# EGE AKADEMİK BAKIŞ

**EGE ACADEMIC REVIEW** 

Ekonomi, İşletme, Uluslararası İlişkiler ve Siyaset Bilimi Dergisi

Journal of Economics, Business Administration, International Relations and Political Science



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#### **EGE AKADEMİK BAKIŞ I** EGE ACADEMIC REVIEW

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# Sustainable Tourism Management: A Systematic Review With Bibliographic Analysis

Mustafa Tuncer OKUMU޹ 00

#### **ABSTRACT**

This research examines sustainable tourism management using bibliometric analysis. This study identifies the complex dynamics of organizational psychology by clarifying essential themes that influence sustainable tourism management. As a global industry, tourism has a profound impact on the planet and its inhabitants; therefore, this powerful sector must be governed by sustainability principles. The analysis provides an overview of the current state of sustainable tourism management, including the most impactful authors, journals, universities, and countries, and tracks its historical development. Data were obtained from the widely used social science database, Web of Science (WOS), and processed using the open-source program R. The results were presented through performance analysis and scientific mapping, the core components of bibliometric analysis. This textual analysis highlighted significant topics, prolific authors, influential sources, and prevalent phrases. The paper discusses the field's contributions and consequences, concluding with future research directions and limitations. A complete collection of pertinent literature was acquired from the Web of Science database, initially yielding 173 documents. The inclusion criteria selected only 'articles' from the following research areas: 'hospitality leisure sport tourism', 'management', 'green sustainable science technology', and 'social science interdisciplinary' studies. Furthermore, only documents from 'SSCI' and 'ESCI' journals, written in 'English', were included, resulting in a final collection of 82 documents. This investigation produced significant findings regarding sustainable tourism management and offered valuable insights for future scholarly research. Sustainable tourism management studies have increased since 2015, with the journal Sustainability publishing the most articles. The nine most prolific writers include Dredge D. and Stoeckl N. The most productive universities are James Cook University, Walailak University, and the University of Patras, with Spain being the most productive country. Sustainable tourism is the most frequently used term, and the keyword co-occurrence network shows that it forms four distinct clusters. As a result, businesses can leverage the existing literature to develop and improve their sustainable tourism management practices. Effective sustainable tourism management requires adherence to ECON-ESG (Economic, Environmental, Social, Governance) elements and the Sustainable Development Goals (SDGs).

**Keywords:** Sustainability, Tourism, Management, Sustainable Tourism Management.

JEL Classification Codes: M10, L83, Q01

Referencing Style: APA 7

#### **INTRODUCTION**

Tourism is a multifaceted phenomenon. It is a transient engagement between visitors and a hosting locale, comprising a consortium of stakeholders active in tourism. A wide array of public, private, and hybrid entities participate by offering services, infrastructure, information, and essential tourist products crucial for a successful destination (Van der Zee and Vanneste, 2015:2). Tourism, as one of the fastest-growing economic sectors globally, is increasingly acknowledged as a vital contributor to employment, income generation, economic growth, environmental conservation, and poverty alleviation. Well-designed and managed tourism can preserve the natural and cultural heritage it relies on, empower local communities, create trade opportunities, and promote peace and intercultural understanding. Nonetheless, the increasing volume of international and domestic travel puts pressure on greenhouse gas

emissions, economic leakage, resource management, and impacts on local populations and cultural assets (UNWTO, 2017:10). Tourism frequently generates adverse effects on the environment, society, culture, and sometimes the economy (Logar, 2010:125). Despite these impacts, it has emerged as a primary economic sector and a vital means of sustenance for numerous countries. Consequently, the industry's competitive challenges are directly tied to achieving sustainable development goals for destinations and providing innovative, eco-friendly services that conserve resources. When tourist influx increases, new enterprises are established to provide essential traveler services like accommodation, catering, transportation, and entertainment (Streimikiene et al., 2021:266). This makes sustainability the core concern: destinations must prioritize environmental preservation and resource protection alongside economic growth (Pahrudin et al., 2022:1). The concept of sustainable

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tourism, which seeks to mitigate adverse effects and ensure long-term viability, emerged directly from the intersection of economic development theory and environmentalism (Liu, 2003:460). Sustainable tourism broadly entails the application of sustainable development principles to fulfill the requirements of the tourism industry (Hardy and Beeton, 2001:169).

This study examines research conducted in the field of sustainable tourism management in the Web of Science (WOS) database. Bibliometric methods were used to answer the following research questions: RQ1. What is the current state of sustainable tourism management? RQ2. Which authors and journals have the most significant influence on the literature of sustainable tourism management? RQ3. Which universities and countries have had the most significant impact on the sustainable tourism management literature? RQ4. How has the literature on sustainable tourism management evolved, and where is it heading?

The present study is anticipated to enhance the literature and assist practitioners in several capacities. This study analyzes the theoretical foundations and principal concerns of sustainable tourism management through a bibliometric examination of 82 works. Secondly, the notable contributions of influential articles are acknowledged, and the current field conditions are evaluated. We utilize bibliometric analysis to underscore the increasing significance of publications concerning sustainable tourism management. Thirdly, the literature on sustainable tourism management highlights key issues, notable authors, and the field's progression. We enrich the current dialogue on sustainable tourism management by incorporating and expanding existing knowledge. A comprehensive study of highly referenced publications was performed, revealing knowledge gaps.

#### LITERATURE REVIEW

#### Sustainability

Sustainability is a human-centered concept, pertaining to individuals and their interactions with the environment (Morse, 2010:5). This concept comprises numerous components. Sustainability is a comprehensive idea, encompassing climate change, development, ethics, and social justice. It rests on three fundamental pillars: environmental, social, and economic. The integration of these three pillars constitutes the paramount objective of sustainable development. Sustainability is a call to action, and thus, a political process. It is a way of developing and providing answers to the problems created by the

current economic, social, and environmental status quo (Robinson, 2012:12-13). Sustainability entails operating a successful enterprise while preserving the environment for future generations and respecting the communities where we function (Hedstrom, 2019:22). Sustainability can only be attained when economic growth, environmental preservation, and social equality are aligned (Portney, 2015:7). Sustainable development enhances a population's ability to reduce its vulnerability and is enhanced by it. Similarly, sustainable development is crucial to national security due to its capacity to mitigate resource disputes, environmental displacement, and the consequences of ecologically harmful behaviors (Farley and Smith, 2020:70). Sustainable tourism has integrated sustainable development within the tourism sector (Hirotsune, 2011). Countries must align their actions with the Sustainable Development Goals (SDGs) for the development of their economies and sectors.

The United Nations Sustainable Development Goals (SDGs), or Global Goals, are a worldwide mandate aimed at eradicating poverty, safeguarding the earth, and guaranteeing that all individuals experience peace and prosperity by 2030. The UN has set 17 goals: No poverty, Zero Hunger, Good health and well-being, Quality education, Gender Equality, Clean water and sanitation, Affordable and clean energy, Decent work and economic growth, Industry, innovation and infrastructure, Reduced inequalities, Sustainable cities and communities, Responsible consumption and production, Climate action, Life Below Water, Life on land, Peace, justice and strong institutions, and Partnerships for the goals. The 17 SDGs are interconnected, acknowledging that actions in one domain influence results in others, and that development must achieve equilibrium among social, economic, and environmental sustainability (Undp, 2025).

