

COMMUNITY PARTICIPATION IN TOURISM DEVELOPMENT: A BIBLIOMETRICS ANALYSIS USING R BIBLIOSHINY

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Abstract. This study aims to consolidate the research situation of community participation in tourism development from 1991 to 2025. The annual publication results show that the number of publications is continuously increasing; 2024 had the highest number of publications (526), indicating that research in this field is in a stage of development. The United States leads in the number of publications and has a steady growth rate. Notable influential authors in this field include Rasoolimanesh, S. M., and Jaafar, M. This study examines the development process of this field through three stages. The results show that the stage (2021-2025) reflects a trend toward practical applications, linking community empowerment with ecosystems and technology, and reflects a growing interest in environmental, emotional, and endogenous values in tourism. Emerging themes regarding geotechnology, ecological sustainability, and a focus on local community participation in entrepreneurship, as well as residents' emotional attachment to the destination. Based on the identified gaps, the study proposed four potential research directions: entrepreneurship and the local economy, perceptions of the impacts of tourism development and the emotions of local communities, environmental crises and tourism model transformation, and integrating technology in destination management.

Keywords: bibliometrics, community participation, tourism development, RBiblioshiny

1 Introduction

Numerous studies have demonstrated that the involvement of local communities in tourism development can significantly contribute to the conservation of local resources [1, 2]; increase income and improve family economic conditions [3]; and facilitate the implementation of sustainable tourism principles. Additionally, the participation of local communities provides them with better opportunities to achieve economic benefits and contributes to balancing the tourism activities taking place locally [4].

There have been academic and practical studies showing the contributions of the community in tourism development. According to Basile et al., community participation

facilitates the interaction between tourists and destinations and is a driving force to strengthen tourists' perceptions of authenticity and their attachment to the destination [5], or the participation of local communities has a positive impact on destination quality [6], when the active participation of local communities at different stages is one of the key factors necessary for the success of planning and implementing local tourism activities [7], and is the central aspect influencing sustainability [8]. Moreover, it has significant implications for local development [9]. In which community empowerment will become the key to sustainable tourism development [10]. Lack of participation will affect the sustainability of the empowerment program [11].

However, there is currently limited systematic research to determine the development of this topic over time, from which it is possible to identify topics that will fade away, new ones that will emerge, and those that are likely to thrive in the future. From there, it helps researchers quickly determine the research direction suitable for the topic's trend.

2 Theoretical backgrounds

2.1 Community

According to Aref et al., a community is a group of individuals living or working in the same geographical area who share some common culture or interests. A community is a collection of many subjects with formal and informal rules and norms that form and interact with each other according to local-level processes [12].

In another approach, a local community is a group of people with diverse characteristics who are linked by social relationships, share common views, and participate in everyday activities within a specific geographical location or context [13, 14].

According to WHO, a community refers to people grouped based on geography and/or shared interests, identities, or interactions [15].

2.2 Tourism development

According to Stoffelen and Vanneste, tourism development involves a series of efforts to integrate the use of different tourism resources and encompass all external aspects of tourism that are directly or indirectly related to the continuity of tourism development [16].

According to Liu, tourism development is a dynamic process that connects tourism resources with the needs and preferences of actual or potential tourists. From this perspective, tourism development must consider both supply and demand. The supply aspect is reflected in providing leading and emerging tourism facilities and services to meet the increasing demand for tourism [17].

2.3 Community participation in tourism development

The concept of participation with the synthesis of forms and levels of community participation in tourism development, according to Arnstein, the participation of local communities can have very different forms, from citizen power to manipulation, or it can vary from minimal forms related to information exchange to complete forms of community control [4].

According to Tosun, local community participation is a classification term that allows the participation of local communities in their operational issues at different levels (local, national, international) and in many different forms (manipulation, coercion, instigation, passive, encouraged, spontaneous...) in the specific conditions of the location [1].

The participation of local communities in tourism development involves being involved in decision-making, management, and benefiting from tourism [18].

3 Methodology

A bibliometric analysis was conducted to examine the literature on community engagement in tourism development over the past 34 years. Bibliometric analysis was used to identify the number of publications, citations, authors, and national organizations with the highest publication counts; most importantly, it enables scholars to explore trends in a particular research field. Bibliometrics is used to organize and map a large number of documents exactly [19]. The implementation method consists of two main parts: performance analysis and science mapping analysis. Performance analysis evaluates the field based on descriptive characteristics (authors, citations, and countries), and science mapping analysis examines the development aspects of the field through content analysis [20]. The open-source bibliometric software Biblioshiny, developed by RStudio, was used to analyze this study. The advantage of Biblioshiny over other bibliometric analysis tools is that it provides a comprehensive set of statistical and visualization techniques, allowing for performance analysis and concept mapping of the research field [21].

