Mapping the Future of Ecotourism: A Decade of Research Insights

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Abstract: This study underscores the importance of deepening understanding of ecotourism to foster sustainability and environmental responsibility in tourism. Through a systematic literature review of 84 articles published between 2015 and 2025 in Web of Science database, the study examines the intellectual and thematic structure of the discipline. Three major thematic clusters were identified, revealing a shift from descriptive studies focused on conservation and community participation toward integrative approaches that encompass governance, behavioral psychology, and digital transformation. By synthesizing current scholarship, this research highlights emerging theoretical trends, unresolved gaps, and future directions that align ecotourism with global sustainability goals. The findings offer conceptual insights for researchers, evidence-based guidance for policymakers, and practical strategies for tourism enterprises aiming to strengthen ecological integrity and community resilience.

Keywords: Ecotourism; Sustainable Tourism; Literature Review; Research Trends; Environmental Conservation

1. Introduction

Ecotourism is a critical area of study positioned at the intersection of environmental conservation and sustainable economic development. Its central role in the broader agenda of sustainable tourism makes it a crucial field for scholarly inquiry (W. Q. Zhang & Fukami, 2024). However, ecotourism is complex, often critically evaluated as a conservation tool that presents social dilemmas, emphasizing the persistent gap between its conceptual ideals and its implementation outcomes (Das & Chatterjee, 2015). Given the rapid evolution and multidisciplinary nature of the field (Zupic & Čater, 2015), there is a need for a systematic assessment of the intellectual landscape to advance sustainable practices and environmental awareness in the tourism sector.

This study addresses this need by through a systematic literature review using bibliometric analysis (Thirumaran et al., 2021; Zupic & Čater, 2015). Our approach provides a quantitative and reliable method for analyzing large datasets of academic publications (Milojevic et al., 2011). The research analyzed 84 articles published between 2015 and 2025, sourced from the Web of Science database using the keyword “ecotourism.”

The analysis identified three distinct thematic clusters (Sustainable Ecotourism Strategies and Community Involvement; Technological Innovation, Marketing Strategies, and Behavioral Drivers; and Ecotourism, Community Livelihoods, and Environmental Resilience), each reflecting major areas of inquiry and the evolution of ecotourism scholarship over the past decade. By synthesizing existing studies and applying co-occurrence and bibliographic coupling analysis (Veloutsou & Ruiz, 2020; Kessler, 1963; W. Liu et al., 2017), the review highlights emerging trends, research gaps, and new directions for future investigation.

The theoretical implications advance the understanding of ecotourism by demonstrating its evolution toward an integrated, multidisciplinary paradigm. The practical implications offer strategic guidance for policymakers and businesses, highlighting the importance of participatory governance and digital transformation in fostering sustainable ecotourism. Overall, the study contributes a comprehensive understanding of ecotourism’s development, serving as a foundation for future research and informed decision-making in sustainable tourism management.

2. Materials and Methods

Bibliometric analysis provides a systematic and quantitative approach to examine research trends and scholarly influence, ensuring objectivity and reproducibility (Milojevic et al., 2011; Zhi et al., 2015). Additionally, it enables the quantitative validation of conceptual categories identified in prior reviews, thereby strengthening the objectivity and credibility of the findings (Zupic & Čater, 2015).

In this study a systematic bibliometric approach was adopted to guarantee rigor, accuracy, and reliability in data collection. The Web of Science Core Collection (WoS) was chosen for its methodological rigor and curated records, which are particularly valuable in social science research (Franceschini et al., 2016; Z. Liu et al., 2015). Data were extracted on October 23, 2025, covering publications from 2015 to 2025 in order to capture a decade of ecotourism research. Following the methodological procedures outlined in previous studies, where the search was limited to titles (Nogueira & Montenegro, 2025) containing the term "ecotourism" (Dinç et al., 2023), including only peer-reviewed articles and review papers written in English were included (Nogueira et al., 2025), and the analysis focused on the fields of Business, Management, and Economics (Thirumaran et al., 2021). This multi-stage selection process yielded a final dataset of 84 publications for detailed bibliometric analysis (Table 1).

Table 1: Steps involved in the methodology.

