

TOURISM AND SUSTAINABLE DESTINATIONS: A BIBLIOMETRIC EXAMINATION

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ABSTRACT

This study aims to understand the dynamics and relationship between tourism and sustainable destinations via bibliometric analysis as these terms are among the 2030 goals of WTO. For this reason, the Web of Science (WoS) database was used to be able to obtain the dataset. Author keywords were used for the search. 406 studies were found; 384 of them were included. An R package, Bibliometrix, was used for the analysis as Bibliometrix performs the entire process. Main information, annual scientific production, most relevant sources and authors, most global cited documents, wordcloud and collaboration worldmap analysis were used. Findings show that between 2002 and 2023 the annual growth rate was 25.73%. *Sustainability* is the most relevant source while Mazilu, M. is the most relevant author. The Styliadis et al. (2014) article titled as 'Residents' support for tourism development: The role of residents' place image and perceived tourism impacts' is the most globally cited document. Wordcloud indicated that tourism, sustainable, and destination are the most frequent terms in the titles of the studies. China, UK and Spain are the lead countries which have the collaboration about the topic. Finally, future research directions were proposed.

Keywords: tourism, sustainable destinations, bibliometric analysis.

1 INTRODUCTION

Global attempts to lessen the negative effects of rising travel and tourism on the environment, society, and economy must now prioritise sustainable tourism [1]. The idea of sustainable destinations – places that give sustainability top priority in their development plans and tourism operations – is essential to this topic [2]. In order to maintain long-term viability and advantages for all stakeholders, these destinations strive to strike a balance between the requirements of tourists, local residents, and the environment [3]. The goal of this study's bibliometric analysis of sustainable destinations is to pinpoint key ideas, ground-breaking publications, and collaborative networks in this area of inquiry. This study uses quantitative approaches to analyse academic literature to understand how sustainable destinations are conceptualised, researched, and implemented in various situations.

2 LITERATURE REVIEW

Since its inception, worldwide policy frameworks and global environmental movements have significantly evolved the concept of sustainable tourism [4]. In the 1980s and 1990s, discussions of sustainable development centred on the need for tourism to be commercially, environmentally, and socially sustainable [5]. These ideas were informed by the Brundtland Report's definition of sustainable development. To accomplish these objectives, researchers like Bramwell and Lane [6] emphasised the need of integrated planning and management. Destinations that incorporate sustainable development principles into their tourism operations and policies are considered sustainable [7]. This entails controlling the expansion of tourism in a way that protects the destination's social, cultural, and natural fabric [8]. The fundamental tenets of sustainable tourism encompass cultural conservation, economic feasibility, social justice, and environmental responsibility [9]. A number of frameworks and standards have been created to help places become more environmentally friendly. Among the most frequently accepted standards are the Global Sustainable Tourism Council's



(GSTC) criteria, which offer a thorough set of recommendations covering sustainable management, socioeconomic advantages, cultural heritage protection, and environmental conservation. The United Nations World Tourism Organization (UNWTO) standards, Green Destinations, and the European Tourism Indicator System (ETIS) are a few more noteworthy frameworks.

3 METHODOLOGY

This study aims to understand the dynamics and relation between tourism and sustainable destinations. So, bibliometric analysis was used. Bibliometric analysis is used for performance analysis and science mapping. Performance analysis shows the evaluation of research and publications of individuals and institutions. Science mapping aims to reveal the structure and dynamics of the scientific field. Here, it is used to analyse the institutions, authors, publications and their relationships [10]–[12].

For this reason, main information, annual scientific production, most relevant sources and authors, most global cited documents, wordcloud and collaboration worldmap analysis were used respectively by using Bibliometrix. This is because Bibliometrix can perform the entire process unlike the other software programs [13].

Web of Science (WoS) database was used to be able to obtain the dataset, as it is advised by many authors who have published SSCI and SCI-E indexed bibliometric articles [14]–[16]. Author keywords were used for the search as this is the best parameter for this search [17]. 406 studies were found; 384 of them were included by excluding the year 2024 as it has not finished.

