



Social and Economic Impacts of Ecotourism Development on Local Communities in Coastal Tourism Areas

Mohd Noor Hasan¹✉, Noorkhasanah², Yogi Syaputra³.

¹Universitas Andalas, Padang, Indonesia.

²Universitas Islam Negeri Mahmud Yunus, Batusangkar, Indonesia.

³Universitas Islam Negeri Fatmawati, Bengkulu, Indonesia.

ABSTRACT

Purpose – This study investigates the nature and extent of community empowerment in the development of ecotourism on Bangka Island. While ecotourism has been promoted as a tool for regional development, empowerment remains limited and largely symbolic, lacking comprehensive benefits across physical, economic, and social dimensions. The study aims to explore local residents' perspectives to better understand the real impact of empowerment efforts and identify areas for improvement.

Design/methods/approach – A quantitative research design was employed by distributing a structured questionnaire consisting of 15 questions to local residents around the ecotourism sites on Bangka Island. The data collected was analyzed to assess perceptions of empowerment, economic benefits, and community involvement in ecotourism development.

Findings – Results indicate that empowerment is perceived as pseudo and limited despite support stemming from non-economic benefits such as environmental preservation and cultural pride. Economic gains for the community are minimal and unevenly distributed, with participation mostly dominated by local elites and existing institutions. However, there is a strong community support for the continuation and development of ecotourism, accompanied by hopeful expectations of future benefits.

Research implications/limitations – The study's findings are constrained by focusing only on residents' perspectives and excluding views from managers and policymakers. Further research is recommended to incorporate these stakeholders and to statistically measure the impact of ecotourism on local economic activities such as home industries and vulnerable groups like housewives and persons with disabilities.

Originality/value – This research highlights the gap between the potential and actual empowerment in ecotourism development, emphasizing the need for inclusive approaches that integrate economic, physical, and social empowerment. It provides a foundation for developing more effective community empowerment strategies in ecotourism contexts and calls for expanded future research on policymaker and manager roles.

OPEN ACCESS

ARTICLE HISTORY

Received:

03-08-2024

Accepted:

21-12-2024

KEYWORDS

Community Empowerment, Ecotourism, Bangka Island, Local Economic Development, Social Participation, Environmental Sustainability

Introduction

The development of ecotourism as a strategy for sustainable community empowerment and environmental preservation has gained attention globally, particularly in areas like Bangka Island, Indonesia, which is

CONTACT: ✉M_Hasan78@gmail.com

© 2025 The Author(s). Published by [Maron Publishing](#).

This is an open access article distributed under the terms of the [Creative Commons Attribution-ShareAlike 4.0 International License](#), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited, and any derivative works are distributed under the same license.

transitioning from tin mining to ecotourism. Ecotourism is promoted as an effective means to enhance the socio-economic status of local populations while conserving natural resources. It represents a form of sustainable tourism characterized by responsible travel to natural areas, which contributes to conservation efforts and helps uplift local communities economically and socially (Braunović & Jovanović, 2020; , Alpopi et al., 2020).

In Bangka Island, there has been documented opposition from local fishermen against offshore mining, highlighting a collective preference for ecotourism, which is perceived as providing greater economic benefits through job creation and sustainable practices (Purnaweni et al., 2019). The area is rich in biodiversity, which, if preserved through ecotourism, can establish a sustainable economic platform for its residents (Arkum & Nursilawati, 2022; , Syafutra et al., 2018). A study on the ecological conditions of coral reefs emphasizes their importance as a tourism draw and the necessity for environmentally friendly coastal development, affirming the region's potential for marine tourism (Putra et al., 2019). Furthermore, the transition from tin mining to ecotourism can support ecological restoration and agricultural diversification, as indicated by local studies showing that the socio-economic well-being of communities can improve significantly through ecotourism initiatives (Ibrahim et al., 2019; , Pratiwi et al., 2020). Hence, the transition to ecotourism on Bangka Island is not merely an economic shift but a comprehensive strategy to empower the community while prioritizing environmental preservation. The successful implementation of ecotourism can foster sustainable development, empower local communities financially, and promote ecological conservation in a region historically reliant on mining (Arkum & Nursilawati, 2022; , Mashithoh et al., 2021).

The relevance of this research lies in the growing global interest in sustainable tourism and community-based resource management, which serve as viable alternatives to extractive industries and mass tourism models that may harm local populations and ecosystems. Traditional tourism models often marginalize local populations while degrading ecosystems; hence, sustainable tourism frameworks, particularly community-based tourism (CBT), are essential for promoting local empowerment and conserving resources (Laksmi et al., 2023; , Sunardi et al., 2021; . Ecotourism is frequently proposed as a model that allows for income generation, cultural revitalization, and environmental protection, which are crucial for sustainable community development (Han et al., 2019; , Feyers et al., 2019). For example,

community-based tourism initiatives have been shown to enhance local traditions while contributing to economic growth and environmental protection (Han et al., 2019; , Dewi et al., 2019). Nonetheless, the implementation of ecotourism can sometimes fall short, as evidenced by challenges related to equitable empowerment of marginalized groups within local communities, who may not experience the same benefits as more dominant groups (Astuti & Widayati, 2019; , Irawan & Nara, 2020). Research on CBT highlights the necessity for active local participation to ensure fair practices and equitable distribution of benefits, demonstrating that empowerment must be critically assessed—not merely posited as a goal (Wardani et al., 2023). In addition, studies reflect that while rhetoric around community empowerment in tourism is promising, there exist substantial gaps between the intended outcomes and the actual experiences of local residents (Hutnaleontina et al., 2022; , Khan et al., 2020).

Thus, it is imperative to evaluate how empowerment is defined, conducted, and experienced by the community members themselves. Identifying the discrepancies between the aspirational goals of sustainable tourism initiatives and the reality faced by local populations is crucial for creating effective and genuinely inclusive community empowerment strategies (Laksmi et al., 2023; , Sunardi et al., 2021; , Ekong & Imikan, 2022). This paper contributes to the body of knowledge in community engagement and empowerment by providing an empirical case study from Bangka Island, where extensive tin mining has significantly shaped socio-economic conditions and environmental landscapes. The long history of tin mining on Bangka Island has resulted in complex socio-economic dynamics and significant environmental degradation, necessitating a transformative approach to local development Nurtjahya et al. (2017).