Steps	Exclusion criteria	Number of Publications
Step 1	Select database: Web of Science	-
	Search date: October, **13 2025** (2015 -2025)	-
	Search performed by: title	-
Step 2	Search Keyword:	-
	ecotourism	1.427
Step 3	Documents types: articles and reviews	1.152 (275 excluded)
Step 4	Articles written in English	1.103 (49 excluded)
Step 5	WOS Categories: Business or Management or Economics	84 (1019 excluded)
	Articles for analyses - 84	

In the analytical phase, VOSviewer software was employed to construct and visualize bibliometric networks, enabling detailed interpretation of relationships within the dataset (Eck & Waltman, 2010; Eck & Waltman, 2017). A keyword co-occurrence analysis was conducted to explore how frequently keywords appeared together, revealing the conceptual structure and thematic development of ecotourism research (Veloutsou & Ruiz, 2020). Additionally, bibliographic coupling analysis was applied to measure the similarity between studies based on shared references (Kessler, 1963; W. Liu et al., 2017), allowing the identification of intellectual connections and clusters within the literature.

3. Results and Discussion

3.1 Co-Occurrence Analysis

The co-occurrence analysis of keywords from the 84 selected publications was carried out using VOSviewer (version 1.6.17). In total, 616 distinct keywords were identified within the dataset. To ensure analytical robustness and focus on the most significant terms, only those keywords that appeared at least four times were retained, resulting in 27 keywords being included in the final analysis (Figure 1). This approach enabled the visualization of keyword relationships and the identification of thematic trends.

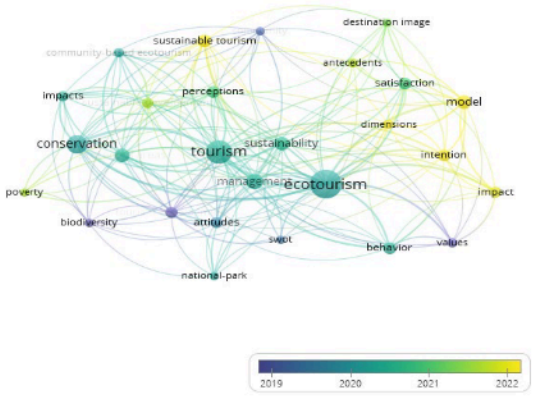

Figure 1: Co-Occurrence Analysis

Figure 1 illustrates the keyword co-occurrence network, where the color gradient from blue to yellow depicts the temporal evolution of ecotourism research between 2019 and 2022, highlighting the conceptual and thematic development of the field over time. "Ecotourism" emerges as the most central and interconnected keyword, closely linked with "tourism," "sustainable tourism," "management," "sustainability," and "conservation," underscoring its role as the core theme of the field. Temporal visualization shows a shift from early studies (2020–2021) focused on ecological and policy-oriented themes like "sustainable development" and "protected areas" to more recent research (2022–2023) emphasizing behavioral aspects such as "intention," "behavior," and "satisfaction." This indicates a growing interest in the psychological and experiential dimensions of ecotourism. Intermediate keywords like "tourism development" and "management" connect environmental and behavioral themes, reflecting a trend toward integrating sustainability with managerial and human-centered perspectives. Overall, the findings underline an ongoing alignment of ecotourism research with the broader sustainability agenda.

3.2 Bibliographic Coupling Analysis

The cluster analysis, conducted using VOSviewer (version 1.6.17), applied bibliographic coupling to identify and visualize the main research frontiers within ecotourism. This method effectively maps thematic connections among scholarly works, revealing how studies align and evolve across related topics (Zupic & Čater, 2015). Of the 84 analyzed publications, 79 were successfully grouped, while five were excluded due to limited bibliographic links. The results, shown in Figure 2, revealed three main thematic clusters: Cluster 1 (Red) – Sustainable Ecotourism Strategies and Community Involvement (36 articles); Cluster 2 (Green) – Technological Innovation, Marketing Strategies, and Behavioral Drivers in Ecotourism (26 articles); and Cluster 3 (Blue) – Ecotourism, Community Livelihoods, and Environmental Resilience (17 articles). The visualization illustrates the bibliographic coupling network, where node size represents citation strength and color differentiation highlights distinct research domains, illustrating the intellectual structure and interconnections within ecotourism scholarship.