The Environmental, Social, and Governance (ESG) approach is the predominant framework for assessing corporate sustainability. These criteria now serve as key measures of managerial competence, risk management, and non-financial performance (Martiny et al., 2024:1). This global focus is clear as firms worldwide acknowledge the importance of ESG matters (Chopra et al., 2024:1). ESG is gaining prominence as industry-wide sustainability concerns grow (Vijaya et al., 2025:1). Sustainability reporting helps fortify brand loyalty, improve public perception, send positive signals to stakeholders, and enhance corporate reputation (Sneideriene and Legenzova, 2025:1). Conventional ESG components are essential for sustainability and form the foundation of a

sustainable economy. However, the framework notably lacks an economic dimension, despite the clear impact of economic activity on sustainability. ESG considerations focus primarily on firm-specific factors, often lacking a direct link to broader economic realities. Adding an "economic foundation" to the traditional framework creates a four-component model called ECON-ESG (Işık Et al., 2024:34). Corporations, alongside governments, must therefore pursue strategic ESG performance to ensure a sustainable future. Climate Policy Uncertainty (CPU) is a significant challenge for sustainability. This uncertainty strongly influences corporate sustainability investments and environmental initiatives. Such uncertainty can also limit a firm's ability to manage risks efficiently (Işık et al., 2025:1).

#### **Sustainable Tourism Management**

Sustainability addresses environmental challenges like water and air pollution, climate change, and biodiversity loss. It is a primary concern within the tourism industry. Sustainable tourism destinations must environmental preservation while also ensuring economic growth (Pahrudin et al., 2022:1). The distinctive aspect of tourism is its societal impact. No other sector likely compares, as tourism inherently involves moving large numbers of people away from their homes (Tiwari, 2009:10). Sustainability is a significant means to mitigate tourism's adverse effects and ensure its long-term viability (Liu, 2003:460). Sustainable development means using natural, cultural, and other tourism resources responsibly, ensuring their preservation for future generations (Angelevska-Najdeska and Rakicevik, 2012:210).

Sustainable tourism satisfies the needs of current travelers and host destinations while protecting and improving future prospects. Tourism has significant potential to accelerate progress toward the Sustainable Development Goals (SDGs). With effective management, the sector can create high-quality jobs, alleviate poverty, and incentivize environmental preservation; a "triple benefit" that helps countries transition to resilient economies (Steiner, 2017:8). Sustainable tourism plans must be integral components of the community, not just token gestures of engagement (Hughes, 1995:59). Tourism is one of the most promising and dynamic industries globally. It requires strategic, sustainable planning that seeks a compromise among society's environmental, economic, and social objectives. Sustainable tourism management must ensure high tourist satisfaction, create meaningful experiences, raise sustainability awareness, and promote sustainable habits (Streimikiene vet al., 2021:259). It involves managing

resources to meet economic, social, and cultural needs while preserving cultural integrity, ecological processes, and biodiversity for future generations. Consequently, modern tourism cannot advance without integrating environmental management as a fundamental part of its economic model. One of its diverse principles is ecological sustainability, which involves development that preserves vital ecological processes, biodiversity, and resources. Tourism's reliance on the environment necessitates preserving attractions and natural resources, which fosters growth and enhances the destination's appeal. Tourism revenue can improve the environment, provide funding, and maintain the area's cultural history (Muhanna, 2006:19). Sustainable tourism ultimately encompasses individuals' actions, values, practices, and beliefs (Budeanu et al., 2015:11).

In the long term, sustainable tourism must be ecologically viable, commercially feasible, and socially and ethically equitable for the local populace. Sustainable tourism development meets the needs of contemporary tourists and host regions while safeguarding future opportunities. It emphasizes growth that preserves the local community's culture, heritage, and artistic qualities rather than exploiting the natural or built environment. The principles of sustainable tourism development demand that natural, historical, and cultural resources be protected to benefit current and future societies (David, 2011:212-213).

#### PROCESS AND RESEARCH METHOD

#### **Literature Research**

This study seeks to analyze academic research on sustainable tourism management. The research employed bibliometric analysis to achieve this goal. It used bibliometric data from the Web of Science (WOS), as it is widely accessible to social scientists. Key phrases were used to retrieve published documents. The gathered data was refined for analysis, limiting results to Englishlanguage documents due to their broad readership. The filtered data was then downloaded and processed using R software for performance analysis, scientific mapping, and bibliometric analysis.

This analysis tool helps researchers quantify key features related to location, author, citation, network, and usage frequency. This strategy helps eliminate the biases and errors researchers often encounter when selecting or synthesizing critical material. This study selected published, peer-reviewed articles from the WOS core collection, which social scientists widely use. The search

term "sustainable tourism management" was used within the topic criteria (title, abstract, and keywords). The query did not specify a time period.

Bibliographic data from the selected WOS publications were extracted as a bib.tex file. A total of 173 files were retrieved. After filtering for articles only, 82 documents, 37 sources, and 253 authors remained. The articles encompass all documents from 1996 until 24 October 2025.

**Table 1:** Methodologies and procedures for exploration

2015 to 2025. This signifies that the subject has attracted							
considerable scholarly interest in recent years. This							
emergence indicates a growing academic dialogue on							
sustainable tourist management.							

There has been a significant increase in the number of publications annually since 2015. This indicates that this subject has garnered scholars' interest in recent years. In the previous year, 2024, there was a significant growth. This increase continues in 2025. By 2025, the number of

Search Focus	Research database(s)	Period	Search Keywords	Total Relevant papers	Finally, Considered
Sustainable tourism management	Web of Science	1996 to until 24 October 2025	Sustainable tourism management	173	82

The researchers employed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) flowchart to evaluate the pertinent literature (Page & Moher, 2017). Following the revised PRISMA 2020 rules, the authors systematically classified the eligible documents for reporting. Figure 1 depicts the filtering process used to select the 82 papers for detailed analysis.

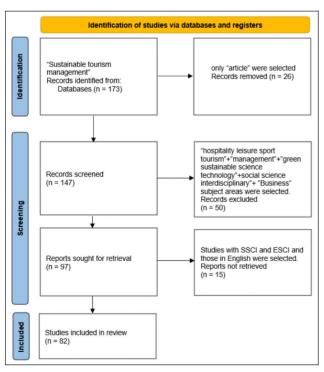


Figure 1: PRISMA flowchart.

#### Performance analysis (RQ1)

Figure 2 depicts the research trends for sustainable tourism management over time. Our findings highlight a swift increase in academic focus on this topic from publications made before the end of the year has reached 20, doubling that of 2024.

