

## **Developing Coffee Tourism in Indonesia: A Bibliometric Analysis**

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### **ABSTRACT**

Coffee tourism is becoming an increasingly important component of the travel market niche due to the global expansion in coffee production, consumption, and the coffee industry. This is because only a tiny segment of the population—coffee lovers—will see value in coffee as a stand-alone commodity. Indonesia is the world's largest producer of coffee, so it has the potential to grow its coffee tourism industry. Indonesia must strengthen its coffee tourism industry to combine tourism and coffee as commodities. Regarding the growth of coffee tourism in Indonesia, bibliometric analytic techniques have not yet been investigated in any studies. As a result, this topic requires research into bibliometric analytical methods. This study uses the technique of bibliometric analysis, which is used to evaluate bibliographic data found in articles or journals, to classify, measure, and analyze information found in articles such as titles, authors, keywords, research methodological approaches, data collection, and research results, and to learn more about the extent of academic research on the growth of coffee tourism in Indonesia. Studies on tourism development, coffee tourism, and Indonesia included topic areas with titles, keywords, and abstract requirements. According to the study's findings, Indonesia saw a fluctuating number of articles from 2012 to 2022 about tourism and coffee tourism growth. Elsevier was the publisher that produced the most publications on this subject, and according to the number of citations, Elsevier had the most citations overall. Then, it was discovered that P. Kuswarini was the most productive writer among the authors of essays on these two subjects. The study utilizing VOSviewers' findings demonstrates the connections between the subjects covered.

**Keywords;** VosViewers; Tourism Development; Coffee Tourism

### **INTRODUCTION**

For ages, Indonesia has been recognized as a producer of coffee. According to historical accounts, coffee arrived in Indonesia sometime in the 17th century, and plantations are still expanding. Despite being well-known in Indonesia, many

estates need to pay more attention to improving coffee production techniques. The methods used in different places to produce coffee are uneven. While some regions, like Banyuwangi, have reasonably good coffee processing, others still need to develop fully. Despite rising local coffee demand and consumption, this inequality generally results in declining or stagnating coffee production. (Rahayu, Pranita and Rachmahani, 2018).

Combining tourism and coffee plantations is one way for coffee producers to boost production and offer new sources of income for the farmers as well as the local community's economy. Coffee tourism is concerned with the consumption of coffee as well as the history, customs, and culture of a particular location. Coffee tourism is becoming an increasingly important component of the travel market niche due to the global expansion in coffee production, consumption, and the coffee industry. This is because only a tiny segment of the population—coffee lovers—will see value in coffee as a stand-alone commodity. (Anbalagan and Lovelock, 2014).

Countries that produce coffee are known as coffee tourism destinations and have distinctive landscapes that can serve as tourist draws, such as Indonesia. Tourists may be drawn to Indonesia by its natural beauty and the taste of its exceptional coffee. Due to the lifestyle coffee drinks have become, travelers are more likely to seek out open, unique, and important tourist sites. There are many different types of excellent traditional archipelago coffee in Indonesia, which presents options for thematic travel. The thematic tourism trend has grown because it is thought to be beneficial in introducing and expanding regional tourism products. The popularity of thematic tourism among travelers results from the unique and memorable experiences it offers. (Thanksgiving & Broto, 2021).

Contrary to typical tourist spots, the travel experience can be enhanced by exciting coffee tourism offers. To encourage visitors to visit coffee plantations, care for the plants, harvest, observe the production process personally, and consume coffee directly in the plantations, coffee tourism offers attractions. Right now, several places in Indonesia cater to coffee tourists, such as Gayo Coffee in Aceh, Sulotco Plantation in Toraja, Banaran Coffee Plantation in Semarang, Doesoen Sirap Coffee in Central Java, Catur Tourism Village in Kintamani Bali, and other places. (Hasyim, Arafah and Kuswarini, 2020).

Indonesia is the world's largest producer of coffee, so it has the potential to grow its coffee tourism industry. To increase the value of coffee as a commodity, Indonesia has to boost its coffee tourist industry. Promoting integrated cultural and environmental preservation, a bottom-up strategy for sustainable regional

development, and local community involvement in sustainable tourism potential are some things that may be done. (Rista Pratiwi, 2019).

According to Woyesa & Kumar (2021), which focuses on coffee tourism as a solution to the difficulties of coffee growers' livelihoods, Ethiopia has become a popular destination for coffee tourists. Also, according to research by Hasyim et al. (2020), Toraja's positioning as a tourist destination with a social value is strengthened by the perceived value, brand advantages, and brand loyalty to Toraja Coffee. The study by Smith et al. (2019), supported by several other tourist benefits, thus demonstrates that Thailand still needs to establish coffee tourism.

Regarding the growth of coffee tourism in Indonesia, bibliometric analytic techniques have yet to be investigated in any studies. As a result, this topic requires research into bibliometric analytical methods. To correctly provide research on the growth of coffee tourism in Indonesia, researchers and practitioners can go forward with the use of the bibliometric analysis approach by adopting a holistic viewpoint. Therefore, this study aims to clarify the breadth of scholarly inquiry into the growth of coffee tourism in Indonesia. There are various research goals for this study. The investigation begins by looking into journal publications on coffee tourism and tourism development. Research also establishes whether there is a unique characteristic to research focusing on the State of Indonesia. The third part of the study looks at specific papers' essential conclusions and contributions. Fourth, the analysis demonstrates a connection between the chosen publications. This study uses bibliometric analysis to evaluate journal publications in Indonesia. The Scopus and Google Scholar databases from 2012 to 2022 are the subject of this study's analysis of a few selected publications.

## **LITERATURE REVIEW**

### **Tourism Development**

Tourism development aims to improve or advance travel locations to make them more appealing to tourists and enhance their quality of life. The main drivers of local, regional, and national tourism development in a location are directly correlated with the economic growth of that area or nation. The advantages and benefits for the community will always be considered while developing tourism in a tourist area. Suppose tourist growth is considered during the development and management process and is connected with community planning and development. In that case, it will likely succeed in the long run. (Woo, Kim, and Uysal, 2015). Tourism development has received a lot of attention because it can satisfy visitor needs, present opportunities for economic growth, protect physical locations, enhance locals' quality of life, and create more opportunities for the future when tourism development and environmental quality coexist. (Le, 2013).

