



A Bibliometric scrutiny of Sustainability of Tourism in India

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Abstract:

Being the fourth engine of growth in a nation's economy, tourism creates more than any other commensurate sector due to its elaborate back-end linkages. Over-tourism has been an extant issue for tourism thriving at tourist destinations for quite some time now. Thus, unsustainability of tourism is today a burning issue, causing greater probable distress for the future generations. Thus, a bibliometrics analysis using Biblioshiny tool of RStudio was conducted on the data retrieved from Scopus database for the years 1993 to 2022. An analysis of 136 such papers has been conducted depicting 15.96 percentage of annual growth with 353 authors from varied countries like India, USA, Australia among others. This study is deemed to benefit research scholars, managers, academicians and other personnel with relevant literature interest. The findings shall help assist in future course of research in such themes.

Keywords: Tourism, Sustainable tourism, Bibliometric analysis

Introduction:

Tourism has been a vital part of economy from the very ancient world when travellers thronged various parts of the globe thereby integrating different civilisations and discovering varied parts of the world only to politically and economically link whole of the world.

Phenomenal advancements in the transport sector has transformed tourism sector and the tourist is today moving much more than ever before (Bhatia, 2000; Niti Ayog, 2018; APEC, 2013). This, along with policy mismanagement on the part of tourism sector has cropped up the issue of over-tourism and issue of unsustainability of tourism for long. Lack of standardisation, unorganised developments, haphazard infrastructural additions and errant policy practices have long been adding to the woes.

Sustainable tourism is defined by UNWTO (United Nations World Tourism Organization) as "Tourism which benefits its current economics, future economics, social impacts and environmental impacts, and also addresses the needs of tourists, tourism industry, the environment and host communities". As per Eco India, Sustainable tourism is tourism with the primary aim of ascertaining long term prospects of tourism ecologically and environmentally. Further on, the focus lies in harnessing local demographic synergy, native heritage, employing indigenous population into the tourism related jobs created and promoting resource and ecological conservation. The related nomenclature on similar lines includes homestays, nature camps, eco-tourism, eco-tours, eco-parks etc. Promoting local cuisines, heritage, culture and implementing strategies affiliated more towards the native demography should be the prime motive of a nation's sustainable tourism profile. United Nation's Sustainable Development Goals (SDGs) targets 8.9, 12.b and 14.7 also depict vital relevance of sustainability of tourism in the overall economy of a nation and its corresponding impacts for the demographics of especially the local area. As per Sejwar and Ahlawat (2019), impacts of over-tourism include negative environmental issues



arising due to haphazard tourism increase in some tourist spots. Sustainable tourism practices must therefore focus on sustainability of environment, mitigation of ill impacts of mass tourism and manage the community and resources of a nation judiciously. There is thus an inherent need for relevant, streamlined and dedicated policy paradigms centred towards amending the mismanagement issues in sustainability of tourism in the country.

To comprehend these impacts and better understand the sustainability of tourism in India, a bibliometric analysis of the current literature was conducted by the researcher. The intention of this work is to comprehend the evolution of concept of sustainability in tourism in India, its growth and trend of literature and relevant research in this theme. The paper intends to scrutinise the vital information on the concept and elaborate on the top authors, leading journals, collaboration and co-occurrence network on this construct.

This paper is segmented into multiple sections where first section includes introduction, second includes data and research methodology while the last includes findings, discussion and conclusion of this study.

Research Methodology:

For the purpose of addressing the objectives of this study, a Bibliometric analysis was performed on data extracted from the Scopus database which has been selected over other literature sources due to its most extensive and elaborate coverage. Bibliometrix and Biblioshiny tools of RStudio were employed to perform the above-mentioned Bibliometric analysis. For the same, data had been collected in the month of November 2022 by shortlisting the literature based on the cues such as title name, abstract, and the keywords tourism, India and sustainable. The original 399 documents were then further limited to 136 documents based on document type, language and subject area. Only articles were selected as document types while streamlining the shortlisting while the language was limited to English only due to the language constraint of the researcher. Subject area for the same was confined to social sciences only.