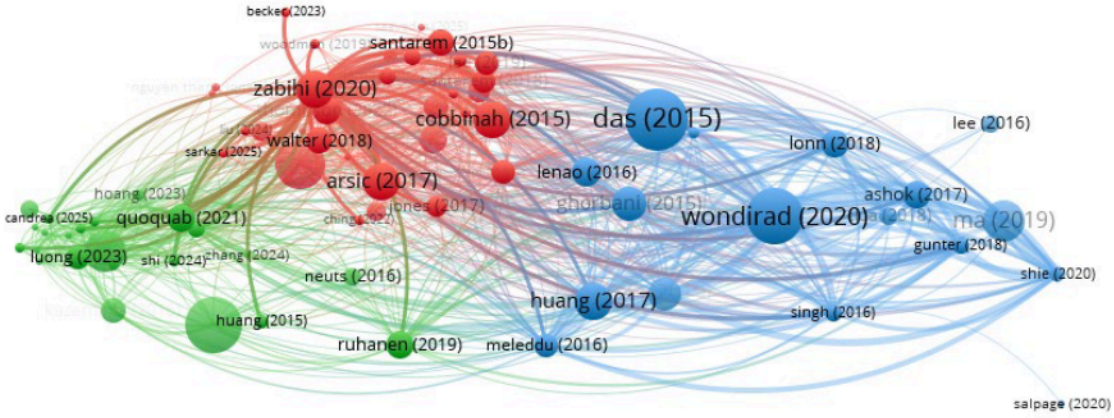

Figure 2: Cluster analysis

The analysis revealed three major thematic clusters that collectively define the intellectual landscape of ecotourism research over the past decade. These clusters highlight how the field has evolved from emphasizing sustainable resource management and community participation toward integrating behavioral sciences, technological innovation, and socio-economic resilience in tourism development.

3.2.1 Cluster 1

Sustainable Ecotourism Strategies and Community Involvement - primarily encompasses research focused on sustainability-oriented ecotourism models, community empowerment, and environmental conservation. Saavedra (2025) identified that ecotourism in Colombia contributes to forest preservation while fostering employment and local development. Similarly, Mohanty et al. (2024) emphasized that community-based initiatives in India's Bhitarkanika Wildlife Sanctuary improve conservation awareness and inclusive growth. Governance and collaboration appear as central themes, with Suryawan et al. (2025) and Tamrin et al. (2024) examining coastal and marine ecotourism management frameworks in Indonesia, highlighting the need for adaptive governance mechanisms. Studies such as Saxena et al. (2025) and Tiwari & Nguyen (2024) argued that

equitable community participation and inclusive governance are vital for ensuring sustainable tourism outcomes. Methodological innovation is another key element of this cluster: Sarkar et al. (2025) and Zabihi et al. (2020) utilized GIS-based and fuzzy-analytic hierarchy process (F-AHP) models to assess ecotourism suitability, while Arsic et al. (2017) and Becker et al., (2023) demonstrated how multi-criteria decision frameworks and economic valuation models can balance conservation and local development. Overall, the cluster reinforces the view that sustainable ecotourism depends on harmonizing ecological protection, governance structures, and socio-economic empowerment.

3.2.2 Cluster 2

Technological Innovation, Marketing Strategies, and Behavioral Drivers in Ecotourism - focuses on the intersection of technology, marketing, and psychology in promoting responsible ecotourism behavior and destination branding. Candrea et al. (2025) and Sorcaru et al. (2025) exemplified how augmented reality and digital engagement enhance online branding and family-focused ecotourism experiences. Complementarily, S. Zhang et al. (2025) explored how immersive virtual environments stimulate pro-environmental intentions, applying the stimulus-organism-response and theory of planned behavior frameworks. Policy and innovation studies such as Firman et al. (2022) demonstrated how eco-innovation, digital media, and government policy align to drive sustainable tourism in Indonesia, while Yuliarni et al. (2023) contrasted marketing strategies in Uzbekistan and Indonesia, showing that satisfaction and loyalty remain key mediating variables for competitiveness. Consumer behavior research by Hoang et al. (2023), Le (2024), and Luong (2023) revealed that destination image, satisfaction, and biospheric values influence visitors' loyalty and environmental responsibility. Meanwhile, Naparin et al. (2025) and Lee (2025) explored sustainability communication and biodiversity education as mechanisms to strengthen environmental citizenship. H. K. Shi & Chen (2024) and Silva et al. (2022) contributed cross-cultural insights, illustrating how emotional intelligence, collectivism, and activism shape ecotourism motivations in China and Brazil. Finally, Sana et al. (2023) and W. Q. Zhang & Fukami (2024) advanced the conceptual boundaries of ecotourism research through systematic reviews and the evaluation of codes of conduct for responsible tourism. Together, this cluster reveals a maturing research direction that combines technological innovation, affective engagement, and sustainable marketing as catalysts for ethical and environmentally conscious tourism.

