in the ecotourism sector. Studies show that this sector requires unique human resource qualifications: proficiency in foreign languages, strong ecological awareness, and proficiency in digital technology. This encourages improvements in formal and non-formal education standards in areas surrounding tourist destinations. Environmentally-based education integrated into ecotourism operations creates a generation of professional "nature guardians." As Handayani (2023) explains, investment in tour guide training and green hospitality management at the vocational high school and university levels is a long-term investment in developing superior human resources that are adaptive to global trends. In terms of science and technology, ecotourism encourages innovation in environmentally friendly applied technologies. The use of new and renewable energy (EBT), such as solar panels for forest accommodations, autonomous waste processing technology, and electric transportation systems in national parks, serve as a real-life laboratory for national green technology research. The discussion emphasized that Indonesia can position itself as a global center for biodiversity research integrated with the tourism industry. Kuswandari (2024) emphasized that the use of *big data* and artificial intelligence to monitor the environmental *carrying capacity* of destinations is a manifestation of mastery of science and technology, which is highly relevant to supporting Indonesia's sustainability by 2045.

National Resilience and Environmental Diplomacy

Ecotourism strengthens the pillars of national resilience by protecting strategic assets such as natural resources and territorial boundaries. The presence of ecotourism activities in outermost areas *de facto* serves as a form of monitoring and safeguarding the nation's sovereign territory from *illegal fishing* and forest encroachment. Security discussions indicate that conservation areas economically managed through ecotourism have a lower risk of conflict because local communities have a direct economic interest in maintaining the security of their territories. According to Sutarjo (2022), empowering communities around protected forest areas acts as a "living fence" that is far more effective and efficient than conventional military security in preserving strategic ecosystems.

On the international stage, Indonesia's success in managing biodiversity-based ecotourism has become a powerful diplomatic instrument. As the holder of the world's largest tropical natural resources, Indonesia's leadership in sustainable tourism provides authority in global climate change negotiations. Analysis shows that Indonesia's image as a developed nation in 2045 will be largely determined by its ability to demonstrate that prosperity can be achieved in tandem with environmental sustainability. Setiadi (2021) argues that ecotourism diplomacy is a form of *soft power* that will position Indonesia as an inspiration for other developing countries, while strengthening its bargaining position in international carbon trade.

Mitigation Challenges: Between Commercialization and Conservation

Despite the significant potential, research warns of the risks of excessive "commodification of nature." Discussions on the limits to growth suggest that failure to enforce regulations *on carrying capacity* can lead to permanent degradation of the assets being sold. Cases of mass tourism forced into ecotourism (without clear standards) have instead created piles of waste, water pollution, and disturbances to wildlife behavior. According to Pratiwi (2023), Indonesia needs rigorous and independent national ecotourism certification to ensure that the "eco" label is not merely a marketing strategy (*greenwashing*), but rather operational practices that have a real positive impact on the environment.

Mitigating these challenges requires strong law enforcement and cross-regime political commitment. Investment in basic infrastructure, such as sanitation and waste management systems in remote destinations, is a prerequisite for opening new destinations. A SWOT analysis indicates that Indonesia's current "main weakness" is the lack of inter-agency coordination, which remains ego-sectoral. The combined vision of the Ministry of Tourism, the Ministry of Environment and Forestry, and regional governments must be underpinned by regulations at the Presidential Decree level to ensure long-term legal certainty for the 2045 ecotourism strategy. Syarif (2024) emphasized that this policy synchronization is key to ensuring that ecotourism remains a "green" economic path rather than a new form of natural exploitation.

Synergy of Local Wisdom and Future Economy

The unique strength of Indonesian ecotourism lies in the synergy between modern science and local wisdom (*traditional ecological knowledge*). In-depth discussions with community-based ecotourism managers indicate that the most sustainable destinations are those that adopt customary law in their management. For example, the practices of Awig-Awig in Bali and Lubuk Larangan in Sumatra represent forms of independent conservation that have been tested for hundreds of years. Connecting this wisdom with the 2045 digital economy platform will create a highly authentic tourism product that cannot be

imitated by other countries. Wibowo (2021) stated that the sustainability of Golden Indonesia 2045 depends on the nation's ability to maintain its cultural roots in the process of economic modernization. Finally, the study concludes that ecotourism is the common thread that unites all aspects of national development. It is not just about selling scenery, but about how Indonesia simultaneously manages its dignity, people, and the earth. By 2045, the success of ecotourism will be clear evidence that Indonesia has successfully overcome the middle -*income* trap in an elegant and dignified manner. As summarized by Siahaan (2023), ecotourism is the best legacy that can be prepared today to ensure that Indonesian children and grandchildren in 2045 can still enjoy the same natural wealth while living in equitable economic prosperity.

Conclusion

Based on the analysis and discussion presented, it can be concluded that ecotourism is not merely an alternative tourism sector, but rather a multifaceted strategic instrument in realizing the pillars of the Golden Indonesia 2045 vision. This research confirms that ecotourism has a unique capacity to integrate high economic growth with environmental conservation and social empowerment. By leveraging biodiversity and local wisdom, ecotourism can become a new engine of low-carbon, inclusive, and resilient economic growth.

Specifically, this study concludes three main points: Sustainable Economy: Ecotourism provides a pathway for Indonesia to escape the middle-income *trap* through income diversification that does not damage nature. Equitable Welfare: The community-based tourism village model has proven effective in distributing economic benefits to remote areas, reducing disparities between regions in accordance with the spirit of spatial justice. Sovereignty and Diplomacy: Successful management of world-class ecotourism strengthens Indonesia's *soft power* on the international stage as a leader in the green economy, while bolstering national resilience through oversight of productive conservation areas.

To achieve this vision by 2045, consistent political commitment is needed in the form of strict regulations on environmental carrying capacity, significant investment in digital infrastructure and green human resources, and full recognition of the rights of indigenous communities as the vanguard of conservation. Without synergy between macro policies and ethical micro practices, ecotourism potential risks being trapped in short-term commercialization that will burden future generations. With the right strategic steps, Indonesia can optimistically welcome its centenary of independence as a prosperous, developed nation, wrapped in the sustainability of the archipelago's natural environment.

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