Findings of analysis:

Table 1 reveals pertinent information about the collected data and the same has been analysed using Biblioshiny tool of RStudio. Table 1 demonstrates that a total of 136 documents has been published from the years 1993 to 2022 on the construct of sustainable tourism in India. This statistic also reveals that 353 authors made their contribution to this field. The mean number of citations garnered by a publication among all of the publications scrutinised for the purpose of this research paper was 10.01 for the above mentioned time period i.e. 1993 to 2022.



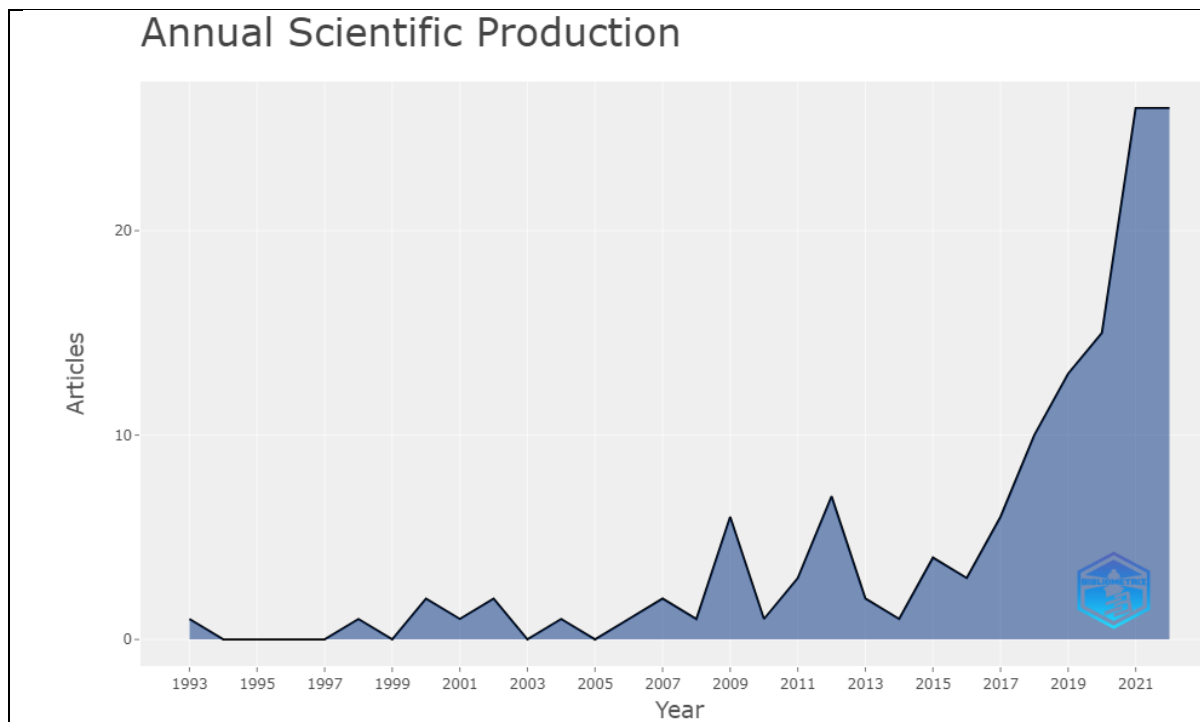
Table 1: Relevant information about data

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1993:2022
Sources (Journals, Books, etc)	66
Documents	136
Average years from publication	5.93
Average citations per documents	10.01
Average citations per year per doc	1.528
References	6824
DOCUMENT TYPES	
	1
ethiopia () ghana journal of geography	20191
article	134
DOCUMENT CONTENTS	
Keywords Plus (ID)	445
Author's Keywords (DE)	518
AUTHORS	
Authors	353
Author Appearances	387
Authors of single-authored documents	24
Authors of multi-authored documents	329
AUTHORS COLLABORATION	
Single-authored documents	24
Documents per Author	0.385
Authors per Document	2.6
Co-Authors per Documents	2.85
Collaboration Index	2.94

Evolution over the period: Figure 1 reveals that the quantum of publications has been constantly ascending with an increasing rate especially post year 2014. Annual growth rate of the literature has been found to be 15.96%.



Figure 1: Annual scientific production



Top contributing Authors:

Figure 2 depicts that the author with top most publications is Chakrabarty P with a total of 4 articles and an H-index score of 2. Next in the list is Gupta SK with 3 articles and an H-index of 2 and a total citation count of 8. Mishra PK had the maximum citation count of 76 amongst the top 10 authors.