3.1 Findings

Table 1, which contains the main information about the data, is displayed below. The table shows that the first study was published in 2002. 384 different studies were published in 184 different sources such as journals, books, etc. Average citations per documents was found to be 5.89 whereas average citations per documents was found 2.85. 17,605 references were used in 384 studies. Most of the documents are articles in this category ($n = 287$). While it was found that 625 keywords plus (ID) were used, 1,193 author's keywords (DE) were used in these studies. Only 53 of 958 authors have single-authored documents. Most of the authors have multi-authored documents ($n = 905$). Collaboration index was found equal to 2.76. The table is presented below for the other details.

The annual growth rate was found to be 25.73%. Although there are micro fluctuations in the figure since 2002, there is an increasing tendency which shows that this topic has a potential, and researchers will pay more attention to it (Fig. 1).

In Fig. 2, the most relevant sources were displayed. According to the figure, *Sustainability* is the most relevant source with the number of documents it has published ($n = 69$) till 2024. The second one is *Journal of Sustainable Tourism* ($n = 20$) whereas *Worldwide Hospitality and Tourism Themes* ($n = 10$) is the third one. The others with the number of documents can be seen below.

According to the Bibliometrix, the top three most relevant authors who have published documents about these topics are Mazilu, M. ($n = 5$), Birkic, D. ($n = 4$), and Dwyer, L. ($n = 4$). Other authors and the number of documents they have published are given in Fig. 3.

In Fig. 4, the most global cited documents were given. The figure displays that the article by Styliadis et al. [18] 'Residents' support for tourism development: The role of residents' place image and perceived tourism impacts' is the most global cited document according to

Table 1: Main information. (Source: Own elaboration done by Bibliometrix.)

Description		Results
Main information about data	Timespan	2002–2023
	Sources (journals, books, etc.)	183
	Documents	384
	Average years from publication	5.89
	Average citations per documents	18.06
	Average citations per year per document	2.85
	References	17,605
Document types	Article	287
	Article; book chapter	4
	Article; early access	9
	Article; proceedings paper	2
	Editorial material	4
	Proceedings paper	62
	Review	16
Document contents	Keywords plus (ID)	625
	Author’s keywords (DE)	1,193
Authors	Authors	958
	Author appearances	1,090
	Authors of single-authored documents	53
	Authors of multi-authored documents	905
Authors collaboration	Single-authored documents	56
	Documents per author	0.401
	Authors per document	2.49
	Co-authors per documents	2.84
	Collaboration index	2.76

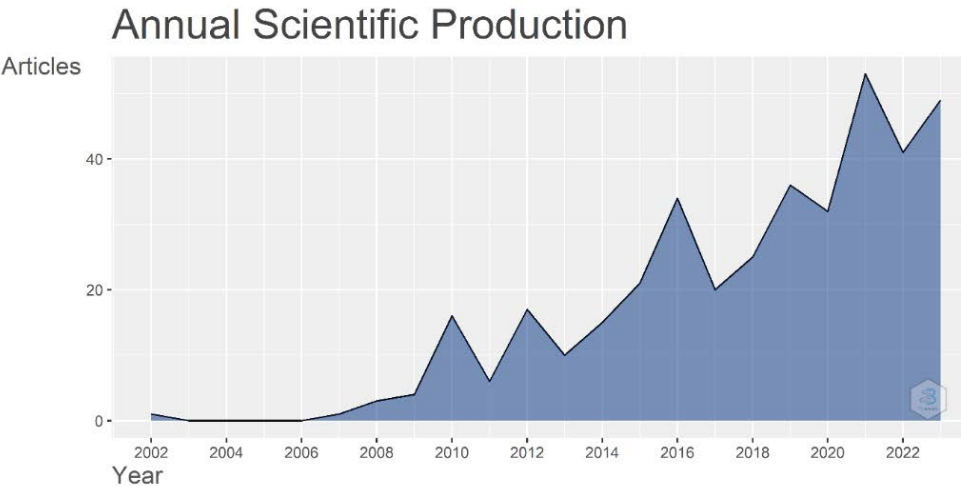


Figure 1: Annual scientific production. (Source: Own elaboration done by Bibliometrix.)