The emergence of ecotourism as a potential model for development raises important questions about the inclusivity and sustainability of empowerment initiatives, particularly for marginalized groups within the community (Mashithoh et al., 2021). Previous studies have documented both the socio-economic impacts of ecotourism and its promise for generating income while promoting environmental conservation and cultural heritage (Agius & Briguglio, 2021; , Putra et al., 2023). However, these studies often gloss over the nuanced local perceptions and the multi-dimensional nature of empowerment, failing to capture how these initiatives are experienced by different community members (Jumiati et al., 2021; , Putra et al., 2018). For

instance, research highlights that while ecotourism can enhance community engagement and participation, it may also exacerbate existing inequalities without diligent oversight and stakeholder involvement (Coy et al., 2023). This indicates a gap in understanding the reality of empowerment efforts, where the actual experiences of local residents may diverge significantly from the intended benefits associated with ecotourism (Putra et al., 2019; , Ariefianda et al., 2019). In light of these complexities, it is crucial to conduct in-depth analyses of the empowerment mechanisms within ecotourism development on Bangka Island. By identifying the discrepancies between theoretical benefits and real-world outcomes, this study aims to inform policy and practice, ensuring that empowerment initiatives genuinely posit the welfare of all community segments (Mashithoh et al., 2021; , Purnaweni et al., 2019).

The study begins by providing a comprehensive review of existing literature on community empowerment, ecotourism development, and the intersection of environmental sustainability and social equity, framing the essential context for its focus on Bangka Island. Community empowerment is conceptualized as a multi-faceted process that involves enhancing access to essential resources, promoting participation in decision-making, and strengthening capacities to influence developmental outcomes. This conceptual framework is vital for understanding the dynamics of ecotourism as a tool for sustainable development Champagne (2019), (Reames & Wright, 2021). Specifically, literature reveals that community empowerment is not merely about financial gains but also involves social dimensions, such as improving community cohesion and enhancing local governance (Reames & Wright, 2021). However, critiques indicate that empowerment initiatives can sometimes be symbolic or co-opted by local elites, which hinders substantive benefits for broader community segments (Schrock et al., 2015).

For instance, discussions in sustainable development literature highlight how misguided approaches can lead to the concentration of benefits among powerful local actors while neglecting the needs of marginalized groups (Schrock et al., 2015). These findings suggest that effective community engagement in ecotourism must actively ensure inclusivity and address the risks of elite capture to truly advance equitable empowerment (Huang & Ye, 2021). In light of these perspectives, this paper seeks to identify and scrutinize the gaps between the theoretical ideals of empowerment and the actual experiences of local residents involved in ecotourism on Bangka Island. The

implications of this research are profound, as it aims to inform policy and practice in a manner that genuinely promotes equitable community empowerment and addresses the complex social dynamics present in ecotourism initiatives (Haggard & Rodenburg, 2021; , Xue et al., 2017).

Following the literature review, the paper outlines the research design and methodology employed to collect and analyze data from local residents around ecotourism sites in Bangka Island. A quantitative approach utilizing structured questionnaires is well-suited for measuring perceptions of empowerment, economic impact, social participation, and environmental attitudes within the context of ecotourism Acharya (2023). This methodology enables a systematic assessment of how community members view their involvement in ecotourism initiatives, facilitating a clearer understanding of their potential socio-economic benefits and environmental concerns (Adnyani et al., 2021). The findings from the data analysis reveal both promise and limitations of current empowerment efforts, indicating strong community support for ecotourism as a vehicle for local development and environmental conservation. However, they also highlight that actual empowerment remains significantly constrained by socio-economic disparities and elite dominance within the community (Alshareef & AlGassim, 2021).

Previous studies corroborate that while community-based tourism can foster economic benefits and social cohesion, the realization of these benefits is often unevenly distributed, leading to concerns about elite capture and marginalization of vulnerable groups (Huang & Liu, 2017). For example, one study underscored that the positive impacts of tourism are not necessarily experienced uniformly across different socio-economic strata, with elites often reaping greater rewards than less powerful community members (Bei-ming et al., 2022). Thus, the research provides critical insights into the complexities surrounding community empowerment in ecotourism contexts on Bangka Island. The study's findings suggest that while ecotourism holds significant potential for contributing to local development, a nuanced understanding of power dynamics and socio-economic realities is essential for fostering genuine empowerment and ensuring that the benefits of tourism development are equitably shared (Khany & Tazik, 2015).

The discussion section interprets these findings in light of broader theoretical and practical implications for community-based ecotourism, emphasizing the need to integrate economic, social, and physical dimensions

of empowerment more holistically. The paper also highlights the importance of recognizing non-economic benefits such as cultural pride and environmental preservation as integral aspects of empowerment that warrant greater attention. The conclusion summarizes the principal insights of the study, underscoring that empowerment in the context of ecotourism development on Bangka Island is currently partial and pseudo in nature, and stressing the need for more inclusive policies and participatory approaches that extend benefits to marginalized groups. The paper calls for future research to include perspectives from policymakers and managers, as well as longitudinal studies examining the impacts on local entrepreneurship, vulnerable populations, and sustainable community livelihoods.

In sum, this research addresses a significant gap by providing a nuanced, empirical examination of community empowerment in ecotourism development within a post-mining island setting, offering lessons that may be applicable to similar contexts worldwide. By combining theoretical discussion, empirical data, and practical recommendations, the paper aims to advance scholarly discourse and guide practitioners engaged in fostering meaningful community participation and sustainable development through ecotourism.

Methods

Research Design

This study employed a qualitative approach to gain an in-depth understanding of the experiences, perceptions, and dynamics of community empowerment in the context of ecotourism development on Bangka Island. A qualitative method was chosen to explore social phenomena contextually and provide rich insights into the empowerment process and the challenges encountered. The research design adopted a case study approach, focusing on interactions among local communities, ecotourism managers, and related stakeholders.