Figure 2: Top contributing authors

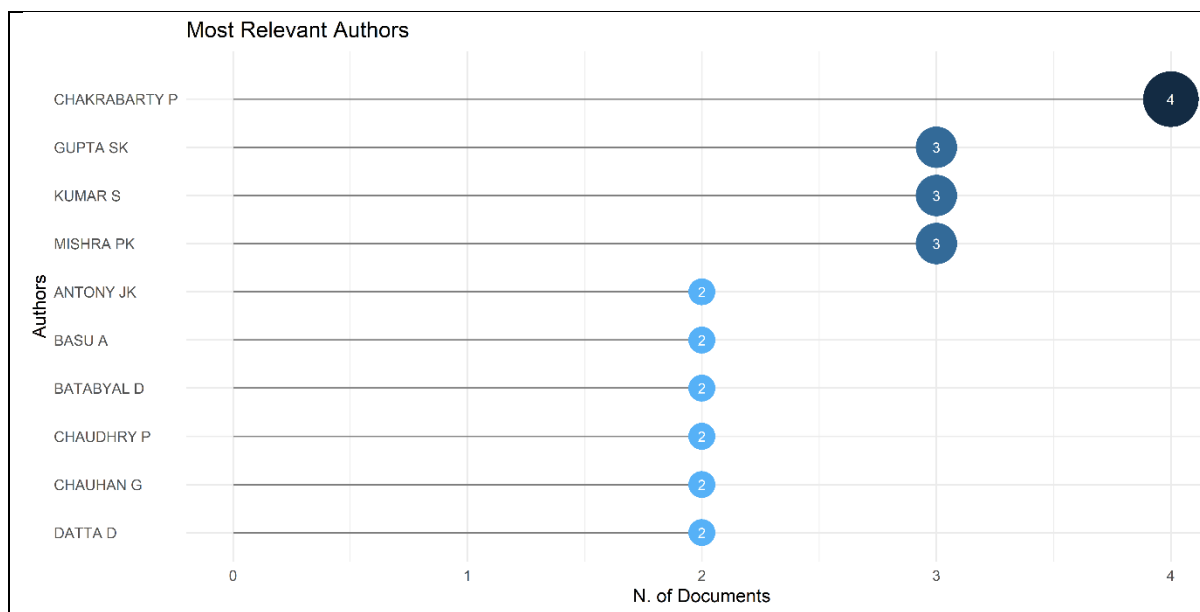




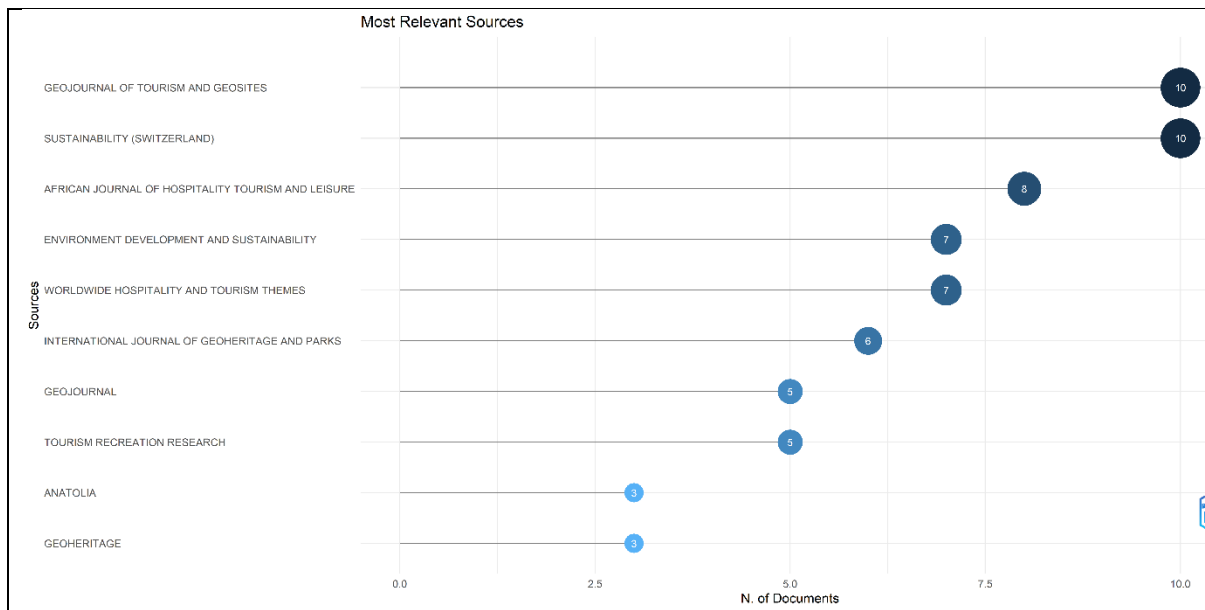
Table 2: Top 10 contributing authors

Authors	Articles	H index	TC
Chakrabarty P	4	2	13
Gupta Sk	3	2	8
Kumar S	3	2	11
Mishra Pk	3	2	76
Antony Jk	2	1	9
Basu A	2	2	5
Batabyal D	2	1	1
Chaudhry P	2	1	5
Chauhan G	2	2	34

Top sources with highest publications:

Figure 3 exhibits sources as per the leading number of publications. Among all “Geojournal of Tourism and Geosites” was found to be the leading journal with the highest number of 10 publications