This study was conducted in two phases: Phase 1: Searching and selecting studies on Scopus. The keyword strategy used for the search included ("community" OR "local" OR "stakeholder" OR "participant") AND ("participation" OR "involvement" OR "engagement" OR "contribution") AND ("tourism" OR "travel" OR "hospitality" OR "recreation") AND ("development" OR "growth"). Search with article title, abstract, and keywords. Results found 9,210 documents. Select the language as English, the document type as articles, and the publication stage as final. Subject areas are social sciences; business, management, and accounting; economics, economics and finance. The source type is journal. The results found 4,463 documents. The period from 1991 to 2025 is notable, as it spans a time when five or more studies

were conducted. The result was 4,386 documents. Then duplicate articles were removed, leaving 4,337 documents for analysis (Figure 1).

Phase 2: Performing bibliometric analysis using the RStudio bibliometric package to analyze performance analysis and evolutionary analysis.

4 Results and Discussion

4.1 **Performance Analysis**

Main Information

Table 1 shows the development and trends of research on community participation in tourism development. The data is presented over time from 1991 to 2025. From 1087 sources and 4,337 documents, the annual growth rate of research is 11.02%, the document average age 7.44, the average number of citations per document is 26.36, the keywords containing content including keywords identifying content (keywords plus) is 4942 and the keywords of the author (author' keywords) is 10597. There are 10465 authors, of whom 761 are the sole authors of the article. The article published in 1991 in this field was "communication participation in tourism development", which marked the beginning of further studies on community participation in

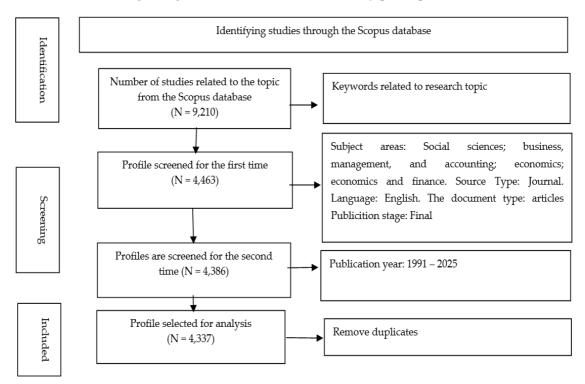


Figure 1. PRISMA flow diagram

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1991:2025
Sources (journals, books, etc.)	1087
Documents	4337
Annual growth rate %	11.02
Document average age	7.44
Average citations per doc	26.36
DOCUMENT CONTENTS	
Keywords plus (ID)	4942
Author's keywords (DE)	10597
AUTHORS	
Authors	10465
Authors of single-authored docs	761
AUTHORS COLLABORATION	
Single-authored docs	801
Co-authors per doc	2.96
International co-authorships %	15.76

Table 1. Main information

Source compiled from Biblioshiny

tourism development. Subsequent studies were conducted based on the results from the biblioshiny software, which indicated that 2024 had the highest number of publications, with 526 articles. This suggests that although this field was studied early, it remains vital today.

Authors impact

Through bibliometric indicators such as h-index, g-index, m-index, total citations (TC), number of publications (NP), and year of first publication (PY_start), this article aims to evaluate the level of academic influence of typical authors in the field of research on community participation in tourism development.

Table 2 shows notable influential authors include Rasoolimanesh SM and Jaafar M, who have the highest growth rate of academic influence, contributing to the shaping of the educational foundation for the topic of community participation in tourism development.

Authors	h_index	g_index	m_index	TC	NP	PY_start
Rasoolimanesh SM	18	23	1.636	2660	23	2015
Wall G	18	24	0.6	1668	24	1996
Jaafar M	17	25	1.308	2052	25	2013
Wang Y	10	18	0.455	966	18	2004
Kim S	9	12	0.75	247	12	2014
Lovelock B	9	10	0.9	321	10	2016
Rogerson CM	9	11	0.474	192	11	2007
Wang S	9	9	0.692	484	9	2013
Xu H	9	10	0.6	302	10	2011
Costa C	8	13	0.5	365	13	2010

Table 2. Ten authors' impact

Source: Biblioshiny

Pioneering author generation: Long-time author Wall G (first publication year: 1996) is a veteran researcher, representing the pioneering generation, and provides the initial knowledge foundation for the field.