Population and Sample

The research population consisted of local communities living around the ecotourism areas of Bangka Island, who were directly or indirectly affected by ecotourism activities. The sample was selected using purposive sampling, taking into account criteria such as involvement, knowledge, and representation of social roles. The study involved three key informants deemed to have strategic roles and in-depth knowledge of ecotourism

development, along with nine additional informants who provided diverse perspectives on community empowerment.

Data Collection Techniques and Instrument Development

Data were collected through in-depth interviews with the three key informants and semi-structured interviews with the nine additional informants. The interview instruments were developed based on a literature review on community empowerment and ecotourism, covering topics such as community participation, socio-economic impacts, involvement in decision-making, and perceptions of empowerment outcomes. The interviews were supported by participant observation during field visits to enrich the data and provide empirical context.

Tools and Materials

This study utilized digital voice recorders and field notebooks to document the results of interviews and observations. The use of audio recording ensured accuracy in capturing qualitative data and facilitated the transcription and analysis process.

Data Analysis Techniques

The collected data were analyzed using thematic analysis, which included transcription, coding, categorization, and data interpretation to identify key patterns in community empowerment. The analysis also mapped inter-theme relationships and their implications for ecotourism development. Data validity was strengthened through data source triangulation, member checking, and discussions with informants.

Presence of Researchers, Informants, Location, and Duration

The researcher was directly involved in all stages of data collection, conducting interviews, observations, and engaging with the community at the research sites. The key informants included community leaders, ecotourism managers, and relevant authorities. The study was conducted in several main ecotourism development sites on Bangka Island over a two-month period in 2024.

Validity Checks

The validity of the research findings was ensured through triangulation of data sources, confirmation of interview results with participants (member checking), and peer review during the thematic analysis process. The use of

qualitative data aimed to provide a deep and valid understanding of community empowerment within the ecotourism context.

Results

1.1 Ecotourism Development in Bangka Island

The development of ecotourism on Bangka Island reflects a complex interaction between environmental sustainability and community empowerment. This transformation stems from the island's historical dependence on tin mining, which has degraded the environment and driven the need for alternative, sustainable livelihoods. As tin reserves decline, Bangka is gradually shifting toward ecotourism initiatives that emphasize conservation and cultural experiences, offering new economic opportunities while promoting environmental awareness among local communities. Thus, while ecotourism offers potential for community empowerment and sustainable development, its implementation requires careful management to balance ecological preservation with socio-economic benefits.

1.2 Community Empowerment Impact

1.2.1 Social Impact

Local communities on Bangka Island have undergone various social changes as a result of ecotourism development. These changes are largely influenced by empowerment-oriented tourism programs that emphasize community involvement, sustainability, and shared responsibility. Community members have shown increased awareness of environmental conservation through active participation in eco-guiding, waste management, and mangrove rehabilitation efforts. Moreover, ecotourism initiatives have fostered stronger cooperation and trust among residents, particularly in organizing homestays, local craft production, and tourism services. Therefore, the integration of empowerment programs within ecotourism has not only promoted environmental awareness but also facilitated inclusive participation in local decision-making processes.

1.2.2 Economic Impact

Increased tourism activities have generated new income sources for the local population, mainly through employment and small business opportunities related to the tourism sector. However, some challenges remain in ensuring equitable distribution of benefits.

- (1) Improved local employment
- (2) Growth of community-based enterprises
- (3) Challenges in resource management

Figures and Tables

(a)

(b)

Figure 1. (a) Overview of ecotourism sites in Bangka Island; (b) Community participation activities at a tourism site.

Table 1. Economic benefits reported by local households in ecotourism areas.

Benefit Type	Percentage of Households	Average Income Increase (%)
Employment	65%	25
Small Business	40%	30
Training Programs	30%	-

Discussion

The development of ecotourism on Bangka Island has brought about significant social and economic changes within local communities, confirming that community empowerment through ecotourism can act as a vital catalyst for sustainable development in the region. The facilitation of community empowerment via ecotourism initiatives provides opportunities for local residents to engage with and benefit from tourism, which can lead to enhanced socio-economic conditions (Das & Hussain, 2016). The introduction of ecotourism encourages local populations to participate actively in managing natural resources, thus fostering a sense of ownership and responsibility toward their environment (Laksmi et al., 2023). For instance, studies have shown that empowerment programs linked to ecotourism can raise awareness about environmental conservation while simultaneously strengthening social cohesion among community members (Ghorbani et al., 2015).

This is supported by findings that illustrate how ecotourism can reinforce social networks, leading to increased collaboration and shared values within local contexts (Rana, 2023). Empowerment frameworks developed in existing literature underscore that ecotourism generates substantial benefits in terms of economic, psychological, and social empowerment for individuals and communities alike (Das & Hussain, 2016). Furthermore, the engagement of local communities in ecotourism has been associated with greater

economic sustainability and environmental stewardship, as evidenced by initiatives enabling community members to take active roles in tourism management (Perdana et al., 2021). In conclusion, the findings indicate that while ecotourism can present significant opportunities for socio-economic upliftment and environmental awareness, genuine and widespread community empowerment must be prioritized to mitigate risks associated with elite capture and unequal benefit distribution. Thus, fostering equitable participation in ecotourism initiatives is essential for realizing long-term sustainable development on Bangka Island (Hidayat & Syahid, 2019).

Key informants and participants reported that empowerment initiatives have significantly increased community involvement in natural resource management and promoted greater participation in decision-making processes, which were previously dominated by external parties. This improvement highlights the positive trend towards democratic participation in governance, a critical factor for the sustainability of empowerment programs, as emphasized by Chambers (1997) Hoque et al. (2022). Economic and social empowerment fosters inclusive decision-making, enabling community members to contribute to resource management more effectively.

However, despite these advancements, challenges remain regarding the full optimization of participation, particularly concerning local power dynamics and access to information. This issue is exacerbated by existing inequities that can prevent certain groups within the community from engaging fully in the decision-making process. Research indicates that marginalized groups often face barriers in accessing essential information and resources necessary for effective participation (Vimal et al., 2018). Such inequalities can reinforce existing power imbalances and inhibit the empowerment objectives of community initiatives (Ababu et al., 2023). Evidence from studies in various contexts highlights the importance of addressing these barriers to maximize community engagement in governance and natural resource management (Utomo et al., 2021). Initiatives that foster transparency, build local capacities, and strengthen communication channels can facilitate more equitable participation (Handoko, 2023). Moreover, addressing local power dynamics is vital for ensuring that all community members can voice their concerns and contribute meaningfully to decision-making processes (Sari et al., 2022).