In 2024, 10 publications were made (Table 2). These publications are as follows: Exploring the interdependent drivers of tourism competitiveness: insights from the Travel and Tourism Development Index (Qazi), From Over-Tourism to Under-Tourism via COVID-19: Lessons for Sustainable Tourism Management (Mahendru et al.), A Study on the Performance of B&B Operations Is Conducted in Sustainable Tourism (Hsu et al.), Tourism and Career Development in the Face of Seawater Threats: Understanding the Perspectives of Tourism and Hospitality Students from Coastal Areas (Grobelna and Bogalecka), Resource Mobilization and Power Redistribution: The Role of Local Governments in Shaping Residents' Pro-Environmental Behavior in Rural Tourism Destinations (Wu et al.), Agritourism and sustainability: A global bibliometric analysis of the state of research and dominant issues (Ndhlovu and Dube), The impact of tourist engagement on low-carbon behavior in glacier tourism (Lv et al.), Evaluating tourism scenarios within the limit of acceptable change framework in Barcelona (Donaire et al.), Community-based tourism mechanism networks: a factor for sustainable tourism at the World heritage corridor in Thailand (Shumadtayar et al.), Modeling for sustainable tourism management and objective happiness in times of profound changes: the case of Usiacurí, Colombia (Ziritt Trejo).

In 2025, 20 publications were made (Table 2). These publications are as follows: A human-centric decision-support system for smart and sustainable tourism management in urban settings (De Maio et al.), Learning organizations and sustainability outcomes in tourism:

Doi	Authors	liblioshiny App.)	Source	Year
		THE STATE OF THE S	Juice	iedí
10.1108/Tr-03-2022-0110	Rahmafitria F.; Dirgahayani P.; Putro H.P.; Rosyidie A.; Hudalah D.	Tourism accessibility in protected islands: the case of the Komodo National Park, Indonesia	Tourism Review	2023
10.3390/Su11215880	Jurado-Rivas C.; Sanchez-Rive- ro M.	Willingness to Pay for More Sustainable Tourism Des- tinations in World Heritage Cities: The Case of Caceres, Spain	Sustainability	2019
10.3390/Su10124788	Haraldsson H.V.; Olafsdottir R.	Evolution of Tourism in Natural Destinations and Dynamic Sustainable Thresholds over Time	Sustainability	2018
10.1080/09669582.2012.708040	Mangan T.; Brouwer R.; Das Lohano H.; Nangraj G.M.	Estimating the recreational value of Pakistan's largest freshwater lake to support sustainable tourism management using a travel cost model	Journal of Sustainable Tourism	2013
10.1016/J.Jhlste.2020.100294	Wu H.C.; Chen X.; Chang Y.Y.	What drives green experiential outcomes in tourism higher education?	Journal Of Hospitality Leisure Sport & Tourism Education	2021
10.3390/Su11226516	Jeong D.; Choi Y.E; Jin L.; Chon J.	Impact of Spatial Change on Tourism by Bridge Con- nections between Islands: A Case Study of Ganghwa County in South Korea	Sustainability	2019
10.1080/13504509.2016.1201021	Iliopoulou-Georgudaki J.; Theo- doropoulos C.; Konstantinopou- los P.; Georgoudaki E.	Sustainable tourism development including the enhancement of cultural heritage in the city of Nafpaktos  – Western Greece	International Journal of Sustainable Develop- ment and World Ecology	2017
10.1080/13504509.2015.1102780	Iliopoulou-Georgudaki J.; Kalo- geras A.P.; Konstantinopoulos P.; Theodoropoulos C.	Sustainable tourism management and development of a Greek coastal municipality	International Journal of Sustainable Develop- ment and World Ecology	2016
10.1108/Bıj-09-2016-0149	Yadav N.; Sahu N.C.; Sahoo D.; Yadav D.K.	Analysis of barriers to sustainable tourism management in a protected area: A case from India	Benchmarking-An Inter- national Journal	2018
10.1080/09669582.2014.991398	Lawton L.J.; Weaver D.B.	Using residents' perceptions research to inform planning and management for sustainable tourism: a study of the Gold Coast Schoolies Week, a contentious tourism event	Journal of Sustainable Tourism	2015
10.5890/Jeam.2019.12.002	Sharma S.	A Study of Relationship between Culture, Gender and Sustainable Tourism: A Study of Bhutan	Journal of Environmental Accounting and Man- agement	2019
10.3390/Su151511937	Fatina S.; Soesilo T.E.B.; Tambu- nan R.P.	Collaborative Integrated Sustainable Tourism Management Model Using System Dynamics: A Case of Labuan Bajo, Indonesia	Sustainability	2023
10.3390/Su9091596	Dumitras D.E.; Muresan I.C.; Jitea I.M.; Mihai V.C.; Balazs S.E.; Iancu T.	Assessing Tourists' Preferences for Recreational Trips in National and Natural Parks as a Premise for Long-Term Sustainable Management Plans	Sustainability	2017
10.1016/J.Tmp.2018.09.007	Canteiro M.; Cordova-Tapia F.; Brazeiroc A.	Tourism impact assessment: A tool to evaluate the environmental impacts of touristic activities in Natural Protected Areas	Tourism Management Perspectives	2018
10.3390/Su10041090	Lakner Z.; Kiss A.; Merlet I.; Olah J.; Mate D.; Grabara J.; Popp J.	Building Coalitions for a Diversified and Sustainable Tourism: Two Case Studies from Hungary	Sustainability	2018
10.3390/Su12125177	Lundberg C.; Lindstrom K.N.	Sustainable Management of Popular Culture Tourism Destinations: A Critical Evaluation of the Twilight Saga Servicescapes	Sustainability	2020
10.1080/09669582.2011.630080	Biggs D.; Hall C.M.; Stoeckl N.	The resilience of formal and informal tourism enterprises to disasters: reef tourism in Phuket, Thailand	Journal of Sustainable Tourism	2012
10.3390/Su132212632	Della Corte V.; Del Gaudio G.; Sepe F.; Luongo S.	Destination Resilience and Innovation for Advanced Sustainable Tourism Management: A Bibliometric Analysis	Sustainability	2021
10.3390/Su141811375	Pongsakornrungsilp P.; Pongsakornrungsilp S.; Jansom A.; Chinchanachokchai S.	Rethinking Sustainable Tourism Management: Learning from the COVID-19 Pandemic to Co-Create Future of Krabi Tourism, Thailand	Sustainability	2022
10.1108/Cr-09-2024-0176	Qazi A.	Exploring the interdependent drivers of tourism competitiveness: insights from the Travel and Tourism Development Index	Competitiveness Review	2024
10.1080/13683500.2024.2339957	De Maio A.; Musmanno R.; Skrame A.	A human-centric decision-support system for smart and sustainable tourism management in urban settings	Current Issues in Tourism	2025
10.1108/Tlo-04-2024-0103	Showkat M.; Nagina R.	Learning organizations and sustainability outcomes in tourism: the mediating role of sustainable practices	Learning Organization	2025
10.1080/09669580903215139	Beaumont N.; Dredge D.	Local tourism governance: a comparison of three network approaches	Journal of Sustainable Tourism	2010
10.1016/J.Annals.2005.10.012	Northcote J.; Macbeth J.	Conceptualizing yield: Sustainable Tourism Management	Annals of Tourism Research	2006
10.1016/J.Tourman.2009.02.015	Vila M.; Costa G.; Rovira X.	The creation and use of scorecards in tourism planning: A Spanish example	Tourism Management	2010
10.1016/J.Jort.2018.08.003	Mutana S.; Mukwada G.	Mountain-route tourism and sustainability. A discourse analysis of literature and possible future research	Journal of Outdoor Rec- reation and Tourism-Re- search Planning and Management	2018
10.1016/J.Tmp.2016.03.006	Uchiyama Y.; Kohsaka R.	Cognitive value of tourism resources and their relation- ship with accessibility: A case of Noto region, Japan	Tourism Management Perspectives	2016