3.2.3 Cluster 3

Ecotourism, Community Livelihoods, and Environmental Resilience - integrates works examining ecotourism's complex relationship with livelihoods, governance, and ecological resilience. Foundational studies such as Das & Chatterjee (2015) critically evaluated ecotourism as both a conservation tool and a social dilemma, emphasizing the gap between conceptual ideals and implementation outcomes. Their subsequent work, Das & Chatterjee (2020), investigated the Bhitarkanika Wildlife Sanctuary in India, showing that while ecotourism improves local employment, it exacerbates human–wildlife conflicts and economic disparities. Complementarily, Ma et al. (2019) demonstrated that ecotourism in Chinese nature reserves reduces poverty yet increases income inequality due to uneven access to tourism benefits. Wondirad et al. (2020) underscored the necessity of stakeholder collaboration and participatory governance in sustaining equitable ecotourism in developing contexts, whereas Shie (2020) explored how indigenous-led river ecotourism in Taiwan fosters community resilience through social capital and adaptive management. Gunter et al. (2018) extended the discussion globally by proving that international ecotourism contributes to economic growth and convergence across the Central American and Caribbean regions. On the behavioral front, Meleddu & Pulina (2016) found that environmental awareness and pro-ecological attitudes significantly enhance willingness to pay for sustainable tourism experiences. Broader system-level inquiries by Shi et al. (2019) and Salpage et al. (2020) assessed visitor dynamics and environmental vulnerability, revealing that mass ecotourism in China can foster ecological citizenship, while Sri Lanka's coastal wetland ecotourism faces climate-induced risks. Lastly, Singh et al. (2016) introduced a framework linking ecotourism certification and sport tourism, advocating standardized certification schemes to strengthen credibility and environmental accountability. Collectively, this cluster highlights the delicate balance between conservation, economic equity, and resilience-building, affirming that ecotourism's sustainability hinges on inclusive governance and proactive climate adaptation strategies.

The three thematic clusters identified align with key theoretical frameworks in sustainable and community-based tourism. Cluster 1 reflects the Community-Based Tourism Theory (Murphy, 1985; Scheyvens, 1999), and Stakeholder Theory (Freeman, 1984), emphasizing governance, participation, and local empowerment. Cluster 2 connects with the Theory of Planned Behavior (Ajzen, 1991) and Sustainable Marketing Framework (Belz &

Peattie, 2012), linking technology, behavior, and responsible tourism marketing. Cluster 3 aligns with the Social-Ecological Systems and Resilience Frameworks (Berkes & Folke, 1998; Folke, 2006), highlighting the balance between conservation, livelihoods, and adaptive capacity. Together, these frameworks demonstrate how ecotourism research integrates behavioral, governance, and ecological perspectives to advance sustainability and community resilience.

3.3 Academic Contributions

This study advances the theoretical understanding of ecotourism and sustainable development by mapping the intellectual landscape of the field between 2015 and 2025 through bibliometric coupling and co-occurrence analysis. The findings indicate that ecotourism research has evolved from descriptive assessments of sustainability and community participation toward an integrated, multidisciplinary paradigm that combines environmental management, behavioral psychology, and digital innovation. The results reveal growing theoretical pluralism, with frameworks such as the theory of planned behavior, stakeholder theory, and adaptive governance increasingly shaping the discourse. The identification of three thematic clusters organizes existing literature into coherent domains while exposing theoretical gaps related to technology-mediated behavior and social equity. This research supports a systems-based theoretical lens that emphasizes the interdependence between environmental, economic, and socio-psychological dimensions of ecotourism.

3.4 Practical Implications

The insights from this research offer strategic and actionable guidance for various stakeholders seeking to promote sustainable ecotourism. For policymakers and destination managers, the study highlights the necessity of embedding participatory governance in ecotourism management, moving decisively beyond traditional top-down approaches. Prioritizing equitable community involvement is essential for achieving sustainable outcomes and strengthening collaborative frameworks that ensure benefits are fairly distributed. It is also crucial to address negative side effects, such as rising income inequality, and to mitigate local tensions, including human-wildlife conflicts. Furthermore, destination management plans must explicitly integrate ecotourism with climate adaptation and biodiversity protection. This strategic alignment helps foster economic growth that is environmentally resilient and enhances local livelihoods, thus supporting key global Sustainable Development Goals. To ensure accountability, governments and industry bodies should champion and implement standardized certification schemes. This measure is vital for establishing credibility, strengthening environmental responsibility among operators, and actively combatting misleading practices often referred to as 'greenwashing'.

For businesses and ecotourism operators, the research emphasizes the potential of digital transformation for both engagement and environmental impact reduction. Operators should strategically leverage technologies like augmented reality and gamification to create immersive visitor experiences, improve destination branding, and actively stimulate pro-environmental intentions among tourists. The use of data analytics is also critical for effectively monitoring visitor dynamics and managing the environmental footprint of their operations. A strong emphasis should be placed on behavioral drivers and education. By investing in rich sustainability communication and biodiversity education, operators strengthen environmental citizenship and provide high-quality experiences that boost visitor satisfaction, cultivate loyalty, and increase customers' willingness to pay a premium for genuinely sustainable options. Finally, when planning new ventures, businesses should adopt a proactive approach by employing multi-criteria decision frameworks and economic valuation models. This ensures a holistic assessment of ecotourism suitability, guaranteeing that conservation needs are perfectly balanced with viable local economic returns right from the initial design phase.