### **Coffee Tourism**

Coffee is a beverage made from coffee beans after they have been processed. The family Rubiaceae includes the genus *Coffea*, which is the home of coffee. *Coffea Arabica* and *Robusta Coffee* are the only two species of coffee. (Carder *et al.*, 2016). Coffee has a long history in human civilization, notably in former colonial and enslaved person nations like Africa, Asia, and Latin America. The government acquired ownership of and took control of the coffee farms once slavery and colonialism ended. Coffee has become a tourist draw because of the blooms' beauty and aroma, and various nations have created coffee tourism. (Suhud, Allan and Gaffar, 2022). Coffee tourism emphasizes educating visitors about growing, roasting, and tasting coffee. (Setiyorini, 2019). Establishing coffee-related tourism activities can be an effective diversification strategy to make coffee more appealing to visitors and locals in agricultural, cultural, and heritage ways. Coffee tourism involves young people and small farmers in coffee production activities, which calls for developing an inclusive business model that considers the local community's needs, such as employment opportunities. It offers visitors fresh perspectives, impressions, and experiences. (Casalegno *et al.*, 2020).

### **Development of Coffee Tourism in Indonesia**

Numerous nations offer coffee tourism, and some authorities concur that it is a specialized form of travel. (Woyesa and Kumar, 2021; Suhud, Allan and Gaffar, 2022). Indonesia is one of them. Indonesia has enormous potential for coffee tourism due to its large plantations dispersed throughout practically every province. Out of the 34 provinces, South Sumatra (198,945 tons), Lampung (117,311 tons), North Sumatra (76,597 tons), Aceh (73,419 tons), and Bengkulu will produce the most coffee in 2020. (62,279 Tons). 2020 Central Bureau of Statistics Indonesia boasts a variety of excellent coffee varieties indigenous to the archipelago and offers the potential for thematic tourism. The growth of travel places offering coffee tourism in Indonesia indicates the industry's progress. In Indonesia, places like Bali, Banyuwangi, Tasikmalaya, Bandung, and Toraja are famous for coffee tourism. (Carder *et al.*, 2016; Hasyim, Arafah and Kuswarini, 2020; Syahchari and Maulana, 2020).

### **METHOD**

Regarding the growth of coffee tourism in Indonesia, this study is restricted to the database found in Google Scholar and Scopus. Researchers utilized the keywords "coffee tourism" and "Indonesia" while searching the database on Google Scholar, and "tourist development," "coffee," and "Indonesia" when searching the database on Scopus. Researchers used the Publish or Perish (PoP) tool to search the database. Additionally, the research is restricted to 10 years, or from 2012 to 2022. Additionally, this study used VOSviewers to conduct a bibliometric analysis to show the link between the themes covered, the number of productive authors, the year of publication, and other data.

According to Naruetharadhol and Gebombut (2020), this study employs the bibliometric method, which uses statistics to assess scholarly works. Bibliometric analysis is a quantitative method for classifying, measuring, and analyzing information in publications, such as titles, authors, keywords, research methodology, data collecting, and research findings. It is used to examine bibliographic data found in articles or journals. The following actions were taken throughout this research: (1) Database collection. Google Scholar and Scopus are used as the data sources for the database collection utilizing the Publish or Perish (PoP) program. The researcher searched for "coffee tourism" and "Indonesia" on Google Scholar and "tourist development," "coffee," and "Indonesia" on Scopus, respectively. The author then further restricts the year of publication by specifying a year between 2012 and 2022. (2) The researchers moved the findings of their database searches—articles regarding the growth of coffee tourism in Indonesia—to Microsoft Excel so that they could be more easily analyzed. (3) Compile statistics on the expansion of coffee tourism in Indonesia for the years 2012 to 2022 using inclusive and exclusive criteria. (4) Analyze data by counting the number of publications, publishers, citations, and ten journals that have received the most citations about the growth of coffee tourism in Indonesia. Using VOSviewers to perform a bibliometric analysis on the issue of coffee tourism development in Indonesia to ascertain the number of productive writers, visualize the relationship between the topics covered, visualize the year of publishing, and the degree of research density. (6) Hold conversations and conclude.

## **RESULT AND DISCUSSION**

### **Descriptive Analysis**

Utilizing the Publish or Perish (PoP) software, articles are searched. Publish or Perish is a helpful program for learning about citations because it accesses Scopus and Google Scholar data and turns it into statistics. (Syamsiah, Amelia and Maarif, 2022). Based on the Publish or Perish application's search results for articles on "Coffee Tourism Development in Indonesia" using the keywords: coffee tourism, development, and Indonesia. Four hundred metadata articles were acquired and analyzed using Microsoft Excel during this search, conducted over the past ten years, starting in 2012 and ending in 2022. Figure 1 shows a graphic representation of the metadata cycle for 400 articles during the past ten years as follows:

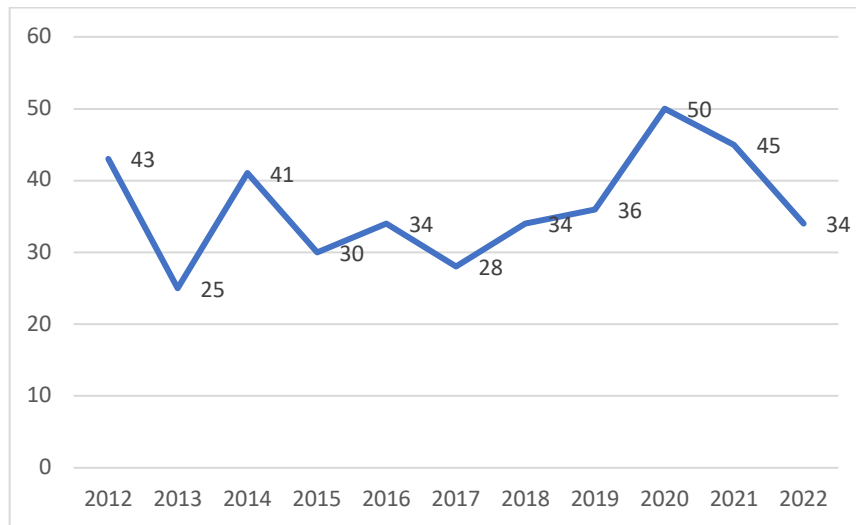


Figure 1. The Cycle Of 400 Article Metadata On Coffee Tourism Development In Indonesia

Figure 1 displays the output of articles on the growth of coffee tourism in Indonesia during the past ten years, from 2012 to 2022, with the majority of them showing oscillations. Between 2012 and 2013, there was a considerable drop in the number of papers published, from 43 to 25, or a decline of 18 articles. In contrast, between 2020 and 2021, there will be a noticeable increase of 14 articles or a jump from 36 to 50. In addition, 136 publishers with articles on the growth of coffee tourism in Indonesia in the previous ten years were found in the search results. A graph of articles published by 136 publishers is shown below in Figure 2. It looks like this:

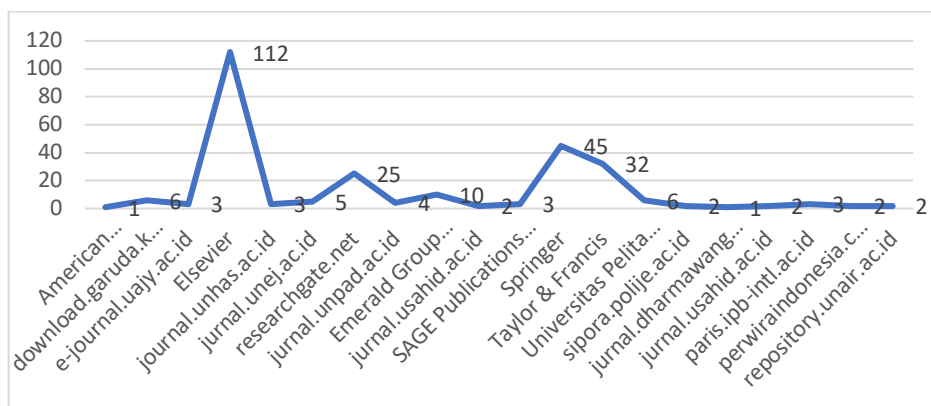


Figure 2. Number Of Published Articles From 136 Publishers Regarding The Development Of Coffee Tourism In Indonesia From 2012-2022

As shown in Figure 2, of the 400 metadata articles published by 136 publishers, Elsevier published 112 articles, Springer published 45, Taylor & Francis published 32, researchgate.net published 25 articles, and Emerald Group Holdings Ltd published 10. These five publishers published the most articles on the growth of coffee tourism in Indonesia within the last ten years, starting in 2012 and ending in 2022. The percentage of the top five publications that produce the most articles is shown in Figure 3.

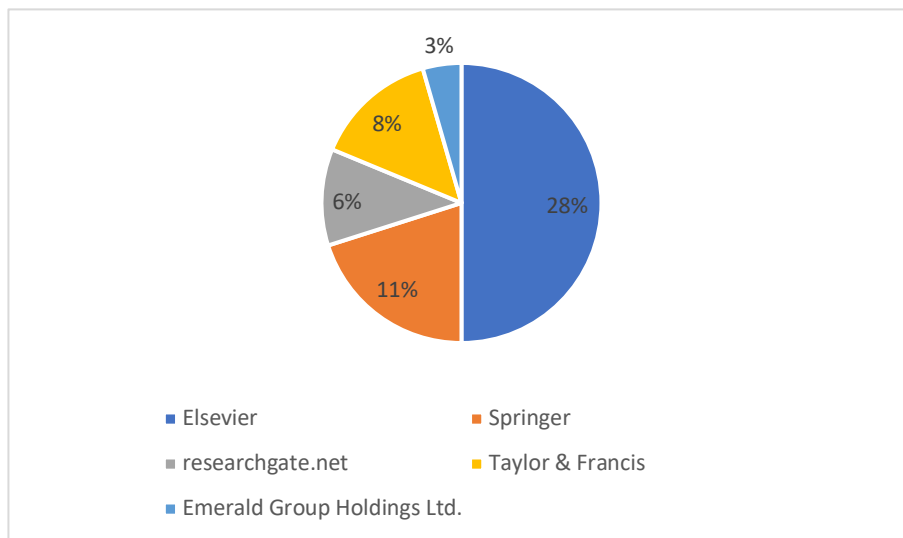


Figure 3.  
The  
Percentage

Of The Five Publishers Who Published The Most Articles On The Development Of Coffee Tourism In Indonesia From 2012-2022

Additionally, from 2012 to 2022, the total number of citations about the growth of coffee tourism in Indonesia was found in the search results, totaling 48889. The following graphs and tables, shown in Figure 4 and Table 1, detail the number of citations based on 136 publishers:

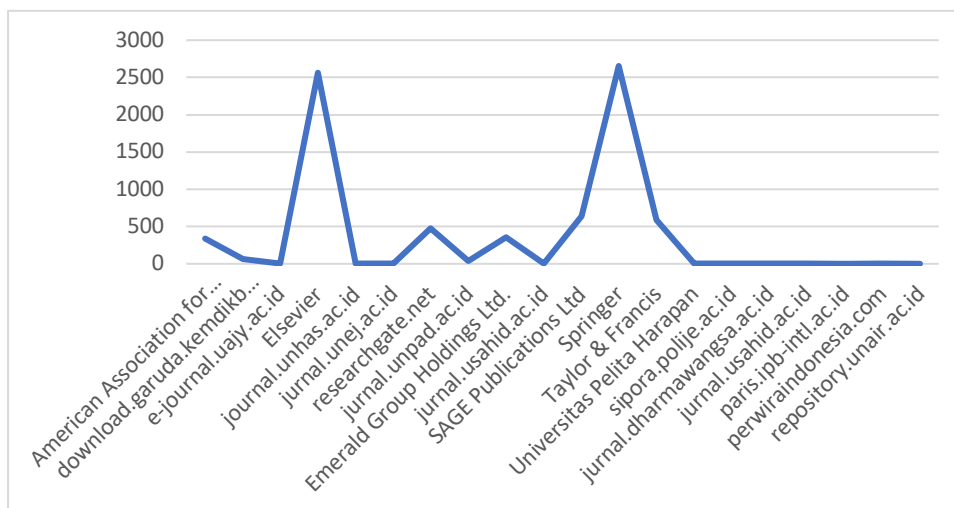


Figure 4  
Shows  
The

Number Of Citations From 136 Publishers On The Growth Of Indonesian Coffee Tourism From 2012 To 2022

The five publishers with the highest number of citations are listed in the following table, which is based on Figure 5, which displays the number of citations from 136 publishers addressing the growth of coffee tourism in Indonesia from 2012 to 2022

Table 1. Lists The Five Publishers With The Most Citations About The Growth Of Indonesian Coffee Tourism Between 2012 And 2022

No	Publishers	Number of Citations	%
1	Elsevier	25529	52.2%
2	Springer	2654	5.4%
3	SAGE Publications Ltd	643	1.3%
4	Taylor & Francis	587	1.2%
5	research gate. net	479	1.0%

There are five publishers with the highest number of citations regarding the growth of coffee tourism in Indonesia in the last ten years, from 2012 to 2022. These publishers are Elsevier, with 25529 citations, or 52.2 percent; Springer, with 2654 citations, or 5.4 percent; SAGE Publication Ltd., with a total of 647 citations, or 1.3 percent; and Taylor & Francis, with a total of 587 citations, or 1.2 percent.

### Review Analysis

According to citations from five publishers, the next set of articles is the top 10 for coffee tourism development in Indonesia from 2012 to 2022.

No	Author	Articles	year	Publishers	Citation	Research result
1	(Gretzel <i>et al.</i> , 2015)	Smart tourism: Foundations and developments	2015	Springer	756	The development of intelligent tourism has already begun. It naturally develops from the widespread adoption of technology in the travel industry. However, the systematic and broad coordination, sharing, and use of tourism data for value creation are still in their infancy. Intelligent tourism programs worldwide aim to create sustainable, innovative tourist ecosystems. Still, due to the complexity of the industry, it is very challenging to go beyond very narrowly focused platforms, technology, or service breakthroughs. However, there is a significant technological push toward intelligent tourism. The tourism industry is



No	Author	Articles	year	Publishers	Citation	Research result
2	(Lee, 2013)	Influence analysis of community resident support for sustainable tourism development	2013	Elsevier	492	<p>anticipated to serve as the backdrop for developing many of these innovative technologies.</p> <p>The analytical findings imply that community involvement and connection are essential elements that influence the degree of support for sustainable tourism development. The relationship between community involvement and support for sustainable tourism development and community attachment and support for sustainable tourism development is influenced by the advantages that most people perceive. The study's managerial implications are discussed, and suggestions for additional research are made.</p>
3	(Soeroso and Susilo, 2014)	Traditional Indonesian Gastronomy As a Cultural Tourism Attraction	2014	research gate.net	315	<p>We must comprehend a few things to grow traditional Indonesian cuisine as a tourist destination. First, tourists seek more unique experiences than monuments, landmarks, and artificial or natural items. In Indonesia, tourists will prepare food as part of the experience when visiting tourist attractions. They will savor the local cuisine and bring back tales of how great it was when they returned to their home country. Additionally, as food accounts for nearly one-third of their allocated expenses, preparation, taste, sanitation, and environmental friendliness become essential factors in</p>

No	Author	Articles	year	Publishers	Citation	Research result
4	(Cheong <i>et al.</i> , 2013)	Volatile composition and antioxidant capacity of Arabica coffee	2013	Elsevier	165	<p>gastronomy tourism. Eight key themes, including trading up, multiculturalism, media communication, and Indonesian gastronomy, are the second reason to construct cultural tourism destinations.</p> <p>The volatile and phenolic components of four Asian coffee varieties were compared in this study. Dichloromethane was used to extract the volatile compounds from Arabica coffee beans from Thailand, Indonesia (Sidikalang and Sidikalang Kopi Luwak), and China (Yunnan), and the results were correlated with sensory information. The total amounts of volatile substances found were 1239.04 ppm in Yunnan, 1084.18 ppm in Doi Chang, 1016.17 ppm in Sidikalang, and 845.53 ppm in Yunnan (Sidikalang et al.). Although its overall profile was identical to Sidikalang's, it was discovered that the Sidikalang Kopi Luwak coffee had the most pleasant aromas. The sulfur-containing chemicals at 8.32 ppm and 12.63 ppm, respectively, are responsible for the different sulfur notes detected in the Doi Chang and Yunnan coffees. The phenolic composition of the beans was also evaluated to evaluate the possible antioxidant properties of the various green and roasted coffee beans. The Sidikalang beans had the most effective overall</p>