10.1057/Thr.2010.064	Dredge D.; Ford E.J; Whitford M.	Managing local tourism: Building sustainable tourism management practices across local government divides	Tourism and Hospitality Research	2011
10.1080/02614367.2016.1141975	Canavan B.	Tourism stakeholder exclusion and conflict in a small island	Leisure Studies	2017
10.1007/510668-021-01562-2	Hu F.; Wang Z.; Sheng G.; Lia X.; Chen C.; Geng D.; Hong X.; Xu N.; Zhu Z.; Zhang Z.; Zhu L.; Wang G.	Impacts of national park tourism sites: a perceptual analysis from residents of three spatial levels of local communities in Banff national park	Environment Develop- ment and Sustainability	2022
10.3390/Su12187515	Wang K.; Gan C.; Chen L.; Voda M.	Poor Residents' Perceptions of the Impacts of Tourism on Poverty Alleviation: From the Perspective of Multidimensional Poverty	Sustainability	2020
10.1080/1528008x.2023.2275260	Jeelani P.; Shah S.A	Tourism and the Environmental Components Coexisting in the Himalayas: A Trade-Off Between the Two	Journal of Quality Assurance in Hospitality & Tourism	2025
10.3390/Su15129712	Rocio H.G.; Jaime O.C.; Cinta P.C.	The Role of Management in Sustainable Tourism: A Bibliometric Analysis Approach	Sustainability	2023
10.1177/0193841x231189805	Mahendru M.; Arora V.; Chatter- jee R.; Sharma G.D.; Shahzadi I.	From Over-Tourism to Under-Tourism via COVID-19: Lessons for Sustainable Tourism Management	Evaluation Review	2024
10.1080/1743873x.2024.2426457	Khater M.; Al-Leheabi S.M.Z.M; Faik M.	Navigating the challenges of over-tourism: comparative insights and solutions from Petra and Karnak	Journal of Heritage Tourism	2025
10.1080/23311886.2024.2447398	Caro-Carretero R.; Monroy-Rod- riguez S.	Residents' perceptions of tourism and sustainable tourism management: planning to prevent future problems in destination management - The case of Cáceres, Spain	Cogent Social Sciences	2025
10.6018/Turismo.542011	Mateos M.R.; Montesdeoca I.M.	Visitors' Perception of Sustainable Tourism Man- agement in Nature Destinations. Case Study in The Galapagos National Park (Ecuador)	Cuadernos De Turismo	2022
10.3390/Su16188198	Hsu C.T.; Lin Y.C; Yao K.C.; Ma P.C.	A Study on the Performance of B&B Operations Is Conducted in Sustainable Tourism	Sustainability	2024
10.1177/21582440251344000	Jiang X.	Exploring the Impact of Metaverse Tourism Technology on Alleviating Overtourism: An Integrated Approach Using TAM and TPB	Sage Open	2025
10.1177/21582440251335733	Çınar K; Zafer Kavacık S; Erul E.	Bibliometric Analysis of GIS-based Tourism Research: Trends, Topics, and Future Directions in Terms of Sus- tainable Tourism Management	Sage Open	2025
10.1080/09669582.2025.2537759	Torres-Delgado A.; Sego- via-Perez M.; Najera-Sanchez; J.J.; Font X.	Gender perspectives in the use of tourism sustainability indicators for decision-making	Journal of Sustainable Tourism	2025
10.1080/15022250.2025.2461458	Sveinsdottir A.M.; Haraldsdottir L.; Ferrante M.	GPS tracking of land-based visitors and cruise passengers on a remote Arctic Island destination: visitor behaviour and resident perspectives	Scandinavian Journal of Hospitality and Tourism	2025
10.3390/Su162310351	Grobelna A.; Bogalecka M.	Tourism and Career Development in the Face of Seawa- ter Threats: Understanding the Perspectives of Tourism and Hospitality Students from Coastal Areas	Sustainability	2024
10.1016/J.Tmp.2015.10.004	Ly T.P.; Xiao H.	The choice of a park management model: A case study of Phong Nha-Ke Bang National Park in Vietnam	Tourism Management Perspectives	2016
10.3390/Su13169409	Pongsakornrungsilp S.; Pong- sakornrungsilp P.; Pusaksrikit T.; Wichasin P.; Kumar V.	Co-Creating a Sustainable Regional Brand from Multiple Sub-Brands: The Andaman Tourism Cluster of Thailand	Sustainability	2021
10.3390/Su12072942	Bae S.Y.; Han J.H.	Considering Cultural Consonance in Trustworthiness of Online Hotel Reviews among Generation Y for Sustain- able Tourism: An Extended TAM Model	Sustainability	2020
10.1108/Jchmsd-04-2021-0078	Alhefnawi M.A.M; Lawal Dano U.; Istanbouli M.J.	Perception of students and their households regarding the community role in urban heritage conservation in Saudi Arabia	Journal of Cultural Heritage Management and Sustainable Devel- opment	2023
10.1177/00472875231191983	Wu J.; Wang X.; Ramkissoon H.; Wu M.Y.; Guo Y.; Morrison A.	Resource Mobilization and Power Redistribution: The Role of Local Governments in Shaping Residents' Pro-Environmental Behavior in Rural Tourism Desti- nations	Journal of Travel Research	2024
10.1080/13683500.2025.2475489	Lebrument N.; Zumbo-Lebrument C.	Are we ready to adopt soft mobility to visit archaeological sites? The case of France	Current Issues in Tourism	2025
10.1080/09669582.2021.1937633	Slabbert L.; Du Preez E.A.	The utilisation of protected area visitor research: a conceptual framework	Journal of Sustainable Tourism	2022
10.30519/Ahtr.749680	Niyazieva S.; Zhechev V.	Could Happiness Be an Assessment Tool in Sustainable Tourism Management?	Advances in Hospi- tality and Tourism Research-Ahtr	2020
10.1080/10941665.2025.2470639	Chen X.; Cheung Lto.	Balancing Nature-Based Tourism and Sustainable Well-Being: Exploring Aesthetic Quality, Environmental Benefits, And Pro-Environmental Behaviour	Asia Pacific Journal of Tourism Research	2025
10.1016/J.Tourman.2018.08.025	Nepal R.; Al Irsyad M.I.; Nepal S.K.	Tourist arrivals, energy consumption and pollutant emissions in a developing economy–implications for sustainable tourism	Tourism Management	2019
10.1016/J.Tourman.2007.07.010	Dolnicar S.; Leisch F.	Selective marketing for environmentally sustainable tourism	Tourism Management	2008