3.5 Future Research Directions

The mapping of ecotourism research over the past decade reveals several promising avenues for future investigation, particularly those that address the field's shift toward an integrated, multidisciplinary paradigm.

Future research should expand the analysis of behavioral drivers in ecotourism. While recent studies has focused on visitor intention and satisfaction, a deeper understanding of the psychological mechanisms is needed. Specific directions include investigating the long-term impact of emerging technologies – such augmented reality, virtual reality, and gamification - on actual tourist behavior, pro-environmental intentions, and ethical consumption post-trip; this research must move beyond mere intention to measure sustained behavioral change.

Furthermore, researchers should explore the influence of emotional intelligence, biospheric values, and cultural dimensions on ecotourism motivations and responsible actions in diverse global contexts.

Studies on the socio-economic and governance aspects requires a stronger focus on implementation challenges and practical solutions. Scholars must develop and test adaptive governance frameworks designed to manage dynamic issues like climate-induced risks and human–wildlife conflicts, particularly in vulnerable areas. Crucially, research should propose reliable metrics to measure the actual success of collaborative and participatory management, moving beyond descriptive assessments. On the socio-economic front, conducting longitudinal analyses is necessary to assess the true impact of ecotourism on local livelihoods and income distribution, with a critical focus on investigating how to effectively mitigate income inequality and ensure equitable access to tourism benefits. Lastly, rigorous evaluation of ecotourism certification schemes in different regional contexts is needed to determine whether these systems genuinely translate into measurable environmental accountability and conservation outcomes.

The nexus between technology and resource management needs further exploration. Academics should explore the use of big data and machine learning to analyze visitor dynamics and environmental vulnerability in real-time, providing management frameworks with the capacity for proactive intervention rather than reactive measures. It is also vital to systematically test and validate the predictive power of methodological tools identified in the literature, such as GIS-based and fuzzy-analytic hierarchy process (F-AHP) models, to assess ecotourism suitability and carrying capacity in new, unexplored destinations. Finally, future studies should explicitly link ecotourism models and outcomes to specific indicators within the United Nations Sustainable Development Goals to provide clearer guidance for national and international policy reporting.

4. Conclusion

This study offers a comprehensive mapping of ecotourism research from 2015 to 2025, drawing on a systematic bibliometric analysis of 84 peer-reviewed articles indexed in the Web of Science. The findings reveal a clear evolution from descriptive analyses of conservation and community participation toward integrative approaches that combine governance, behavioral psychology, and digital transformation. Using co-occurrence and bibliographic coupling techniques, the study identifies three major thematic clusters defining the intellectual structure of the field.

The first cluster, Sustainable Ecotourism Strategies and Community Involvement, emphasizes governance, ecological protection, and community empowerment. The second, Technological Innovation, Marketing Strategies, and Behavioral Drivers in Ecotourism, reflects the influence of behavioral theories, sustainable marketing, and digital engagement in shaping pro-environmental behavior. The third, Ecotourism, Community Livelihoods, and Environmental Resilience, focuses on the balance between conservation, social equity, and adaptive capacity in climate-vulnerable contexts. Jointly, these clusters underscore the growing theoretical pluralism in ecotourism and its alignment with frameworks such as Stakeholder Theory, the Theory of Planned Behavior, and Social-Ecological Systems thinking. Although limited by database scope and keyword constraints, this study provides a rigorous and transparent overview of the field. It advances understanding of ecotourism's multidisciplinary nature and highlights future directions for integrating governance, technology, and behavioral insights to enhance sustainable tourism and community resilience.

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Ethics Declaration

This is an original work of authors. Ethical clearance was not required for the research.

AI Declaration

Minimal assistance from AI tools was utilized solely for language refinement, such as grammar and style corrections. The human authors confirm full and sole responsibility for the scientific content and conclusions of this manuscript.

References

Arsić, S., Nikolić, D. and Živković, Z. (2017) 'Hybrid SWOT-ANP-FANP model for prioritisation strategies of sustainable development of ecotourism in National Park Djerdap, Serbia', *Forest Policy and Economics*, 80, pp. 11–26. doi:10.1016/j.forpol.2017.02.003.

Ajzen, I. (1991) 'The theory of planned behaviour', *Organizational Behavior and Human Decision Processes*, 50(2), pp. 179–211.

