

ARTICLE

A Systematic Review of Tourism Governance: Sustainable Tourism Governance Model Post COVID-19

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ABSTRACT

This study aims to examine and categorise themes and concepts related to the study of tourism sustainability governance during the COVID-19 pandemic. The study of tourism governance is becoming a big topic since the emergence of COVID-19, especially from the management point of view, the role and contribution of policy actors, the economy, and changes in social structures. Through qualitative and quantitative analysis with the help of software, VOSviewer and NVivo12+ obtained 78 Scopus-indexed articles relevant to the study. The articles were collected from various publishers, namely Elsevier, SAGE, MDPI, and Taylor and Francis. The results showed 71 concepts in the study of tourism governance, which the researchers categorised into 6 clusters-related to the discussion of the dominant themes, namely tourism development, economic recession, world change, ecology, and policy. The significance of this research is the discovery of the concept of sustainable tourism governance during the COVID-19 pandemic, which can assist in developing a conceptual framework for future studies related to the tourism sector. While the limitations of this study are reviewed are only articles obtained from the Scopus database, there is no comparison. Therefore, it is necessary to use a comparative approach involving the Scopus database and Web of Science (WoS) for further research.

A. INTRODUCTION

The governance of tourism destinations with the concept of destination management organisation and destination governance balances the application of ethical, aesthetic, and economic values as well as locality to create a quality travel experience, optimising inclusive benefits for the community and the environment (Purnomo et al., 2022; Purnomo et al., 2021). Tourism governance models in the future require exploration of the order of values, locality,

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balance, championship, leadership, and accountability to create quality destination excellence as well as become the choice and preference of tourists as a destination of the future (Mulyani et al., 2021). In achieving sustainable tourism governance, it is also necessary to consider the main aspects for the sustainability of tourism, including accessibility, facilities, destination attractiveness, and transportation, so it will be easy to develop the tourism sector. Hence, since the presence of COVID-19, the activities of the global tourism sector have experienced a significant setback, so new governance is needed for the future to create tourism that is resilient, strong, and resistant to internal and external pressures (Purnomo et al., 2021).

Since the presence of COVID-19 at the end of 2019, it became a major disaster for sectors of the global economy because it resulted in the cessation of export-import activities (trade, agriculture, plantations, weapons, vehicles, and technology) so that it harmed the national economy (Oldekop et al., 2020; Subekti et al., 2022). In addition, another critical sector affected by COVID-19 is the tourism sector (Gössling et al., 2020) which has experienced a massive decline in tourists (Bonaccorsi et al., 2020; Higgins-Desbiolles et al., 2019). COVID-19 also affects the global economy (Ranasinghe et al., 2020), transportation (Collins-Kreiner & Ram, 2020), hotel or inn occupancy (Utami & Kafabih, 2021) and affects workers in the tourism sector. In an emergency during the COVID-19 pandemic, managing tourism development with wise and correct ideas and innovation in rebuilding the tourism sector is essential.

Therefore, this study aims to examine scientific articles discussing sustainable tourism governance during the COVID-19 pandemic published in reputable international journals indexed by Scopus. This research is important because it gives a novel tourist mapping and concept during COVID-19 and may also be used during the transition-recovery period. This reference is based on theoretical reviews, scientific articles, and the expertise of scholars specialising in Governance Science, Tourism Science, and Sustainability Science. During the COVID-19 pandemic, a new plan for sustainable tourism governance arose. The study questions have been rigorously constructed and reduced to three: (1) How are the relationships and grouping of themes in the study of sustainable tourism governance? (2) what are the dominant themes in sustainable tourism governance studies during COVID-19? (3) the relationship between topics What type of mapping is used in sustainable tourism governance? And (4) During COVID-19, what concepts were used to study sustainable tourism governance?

This article answers these questions using the study's topic, framework, and findings from previous research collected from the Scopus database; this study analysed the articles using a multistage process that included article search and discussion topic mapping. Finally, a new concept image will appear as the final result of the research, which can be developed further through further research.