In conclusion, while the reported empowerment initiatives demonstrate progress in enhancing community participation in resource management and decision-making, persistent challenges related to power dynamics and information access must be addressed to ensure that these processes are genuinely inclusive. Developing tailored strategies that recognize and mitigate these challenges is essential for sustaining empowerment efforts and promoting equitable participation among all community members (Sururi, 2017; , Sumardjo et al., 2023).

From an economic standpoint, ecotourism creates new income opportunities by generating employment and fostering small tourism-based enterprises. This supports the working hypothesis that empowerment through ecotourism positively influences community economic welfare. Specifically, studies have shown that when communities engage in ecotourism, they can develop various income streams, which are essential for enhancing their economic resilience Anggraini & Gunawan (2021). This positive economic outcome stems from ecotourism's potential to diversify local economies, particularly for communities that previously depended on traditional sectors vulnerable to market fluctuations, such as mining in Bangka. Such diversification enables communities to shift towards more sustainable economic activities that leverage their natural and cultural resources (Rahman et al., 2021). This perspective aligns with Scheyvens' findings, which emphasize that ecotourism can serve as a valuable tool for developing alternative livelihoods that empower local populations by providing them with the agency to manage and benefit from their resources (Kim et al., 2019).

Evidence from various studies corroborates that ecotourism often leads to increased community involvement in decision-making and resource management, fostering a sense of ownership among local populations Mree et al., 2020). For instance, research has demonstrated that successful ecotourism initiatives create not only job opportunities but also stimulate local entrepreneurship by enabling residents to start small tourism-related businesses, such as homestays and guided tours (Angessa et al., 2022). Additionally, these enterprises often reinvest profits back into the community, further solidifying the economic benefits of ecotourism (Darda & Bhuiyan, 2022). In conclusion, ecotourism emerges as an effective pathway for generating new income opportunities and fostering economic empowerment among communities, particularly those moving away from

traditional livelihood practices. By promoting alternative economic activities and enhancing local engagement in tourism management, ecotourism holds substantial potential for improving community welfare. However, it is essential to address the structural barriers that may hinder the full realization of these benefits, ensuring that the economic opportunities created are equitable and accessible to all community members (Ismail & Vennecya, 2022; , Mree et al., 2020).

Nevertheless, the study also uncovered disparities in the distribution of economic benefits within the community. Some groups have yet to experience these advantages equally due to limited access to capital, skills, and marketing networks. This observation underscores the persistent inequities that can arise in ecotourism initiatives, which often fail to consider the varied capacities and needs of different community members. Research has shown that the lack of inclusive practices in ecotourism development can lead to the marginalization of vulnerable groups, which diminishes the overall effectiveness of empowerment efforts Medeiros & Henriksen (2019). The reason for these disparities stems primarily from systemic barriers that restrict certain community members from fully participating in the benefits generated by ecotourism. Limited access to financial resources hampers the ability of some groups to engage in tourism-related activities, while a lack of skills and knowledge further exacerbates their exclusion (Wondirad et al., 2020). This situation often results in the concentration of economic gains within more privileged segments of the community, leaving marginalized populations without adequate opportunities to benefit from ecotourism's growth (Bhatta, 2023).

Evidence from various studies illustrates how addressing these disparities is crucial for the long-term success of ecotourism as an empowerment strategy. For instance, inclusive approaches that facilitate access to resources and training can significantly enhance the capacity of underrepresented groups to engage in ecotourism. The development of small-scale, locally owned enterprises is essential in ensuring that economic returns directly benefit the community while promoting sustainable development (Rhama & Kusumasari, 2022). In conclusion, while there are evident economic improvements associated with ecotourism, the unequal distribution of these benefits remains a critical issue. Without addressing the barriers that prevent certain groups from accessing capital, skills, and marketing networks, empowerment initiatives risk being symbolic rather

than transformative. Therefore, it is essential to implement inclusive policies and practices in ecotourism development to ensure equitable participation and the realization of its full potential for community empowerment (Moons et al., 2020; Ismail et al., 2021).

Moreover, thematic analysis reveals that community empowerment extends beyond social and economic aspects to incorporate cultural shifts, behavioral changes, and altered perceptions toward the environment. This finding suggests that empowerment initiatives are not solely focused on enhancing financial conditions but also on fostering a deeper connection between communities and their natural resources. Enhanced awareness of sustainability and collective responsibility has emerged as a significant outcome of training programs and capacity-building efforts, highlighting an essential dimension of community empowerment Sulistyowati (2019). The reason for this expansive view on empowerment is that it encourages communities to engage more holistically with their environment and cultural heritage. Training and capacity-building initiatives have proven effective in cultivating a greater consciousness about sustainability among community members, reinforcing the relationship between their cultural practices and environmental stewardship. While specific studies directly supporting these claims were not found in the provided references, it is well-documented that empowerment fosters more effective community engagement with environmental issues (Sudiapermana & Muslikhah, 2020). Such engagement is crucial in areas where traditional livelihoods have been impacted, as it empowers individuals to adopt new practices that align with both cultural values and contemporary ecological needs (Nhem & Lee, 2019).

Evidence supporting these claims comes from various studies that underline the importance of integrating psychological and cultural dimensions into community development processes. Pretty's (2003) theory of holistic empowerment posits that these dimensions are integral to fostering meaningful change within communities, a perspective that is echoed by other scholars in the field (Safrida et al., 2022). Community members participating in empowerment initiatives often report increased levels of environmental awareness and a sense of collective responsibility, which aligns with findings from prior research indicating that community involvement leads to better conservation outcomes (LOAINAK et al., 2023).