No	Author	Articles	year	Publishers	Citation	Research result
						<p>polyphenol content among the four coffee varietals.</p> <p>Ferric-reducing antioxidant power tests and diphenyl-1-picrylhydrazyl (DPPH) assays were used to measure the antioxidant activities (FRAP). The radical scavenging activity of green and roasted coffee beans was comparable, although the Arabica Sidikalang variety recorded the highest ferric-reducing capacity (pb0.05). A better understanding of Asian coffee quality would be possible with knowledge of the volatile composition and antioxidant capacities. The Sidikalang beans had the most effective overall polyphenol content among the four coffee varietals.</p> <p>Ferric-reducing antioxidant power tests and diphenyl-1-picrylhydrazyl (DPPH) assays were used to measure the antioxidant activities (FRAP). The radical scavenging activity of green and roasted coffee beans was comparable, although the Arabica Sidikalang variety recorded the highest ferric-reducing capacity (pb0.05). A better understanding of Asian coffee quality would be possible with knowledge of the volatile composition and antioxidant capacities. The Sidikalang beans had the most effective overall polyphenol content among the four coffee varietals.</p> <p>Ferric-reducing antioxidant power tests and diphenyl-1-picrylhydrazyl (DPPH)</p>

No	Author	Articles	year	Publishers	Citation	Research result
5	(Wijaya, 2019)	Indonesian food culture mapping: A starter contribution to promote Indonesian culinary tourism	2019	Springer	93	<p>assays were used to measure the antioxidant activities (FRAP). The radical scavenging activity of green and roasted coffee beans was comparable, although the Arabica Sidikalang variety recorded the highest ferric-reducing capacity (pb0.05). A better understanding of Asian coffee quality would be possible with knowledge of the volatile composition and antioxidant capacities. The maximum ferric-reducing capability was recorded by the Arabica Sidikalang cultivar (pb0.05). A better understanding of Asian coffee quality would be possible with knowledge of the volatile composition and antioxidant capacities. The maximum ferric-reducing capability was recorded by the Arabica Sidikalang cultivar (pb0.05). A better understanding of Asian coffee quality would be possible with knowledge of the volatile composition and antioxidant capacities.</p> <p>The reviews and conversations that came before them have demonstrated that Indonesia has a rich past with numerous cultural influences. The diversity's substantial influences have aided the formation of multiple unique ethnic cuisines in the nation. This study is predicted to serve as a preliminary contribution to raising consumer knowledge of Indonesian cuisine and its richness through</p>

No	Author	Articles	year	Publishers	Citation	Research result
6	(Neilson and Shonk, 2014)	Chained to Development? Livelihoods and global value chains in the coffee-producing Toraja region of Indonesia	2014	Taylor & Francis	55	investigating sociocultural factors. Adopting what is commonly referred to as a "value chain approach," in which strengthened relationships between small producers in impoverished rural communities and "lead enterprises" serve as the cornerstone of development interventions, has recently been a popular rural development strategy. While adopting value chains as a development strategy tends to ignore the complexity of smallholder livelihoods that shape poverty alleviation pathways in various contexts, the global value-chain framework can deliver insights into the overall structural processes shaping livelihood possibilities. This article uses the case of smallholder coffee cultivation in Indonesia's Toraja area to examine the connections between global value chains, development initiatives, and rural livelihoods. Given the variety of local livelihoods, the subtleties of how coffee production is ingrained within Torajan's culture and economy, and the excellent current market opportunities, value-chain interventions in the coffee sector are unlikely to contribute significantly to improved rural welfare in this case. Therefore, the livelihood framework offers a necessary correction to the sometimes overly optimistic

No	Author	Articles	year	Publishers	Citation	Research result
7	(Carder <i>et al.</i> , 2016)	The animal welfare implications of civet coffee tourism in Bali	2006	nature. Berkeley. edu	27	<p>arguments made by proponents of a value-chain approach to rural development.</p> <p>Civet coffee, also known as "Kopi Luwak" in Indonesia, is becoming increasingly popular. It is made from coffee cherries consumed and partially digested by civets. The popularity of "caged" civet coffee, produced by removing live civets from the wild and keeping them in captivity instead of using scat gathered from the wild, is rising. Indonesia's fast-growing civet coffee tourism sector has evolved over the past five years. The current study is based on observations of 48 wild-caught common palm civets (<i>Paradoxurus Hermaphroditus</i>) living conditions at 16 of these Bali coffee plantations that cater to tourists. At each plantation, eight husbandry factors—mobility, hygiene, surfaces, shelter, noise, food, water, and social interactions—were assigned a score between 0 and 4, with a score of 4 suggesting welfare concerns. Senior tour guides at each plantation were also interviewed to learn about tourism activities and civet coffee cultivation.</p> <p>The information made it possible to conduct a welfare evaluation, which exposes the poor conditions and harm to common palm civets caused by the</p>

No	Author	Articles	year	Publishers	Citation	Research result
						commercial manufacturing of this luxury good in cages as opposed to the more frequent practice of gathering scat from civets that are free to roam. Our research results are intended to educate tourists and tour guides on the moral ramifications of visiting these attractions. Senior tour guides at each plantation were questioned to learn about tourist activities and civet coffee production. The information made it possible to conduct a welfare evaluation, which exposes the poor conditions and harm to common palm civets caused by the commercial manufacturing of this luxury good in cages as opposed to the more frequent practice of gathering scat from civets that are free to roam. Our research results are intended to educate tourists and tour guides on the moral ramifications of visiting these attractions. Senior tour guides at each plantation were questioned to learn about tourist activities and civet coffee production. The information made it possible to conduct a welfare evaluation, which exposes the poor conditions and harm to common palm civets caused by the commercial manufacturing of this luxury good in cages as opposed to the more frequent practice of gathering scat from civets that are free to roam. Our research results are intended