B. LITERATURE REVIEW

According to the principles established by the United Nations World Tourism Organization (UNWTO), sustainable tourism development is the development that meets the needs of current and future tourists, protects the sustainability of tourist destinations, and seeks to increase the potential and opportunities for future tourism (UNWTO, 2017). The discussion of sustainable tourism is closely related to environmental values, sociocultural sustainability (Aimagambetov et al., 2017; Wahyuni et al., 2021) and prioritising the welfare of local communities (Hall, 2019). Besides that, the goal of sustainable development is to minimise environmental damage and protect the environment and nature, which tends to be harmed during tourism activities (Kapera, 2018), such as an increase in waste, which results in environmental pollution, sanitation, and tourists' ethics-aesthetics (Sahu et al., 2014; Santikul et al., 2016). On the other hand, the empirical literature examines the fundamental questions

for sustainable tourism development, and many pertinent questions remain unresolved. Without forgetting its roots in environmental quality preservation (Grilli et al., 2021), it must not harm future generations.

Also, long-term environmental, socio-culture, and community welfare assessments require serious consideration (Kamaludin et al., 2021). Several researchers have investigated the sustainability of tourism in ASEAN, especially in Indonesia, Malaysia, Thailand, Philippines and Singapore (Hamid & Isa, 2020; Roxas et al., 2020), because it is the leading sector of the government and the country and becomes a paradigm for the future (Pan et al., 2018). For this reason, there has been an increase in recent years in studying the sustainability of tourism by highlighting the difficulties in its development (Niñerola et al., 2019) and identifying it as a fundamental tool for the competitiveness of the sector area (Cucculelli & Gof, 2015). Moreover, since the emergence of COVID-19 in 2020, Corona Viruses Disease 19 (COVID-19) has become a disease epidemic still a hotspot in world countries (Rastegar et al., 2021). Countermeasures and policies issued by world countries include closing access in and out, large-scale social restrictions, social distancing, working and studying from home, wearing masks and implementing health protocols in every daily activity (Fotiadis et al., 2021).

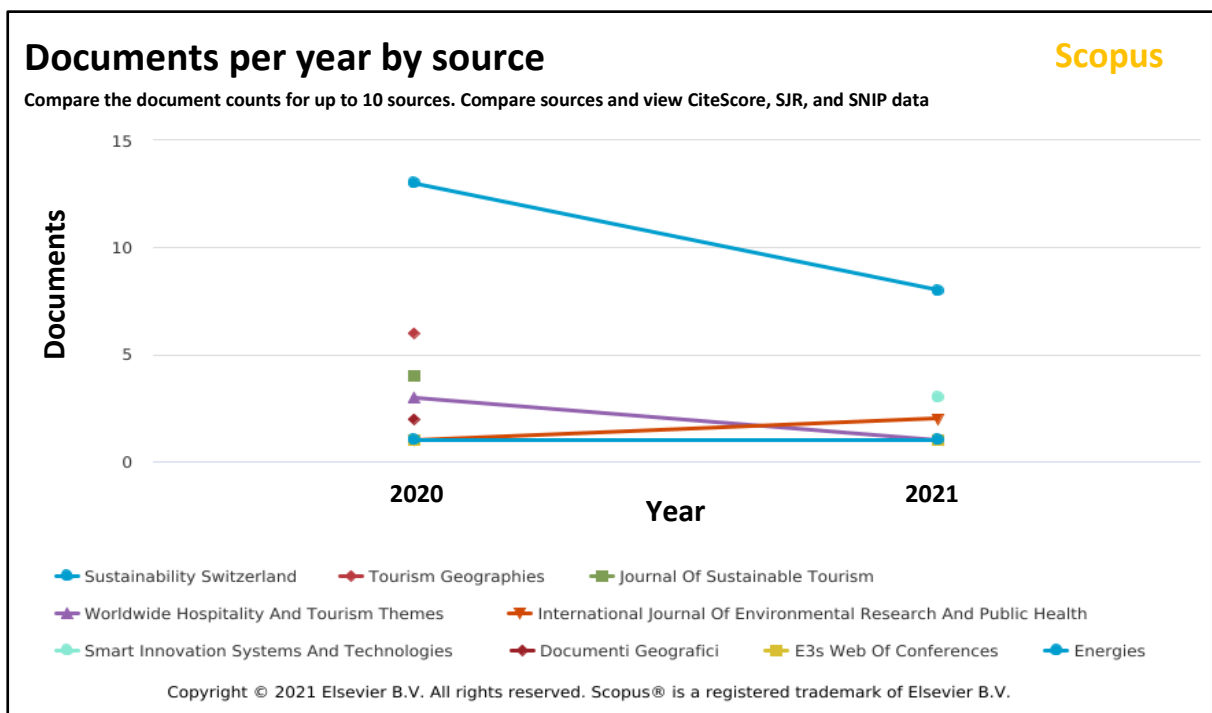
Countries in Europe and America have also made great efforts to reduce the number of infections and fatalities due to COVID-19 by making vaccines and other medical drugs (Lazarus et al., 2021). However, these efforts still have obstacles because of vaccine-drug limitations that are not proportional to the human population (Kim et al., 2021). Studies on tourism sustainability have been widely researched, especially in connecting and determining the influence, impact and innovation of sustainable tourism development in various countries. However, very few articles that research discuss the sustainability of tourism during the COVID-19 Pandemic, such as the challenges, future, economy, environment, community resilience during COVID-19, the latest innovations, new policies, management models, roles of actors/stakeholders and various models to be implemented in each country. After that, categorising it significantly aids future research in focusing on concepts that have never been discussed. With the numerous problems and complexities encountered in each tourism perspective during COVID-19, it is critical to categorise the various concepts and related themes discussed in his studies.