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10.1016/J.Tourman.2009.02.005	Logar I.	Sustainable tourism management in Crikvenica, Croatia: An assessment of policy instruments	Tourism Management	2010
10.1080/09669582.2013.802325	Esparon M.; Gyuris E.; Stoeckl N.	Does ECO certification deliver benefits? An empirical investigation of visitors' perceptions of the importance of ECO certification's attributes and of operators' performance	Journal of Sustainable Tourism	2014
10.1080/09669582.2011.617827	Orchiston C.	Seismic risk scenario planning and sustainable tourism management: Christchurch and the Alpine Fault zone, South Island, New Zealand	Journal of Sustainable Tourism	2012
10.1080/09669582.2018.1501053	Cannas R.; Argiolas G.; Cabiddu F.	Fostering corporate sustainability in tourism management through social values within collective value co-creation processes	Journal of Sustainable Tourism	2019
10.1080/08985626.2021.1872937	Pineiro-Chousa J.; Lopez-Cabar- cos M.A.; Romero-Castro N.; Vazquez-Rodriguez P.	Sustainable tourism entrepreneurship in protected areas. A real options assessment of alternative management options	Entrepreneurship and Regional Development	2021
10.1016/J.Jort.2024.100746	Ndhlovu E.; Dube K.	Agritourism and sustainability: A global bibliometric analysis of the state of research and dominant issues	Journal of Outdoor Rec- reation and Tourism-Re- search Planning and Management	2024
10.1080/10941665.2014.904803	Cheablam O.; Shrestha R.P.	Climate Change Trends and Its Impact on Tourism Resources in Mu Ko Surin Marine National Park, Thailand	Asia Pacific Journal of Tourism Research	2015
Na	Conaghan A.; Hanrahan J.; Mcloughlin E.	The sustainable management of a tourism destination in Ireland: A focus on county clare	Advances in Hospi- tality and Tourism Research-Ahtr	2015
10.1016/0261-5177(96)87004-X	Bramwell B.	Sustainable tourism management education in Europe	Tourism Management	1996
10.1057/Thr.2009.29	Shikida A.; Yoda M.; Kino A.; Morishige M.	Tourism Relationship Model and Intermediary for Sustainable Tourism Management: Case Study of the Kiritappu Wetland Trust in Hamanaka, Hokkaido	Tourism and Hospitality Research	2010
10.3390/Su12114616	Mangano S.; Ugolini G.M.	New Opportunities for Cruise Tourism: The Case of Italian Historic Towns	Sustainability	2020
10.6092/İssn.2036-5195/6331	Cannas R.	The sustainable tourism management of cultural heritage: the case of the Rosas Mine in Sardinia	Almatourism-Journal of Tourism Culture and Terri- torial Development	2016
10.1080/09669582.2023.2287396	Lv X.; Pan X.; Xu S.; Lan T.	The impact of tourist engagement on low–carbon behavior in glacier tourism	Journal of Sustainable Tourism	2024
10.1080/09669582.2024.2309200	Dos Santos C.S.; Lugosi P.; Hawkins R.	Trust, traditions and indigenous women's leadership in sustainable tourism management	Journal of Sustainable Tourism	2025
10.1016/J.Annale.2024.100145	Donaire Ja; Gali N; Coromina L.	Evaluating tourism scenarios within the limit of acceptable change framework in Barcelona	Annals of Tourism Research Empirical Insights	2024
10.3390/Su17073119	Wang L.; Zhuang J.; Wang M.	Integrating AHP-SBE for Evaluating Visitor Satisfaction in Traditional Village Tourism Landscapes	Sustainability	2025
Na	Kubankova M.; Drozen F.; Hyrslova J.	Sustainable tourism management: A Case study approach	Journal of Tourism and Services	2014
10.6018/Turismo.541881	Vidal-Serrano L.; Rodríguez- Antón J.M.; Rubio-Andrada L.; Narbona-Reína B.	Information and communication technologies (ICT) as a tool for sustainable tourism management: a bibliometric analysis	Cuadernos De Turismo	2022
10.3390/Su17041723	Yessimova D.; Faurat A.; Belyi A.; Yessim A.; Sadykov Z.	Environmental Sustainability and Carbon Footprint of Tourism: A Study of a Natural Park in Northeastern Kazakhstan	Sustainability	2025
10.37741/T.70.4.14	Kaberere I.N.; Birendra K.C.; Hoogendoorn G.	Wildlife tourism experiences at the Maasai Mara, Kenya: using kano model to assess tourists' satisfaction	Tourism	2022
10.22452/Jati.Vol29no1.2	Shumadtayar U.; lamtrakul P.; Kazunori H.	Community-based tourism mechanism networks: a factor for sustainable tourism at the World heritage corridor in Thailand	Jati-Journal of Southeast Asian Studies	2024
10.20867/Thm.30.3.5	Ziritt Trejo G.Y.; Moreno Freites Z.; Mendez M.; Prada M.C.	Modeling for sustainable tourism management and objective happiness in times of profound changes: the case of Usiacurí, Colombia	Tourism and Hospitality Management-Croatia	2024
10.1016/J.Annals.2025.104042	Burlando C.; Musso E.; Pavanini T.; Susanna T.	A proposal for an overtourism index	Annals of Tourism Research	2025
10.1177/14673584251356792	Shankar S.; Greenwood S.	Understanding tourism's environmental, social, and economic impacts through systematic literature mapping	Tourism and Hospitality Research	2025
10.3390/Su17093943	Yılmaz Y.U.; Rezapouraghdam H.; Kılıc H.	The Nexus Between Tourism and Environmental Quality in Countries Most Dependent on Tourism: A RALS Approach to the Cointegration Test	Sustainability	2025
10.1177/14673584251343263	Subadra I.N.	Toxic Tourists in Paradise – Bali: Cultural Disrespects, Crimes, and Misconducts	Tourism and Hospitality Research	2025
10.1108/Jpmd-05-2024-0045	Garcia-Altmann S.; Hernan- dez-Martin R.; Padron-Avila H.	What should tourism observatories be doing? Identifying key success driver	Journal of Place Manage- ment and Development	2025
10.3390/Admsci15020035	Sardi A.; Rizzi A.; Sorano E.	Economic Impact Analysis of Mega Events for Sustain- able Tourism: Insights from the Giro d'Italia and Tour de France	Administrative Sciences	2025