followed by “Sustainability” with the same number of publications. The figure includes a total of 66 journals publishing studies related to the construct of sustainable tourism in India.

Figure 3: Top sources with highest publications

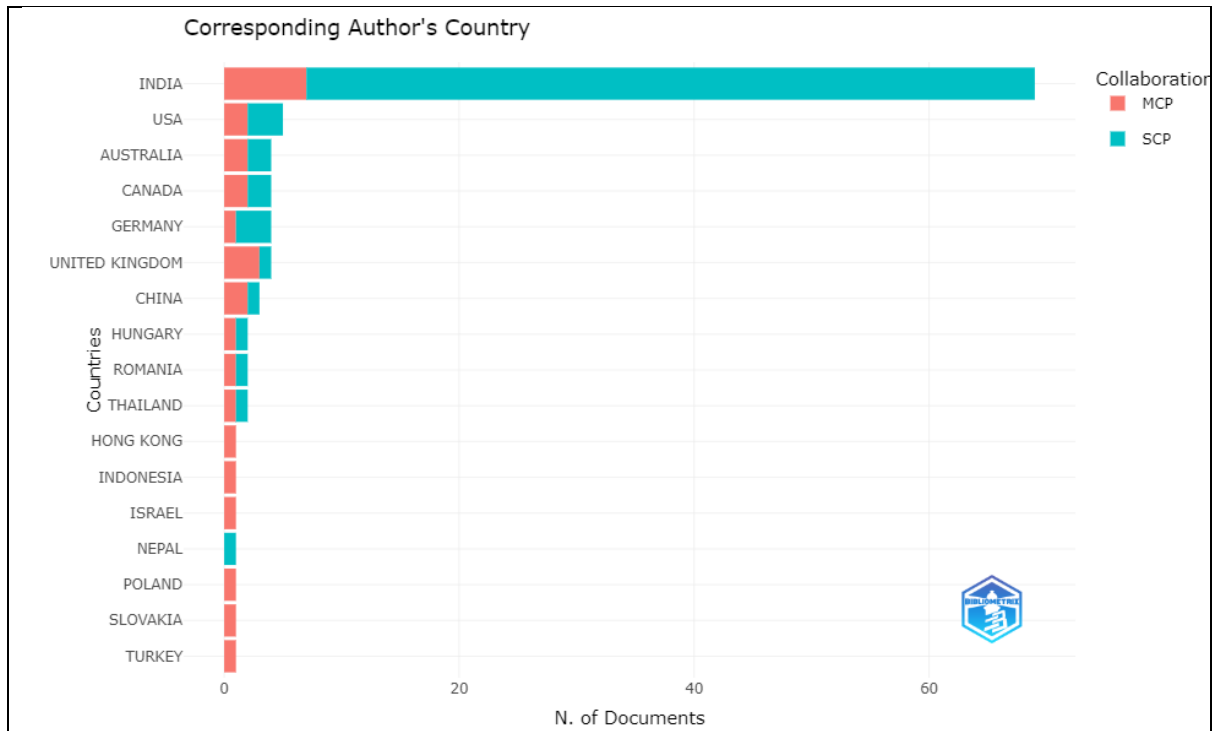




Top contributing countries:

Figure 4 demonstrates that the top contributing country with the maximum number of researches published is India followed by USA, Australia and Canada in the decreasing order. India had both the maximum number of multiple country and single country publications too.