Young authors with great potential: Lovelock B and Kim S have high m-indexes (0.9 and 0.75, respectively), indicating a rapid growth in academic influence, despite relatively low citation counts.

Authors such as Wang S, Xu H, and Costa C also show an upward trend, worth watching shortly.

Additionally, the presence of both long-standing authors (Wall G) and promising young authors suggests a strong academic legacy in the field.

Suggestions for building research networks in the future include developing international research alliances by drawing on influential authors from Asia (e.g., Jaafar, Wang), the Middle East (e.g., Rasoolimanesh), and the West (e.g., Wall, Lovelock).

Country scientific production

Figure 2 shows that the countries with the most publications are The United States (1176 documents), China (687 papers), The United Kingdom (585 documents), Indonesia (541 documents), Malaysia (394 documents), South Africa (368 documents), Canada (367 documents), Spain (320 documents), and Italy (311 documents). According to Figure 3 the number of authors by country has increased significantly. The leading authors are still from the



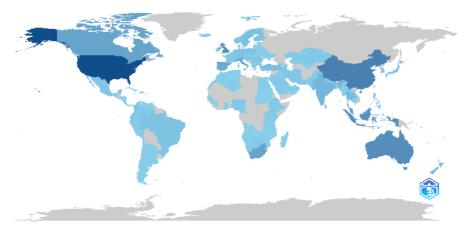


Figure 2. Country scientific production

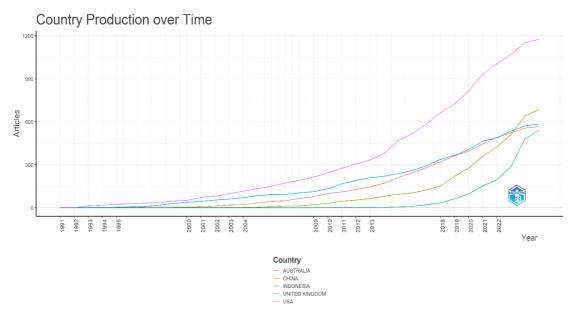


Figure 3. Country production over time

United States. Additionally, the number of authors from China has increased considerably in recent years, rising to second place.

Scientific significance: The United States, the United Kingdom, and China are the leaders in this field and can play a role in coordinating international research cooperation. It is necessary to exploit the potential for collaboration between developed countries (the United States, the United Kingdom, and Australia) and emerging countries (China and Indonesia) to optimize research efficiency (Table 3).

Nations	Features	Main scientific contributions
The United States	Leading in the number of publications and a steady growth rate	Global Knowledge Center
The United Kingdom	Stable academic tradition	Theoretical and policy background
China	Recent Breakthrough Growth	Scientific resilience and research investment
Australia	Focus on quality and high applicability	Research on sustainable community tourism
Indonesia	Emerging country	Regional cooperation opportunities and expansion potential

Table 3. Scientific comments and	contributions
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Most cited studies articles

Table 4 shows that the top 10 most-cited papers reflect the level of interest that the scientific community has in the issues presented in the documents. Based on the total number of citations, it is evident that later scholars have built upon the theoretical foundations established by earlier scholars. In addition, three articles highest have total number of citations per year show that the issues that researchers are currently more interested in include: From high-touch to high-tech: COVID-19 drives robotics adoption; ; Development of a Scale to Measure Memorable Tourism Experiences and Influence analysis of community resident support for sustainable tourism development.

Ran k	Title	Authors	Journal	Year	TC	TC per Year	Normalize d TC
1	Collaboration theory and community tourism planning	Jamal TB [22]	Annals of Tourism Research	1995	1126	36.32	8.07
2	Development of a Scale to Measure Memorable Tourism Experiences	Kim JH [23]	Journal of Travel Research	2012	1047	74.79	23.34
3	Limits to community participation in the tourism development process in developing countries	Tosun C [4]	Tourism manageme nt	2000	848	32.62	8.31
4	Influence analysis of community resident support for sustainable tourism development	Lee T [24]	Tourism manageme nt	2013	725	55.77	16.25