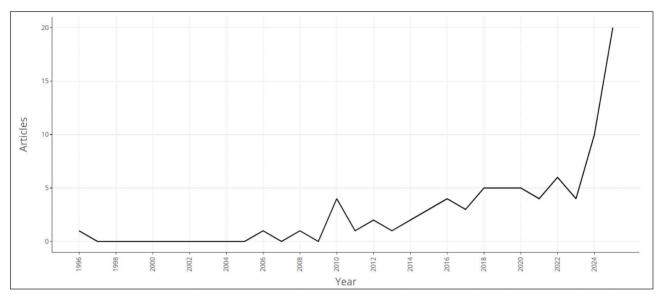


Figure 2: Annual Scientific Analysis (source: R Biblioshiny App.)

the mediating role of sustainable practices (Showkat and Nagina), Tourism and the Environmental Components Coexisting in the Himalayas: A Trade-Off Between the Two (Jeelani and Shah), Navigating the challenges of over-tourism: comparative insights and solutions from Petra and Karnak (Khater et al.), Residents' perceptions of tourism and sustainable tourism management: planning to prevent future problems in destination management - The case of Cáceres, Spain (Caro-Carretero et al.), Exploring the Impact of Metaverse Tourism Technology on Alleviating Overtourism: An Integrated Approach Using TAM and TPB (Jiang), Bibliometric Analysis of GIS-based Tourism Research: Trends, Topics, and Future Directions in Terms of Sustainable Tourism Management (Çınar et al.), Gender perspectives in the use of tourism sustainability indicators for decision-making (Torres-Delgado et al.), GPS tracking of land-based visitors and cruise passengers on a remote Arctic Island destination: visitor behaviour and resident perspectives (Sveinsdottir et al.), Are we ready to adopt soft mobility to visit archaeological sites? The case of France (Lebrument et al.), Balancing Nature-Based Tourism and Sustainable Well-Being: Exploring Aesthetic Quality, Environmental Benefits, And Pro-Environmental Behaviour (Chen and Cheung), Trust, traditions and indigenous women's leadership in sustainable tourism management (Dos Santos et al.), Integrating AHP-SBE for Evaluating Visitor Satisfaction in Traditional Village Tourism Landscapes (Wang et al.), Environmental Sustainability and Carbon Footprint of Tourism: A Study of a Natural Park in Northeastern Kazakhstan (Yessimova et al.), A proposal for an overtourism index (Burlando et al.), Understanding tourism's environmental, social, and economic impacts through systematic literature mapping (Shankar

and Greenwood), The Nexus Between Tourism and Environmental Quality in Countries Most Dependent on Tourism: ARALS Approach to the Cointegration Test (Yılmaz et al.), Toxic Tourists in Paradise – Bali: Cultural Disrespects, Crimes, and Misconducts (Subadra), What should tourism observatories be doing? Identifying key success driver (Garcia-Altmann et al.), Economic Impact Analysis of Mega Events for Sustainable Tourism: Insights from the Giro d'Italia and Tour de France (Sardi et al.).

#### Performance analysis of authors and journals (RQ2)

#### **Co-citation analysis**

Table 3 shows that Sustainability is the most prolific journal, with 19 articles. The Journal of Sustainable Tourism ranks second in both publications (11) and total citations (217). However, despite ranking third in article count, Tourism Management is the most cited journal overall with 278 citations.

An analysis of the 19 articles published in Sustainability reveals that a wide range of research has been conducted on sustainable tourism management. The topics covered in the 19 articles published in the Sustainability journal can be summarized as follows: balancing tourism growth and its impact on the environment, economy, and society; how destination management can ensure multi-sectoral participation to create a favorable tourism ecosystem in the long term; evaluating tourist preferences as a basis for developing sustainable tourism strategies, sustainable rural tourism development, tourist destination resilience, environmental, social, and economic aspects of a plan to develop a successful sustainable tourism management plan, tourism's impact on poverty, social-emotional

Table 3: Most productive publications in sustainable tourism management (source: R Biblioshiny App.)

Sources	Articles	Number of Citations	
Sustainability	19	5	
Journal Of Sustainable Tourism	11	217	
Tourism Management	5	278	
Tourism And Hospitality Research	4	15	
Tourism Management Perspectives	3	55	
Advances In Hospitality And Tourism Research-Ahtr	2	1	
Annals Of Tourism Research	2	185	
Asia Pacific Journal Of Tourism Research	2	27	
Cuadernos De Turismo	2	1	
Current Issues In Tourism	2	1	
nternational Journal Of Sustainable Development And World Ecology	2		
ournal Of Outdoor Recreation And Tourism-Research Planning And Management	2	25	
Sage Open	2	1	

intelligence (EQ) skills, place branding and brand culture, cultural variables, shore excursions offered by cruise companies to reduce pressure on popular destinations, increasing social interaction, optimizing educational components, enriching aesthetic experiences, and supporting sustainable, experience-oriented rural tourism development, environmental sustainability and carbon footprint, the impact of socio-economic variables on environmental quality in tourism-dependent countries, making specific tourism products or services more sustainable, and the impact of the destination on different visitor types. Articles published in Sustainability magazine were published between 2017 and 2025. Two articles were published in 2024, and three articles were published in 2025.

Table 4 lists the most productive authors. The data shows that 10 authors are the leading contributors, each with two articles: Cannas R. (2), Chen X. (2), Dredge D. (2), Iliopoulou-Georgudaki J. (2), Konstantinopoulos P. (2), Pongsakornrungsilp P. (2), Pongsakornrungsilp S. (2), Stoeckl N. (2), Theodoropoulos C. (2), and Akawut A. (2). The other 244 authors wrote only one article. In total, 253 authors have publications.

This section presents details regarding the 10 foremost publications displayed in the table. Additional publications are excluded.

Table 4: Most productive authors in green innovation and competitive advantage (source: R Biblioshiny App.)

Most_Relevant_Authors			Most cited authors			
Authors	Articles	h_ index	g_index	m_ index	TC	PY_ start
Cannas R.	2	2	2	0,200	52	2016
Chen X.	2	2	2	0,400	8	2021
Dredge D.	2	2	2	0,125	305	2010
Iliopoulou-Georgudaki J.	2	2	2	0,200	26	2016
Konstantinopoulos P.	2	2	2	0,200	26	2016
Pongsakornrungsilp P.	2	2	2	0,400	10	2021
Pongsakornrungsilp S.	2	2	2	0,400	10	2021
Stoeckl N.	2	2	2	0,143	336	2012
Theodoropoulos C.	2	2	2	0,200	26	2016
Akawut A.	1	1	1	0,250	7	2022

# Performance Analysis of Universities and Countries (RQ3)

#### Most relevant affiliation

A total of 158 universities have published on this topic. The top 11 are shown in Table 5. James Cook University, Walailak University, and the University of Patras rank as the top three. James Cook University leads with 7 publications. Walailak University follows with 6 publications. The University of Patras has 5 publications.

The following seven universities each have three publications. The subsequent sixty-seven institutions own two publications apiece, while the concluding seventy-three universities each have one publication.

#### The most productive countries

The most productive country table was created by combining data from the relevant authors' affiliations and the countries with the most citations. Table 6 shows that Spain ranks first in the number of articles and second in citations. Australia ranks second in publication volume but first in citation count, with a ratio five times higher than its closest competitor. Italy ranks fourth in both publication volume and citation count. China ranks third in publication volume and sixth in citation count.

In conclusion, performance analysis is essential because it provides crucial insights into documents, authors, publications, countries, and references. This information helps new researchers identify relevant authors, their work, their affiliated institutions, and potential journals for future publication. Policymakers can also use this information to implement advice from the field's leading researchers.

#### Countries' scientific production

A total of 37 contributing countries are shown in Figure 3. The most productive country is China, with 33 publications. Spain follows with 31 publications,

Table 5: The most productive institutions in sustainable tourism management (source: R Biblioshiny App.)

Affiliation	Articles
James Cook University	7
Walailak University	6
University of Patras	5
Gdynia Maritime University	4
Guangzhou University	4
Korea University	4
University of Cagliari	4
University of Debrecen	4
University of the Free State	4
University of Genoa	4
University of Girona	4

**Table 6:** The most productive countries (corresponding author's countries and most cited countries) in sustainable tourism management (source: R Biblioshiny App.)