Figure 4: Top researched country



Keyword analysis:

Figure 5 depicts that India, tourism, sustainability, sustainable tourism and ecotourism are the keywords that have been used the maximum number of times in the publications scrutinised for the purpose of this Bibliometric analysis.



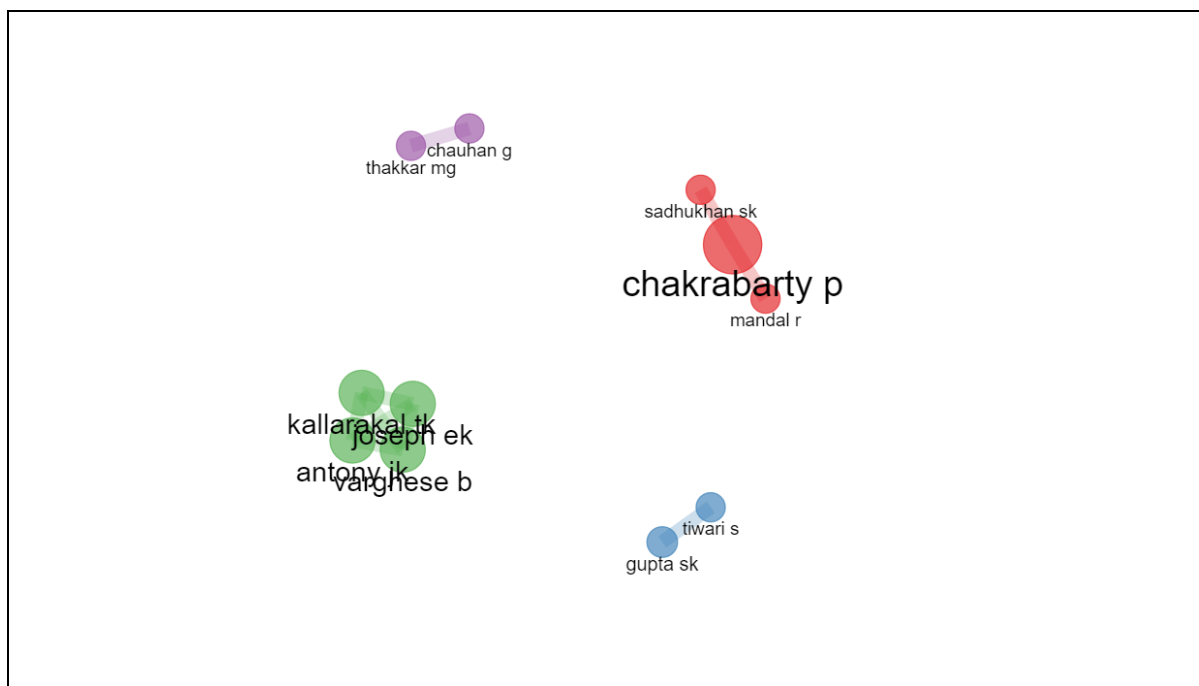
Figure 5 – Authors keyword analysis



Collaboration network:

Collaboration network is the group of researchers that collaborate for working on similar content or in a single publication as shown in figure 6. Green colour in the figure below shows that Antony JK, Kallarakal TK, Varghese B and Joseph EK have collaborated for their study. Another collaboration can be seen in red colour by Chakrabarty P, Sadhukhan SK and Mandal R.