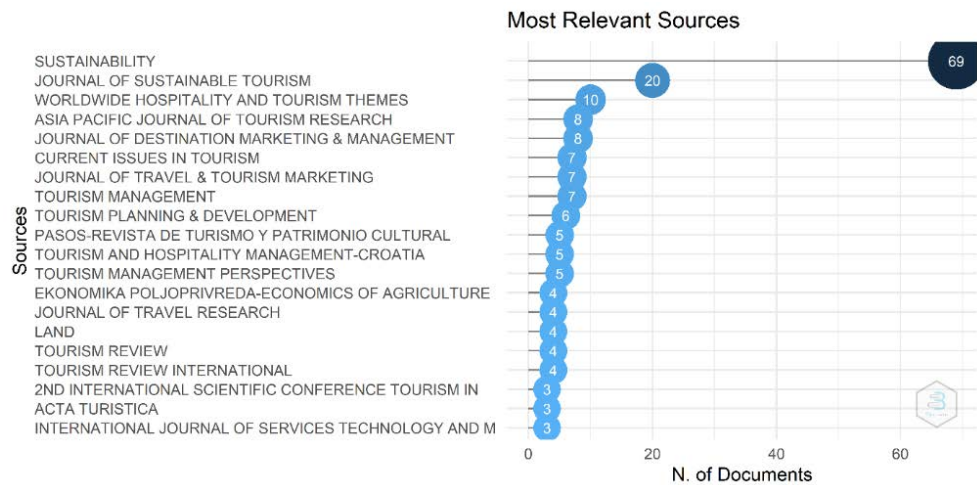


Figure 2: Most relevant sources. (Source: Own elaboration done by Bibliometrix.)

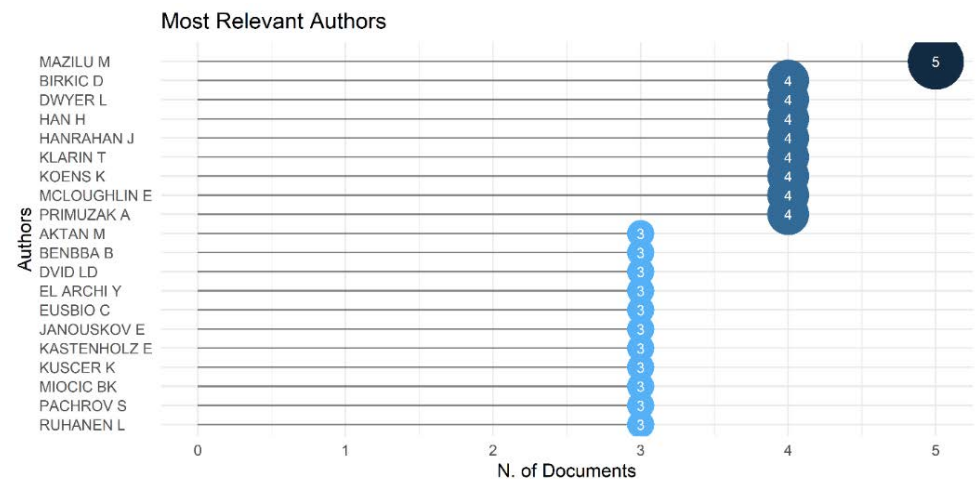


Figure 3: Most relevant authors. (Source: Own elaboration done by Bibliometrix.)

the total citations (TC) (TC = 363). The article by Koens et al. [19] entitled ‘Is overtourism overused? Understanding the impact of tourism in a city context’ is the second document on the list (TC = 328). The article by Dwyer et al. [20] entitled ‘Destination and enterprise management for a tourism future’ is the third one on the list (TC = 283). The details about other documents can be seen in Fig. 4.

By selecting titles as a parameter, wordcloud gives the researchers clues about the tendency of the studies about these topics. As a result, tourism (frequency (f) = 281), sustainable (f = 203), destination (f = 122), development (f = 111), destinations (f = 94), tourist (f = 67), sustainability (f = 42), management (f = 40), analysis (f = 26), and rural (f = 25) are the most dominant top 10 words in the titles. This can be seen in Fig. 5.