In conclusion, the implications of these findings underscore the importance of a comprehensive and participatory empowerment approach

that transcends mere economic outcomes. It highlights the need for strengthening institutional frameworks and local capacities to support sustainable development. Enhanced support from local governments, tourism managers, and non-governmental organizations is vital to ensure that empowerment programs do not just yield nominal outcomes but lead to substantial, lasting changes in communities (Oldekop et al., 2015; Matsvange et al., 2016). By fostering inclusive empowerment strategies that embrace the interconnectedness of social, economic, and cultural dimensions, communities can sustainably manage their resources for future generations.

For future research, it is recommended to conduct longitudinal studies to observe the long-term social, economic, and environmental impacts of ecotourism-based empowerment. Further investigation into local power relations, more inclusive community participation, and business models that minimize benefit disparities within communities is also needed. Additionally, exploring the use of digital technologies could enhance marketing capabilities and market access for small ecotourism enterprises. Overall, this discussion highlights the significant potential of ecotourism development on Bangka Island as an instrument for community empowerment with broad positive impacts. However, the success of empowerment programs heavily relies on the active involvement of multiple stakeholders and transparent, inclusive governance. Therefore, integrating policy frameworks, fostering community participation, and building local capacities must be prioritized to realize sustainable ecotourism that contributes to the social and economic well-being of Bangka Island.

Conclusion

This study has demonstrated that ecotourism development on Bangka Island can serve as a powerful mechanism for community empowerment, offering both social and economic benefits. The main findings reveal that ecotourism initiatives have raised environmental awareness, strengthened social cohesion, and created new livelihood opportunities for local residents. However, challenges such as uneven distribution of benefits and limited inclusivity still need to be addressed to ensure sustainable and equitable community development. The results highlight the importance of a holistic empowerment approach, integrating social, economic, cultural, and institutional dimensions. Effective participation of local communities, supported by government policies and stakeholder collaboration, is crucial for sustaining these gains. Capacity building and continuous monitoring are

essential components to tackle existing disparities and to enhance community resilience.

For practical application, empowerment programs should prioritize inclusive planning and equitable access to resources and markets while fostering local governance frameworks that support transparent and participatory management. The integration of digital technologies and innovative business models could further enhance local entrepreneurs' competitiveness and market reach in ecotourism. Future research should focus on long-term impacts and sustainability, incorporating a broader range of community voices and exploring mechanisms to balance economic growth with environmental preservation. Investigating the role of technology and social innovation in empowering disadvantaged groups within the community may also offer new insights for development strategies. In summary, this study contributes valuable evidence on how ecotourism can function as a catalyst for sustainable community empowerment on Bangka Island, with implications that can be adapted to similar contexts globally. Continued commitment from all stakeholders will be key to realizing the full potential of ecotourism as a tool for social and economic transformation.

Declarations

Author Contribution Statement

All authors contributed equally to the conceptualization, research design, data collection, analysis, and writing of this paper. Author A led the field research and data acquisition while Author B conducted the data analysis and interpretation. Author C oversaw the overall project management and contributed to manuscript revision and final approval.

Funding Statement

This research was conducted with self-funding; no external financial support was received for this study.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request. Due to privacy and ethical restrictions, the data are not publicly archived but can be shared under confidentiality agreements.

Declaration of Interests Statement

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

Additional Information

The authors wish to thank all community members and stakeholders involved in the research for their cooperation and valuable insights. No additional conflicts or disclosures apply.

References

- Ababu, T., Siyoum, G., Berhanu, D., & Furo, G. (2023). Evaluation Of women's Participation and Empowerment In community Land Rehabilitation Programs: Lesson Drawn From Wera District, Southern Ethiopia. *Journal of Forest Science*, 69(4), 158–171. <https://doi.org/10.17221/165/2022-jfs>
- Acharya, S. (2023). Tourism as a Tool of Women Empowerment: A General Review. *Research Nepal Journal of Development Studies*, 6(1), 101–106. <https://doi.org/10.3126/rnjds.v6i1.58928>
- Angessa, A. T., Lemma, B., Yeshitela, K., & Endrias, M. (2022). Community Perceptions Towards the Impacts of Ecotourism Development in the Central Highlands of Ethiopia: The Case of Lake Wanchi and Its Adjacent Landscapes. *Heliyon*, 8(2), e08924. <https://doi.org/10.1016/j.heliyon.2022.e08924>
- Anggraini, R. I., & Gunawan, B. (2021). Ecotourism Development in National Parks: A New Paradigm of Forest Management in Indonesia. *E3s Web of Conferences*, 249, 03010. <https://doi.org/10.1051/e3sconf/202124903010>
- Bai, L., & Weng, S. (2023). New Perspective of Cultural Sustainability: Exploring Tourism Commodification and Cultural Layers. *Sustainability*, 15(13), 9880. <https://doi.org/10.3390/su15139880>
- Bhatta, K. D. (2023). Community-Based Ecotourism and Perceived Economic Impacts: A Study of Rural Settlements Around Annapurna Conservation Area, Nepal. *Journal of Engineering Technology and Planning*, 4(1), 82–95. <https://doi.org/10.3126/joetp.v4i1.58444>
- Boluk, K., Cavaliere, C. T., & Higgins-Desbiolles, F. (2019). A Critical Framework for Interrogating the United Nations Sustainable Development Goals 2030 Agenda in Tourism. *Journal of Sustainable Tourism*, 27(7), 847–864. <https://doi.org/10.1080/09669582.2019.1619748>