Figure 6: Collaboration network

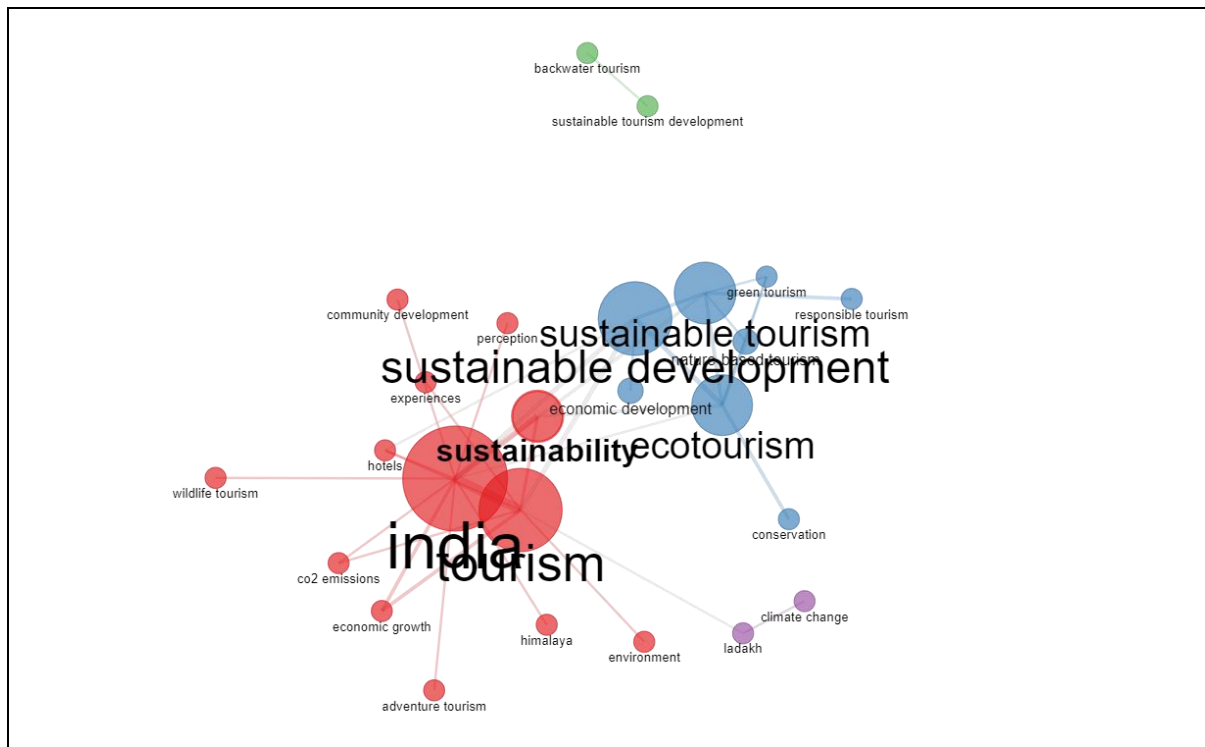


Co-occurrence network:



Figure 7 shows the network of authors' keywords that occur together. Different combinations of words show the variety of words that occur together. Four different combinations of words are shown in figure 7 as per their usage. Red colour depicts India, tourism and sustainability while blue colour depicts sustainable tourism and sustainable development.

Figure 7: Co-occurrence network



Discussion:

This research work has been undertaken to study the chronological developments in the above-mentioned theme of extant literature and to streamline the understanding regarding this concept. For this purpose, a bibliometric analysis was conducted using Biblioshiny tool of RStudio on data retrieved from Scopus database for the years 1993 to 2022. Main findings of the study are as follows:

- Time span of scrutiny was of years 1993 to 2022
- Annual growth rate observed for these years was 15.96%
- 353 researchers had a total of 136 publications amongst which Chakrabarty P had the maximum number of four publications.
- “Geojournal of Tourism and Geosites” was found to be the leading journal with the highest number of 10 publications.
- India topped with the maximum number of publications

Conclusion:



Tourism has been a driving and motivating factor for the economy and demography of a nation respectively. It helps in job creation, cultural harmony enhancement amongst different civilisations, increase in per capita and standards of living of the local population. Thus, tourism in certain locations is bound to go over the board and its sustainability goes for a toss. It then results into bad resource management for the local area and impacts in an overall negative manner. It is therefore in everyone's interests that sustainability, least ecological impact and environmentally sound practices be ensured while reaping the dividends from tourism exploitation in an area.

This work although exhaustive has some limitation and that forms the research gap for further future researches on this theme. This work focusses only on Scopus database while other database can also be included such as Web of Science, Google Scholar etc. Also, the time period is taken from 1993 to 2022 only while the relevant literature boasts a much more diversified chronological profile. Thus, future researches can plug these research gaps while achieving their research objectives.

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