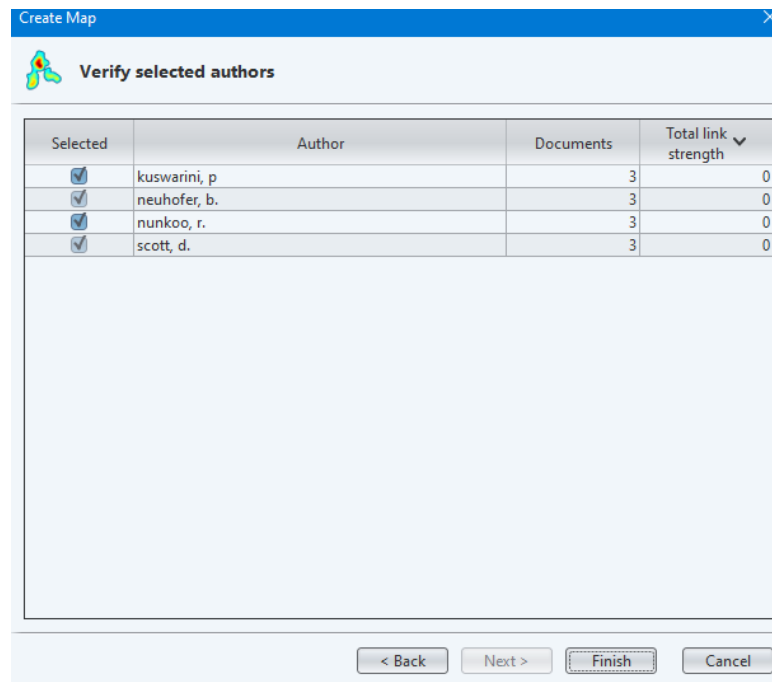
No	Author	Articles	year	Publishers	Citation	Research result
						to educate tourists and tour guides on the moral ramifications of visiting these attractions, which are unrelated to the conventional practice of gathering scat from civets in the wild. Our research results are intended to educate tourists and tour guides on the moral ramifications of visiting these attractions, which are unrelated to the conventional practice of gathering scat from civets in the wild. Our research results are intended to educate tourists and tour guides on the moral ramifications of visiting these attractions.
8	(Hasyim, Arafah and Kuswari, 2020)	The new Toraja Destination: Adding the Value of 'Toraja coffee' to sustainable tourism development	2020	research gate. net	26	According to the study, Toraja coffee is attractive as a travel destination because it has various characteristics (taste) depending on where it is grown. The names of the Toraja coffee goods are derived from one of the 15 regional names for coffee products. For instance, coffee Sesean comes from the settlement of Sean, as does coffee Toraja Sapan, which is sourced from the Sapan region. Foreign visitors' view of Toraja coffee is that the flavor varies depending on the height of the coffee-planting area, which has become a trademark of Toraja Agritourism.
9	(Yudhari <i>et al.</i> , 2020)	Multidimensional Scaling:	2020	research gate. net	11	The environmental dimension has the lowest value, according to the analysis of the four aspects



No	Author	Articles	year	Publishers	Citation	Research result
		Sustain ability of Arabica Coffee Agro- Touris m in Bangli Regenc y, Bali				of sustainability. This is because future land conversion will have a significant negative impact on environmental circumstances. Farmers will switch their coffee plants to other ones that are more commercially successful if agrotourism is unable to benefit and boost the local economy. A rule or local government policy must be created to avoid land conversion in the Bangli Regency's Arabica coffee agrotourism area.
10	(Handin i, 2020)	Coffee Cafe Creativ e Industry Develo pment in Improvi ng the Touris m Sector in Bondo woso Regenc y	2020	journal.un .ac.id	3	According to the study's findings, two key issues must be resolved before the coffee cafe creative industry can grow and improve Bondowoso Regency's tourism industry: human resources and capital. Maintaining the quality of coffee and packaging is a challenge connected to the fourth licensing concern. A market niche for coffee cafes is another barrier. It involves marketing by cooperating with associated stakeholders, including the café managers and affiliated organizations. Additionally, the community of Bondowoso and its business leaders are conscious of the need to keep working to advance the Bondowoso coffee cafe creative industry.

### Bibliometric Analysis

The data is evaluated using VosViewers and Microsoft Excel when utilizing Publish or Perish to look for information about the growth of coffee tourism in Indonesia. The metadata of 400 articles has been collected and stored as RIS files for use in the analysis utilizing VosViewers. The most prolific authors who have written about coffee tourism development plans in Indonesia are included in Figure 5 below:



Selected	Author	Documents	Total link strength
<input checked="" type="checkbox"/>	kuswarini, p	3	0
<input checked="" type="checkbox"/>	neuhofer, b.	3	0
<input checked="" type="checkbox"/>	nunkoo, r.	3	0
<input checked="" type="checkbox"/>	scott, d.	3	0

Figure 5 shows the most productive author.

Figure 5 displays the complete counting technique analysis of 400 articles' information by VosViewers regarding the growth of coffee tourism in Indonesia. Only four authors out of 511 met the requirements, meaning they have produced at least three documents about Indonesian and coffee tourism development. The binary counting technique is used, as shown in Figure 6 below.

The VosViewers investigation also obtained visualizations relating to 400 articles' metadata regarding Indonesia's strategy for boosting coffee tourism and travel:

Selected	Term	Occurrences	Relevance
<input checked="" type="checkbox"/>	indonesia	333	3.42
<input checked="" type="checkbox"/>	tourism development	204	1.91
<input checked="" type="checkbox"/>	tourism	176	1.06
<input checked="" type="checkbox"/>	coffee	164	1.48
<input checked="" type="checkbox"/>	bali	37	0.92
<input checked="" type="checkbox"/>	strategy	34	0.72
<input checked="" type="checkbox"/>	coffee shop	28	0.90
<input checked="" type="checkbox"/>	attraction	26	0.43
<input checked="" type="checkbox"/>	potential	23	0.70
<input checked="" type="checkbox"/>	coffee plantation	19	1.13
<input checked="" type="checkbox"/>	region	19	0.74
<input checked="" type="checkbox"/>	sustainable tourism development	18	1.61

Figure 6. Important subjects

Figure 6 displays the minimum number of times a term must appear, which is 4. Only 44 of 1825 currently used terms passed the requirements. There are only 12 terms that are most relevant or linked out of the 44 total terms when they are calculated and chosen based on the most related terms. VosViewers presents three visualizations of the findings for the ten related or pertinent terms shown in Figures 7, 8, and 9 below.