C. METHOD

Following the explanation of the research objectives in the introductory sub-chapter, this study will analyse a collection of articles that discuss sustainable tourism governance during the COVID-19 pandemic. The number of articles analysed was 78, published in reputable international journals and indexed by Scopus. The search for the article is carried out in several stages: first, identifying the articles to be analysed, namely by filtering automatically with the Publish or Perish application, then identifying the selected articles using the Scopus Database by using Time Series filtering, which is as long as 2020- February 2021.

In the initial search with the keyword "Sustainable Tourism", 1977 journal articles were found relevant to the research topic. In a general discussion, this figure is considered very large. Then, the second stage filtering with the keyword "Sustainable Tourism Development" found 858 articles. The second stage is the in-depth verification of the article by a) adding the keyword "Sustainable Tourism Development COVID-19", b) conducting article relevance criteria and H-Index, c) review of articles that emphasise policy, environment, sustainability, tourism structuring, tourism technology, innovation, governance, social and social and economic tourism which has high relevance to the research topic. This filtering is done on the database system using a mixed model, automatic model, and by excluding choices. Following that, a manual model is used to evaluate and validate the relevance of research data; this model is instrumental since researchers can determine the usage of dependable and relevant data. This

filtering found 78 articles most relevant to the research theme, namely, discussing the Formulating Model of Sustainable Tourism Governance During Covid-19 (Figure 1).



(Source: Processed Research Result, 2022)

Figure 1. Themes of Tourism Governance by Scopus Database

Then, we carried out the mapping stage in the research. First, the articles were imported into the VOSviewer software. This was done to get dominant themes, linkages between themes, and visualise networks between themes so that readers could easily understand them. It should be mentioned that each piece of analytic software, including VOSviewer, has flaws. Manual and automatic filter validation is required to avoid synonyms and typos during the filtering and mapping analysis stages. We know that algorithm engines only calculate and ask for equations for their defined words.

Researchers also use the Nvivo 12 plus software to divide themes based on study clusters, linkages between themes and mapping, and strengthen visualisation. It makes it easier for researchers to carry out an in-depth analysis of the collection of articles. Then the researcher classified the articles based on the author, journal name, publisher name and author origin. Data will be generated to answer research questions at the data analysis stage and conceptualisation of the articles. In contrast, the data analysis stage is focused on cluster topic analysis, dominant topics, linkages between themes and mapping of tourism governance generated through the analysis of 78 articles. Finally, this analysis aims to produce a concept about tourism governance studies during the COVID-19 pandemic, formulated based on analysed articles.

89 out of 383 articles were identified through a series of visualisations related to the research theme. Additionally, a review using VOSviewer revealed the existence of six concept groups/clusters (table 1). Further, Figure 1 depicts the concept names deduced from the visualisation of cluster density. Additionally, the colour coding assigned to each cluster enables the visualisation of a list of particularly prominent concepts within each cluster. This exercise aims to identify as many themes as possible that have been discussed frequently in previous research and can be used in future research. The distinct colours of each cluster in Figure 1 denote the cluster's density.

When researchers discover exciting topics in a particular field of science that they want to learn about or analyse, identification in the form of mapping in Figure 1 can assist them, particularly those just getting started with research. Additionally, researchers can use this study analysis to read articles related to the research topic.