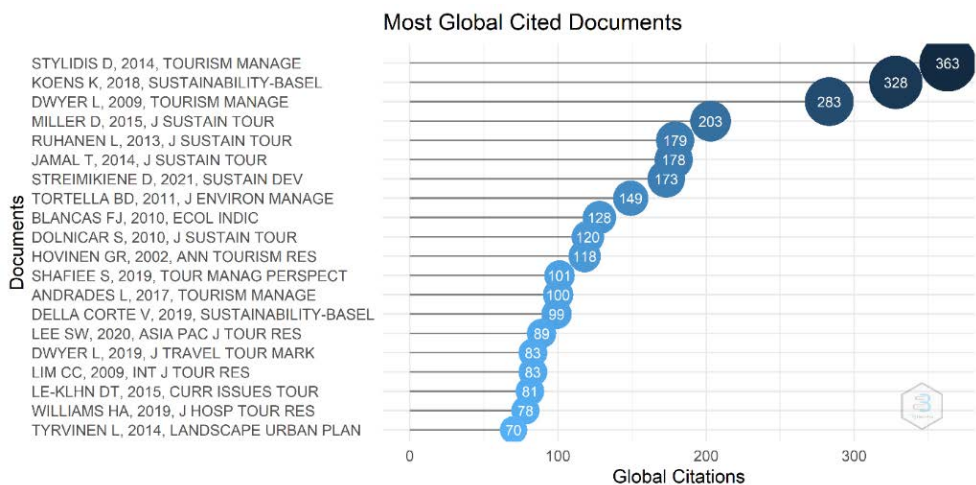


Figure 4: Most global cited documents. (Source: Own elaboration done by Bibliometrix.)



Figure 5: Wordcloud parameter: Titles. (Source: Own elaboration done by Bibliometrix.)

The country collaboration map shows us the network of the countries which work on these topics together. Bold lines show us that there is a strong network between the countries. According to that, China–UK ($f = 4$), China–USA ($f = 4$), Netherlands–South Africa ($f = 4$), Spain–Ecuador ($f = 4$), Spain–Italy ($f = 4$), and UK–Germany ($f = 4$) are the countries which collaborate most together about tourism and sustainable destinations (Fig. 6).

4 CONCLUSION

This study provides an extensive overview of the research trends, main contributors, and collaboration networks in the field of tourism and sustainable destinations from 2002 to 2023 by bibliometric analysis. The results shed important light on how research on sustainable



Country Collaboration Map

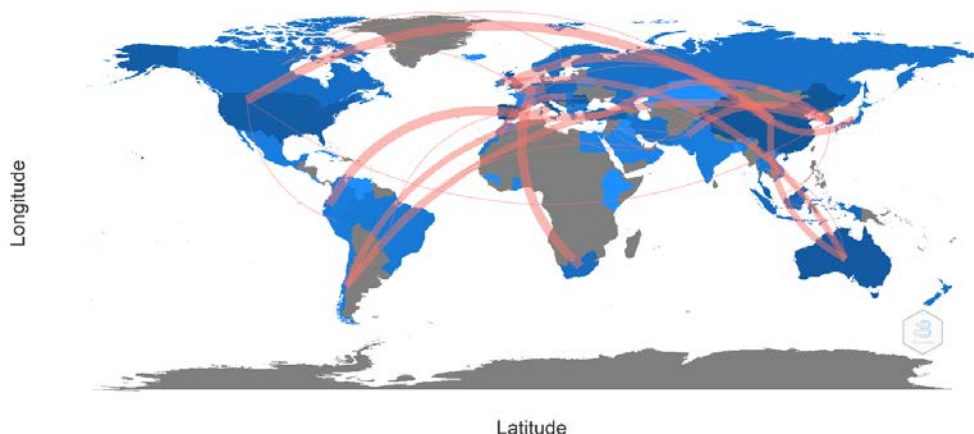


Figure 6: Country collaboration map. (Source: Own elaboration done by Bibliometrix.)

tourism and destinations has developed over time. A total of 384 studies – published in 184 different publications and books – have been published since the initial research was released in 2002. 5.89 citations on average per publication indicates a moderate level of recognition and impact within the academic world. The total number of references cited in these publications is 17,605, which illustrates the depth and scope of the field's study. According to these parameters, research on sustainable tourism is being conducted in a way that is both impactful and prolific, greatly advancing both academic and practical knowledge in the field.