Becker, N., Farja, Y., Greenfeld, A., Markova-Nenova, N. and Wätzold, F. (2023) 'A blueprint for addressing conflicts between ecotourism and farming from an economic perspective: The case of wintering crane conservation in the Hula Valley in Israel', *Ecological Economics*, 209. doi:10.1016/j.ecolecon.2023.107824.

Belz, F.M. and Peattie, K. (2012) *Sustainability marketing: A global perspective*. 2nd edn. Chichester: Wiley.

Berkes, F. and Folke, C. (1998) *Linking social and ecological systems: Management practices and social mechanisms for building resilience*. Cambridge: Cambridge University Press.

Candrea, A.N., Ivasciuc, I.S., Ispas, A., Constantin, C.P. and Nechita, F. (2025) 'From clicks to trips: Examining online destination brand experience in ecotourism decision making', *Administrative Sciences*, 15(6). doi:10.3390/admsci15060228.

Das, M. and Chatterjee, B. (2015) 'Ecotourism: A panacea or a predicament?', *Tourism Management Perspectives*, 14, pp. 3–16. doi:10.1016/j.tmp.2015.01.002.

Das, M. and Chatterjee, B. (2020) 'Livelihood in Bhitarkanika Wildlife Sanctuary, India: An impact assessment of ecotourism practices', *Singapore Economic Review*, 65(3), pp. 653–681. doi:10.1142/S0217590817410065.

Dinç, A., Bahar, M. and Topsakal, Y. (2023) 'Ecotourism research: A bibliometric review', *Tourism and Management Studies*, 19(1), pp. 29–40. doi:10.18089/tms.2023.190103.

Eck, N.J. and Waltman, L. (2010) 'Software survey: VOSviewer, a computer program for bibliometric mapping', *Scientometrics*, 84(2), pp. 523–538. doi:10.1007/s11192-009-0146-3.

Eck, N.J. and Waltman, L. (2017) 'Citation-based clustering of publications using CitNetExplorer and VOSviewer', *Scientometrics*, 111(2), pp. 1053–1070. doi:10.1007/s11192-017-2300-7.

Firman, A., Moslehpour, M., Qiu, R.F., Lin, P.K., Ismail, T. and Rahman, F.F. (2022) 'The impact of eco-innovation, ecotourism policy and social media on sustainable tourism development: Evidence from the tourism sector of Indonesia', *Economic Research – Ekonomska Istraživanja*. doi:10.1080/1331677X.2022.2143847.

Folke, C. (2006) 'Resilience: The emergence of a perspective for social–ecological systems analyses', *Global Environmental Change*, 16(3), pp. 253–267.

Franceschini, S., Faria, L.G.D. and Jurowetzki, R. (2016) 'Unveiling scientific communities about sustainability and innovation: A bibliometric journey around sustainable terms', *Journal of Cleaner Production*, 127, pp. 72–83. doi:10.1016/j.jclepro.2016.03.142.

Freeman, R.E. (1984) *Strategic management: A stakeholder approach*. Boston: Pitman.

Gunter, U., Ceddia, M.G., Leonard, D. and Tröster, B. (2018) 'Contribution of international ecotourism to comprehensive economic development and convergence in the Central American and Caribbean region', *Applied Economics*, 50(33), pp. 3614–3629. doi:10.1080/00036846.2018.1430339.

Hoang, S.D., Dey, S.K., Ratilla, M. and Tucková, Z. (2023) 'Investigating the antecedents of ecotourism and destination loyalty among Vietnamese tourists: An expectation-confirmation perspective', *Global Business Review*. doi:10.1177/09721509231174740.

Kessler, M.M. (1963) 'Bibliographic coupling between scientific papers', *American Documentation*, 14(1), pp. 10–25. doi:10.1002/asi.5090140103.

Lee, Y.J. (2025) 'Towards a sustainable future: Analysing meta-competencies in community-based ecotourism on Liuqiu Island', *Journal of Hospitality and Tourism Management*, 62. doi:10.1016/j.jhtm.2025.01.005.

Le, T.T. (2024) 'Influences of the ecotourism industry in the Mekong Delta, Vietnam: The mediating role of tourist satisfaction', *Cogent Business & Management*, 11(1). doi:10.1080/23311975.2024.2353570.

Liu, W., Bai, E., Liu, L. and Wei, W. (2017) 'A framework of sustainable service supply chain management: A literature review and research agenda', *Sustainability*, 9(3). doi:10.3390/su9030421.