Table 1. Themes Clustering in Sustainable Tourism Governance Studies

Cluster	Concept Name	Total
Cluster 1	Sustainable Development Tourism, Accommodation, Competitiveness, Cultural Heritage, Pandemic COVID-19, Economic Impact, Ethics, Future Prospect, Heritage Tourism, Hospitality Tourism, Industrial Policy, Marketing, Social Development,	20
Cluster 2	Ecology, Commerce, Covid-19, Health, Leisure Industry, Project Management, Society, Supply Chain, Tourism, Tourism Industry, Tourism Destination, Tourism Sector	18
Cluster 3	Economic Recession, Air Quality, Carbon, Climate Change, Economic Development, Global Economy Government, Pandemic, Social Distancing	17
Cluster 4	Global Change, Ecotourism, Hospitality, Inclusive Tourism, Perception, Public Health, Responsible Tourism, Sustainability, Tourism Market, Tourism Behaviour	12
Cluster 5	Policy Making, Coronavirus Infection, Humans, Management, Mental health, Natural Disaster, Motivation, Travel	11
Cluster 6	Domestics Tourism, Globalization, Tourism economics	3

Source: Processed Research Result, 2022

Identification in the form of mapping in Figure 1 can assist researchers, particularly those just beginning their research. For instance, if they discover an interesting topic in a particular field they wish to learn more about, they can use this study to read articles about that subject. Cluster 1 includes Accommodation, Competitiveness, Cultural Heritage, Economic Impact, Ethics, Future Prospects, Heritage Tourism, Hospitality Tourism, Industrial Policy, Marketing, Social Development, and Sustainable Development. While Cluster 2 emphasises the concepts of Commerce, Covid-19, Ecology, Health, Leisure Industry, Project Management, Society, Supply Chain, Tourism, Tourism Industry, Tourism Destination, and Tourism Sector. In Cluster 3, the concept is aimed at Air Quality, Carbon, Climate Change, Economic Development, Economic Recession, Global Economic Government, Pandemic, and Social Distancing. Cluster 4 focuses on Ecotourism, Global Change, Hospitality, Inclusive Tourism, Perception, Public Health, Responsible Tourism, Sustainability, Tourism Market, and Tourism Behavior. Furthermore, cluster 5 focuses on Coronavirus Infection, Humans, Management, Mental health, Natural Disasters, Motivation, Policy Making, and Travel. While in cluster 6, it focuses on Domestics Tourism, Globalization, and Tourism economics. This clustering will

aid researchers who wish to discuss the topic of sustainable tourism governance in determining which concepts are related. For instance, if researchers select cluster 4, the body literature should begin with the concept of world change in the tourism sector during the COVID-19 pandemic. Additionally, researchers can search the reference manager for related literature using keywords from the cluster 4 category, including changes in the world during COVID-19, particularly in the tourism sector, tourist perceptions during COVID-19, public and tourist health, the tourism market, and tourism sustainability.

The explanation for cluster 1 related to sustainable tourism governance is that the sustainable tourism sector problem is dominated by interest actors in supporting the implementation of measures to improve the coordination of sustainable tourism (Kawuryan et al., 2022; Purnomo et al., 2022). The main function of the government, tourist actors, and policy analysts are very important for the sector; they design policies executed in an emergency for economic sustainability, even on a small scale. On the other side, if the tourism industry is allowed to die, the local economy and community welfare will suffer, resulting in a rise in poverty rates (Higgins-Desbiolles et al., 2019). Moreover, there is no unified vision and mission for managing specific aspects wisely and adequately. There is, therefore, a need for a multi-stakeholder debate that should consider the relationship between governance features and sustainable tourism performance. Furthermore, during the COVID-19 pandemic, tourism is very vulnerable to the policy of limiting human mobility and social distancing activities because there is no interaction, economic turnover, or trade. So it is necessary to study further the prospects for tourism in the future, which genuinely has elements of Sustainability Tourism so that the tourism industry can continue to grow—walking despite internal and external stresses (Gössling et al., 2020).