Table 4. Top 10 most-cited articles

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Ran k	Title	Authors	Journal	Year	тс	TC per Year	Normalize d TC
5	Developing a tourism impact attitude scale	Lankford S [25]	Annals of Tourism Research	1994	607	18.97	8.04
6	New directions in tourism for third world development	Brohman J [26]	Annals of Tourism Research	1996	568	18.93	6.96
7	Tourism routes as a tool for the economic development of rural areas—vibrant hope or impossible dream?	Briedenhann J [27]	Tourism manageme nt	2004	555	25.23	6.23
8	Stakeholdersinsustainabletourismdevelopmentand theirroles:Applyingstakeholdertheory tosustainabletourismdevelopmenttourism	Byrd E [28]	Tourism review	2007	534	28.11	9.91
9	Residents'AttitudestowardTourismDevelopment:ALiterature Review withImplicationsforTourism Planning	Harrill R, [27]	Tourism manageme nt	2004	522	23.73	5.86
10	From high-touch to high-tech: COVID-19 drives robotics adoption	Zeng Z [29]	Tourism geographie s	2020	466	77.67	17.77

Source compiled from Biblioshiny

Most frequent keywords and research trend topics

The most frequently appearing keywords represent the most researched content. The prominent contents when researching community participation in tourism are tourism development (961), ecotourism (544), local participation (516), sustainable development (398), tourist destination (348), stakeholder (343), sustainability (331), tourism management (319), tourism (270), perception (203). Figure 4 shows the beginning and development of the research topics. The earliest research topics were community participation in tourism planning, local community empowerment, NGO participation, and poverty reduction. The next period involved research on key forms of tourism with community participation, including community-based ecotourism, ecotourism, community-based tourism, and sustainable tourism. The most recent studies included local community participation, value co-creation, environmental sustainability, and bibliometric analysis.

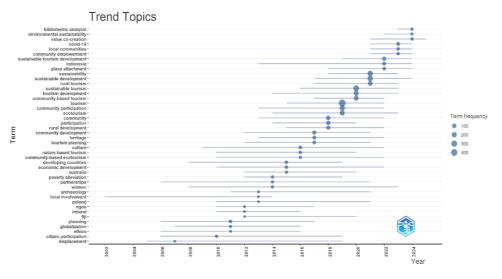


Figure 4. Trend topics

Source: Biblioshiny

4.2 Thematic evolution

This paper uses the thematic evolution analysis technique. This is a bibliometric analysis method using the Biblioshiny interface of the R Bibliometrix package. Data were collected from the Scopus database, focusing on publications related to community participation in tourism development from 1991 to 2025. The analysis includes topic mapping, keyword co-occurrence networks, and tracking of evolution over time. Three distinct periods were identified for comparative analysis: 1991–2015, 2016–2020, and 2021–2025 (Figure 5). This hybrid bibliometric design makes the analysis more concise, condensed, and scientific. At the same time, it allows for identifying: (1) determining the development process of research topics through the stages, (2) emerging topics, (3) research gaps, and (4) research directions for the future.

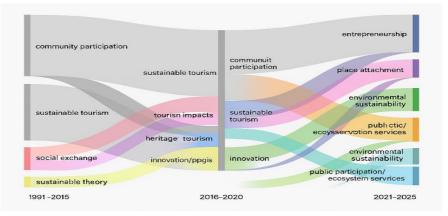


Figure 5. Development progress of research topics in the period 1991 - 2025

(1) Determine the development process of research topics through stages

Based on the results of the analysis of the development process of research topics in the tourism field in the period 1991–2025, the study divided the period into different time slices (1991–2015, 2016–2020, 2021-2025) and created the following topic development chart (Figure 6).

Based on the development chart above, there is a clear shift from fundamental issues to highly interdisciplinary and sustainable topics:

In the first phase (1991–2015), studies primarily focused on conceptual development, emphasizing the role of sustainable tourism and the attitudes of residents, as informed by theories such as social exchange theory and sustainability theory, which reflected the initial concern with balancing economic development and the needs of local communities.

As the field matured (2016–2020), scholars expanded their research to include the social and environmental impacts of tourism, exploring innovation, multi-stakeholder governance, and the integration of participatory mapping technologies such as PPGIS (Public Participation Geographic Information Systems), indicating a shift toward deeper theoretical considerations and the assessment of the consequences of tourism development. Social exchange theory remains widely applied in research to clarify local communities' perceptions of the impacts of tourism development.

Most recently (2021–2025), research topics shifted toward practical applications, focusing on entrepreneurship, local engagement, and ecosystem services. This process reflects a broader trend toward action research, linking community empowerment with ecosystems and technology, and reflects a growing interest in environmental, emotional, and endogenous values in tourism. In addition to social exchange theory, other theories have emerged to clarify the impact of local

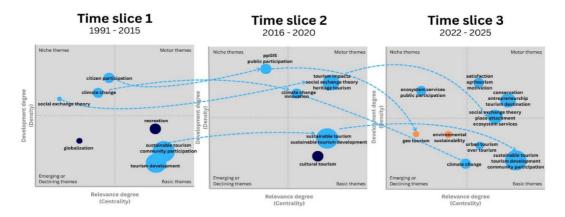


Figure 6. Topic development chart over time from 1991 to 2025

community participation, which is formed through long-term local attachments, as well as place attachment theory.