Liu, Z., Yin, Y., Liu, W. and Dunford, M. (2015) 'Visualising the intellectual structure and evolution of innovation systems research: A bibliometric analysis', *Scientometrics*, 103(1), pp. 135–158. doi:10.1007/s11192-014-1517-y.

Luong, T.B. (2023) 'Eco-destination image, environmental beliefs, ecotourism attitudes and ecotourism intention: The moderating role of biospheric values', *Journal of Hospitality and Tourism Management*, 57, pp. 315–326. doi:10.1016/j.jhtm.2023.11.002.

Ma, B., Cai, Z., Zheng, J. and Wen, Y.L. (2019) 'Conservation, ecotourism, poverty and income inequality: A case study of nature reserves in Qinling, China', *World Development*, 115, pp. 236–244. doi:10.1016/j.worlddev.2018.11.017.

Meleddu, M. and Pulina, M. (2016) 'Evaluation of individuals' intention to pay a premium price for ecotourism: An exploratory study', *Journal of Behavioral and Experimental Economics*, 65, pp. 67–78. doi:10.1016/j.socec.2016.08.006.

Milojević, S., Sugimoto, C.R., Yan, E.J. and Ding, Y. (2011) 'The cognitive structure of library and information science: Analysis of article title words', *Journal of the American Society for Information Science and Technology*, 62(10), pp. 1933–1953. doi:10.1002/asi.21602.

Mohanty, P.P., Ravenshaw, S.K.P., Kunjuraman, V. and Pathak, D. (2024) 'Community-based ecotourism in protected areas towards inclusive development: Evidence from Bhitarkanika Wildlife Sanctuary, India', *International Journal of Business and Society*, 25(2), pp. 810–831. doi:10.33736/ijbs.7633.2024.

Murphy, P.E. (1985) *Tourism: A community approach*. New York: Methuen.

Naparin, M., Prihatiningrum, R.Y., Claudia, M. and Adriani, A. (2025) 'Transforming customer behaviour into pro-environmental citizenship: A new challenge in sustainability-based marketing communication in the ecotourism industry', *Cogent Business & Management*, 12(1). doi:10.1080/23311975.2025.2567628.

Nogueira, E., Gomes, S. and Lopes, J.M. (2025) 'Unveiling the triple bottom line's influence on business performance', *Discover Sustainability*, 6(1), pp. 1–18. doi:10.1007/S43621-025-00804-X.

Nogueira, E. and Montenegro, Z. (2025) 'Exploring sustainable tourism research trends: A literature review of the last decade', in Tunkkari-Eskelinen, M. (ed.) *Proceedings of the 7th International Conference on Tourism Research*. Reading: Academic Conferences International Limited.

Saavedra, S. (2025) 'Economic development and environmental conservation: Evidence from ecotourism', *Economic Development and Cultural Change*, 73(3), pp. 1297–1324. doi:10.1086/730828.

Salpage, N.D., Aanesen, M. and Amarasinghe, O. (2020) 'Is the Sri Lankan ecotourism industry threatened by climate change? A case study of Rekawa coastal wetland using a contingent visitation approach', *Environment and Development Economics*, 25(3), pp. 226–243. doi:10.1017/S1355770X19000391.

Sana, Chakraborty, S., Adil, M. and Sadiq, M. (2023) 'Ecotourism experience: A systematic review and future research agenda', *International Journal of Consumer Studies*, 47(6), pp. 2131–2156. doi:10.1111/ijcs.12902.

Sarkar, A., Mondal, M., Das, S. and Gayen, S.K. (2025) 'Revealing ecotourism potentiality in the northeast seven sister states of India: A geospatial analysis using a multifaceted GIS-based approach', *Asia-Pacific Journal of Regional Science*, 9(1), pp. 223–263. doi:10.1007/s41685-024-00367-1.

Saxena, A.P., Shanker, S., Sethi, D., Seth, M. and Saxena, A. (2025) 'Touchstones for the development of an inclusive approach to ecotourism as a service industry', *Benchmarking: An International Journal*, 32(4), pp. 1173–1206. doi:10.1108/BIJ-07-2023-0456.

Scheyvens, R. (1999) 'Ecotourism and the empowerment of local communities', *Tourism Management*, 20(2), pp. 245–249.

Shie, Y.J. (2020) 'Indigenous legacy for building resilience: A case study of Taiwanese mountain river ecotourism', *Tourism Management Perspectives*, 33. doi:10.1016/j.tmp.2019.100612.

Shi, F.F., Weaver, D., Zhao, Y.Z., Huang, M.F., Tang, C.Z. and Liu, Y. (2019) 'Toward an ecological civilisation: Mass comprehensive ecotourism indications among domestic visitors to a Chinese wetland protected area', *Tourism Management*, 70, pp. 59–68. doi:10.1016/j.tourman.2018.07.011.