Country	Articles	Articles %	single country publications	multiple country publications	multiple country publications %	total citations	average article citations
Spain	10	12,2	9	1	10	216	21,60
Australia	8	9,8	5	3	37,5	1114	139,20
China	7	8,5	5	2	28,6	55	7,90
Italy	7	8,5	7	0	0	97	13,90
United Kıngdom	6	7,3	4	2	33,3	41	6,80
India	5	6,1	4	1	20	44	8,80
Thailand	4	4,9	1	3	75	23	5,80
Indonesia	3	3,7	3	0	0	13	4,30
South Africa	2	3,7	3	0	0	52	17,30
Greece	2	2,4	2	0	0	26	13,00

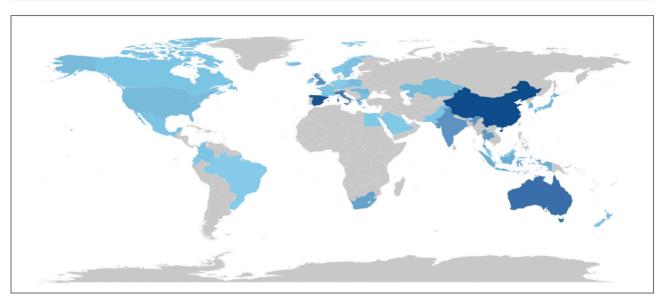


Figure 3: Countries' Scientific Production (source: R Biblioshiny App.)

and Australia is third with 23. Italy ranks fourth with 20 publications. The UK is fifth with 15 publications. India is sixth with eight publications, while Thailand is seventh. South Africa ranks eighth with 11 publications, and Greece ranks ninth with nine.

In summary, China has the highest number of publications, followed by Spain and Australia. Research is concentrated in the Far East, parts of Europe, and the Americas. The gray regions indicate areas where no studies have been conducted.

#### Analysis of Evolving and Heading (RQ4)

#### **Treemap**

A term map signifies the examination of concepts within the texts. Figure 4 shows the 20 most frequently used keywords in sustainable tourism management.

Sustainable tourism, sustainable tourism management, tourism, management, sustainable, tourism carrying capacity, tourism management, climate change, destination management, happiness, limits of acceptable change, local government, protected areas, resident attitudes, sustainability, sustainable development goals, system dynamics, tourism impacts, tourism resources, tourism sustainability, has increased, corroborating the results of network.

A total of 354 words were identified. The most frequently repeated word was sustainable tourism, accounting for 25% of all words. Sustainability ranked second with an 11% share. Tourism ranked third with 10%, while sustainable tourism management ranked fourth with 8%. Management ranked fifth with 8%. The others had lower values.

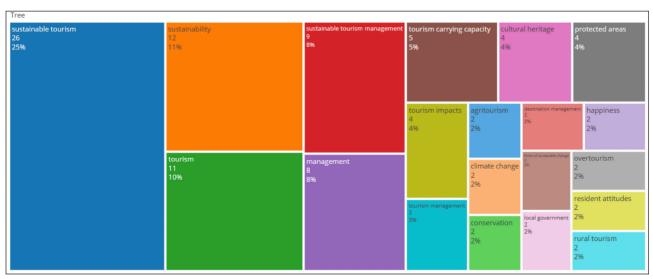


Figure 4: The 20 most used keywords in sustainable tourism management (source: R Biblioshiny App.)

#### **Keyword Co-occurrence Network**

Irrelevant words such as "Covid-19", "Leopold matrix", "analysis", "Bhutan", "bibliometric", "Ecuador", "bibliometric analysis", "Barcelona", "Crikvenica", "Bayesian belief networks" were removed. The words "sustainable," was combined with "sustainability," and the words "tourism sustainability" was combined to form "sustainable tourism," and the words "heritage" was combined to form "cultural heritage," and the words "accesibilidad turistica" was combined to form "accesibile tourism," and the words "agrotourism" was combined to form "agritourism," and "carrying capacity" combined with "tourism carrying capacity". To create cluster groups efficiently, the minimum number of edges was set to 1, and the number of nodes to 40. After applying the minimum appearance threshold and eliminating general terms, 38 key terms were identified, enabling the literature to be categorized into four main thematic clusters. The keyword co-occurrence network was used in this research.

The concepts of management, cultural heritage, protected areas, and conservation are intricately linked to sustainable tourism; the concepts of sustainability, sustainable tourism management, tourism carrying capacity, tourism impacts, tourism management, and local government are closely associated with sustainability; the concepts of resident attitudes, and tourism resources are significantly connected to climate change.

#### Cluster 1. Eco-tourism

Sustainable tourism, management, cultural heritage, protected areas, agritourism, conservation, happiness, rural tourism, sustainable development goals, sustainable tourism development, tourism development, accessible tourism, accessibility concept, archaeological sites, biodiversity loss, capacity, carbon footprint, carrying.

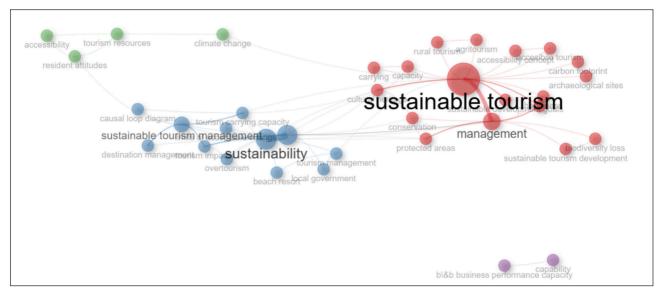


Figure 5: Key Theme Network (source: R Biblioshiny App.)

The graphic display categorizes the examined topics into four orientations based on the co-occurrence of key phrases. The primary domains with several nodes indicate diverse scientific investigations. They may be referred to as clusters. The crimson network has expanded in and around sustainable tourism. The blue network examined the regions based on sustainability. The green network examined the regions in terms of climate change. The purple network examined the regions based on b\&b business performance capacity and capability. Co-occurrence Network Analysis findings show that clusters have formed around four words: sustainable tourism, sustainability, and resident attitudes. It is understood that these clusters are largely related to sustainability.

#### **Cluster 2. Tourism Management for Sustainability**

Sustainability, tourism, sustainable tourism management, tourism carrying capacity, tourism impacts, tourism management, destination management, limits of acceptable change, local government, overtourism, beach resort, causal loop diagram.

#### **Cluster 3. Environment**

Climate change, resident attitudes, tourism resources, and accessibility.

#### **Cluster 4. Capacity of Tourism Businesses**

B&b business performance capacity, capability.

Both Key Theme Network, clusters, and treemap provide predictable information about the development of sustainable tourism management.

#### **DISCUSSION**

The bibliometric analysis of published materials concerning the relationship between sustainable tourism management provides a comprehensive overview of the field. Although the analysis lacks depth in specificity, it provides a thorough understanding of key sub-concepts, their emergence and co-occurrence, the evolution of topics over time, principal authors, leading countries, prominent journals, citation metrics, affiliation information, significant topics, and their interconnections, among other aspects. This approach aids budding scholars in rapidly acquiring information in the field and serves as a foundation for subsequent exploration. This approach helps new scholars quickly understand the field and serves as a foundation for subsequent exploration.