Journal papers represent the bulk of the documents ($n = 287$), demonstrating the importance of peer-reviewed literature in distributing knowledge about sustainable destinations. Journal publications are preferred because of their thorough review procedures and wider distribution, which enhance the legitimacy and visibility of the research. Significant keyword usage was also found by the investigation, with 1,193 author's keywords (DE) and 625 keywords plus (ID) being used. A broad range of research interests and emphasis points, from particular sustainability practices to more general conceptual frameworks, are indicated by the diversity of keywords. This suggests that the literature has a rich and varied theme landscape. This study field is dominated by collaborative efforts, as seen by authorship patterns. With 905 authors contributing to multi-authored works, out of 958 contributors, only 53 have single-authored publications; this results in a collaboration index of 2.76. This high degree of cooperation indicates the multidisciplinary character of research on sustainable tourism, which calls for contributions from various disciplines including economics, sociology, environmental science, and urban planning. It also implies that scholars understand how complicated sustainability issues are and how different skills are required to solve them successfully. This emphasises how crucial collaborative research is to the advancement of sustainable tourism research. Despite variations over time, the annual growth rate of 25.73% indicates a robust and growing interest in sustainable destinations for travel. This implies that the subject has a lot of potential and will probably keep getting scholarly attention in the future.

With 69 studies published on the topic, the journal *Sustainability* comes out on top, followed by the *Journal of Sustainable Tourism* ($n = 20$) and *Worldwide Hospitality and Tourism Themes* ($n = 10$). The fact that these journals are at the forefront of publishing research on sustainable tourism suggests how important a role they play in influencing the conversation and determining the direction of future research. This demonstrates how important these journals are in influencing the conversation about environmentally friendly travel.

Mazilu, M. ($n = 5$), Birkic, D. ($n = 4$), and Dwyer, L. ($n = 4$) are the top authors who have contributed to the scholarship on sustainable destinations. Their efforts have played a crucial role in expanding knowledge and understanding in this area. The word cloud analysis sheds light on the recurring topics and areas of interest in the literature based on study titles. The most common keywords, which highlight the main areas of interest and research, are tourism, sustainable, destination, development, tourism, sustainable, management, analysis, and rural. The frequency of keywords like 'rural' indicates an elevated interest in the relationship between sustainability and rural tourism, emphasising the necessity of sustainable practices in less developed and frequently environmentally sensitive destinations.

Significant international cooperation is revealed by the country collaboration map, with notable collaborations between China, the UK and the USA. They also demonstrate the understanding that to effectively address the global character of sustainability concerns in tourism, coordinated international actions are necessary. This demonstrates how international research on sustainable destinations is and how crucial international collaborations are to the field's advancement. This bibliometric research concludes by highlighting the active and expanding interest in eco-friendly travel destinations and tourism. The results emphasise significant figures, overarching themes, and cooperative networks that influence this field's scholarly environment. Research on sustainable destinations is expected to increase as interest in sustainability grows, offering important insights and answers to the problems associated with the development of sustainable tourism.

This bibliometric analysis highlights a vibrant and expanding area of study devoted to environmentally friendly travel and travel destinations. The significance and applicability of this research are demonstrated by the growing scholarly interest, high levels of collaboration, and noteworthy contributions from important authors and journals. Research on sustainable destinations is expected to grow as sustainability continues to gain traction in international conversations, offering vital insights and answers to the urgent problems confronting the travel and tourism sector. In addition to mapping the existing status of the sector, this analysis lays the groundwork for future studies that may promote more environmentally friendly travel patterns across the entire world.

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