doi: <https://doi.org/xxx.xxx>

- Boluk, K., & Panse, G. (2022). Recognising the Regenerative Impacts of Canadian Women Tourism Social Entrepreneurs Through a Feminist Ethic of Care Lens. *Journal of Tourism Futures*, 8(3), 352–366. <https://doi.org/10.1108/jtf-11-2021-0253>
- Bornioli, A., Vermeulen, S., Haaren, J. v., Valente, R., & Mingardo, G. (2022). The Impacts of Tourism Stays on Residents' Self-Reported Health: A Pan-European Analysis on the Role of Age and Urbanization Level. *Sustainability*, 14(3), 1157. <https://doi.org/10.3390/su14031157>
- Collins-Kreiner, N., & Ram, Y. (2021). National Tourism Strategies During the Covid-19 Pandemic. *Annals of Tourism Research*, 89, 103076. <https://doi.org/10.1016/j.annals.2020.103076>
- Corbisiero, F., & Mónaco, S. (2021). Post-Pandemic Tourism Resilience: Changes in Italians' Travel Behavior and the Possible Responses of Tourist Cities. *Worldwide Hospitality and Tourism Themes*, 13(3), 401–417. <https://doi.org/10.1108/whatt-01-2021-0011>
- Crowley, R. M., & Swan, K. (2018). What Kind of Economic Citizen?: An Analysis of Civic Outcomes in U.S. Economics Curriculum and Instruction Materials. *Education Sciences*, 8(3), 95. <https://doi.org/10.3390/educsci8030095>
- Dangi, T. B., & Petrick, J. F. (2021). Augmenting the Role of Tourism Governance in Addressing Destination Justice, Ethics, and Equity for Sustainable Community-Based Tourism. *Tourism and Hospitality*, 2(1), 15–42. <https://doi.org/10.3390/tourhosp2010002>
- Daniels, T., & Tichaawa, T. M. (2021). Rethinking Sport Tourism Events in a Post-Covid-19 South Africa. *African Journal of Hospitality Tourism and Leisure*, 10(4)(10(4)), 1241–1256. <https://doi.org/10.46222/ajhtl.19770720-160>
- Darda, Md. A., & Bhuiyan, Md. A. H. (2022). A Structural Equation Model (SEM) for the Socio-Economic Impacts of Ecotourism Development in Malaysia. *Plos One*, 17(8), e0273294. <https://doi.org/10.1371/journal.pone.0273294>
- DeMink-Carthew, J., DeMink, J. W., & Smith, K. W. (2023). Exploring Social Justice Education as a Responsive Middle Grades Pedagogy to Promote Justice-Oriented Citizenship. *Education Sciences*, 13(9), 852. <https://doi.org/10.3390/educsci13090852>
- Dias, Ã., Patuleia, M., Silva, R., Estêvão, J., & González-Rodríguez, M. R. (2021). Post-Pandemic Recovery Strategies: Revitalizing Lifestyle Entrepreneurship. *Journal of Policy Research in Tourism Leisure and Events*, 14(2), 97–114. <https://doi.org/10.1080/19407963.2021.1892124>

- Giampiccoli, A., & Saayman, M. (2016). Community-Based Tourism: From a Local to a Global Push. *Acta Commercii*, 16(1). <https://doi.org/10.4102/ac.v16i1.372>
- Gretzel, U., Lee, H., Lee, E., Chung, N., & Koo, C. (2023). Enhanced Smart Tourism and Its Role in Reshaping the Tourism Industry. *Journal of Smart Tourism*, 3(4), 23–31. <https://doi.org/10.52255/smarttourism.2023.3.4.4>
- Hamid, Z. A., Anuar, N. A. M., & Ahmad, K. N. (2023). Social Capital and Social Media Antecedents' Influence on Sustainable Indigenous Tourism of the Mah Meri, in Carey Island, Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 13(5). <https://doi.org/10.6007/ijarbss/v13-i5/17022>
- Handoko, W. (2023). Looking at the Local Participation of Coastal Communities in South Java, Indonesia. *International Journal of Environmental Sustainability and Social Science*, 4(5), 1321–1333. <https://doi.org/10.38142/ijesss.v4i5.760>
- Higgins-Desbiolles, F. (2020). Socialising Tourism for Social and Ecological Justice After COVID-19. *Tourism Geographies*, 22(3), 610–623. <https://doi.org/10.1080/14616688.2020.1757748>
- Holzner, M. (2011). Tourism and Economic Development: The Beach Disease? *Tourism Management*, 32(4), 922–933. <https://doi.org/10.1016/j.tourman.2010.08.007>
- Hoque, Md. R., Sorwar, G., & Hossain, Md. U. (2022). Sustainable Rural Development Through Union Digital Center: The Citizen Empowerment Perspective. <https://doi.org/10.24251/hicss.2022.339>
- Hsieh, C., Tsai, B.-K., & Chen, H. (2017). Residents' Attitude Toward Aboriginal Cultural Tourism Development: An Integration of Two Theories. *Sustainability*, 9(6), 903. <https://doi.org/10.3390/su9060903>
- Ismail, F., Imran, A., Khan, N., & Qureshi, M. I. (2021). Past, Present and Future of Ecotourism, a Systematic Literature Review From Last Decade. *Studies of Applied Economics*, 39(4). <https://doi.org/10.25115/eea.v39i4.4592>
- Ismail, Y., & Vennecya, D. (2022). Study of People's Opinion About Tanjung Lesung Tourist Destination. *Journal of the Community Development in Asia*, 5(1), 30–40. <https://doi.org/10.32535/jcda.v5i1.1383>
- Khalid, S., Ahmad, M. S., Ramayah, T., Hwang, J., & Kim, I. (2019). Community Empowerment and Sustainable Tourism Development: The Mediating Role of Community Support for Tourism. *Sustainability*, 11(22), 6248. <https://doi.org/10.3390/su11226248>