Overall, the stability and continuity of themes such as sustainable tourism and community participation across the three phases show that these are indispensable pillars in the long-term research orientation. This process reflects the evolution from basic concepts to integrated and sustainable approaches, suitable for the current context of globalization and climate change.

(2) Emerging themes

Period 2016–2020: innovation/PPGIS; creative tourism; agricultural/indigenous tourism.

Period 2021–2025: geo tourism; environmental sustainability; ecosystem services; place attachment; entrepreneurship.

As such, it can be seen that these topics are often newly mentioned or are developing rapidly recently, especially concerning geotechnology, environmental sustainability, and a focus on local community participation in startups, as well as residents' emotional attachment to the destination.

(3) Research gaps

Based on niche or emerging topics that do not translate into motor or basic themes, the following research gaps can be identified:

Geo-tourism and climate change have emerged in the early stages but have not developed sufficiently to become the central theme.

PPGIS, although introduced in 2016, has not yet established its role as of 2025, so it is necessary to survey practical applications at the local level with community participation. Additionally, there are limited topics related to artificial intelligence, digital tourism, the metaverse, and blockchain in the tourism sector.

Authenticity emerged as a sub-theme only between 2021 and 2025, indicating that this is a topic that warrants further in-depth study regarding cultural identity.

Environmental sustainability is an emerging topic from 2021 to 2025, so it needs to be studied further in the future.

Place attachment is a relatively new but promising area that warrants focused research. For local communities, emotions formed during the process of living and being attached to the destination will contribute to influencing their participation in tourism development.

(4) Potential research directions

Entrepreneurship and local economy: Focusing on the actual behaviors of community participation in tourism activities as a way to increase local community entrepreneurship and local economic development, especially in developing countries, explore the role of entrepreneurship in the development of tourism.

Perceptions of the impacts of tourism development and emotions of local communities: combining social exchange theory with pride theory to explore the relationship between community perceptions and community pride; developing theoretical frameworks on place attachment and authenticity in the post-COVID-19 context; researching emotional mapping in tourist experiences.

Environmental crisis and tourism model transformation: Tourism development has impacted the natural environment, exacerbating climate change. This has led to a shift in tourism development policies, prioritizing environmental protection, particularly in environmentally sensitive locations such as marine tourism, where the community's livelihood is closely tied to the aquatic environment. Therefore, it is necessary to conduct research in vulnerable environmental areas, such as the marine environment, to determine whether people's awareness of the ecological impact of tourism is positive, which is a factor that stimulates them to participate in tourism and contribute to protecting the local living environment; link climate change and tourism resilience; analyze the impacts of climate change on natural heritage and tourism destinations.

Integrating technology in destination management: research on the application of GIS, PPGIS, and IoT in innovative destination management to facilitate tourism development with the participation of local communities; survey on the relationship between big data and tourist behavior associated with ecological conservation.

5 Conclusions

This study aims to review the literature on community participation in tourism development from 1991 to 2025 by bibliometric analysis. The author reviewed 4,337 published documents from Scopus databases using RStudio's bibliometrix package. This tool enables users to review and visualize the performance of authors, sources, and countries within a specific research field. The author analyzed the top ten most influential authors in the research field, the top ten most cited documents, the countries with the highest number of studies, and the topic trends based on the frequency of keyword occurrences. The study has determined the development process of research topics with a multidimensional, multitype tourism approach across three stages: 1991-2005, 2016-2020, and 2021-2025. The study highlights emerging topics in geotechnology,

environmental sustainability, and the importance of local community participation in startups, as well as residents' emotional attachment to the destination. From there, the study identified four research gaps and proposed four potential research directions. However, this study has some limitations.

The analysis is limited to studies from the Scopus database. Scopus is an important database in the research community; however, other databases, such as Web of Science, Dimensions, and PubMed, are also significant. Furthermore, like R Biblioshiny, various platforms, such as VOSviewer, SciMAT, and CiteSpace, also possess powerful processing and visualization capabilities [11]. Therefore, future studies can utilize these tools to further validate the research results. Additionally, this study offers a comprehensive understanding of research topics that have garnered considerable attention from scholars examining community participation in tourism development. However, these results are dynamic and may change over time, with dominant themes emerging and some themes increasing or decreasing in importance.

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