Shi, H.K. and Chen, W. (2024) 'Environmental values, face and ecotourism intention in China: The mediating role of ecotourism attitude and the moderating role of emotional intelligence', *Journal of Hospitality and Tourism Management*, 61, pp. 101–114. doi:10.1016/j.jhtm.2024.09.008.

Silva, A.S., Fialho, R.G.G., da Costa, M.F. and Campos, P.D. (2022) 'Antecedents of the intention to visit ecotourism destinations that suffered environmental disasters', *Tourism Management Perspectives*, 41. doi:10.1016/j.tmp.2022.100942.

Singh, S., Dash, T.R. and Vashko, I. (2016) 'Tourism, ecotourism and sport tourism: The framework for certification', *Marketing Intelligence & Planning*, 34(2), pp. 236–255. doi:10.1108/MIP-09-2014-0180.

Sorcaru, I.A., Micu, A., Bleoju, G., Micu, A.E., Dragan, G.B., Muntean, M.C. and Camilleri, M.A. (2025) 'Augmented reality marketing in family ecotourism: Cognitive and behavioural drivers of destination branding', *Journal of Innovation & Knowledge*, 10(4). doi:10.1016/j.jik.2025.100742.

Suryawan, W.K., Gunawan, V.D. and Lee, C.H. (2025) 'The role of local adaptive capacity in marine ecotourism scenarios', *Tourism Management*, 107. doi:10.1016/j.tourman.2024.105039.

Tamrin, M.H., Muhafidin, D., Nurasa, H. and Muhtar, E.A. (2024) 'Stakeholder analysis of tourism governance in Dalegan beach ecotourism, East Java, Indonesia', *Journal of Infrastructure Policy and Development*, 8(3). doi:10.24294/jipd.v8i3.3107.

Thirumaran, K., Jang, H.J., Pourabedin, Z. and Wood, J. (2021) 'The role of social media in the luxury tourism business: A research review and trajectory assessment', *Sustainability*, 13(3), pp. 1–13. doi:10.3390/su13031216.

Tiwari, S. and Nguyen, T.P.L. (2024) 'Towards social equity and sustainable economic prosperity through ecotourism: A case of a caste-diversified community along the Annapurna Sanctuary Trail, Nepal', *World Development Perspectives*, 34. doi:10.1016/j.wdp.2024.100592.

Veloutsou, C. and Ruiz, C. (2020) 'Brands as relationship builders in the virtual world: A bibliometric analysis', *Electronic Commerce Research and Applications*, 39. doi:10.1016/j.elerap.2019.100901.

Wondirad, A., Tolkach, D. and King, B. (2020) 'Stakeholder collaboration as a major factor for sustainable ecotourism development in developing countries', *Tourism Management*, 78. doi:10.1016/j.tourman.2019.104024.

Yuliarni, N., Hurriyati, R., Disman, D., Hendrayati, H. and Warlina, L. (2023) 'Marketing strategy of ecotourism in Uzbekistan and Indonesia', *Journal of Eastern European and Central Asian Research*, 10(4), pp. 638–649. doi:10.15549/jeecar.v10i4.1359.

Zabihi, H., Alizadeh, M., Wolf, I.D., Karami, M., Ahmad, A. and Salamian, H. (2020) 'A GIS-based fuzzy analytic hierarchy process (F-AHP) for ecotourism suitability decision making: A case study of Babol, Iran', *Tourism Management Perspectives*, 36. doi:10.1016/j.tmp.2020.100726.

Zhang, S., Pham, N.A. and Luan, C.C. (2025) 'Exploring the role of immersive technology in promoting ecotourism: Integrating perspectives from environmental psychology theory and the theory of planned behaviour', *Journal of Vacation Marketing*. doi:10.1177/13567667251382418.

Zhang, W.Q. and Fukami, S. (2024) 'Quantitative content analysis of codes of conduct for ecotourism in Japan', *Journal of Hospitality and Tourism Management*, 58, pp. 209–213. doi:10.1016/j.jhtm.2024.01.002.

Zhi, W., Yuan, L., Ji, G.D., Liu, Y.S., Cai, Z. and Chen, X. (2015) 'A bibliometric review on carbon cycling research during 1993–2013', *Environmental Earth Sciences*, 74(7), pp. 6065–6075. doi:10.1007/s12665-015-4629-7.

Zupic, I. and Čater, T. (2015) 'Bibliometric methods in management and organisation', *Organizational Research Methods*, 18(3), pp. 429–472. doi:10.1177/1094428114562629.