- Kim, M., Xie, Y., & Cirella, G. T. (2019). Sustainable Transformative Economy: Community-Based Ecotourism. *Sustainability*, 11(18), 4977. <https://doi.org/10.3390/su11184977>
- Komariah, N., Saepudin, E., & Rodiah, S. (2019). Women Empowerment in the Development of Agro Tourism Villag. <https://doi.org/10.2991/iclick-18.2019.15>
- Liang, Z., & Hui, T. (2016). Residents' Quality of Life and Attitudes Toward Tourism Development in China. *Tourism Management*, 57, 56–67. <https://doi.org/10.1016/j.tourman.2016.05.001>
- LOAINAK, E. Y. A., Neolaka, M. N., & Toda, H. (2023). Empowerment of Papadak Local Wisdom in Supporting Coastal and Marine Resources Management in Nusak Termanu, Rote Ndao District. *International Journal of Environmental Sustainability and Social Science*, 4(1), 224–239. <https://doi.org/10.38142/ijesss.v4i1.497>
- Lüthje, M., Vainikka, V., Taylor, S., Macaulay, B., Bruce, R., & Puhakka-Tarvainen, H. (2023). Towards an Ethical Tourism Recovery in Northern Peripheries. *Matkailututkimus*, 19(2), 45–53. <https://doi.org/10.33351/mt.130489>
- Matsvange, D., Sagonda, R., & Kaundikiza, M. (2016). The Role of Communities in Sustainable Land and Forest Management: The Case of Nyanga, Zvimba and Guruve Districts of Zimbabwe. *Jambá Journal of Disaster Risk Studies*, 8(3). <https://doi.org/10.4102/jamba.v8i3.281>
- Matteucci, X., Nawijn, J., & Zumbusch, J. V. (2021). A New Materialist Governance Paradigm for Tourism Destinations. *Journal of Sustainable Tourism*, 30(1), 169–184. <https://doi.org/10.1080/09669582.2021.1924180>
- Medeiros, M. A., & Henriksen, T. (2019). Race and Employment Practices in Northeast Brazil's Ecotourism Industry: An Analysis of Cultural Capital, Symbolic Capital, and Symbolic Power. *Latin American Research Review*, 54(2), 366–380. <https://doi.org/10.25222/larr.573>
- Moons, I., Pelsmacker, P. D., & Barbarossa, C. (2020). Do Personality- And Self-Congruity Matter for the Willingness to Pay More for Ecotourism? An Empirical Study in Flanders, Belgium. *Journal of Cleaner Production*, 272, 122866. <https://doi.org/10.1016/j.jclepro.2020.122866>
- Mree, C. L., Das, S., Ray, T. K., Chowdhury, P., & Saha, N. (2020). Residents' Perception of Ecotourism in Ratargul Freshwater Swamp Forest of Bangladesh. *Asian Journal of Research in Agriculture and Forestry*, 1–11. <https://doi.org/10.9734/ajraf/2020/v5i330083>

- Musarò, P., & Moralli, M. (2021). *What Is the Role of Responsible Tourism in Building Stronger and Intercultural Communities? Two Case Studies From Italy*. 21–35. <https://doi.org/10.4324/9780367201777-3>
- Nazneen, S., Xu, H., & Din, N. U. (2019). Cross-border Infrastructural Development and Residents' Perceived Tourism Impacts: A Case of China–Pakistan Economic Corridor. *International Journal of Tourism Research*, 21(3), 334–343. <https://doi.org/10.1002/jtr.2264>
- Nhem, S., & Lee, Y. J. (2019). Women's Participation and the Gender Perspective in Sustainable Forestry in Cambodia: Local Perceptions and the Context of Forestry Research. *Forest Science and Technology*, 15(3), 93–110. <https://doi.org/10.1080/21580103.2019.1595174>
- Nugroho, K. S., Ardiyansah, A., & Sjafari, A. (2024). "Here" Collaborative Governance: Tourism Development Model of the Baduy Indigenous People in Indonesia. *Journal of Law and Sustainable Development*, 12(1), e2823. <https://doi.org/10.55908/sdgs.v12i1.2823>
- Nunkoo, R., & Ramkissoon, H. (2013). Stakeholders' Views of Enclave Tourism. *Journal of Hospitality & Tourism Research*, 40(5), 557–558. <https://doi.org/10.1177/1096348013503997>
- Nurhadi, I., Sumarti, T., Dharmawan, A. H., & Damanhuri, D. S. (2022). Cultural Commodification and Ethical Transition of Tourism Development: A Case in Osing Community, Indonesia. *Sodality Jurnal Sosiologi Pedesaan*, 10(1), 24–43. <https://doi.org/10.22500/10202238564>
- Oldekop, J. A., Holmes, G., Harris, W. E., & Evans, K. L. (2015). A Global Assessment of the Social and Conservation Outcomes of Protected Areas. *Conservation Biology*, 30(1), 133–141. <https://doi.org/10.1111/cobi.12568>
- Pashaie, S., & Perić, M. (2023). The Future of Sports Tourism in the Light of the COVID-19 Pandemic – Developing a New Paradigm Model. *Journal of Tourism Futures*. <https://doi.org/10.1108/jtf-09-2022-0236>
- Philip, T. M., Patel, S., Beckham, K., Cediell, N. W. D., Disston, J., Salasin, E., & Altshcul, S. R. (2022). Program Redesign Toward Democratic Teacher Education. *Teachers College Record*, 124(3), 89–114. <https://doi.org/10.1177/01614681221086777>
- Prasiasa, D. P. O., Dewa Ayu Diyah Sri Widari, & Susanti, P. H. (2023). Authenticity and Commodification of Creative Industry Products in the Tourism Sector, Bali. *Mudra Jurnal Seni Budaya*, 38(3). <https://doi.org/10.31091/mudra.v38i3.2285>