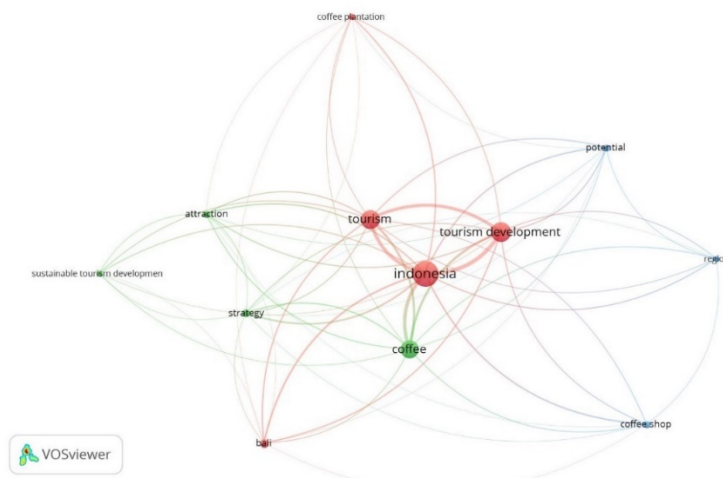


Figure 7. Network visualization

According to Figure 7, three distinct clusters in the data for the 12 items are linked or necessary when shown on the network visualization. Table 3 below shows how the three clusters were split up:

Table 3. Cluster Distribution by Color

No	Clusters	Color	Items
1	1	Red	Bali, Coffee Plantation, Indonesia, Tourism, Tourism Development
2	2	Green	Attraction, Coffee, Strategy, Sustainable Tourism Development

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3	3	Blue	Coffee Shop, Potential, Region
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In Figure 8 below, each term is connected based on the year to re-visualize the outcomes of the 12 related or pertinent terms:

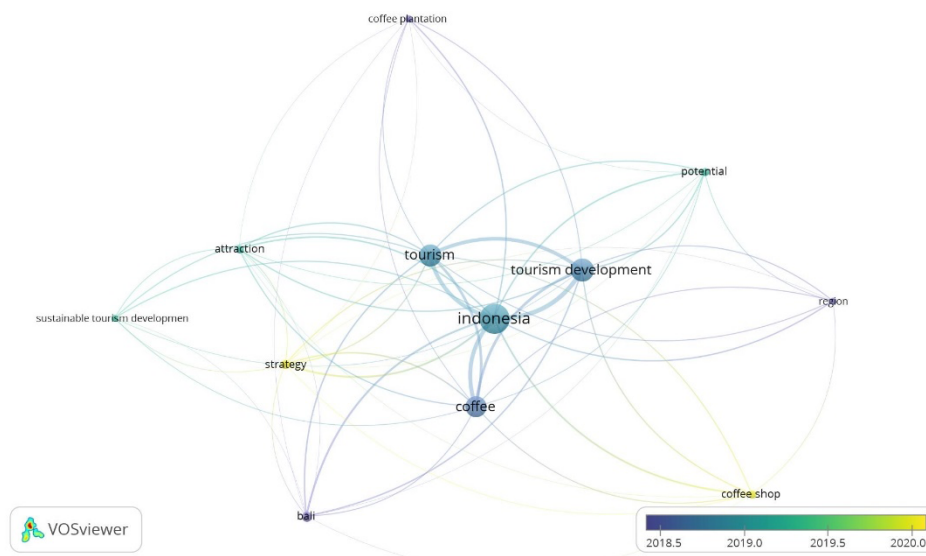


Figure 8. Overlay Visualization

Based on Figure 8, the results of the 12 phrases displayed on the overlay visualization are linked or essential and have numerous clusters arranged by year. Table 4 below shows the distribution of these clusters:

Table 4. Distribution of Clusters by Year

No	Year	Color	Items
	2018.5	Blue	Coffee Plantation, Region, and Bali
	2019.0	Tosca	Tourism, Tourism Development, Indonesia, Coffee
	2019.5	Green	Potential, Attraction, Sustainable Tourism Development
	2020.0	Yellow	Strategy, Coffee Shop

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The outcomes of the 12 relevant or related phrases are then visualized by connecting each term according to its brightness level.

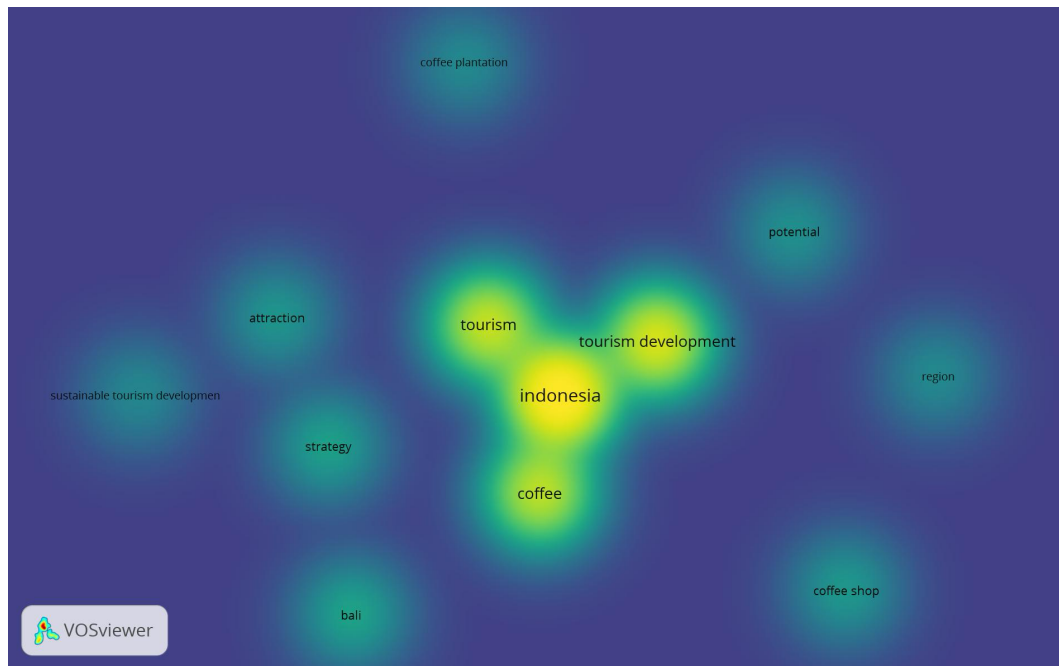


Figure 9. Density Visualization

Based on Figure 9, several distinct clusters are arranged according to their brightness level in the results of the 12 connected or important terms displayed on the density visualization. Table 5 below shows the cluster division:

Table 5. Cluster Distribution Based on the Brightness Level

No	Color	Items
1	Very bright	Indonesia
2	Bright	Tourism Development
3	Bright Enough	Coffee, Tourism
4	Not bright	Strategy, Attraction, Bali, Sustainable Tourism Development, Potential, Coffee Plantation, Coffee Shop, Region

The trend of this research has fluctuated, which means that it does not always experience an increase or decrease in the number of studies every year about the development of coffee tourism in Indonesia, according to the results of the data obtained by the Bibliometric method regarding the last ten years of data, starting from 2012 to 2022. In other words, the number of researchers bringing up this subject still fluctuates and grows. According to reports, studies into the growth of coffee tourism in Indonesia have been rising steadily. This is due to Indonesia's enormous coffee plantations, dispersed over practically every province, giving the country much promise in the coffee tourism sector. In addition, Indonesia boasts a variety of coffee varieties unique to the archipelago and presents prospects for

developing thematic tourism. The rise in tourist places offering coffee tours indicates that Indonesia's thematic tourism, or coffee tourism, has lately picked up. Indonesian travel sites, including Gayo Coffee in Aceh, Sulotco Plantation in Toraja, Banaran Coffee Plantation in Semarang, Doesoen Sirap Coffee in Central Java, Catur Tourism Village in Kintamani, and others let visitors experience drinking coffee at coffee plantations. The potential to boost the economy of Indonesia's coffee-producing regions arises from the rise in coffee consumption worldwide, particularly in Indonesia. (Hasyim, Arafah and Kuswarini, 2020).

Additionally, several foreign publishers, including Elsevier, Springer, Taylor & Francis, researchgate.net, and Emerald Group Holdings Ltd., have published studies on the growth of coffee tourism in Indonesia. It demonstrates that research on the growth of coffee tourism in Indonesia is published by worldwide publishers as well as Indonesian publishers, as evidenced by the research done by Carder et al. (2016), Prihayati & Veriasa (2021); Suhud et al. (2022); Syahchari & Maulana (2020).

Figure 4 displays the total amount of 48889 citations from 136 publishers. Five publishers, Elsevier, Springer, SAGE Publication Ltd, Taylor & Francis, and researchgate.net, have received the most citations out of the 136 publishers. The most cited articles among the five most-cited publishers are those titled Smart Tourism: Foundation and Development, published by Springer, which has 756 citations. In addition, Figure 7 displays Kuswarini, a prolific author who has written three papers on a subject relating to the growth of tourism and coffee tourism in Indonesia. The New Toraja Destination: Adding Value Coffee Toraja For Sustainable Development Tourism is the title of one article discussing coffee tourism growth in Indonesia.

The relationship between the subjects covered in this study—tourism development and coffee tourism in Indonesia—is also examined using VOSviewers. Three visualizations—network visualization, overlay visualization, and density visualization—are shown about VosViewer's analysis of the metadata of 400 articles about the growth of tourism and coffee tourism in Indonesia. The network visualization display divides the results of the 12 pertinent phrases into three distinct clusters. A cluster in this section refers to a grouping composed of a connected set of terms. Therefore, researchers may see phrases related to tourism development and coffee tourism in Indonesia in this network visualization display. In this instance, Figure 7 demonstrates the close association between Indonesia, tourism, and tourist development. On the other hand, the term coffee has a smaller circle than the other terms, suggesting no substantial correlation exists between Indonesian tourism growth and coffee production.

The outcomes of the overlay visualization then show 12 pertinent phrases arranged by year. Figure 8 shows four distinct colors, starting with dark hues and moving toward lighter ones. Light hues denote the current year, whereas dark tones reflect the previous year. The Tosca color, which consists of the phrases tourism, tourism

development, Indonesia, and coffee, is what this research will use to identify the terms most pertinent to the year 2019 in general.

The density visualization's results also show 12 pertinent phrases organized by brightness or density level. There are four distinct clusters with various brightness levels, as seen in Figure 9. This demonstrates that the higher the saturation level in the study, which indicates that there are more papers discussing the same topic, the brighter the brightness level. Conversely, if the brightness level is lower, either the saturation level is lower or fewer issues are being covered. Other scholars' discussions in this study focused on Indonesia's tourist development. More than the subject of Indonesian tourism development in the theme of coffee tourism. Future academics are encouraged to conduct more thorough research on tourist development related to coffee tourism in Indonesia. Furthermore, other researchers should be able to use the bibliometric method to undertake studies on the growth of tourism and coffee tourism related to other issues.

## CONCLUSION

The relationship between the subjects covered in this study—tourism development and coffee tourism in Indonesia—is also examined using VOSviewers. Three visualizations—network visualization, overlay visualization, and density visualization—are shown about VosViewer's analysis of the metadata of 400 articles about the growth of tourism and coffee tourism in Indonesia. The network visualization display divides the results of the 12 pertinent phrases into three distinct clusters. A cluster in this section refers to a grouping composed of a connected set of terms. Therefore, researchers may see phrases related to tourism development and coffee tourism in Indonesia in this network visualization display. In this instance, Figure 7 demonstrates the close association between Indonesia, tourism, and tourist development.

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academics are encouraged to conduct more thorough research on tourist development related to coffee tourism in Indonesia. Furthermore, other researchers should be able to use the bibliometric method to undertake studies on the growth of tourism and coffee tourism related to other issues.

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