The study uses a singular database, leaving others unexamined. This study does not encompass empirical observation; the analysis has concentrated on themes, performance, and scientific mapping in the data examination. While this study has examined the sustainable tourism management context scientifically and vividly, the subjective aspect of interpretability from critical studies remains limited. The study provides a more objective assessment of the research field than the literature review. Multiple studies, including those by Budeanu, A. et al. (2016), Streimikiene, D. (2021), and Pahrudin, P. et al. (2022), affirm the significance of sustainable tourism management.

The study has emphasized both recent trend regions and previously investigated domains. Additional efforts are required to enhance sustainable tourism management. Identifying research gaps in sustainable tourism management can guide future investigations and enhance our understanding of this vital subject.

#### **Future directions**

For sustainable tourism management, ecotourism, tourism management for sustainability, environment, and capacity of tourism businesses seem to stand out.

#### **Eco-tourism**

Ecotourism involves developing a region's tourism sector in a way that preserves the resources and attractions that make it appealing to visitors (Singh and Dwivedi, 2011:78). It integrates conservation, communities, and sustainable travel practices. Ecotourism activities aim

to reduce impact, foster cultural awareness, ensure positive experiences, provide direct financial benefits for conservation, empower local communities, and raise sensitivity to the host country's context (Hirotsune, 2011:3). Ecotourism not only fosters sustainable development but also helps integrate it into the wider tourism framework (Pforr, 2001:70). Ecotourism activities focus primarily on environmental concerns. This focus seeks to reduce or prevent the negative impacts of tourism (Mulyani et al., 2021:330). Ecotourism is more than just "nature tourism meets sustainable tourism," as it also incorporates social organization and environmental preservation. It is not just about creating activities; it facilitates interaction with nature in a way that preserves the site's unique attributes for future visitors. These practices also provide a productive foundation that allows local residents and service providers to achieve a sustainable quality of life (Khanal and Babar, 2007:2). Sustainable tourism alone has struggled to achieve its goals of environmental conservation, cultural preservation, and economic development. Ecotourism, therefore, serves to enhance sustainable tourism by focusing on its core principles (Salman et al., 2020:215).

#### **Tourism Management for Sustainability**

The tourism sector faces challenges in achieving broad socio-economic advancement due to various approaches. Institutions shape both tourism activities and tourist behavior, making stakeholder involvement essential. Sustainable tourism indicators are vital for planning, management, and monitoring, especially focusing on economic sustainability, cultural preservation, and project management. Community-driven projects ensure the sustainable use of natural resources, the conservation of biodiversity, and community engagement in these efforts (Matiku, 2021). All tourism operations must align with the United Nations Sustainable Development Goals (SDGs).

#### **Environment**

As an economic activity, tourism invariably impacts the local environment. The environment is frequently the primary attraction for tourists, enhancing a site's appeal. The environment is a vital asset for the tourism industry; therefore, protecting its natural, cultural, and historical resources is essential for the industry's core product (Lim and McAleer, 2003:2). The tourism sector may be among the most significant economic casualties of climate change. Conversely, the wider tourism industry is also a substantial contributor to greenhouse gas emissions (Pang et al., 2013:4). To protect the environment and promote economic sustainability, the eco-friendly behavior of tourists is essential (Khan et al., 2021:7).

#### **Capacity of Tourism Businesses**

Strong capabilities are essential for the sustainable development of the B&B business and for enhancing its standing in the global sustainable tourism market (Hsu et al., 2024). Innovation is a crucial catalyst for sustainable tourism growth, facilitating the advancement of sustainable practices. Identifying the drivers of innovation is essential for fostering it within the tourism sector (Liu and Cheng, 2018:2).

#### **CONCLUSION**

Bibliometric research indicates the field has developed along distinct objective and subjective lines. Sustainable tourism management remains a significant behavioral driver and has recently prompted research in related fields. This study aimed to identify key metrics and current developments in sustainable tourism management. The field is still in its nascent phase and requires more scholarly engagement. This study's findings show a rising trend in the number of publications on the topic.

Spain, Australia, and Italy are the most frequently cited countries. Australia and Spain lead in terms of "Countries' Scientific Production." Sustainable tourism management appears closely related to tourism, sustainability, protected areas, local government, and management, among others. The terms "conservation," "management," and "attitudes" emerged prominently in the word tree and word cloud analyses.

#### Limitations of the study

This study is limited to articles selected from the Web of Science database using the criteria in Figure 1. A primary limitation is the exclusion of studies from other databases, such as Scopus and Google Scholar. The analysis was conducted using the biblioshiny package in RStudio (version 4.4.2). The technical constraints of this specific software package present another limitation. We acknowledge that much more information could have been extracted using Biblioshiny's full capabilities. Furthermore, the deliberate exclusion of graphs and data not directly relevant to the research questions narrows the study's scope. The research is specifically focused on sustainable tourism management. Finally, excluding other key variables related to this topic is a limitation that offers new research opportunities for future scholars.

#### **Practical implications**

Governments should regulate economic and environmental matters, create channels for sustainable innovation, and emphasize sustainability and social identity within tourism enterprises (Liu and Cheng, 2018:3).

Tourism is an economic sector that requires regulation to ensure it is sustainable, profitable, high-quality, and accessible to all social classes. It is also seen as a supportive activity that helps achieve other complementary goals. Achieving sustainable tourism requires applying "green thinking" and ecotourism principles (Ana. 2017:12). Sustainable tourism is tourism that seeks to satisfy the needs of local communities, tourists, the industry, and future generations. Ecotourism is gaining traction as a way to promote economic growth, reduce harm to biodiversity, and enhance local identity and cultural values (Esparza-Huamanchumo et al., 2024:954). Enhancing ecotourism requires fostering local empowerment, developing protective infrastructure, establishing good governance, promoting tourism through market segmentation, and implementing educational initiatives for conservation (Nugroho et al., 2018:43). For an area to have ecotourism value, it must protect its ecological and recreational quality, ensure proper access, provide nearby food and lodging, offer necessary facilities, and share information about that infrastructure (Moore and Carter, 1993:129).

Hotels and resorts can promote sustainable practices by using renewable energy, reducing water usage, and implementing waste management. Education on environmental concerns and responsible tourism conduct is crucial. Implementing stricter environmental criteria, restricting tourists in ecologically fragile zones, and imposing fines or sanctions can also help (Uddin et al., 2023:23).

Strengthening skills, cultivating talent, and promoting cross-field expertise are crucial for successful B&B operations. This includes comprehensive skills in marketing, finance, and accounting, as well as emotional control and sustainable operation (Hsu et al., 2024:15). Research suggests B&Bs should use tangible assets (like recreation and decoration) and intangible ones (like medical treatment) to succeed; intangibles like cultural interpretation must be developed through professional operation. B&B operators should understand their unique assets and develop special capabilities, using management strategies to create a competitive advantage (Chiang, and Shyu, 2016:95). Building standards for B&Bs must account for the distinctiveness of each establishment, since uniqueness enhances their appeal and provides a competitive advantage worth preserving (Zhang, 2022:184).

#### **Ethical considerations**

Not applicable.

#### **Conflict of Interest**

The authors declare no conflicts of interest.

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