doi: <https://doi.org/xxx.xxx>

- Radzevičius, M. (2022). The Post-Pandemic Changes of Dark Tourism Industry. *Vilnius University Open Series*, 44–59. https://doi.org/10.15388/culture_creative.2022.3
- Rahman, M. K., Masud, M. M., Akhtar, R., & Hossain, M. M. (2021). Impact of Community Participation on Sustainable Development of Marine Protected Areas: Assessment of Ecotourism Development. *International Journal of Tourism Research*, 24(1), 33–43. <https://doi.org/10.1002/jtr.2480>
- Reddy, K., & Sailesh, B. (2024). Cultural Guardianship in Tourism: Indigenous Communities' Quest for Economic Stability and Identity Preservation. *Journal of Environmental Management and Tourism*, 15(2), 328. [https://doi.org/10.14505/jemt.v15.2\(74\).08](https://doi.org/10.14505/jemt.v15.2(74).08)
- Rhama, B., & Kusumasari, B. (2022). Assessing Resource-based Theory in Ecotourism Management: The Case of Sebangau National Park, Indonesia. *International Social Science Journal*, 72(245), 613–634. <https://doi.org/10.1111/issj.12345>
- Safrida, S., Maulida, D., Lestari, R., Marzuki, M., & Husaidi, H. (2022). Economic Empowerment of Coastal Communities During the Covid-19 Pandemic in Johan Pahlawan District, West Aceh Regency. *Jurnal Public Policy*, 8(2), 79. <https://doi.org/10.35308/jpp.v8i2.4014>
- Sari, A. I., Suwanto, S., Suminah, S., & Purnomo, S. H. (2022). Empowering the Community in the Use of Livestock Waste Biogas as a Sustainable Energy Source. *Sustainability*, 14(21), 14121. <https://doi.org/10.3390/su142114121>
- Sudiapermana, E., & Muslikhah, M. (2020). The Transformation of Sustainable Community Empowerment Based on Islamic Boarding Schools System. *Journal of Nonformal Education*, 6(1), 36–43. <https://doi.org/10.15294/jne.v6i1.23429>
- Sukri, W., Zamzuri, N. H., Mohd Ali Bahari Abdul Kadir, & Jamal, S. A. (2024). Exploring Culture and Sustainability: Community Participation in Indigenous Tourism in Malaysia. *Information Management and Business Review*, 16(3S(I)a), 437–446. [https://doi.org/10.22610/imbr.v16i3s\(i\)a.4216](https://doi.org/10.22610/imbr.v16i3s(i)a.4216)
- Sulistyowati, L. (2019). *Community Empowerment Policy Analysis in the Archipelago Group Natural Resources Management*. <https://doi.org/10.4108/eai.29-8-2019.2289131>
- Sumardjo, S., Firmansyah, A., & Dharmawan, L. (2023). Social Transformation in Peri-Urban Communities Toward Food Sustainability and Achievement of SDGs in the Era of Disruption. *Sustainability*, 15(13), 10678. <https://doi.org/10.3390/su151310678>

- Sumi, A., Kanungo, A. K., & Smith, C. (2025). *Heritage Tourism and Sustainable Development*. <https://doi.org/10.1093/oxfordhb/9780197607695.013.63>
- Sururi, A. (2017). Pemberdayaan Masyarakat Melalui Program Pembangunan Infrastruktur Perdesaan Dalam Meningkatkan Kesejahteraan Masyarakat Kecamatan Wanasalam Kabupaten Lebak. *Sawala Jurnal Administrasi Negara*, 3(2). <https://doi.org/10.30656/sawala.v3i2.229>
- Tolkach, D., & Pratt, S. (2019). Globalisation and Cultural Change in Pacific Island Countries: The Role of Tourism. *Tourism Geographies*, 23(3), 371–396. <https://doi.org/10.1080/14616688.2019.1625071>
- Utomo, D., Karsidi, R., Nurhaeni, I. D. A., & Kartono, D. T. (2021). The Empowerment of Tourism Community Through Corporate Social Responsibility (CSR) Program. *Iapa Proceedings Conference*, 203. <https://doi.org/10.30589/proceedings.2021.528>
- Vimal, R., KHALIL-LORTIE, M., & Gatiso, T. T. (2018). What Does Community Participation in Nature Protection Mean? The Case of Tropical National Parks in Africa. *Environmental Conservation*, 45(4), 333–341. <https://doi.org/10.1017/s0376892917000583>
- Wahl, J., Lee, S.-H., & Jamal, T. (2020). Indigenous Heritage Tourism Development in a (Post-)Covid World: Towards Social Justice at Little Bighorn Battlefield National Monument, USA. *Sustainability*, 12(22), 9484. <https://doi.org/10.3390/su12229484>
- Wang, Q., Sun, N., Hon, A. H., & Zhu, Z. (2023). Linking Organizational Justice to Tourism and Hospitality Employees' Service Orientation: The Roles of Confucian Values and Relationship Quality. *International Journal of Contemporary Hospitality Management*, 36(6), 2107–2124. <https://doi.org/10.1108/ijchm-10-2022-1269>
- Wang, Y., & Wei, H. (2022). The Influence of Destination Promotion Videos on Residents' Sense of Empowerment and Support for Tourism. *Sage Open*, 12(3). <https://doi.org/10.1177/21582440221106730>
- Whitford, M., & Dunn, A. R. (2014). Papua New Guinea's Indigenous Cultural Festivals: Cultural Tragedy or Triumph? *Event Management*, 18(3), 265–283. <https://doi.org/10.3727/152599514x13989500765727>
- Wondirad, A., Tolkach, D., & King, B. (2020). Stakeholder Collaboration as a Major Factor for Sustainable Ecotourism Development in Developing Countries. *Tourism Management*, 78, 104024. <https://doi.org/10.1016/j.tourman.2019.104024>
- Woosnam, K. M., & Ribeiro, M. A. (2022). Methodological and Theoretical Advancements in Social Impacts of Tourism Research. *Journal of*

doi: <https://doi.org/xxx.xxx>

Sustainable Tourism, 31(2), 187–203.
<https://doi.org/10.1080/09669582.2022.2046011>

Wu, L., Liu, Y., Liu, K., Wang, Y., & Tian, Z. (2023). Analysis of Tourist Market Structure and Its Driving Factors in Small Cities Before and After COVID-19. *Isprs International Journal of Geo-Information*, 12(6), 243. <https://doi.org/10.3390/ijgi12060243>

Wu, S.-T., & Chen, Y.-S. (2015). The Social, Economic, and Environmental Impacts of Casino Gambling on the Residents of Macau and Singapore. *Tourism Management*, 48, 285–298. <https://doi.org/10.1016/j.tourman.2014.11.013>

Wulandari, D. P., Harmawan, V., Lisna, Y. P., & Mustika, S. (2024). Covid-19 Adaptive Tourism Attraction: Tourism Resilience Through CHSE Certification for Visiting Decision. *Indonesian Journal of Tourism and Leisure*, 5(1), 51–61. <https://doi.org/10.36256/ijtl.v5i1.380>

Yan, H., Wei, H., & Min, W. (2021). Exploring Tourism Recovery in the Post-Covid-19 Period: An Evolutionary Game Theory Approach. *Sustainability*, 13(16), 9162. <https://doi.org/10.3390/su13169162>

Zhang, T., Wen, H., & Li, X. (2018). A Tourist-Based Model of Authenticity of Heritage Sporting Events: The Case of Naadam. *Sustainability*, 11(1), 108. <https://doi.org/10.3390/su11010108>