In cluster 2, tourism governance must be more concerned with elements of the environment/ecology, health aspects of tourists, communities, tourism personnel, or more complex tourism management. The tourism sector has a good supply chain needed by tourists in carrying out tourism activities. As Huang & Zhang (2020) stated, the emergence of unprofessional services in tourism activities makes conformity quality control even more critical. It is necessary to apply a tourism supply chain model consisting of traditional tourism retail channels and online tourism under the umbrella of tourist quality preferences. The quality of supply has a different impact on the two retail channels. The decentralised structure is the dominant strategy, while the centralised system is more conducive to quality control of conformity. Cluster 3, related to the quality of life and air, climate change, economic development, and economic recession, can be found in the research of Suntutik et al. (2016). In Vietnam, it explains that the impact of tourism on the quality of life (QOL) of Hue residents provides a sense of well-being and pride. Towards the ethnicity of the Hue community, however, there is dissatisfaction with the quality of available employment. There is no population empowerment, especially in policymaking and government participation (Suntutik et al., 2016).

In cluster 4, articles related to world changes in the tourism sector during the COVID-19 pandemic, which prioritises public health during a pandemic (Gössling et al., 2020), tourism sustainability, and the tourism market during or after the COVID-19 pandemic (Purnomo, Aditya, et al., 2021). At the same time, the concepts in cluster 5 related to the spread of COVID-19 and tourism management and adaptive government policies in dealing with the COVID-19 pandemic (Mei, 2020; Yeh, 2020). They explained that the approach of locking down, large-scale restrictions, and closing access to airports, terminals, and stations was very appropriate to suppress the spread of the COVID-19 pandemic, even though it had a terrible impact on tourism activities. Finally, cluster 6 focuses on tourism activities on a local or domestic scale. It significantly affects economic activity because, before the COVID-19 pandemic, tourism sector activities could be enjoyed globally (Canh & Thanh, 2020). But policies on tourism

concept of tourism sustainability is properly implemented (Waligo et al., 2013). Additionally, ensuring the concept of sustainable tourism is implemented effectively necessitates the involvement and intervention of non-governmental parties in decision-making and ensuring the concept's success, including private-business actors, communities, academics, and the media (Purnomo et al., 2022).

We also assess regional tourism sustainability issues such as Indonesia, Thailand, and Singapore. We understand that policies in management vary according to the approach used, the location, and the interests of each actor involved in tourism management. Generally, the policies issued must be adapted to the local ecological, cultural, social, and political context, such as during COVID-19. In tourism management, the Indonesian government carried out significant restrictions on mobility, such as closing access to transportation in/out of Indonesia many and complicated administrative arrangements for tourists. Meanwhile, for domestic tourists and tourist destination areas, restrictions are carried out by 50% and carry out a more detailed screening of tourist destinations that domestic tourists may visit (Uno, 2021). In contrast to Singapore and Thailand, they issued more detailed policies such as closing all destination areas, prohibiting everyone from travelling, and implementing severe sanctions and hefty fines for violators of health protocols (Marome & Shaw, 2021; Uğur & Akbıyık, 2020). In addition, foreign tourists are also more detailed and implement complex administration, such as providing health insurance and guarantees for how long to stay during COVID-19 and other warranties.

This research demonstrates that policies for sustainable tourism management face numerous obstacles, including poorly coordinated national development policies, complex and underdeveloped institutional frameworks, and frequent top-down misunderstandings. Therefore, developing or modelling an integrated tourism management policy is necessary, for example, through a collaborative approach that considers the population, size, significance of the problem, institutional arrangements, and focus of activities, and ensuring that sustainability is implemented wisely and correctly. It will aid policymakers in better understanding challenges and appointing appropriate types of collaboration (Purnomo et al., 2020).

Additionally, the relationship between tourism and ecotourism environmental ecology and global trends indicate that tourism management is becoming influenced by the sustainability principle, specifically a more robust horizontal integration of social, economic, and ecological dimensions. Tourism capacity is not constant. After all, it changes due to population growth, land use changes, and poor governance. As a result, economic activity in the sector declines, poverty increases, environmental degradation continues unchecked, and tourism potential is diminished (Rasoolimanesh et al., 2017). It can be concluded that tourism governance requires sustainable essential management. Including the development of innovations in a broad market through the adoption of information and communication technology, e-marketing, e-tourism, and an emphasis on the integrity of tourism management (Kamaludin et al., 2021; Purnomo et al., 2021).

The Correlation Topic of Sustainable Tourism Governance Studies

The results of a review of 78 articles using Nvivo 12 plus show a strong correlation between sustainable tourism governance and ecology, Covid-19, economic recession, global change, policy, and domestic tourism (Table 2). This correlation demonstrates that the keywords mentioned during COVID-19 dominated the common concepts of researchers. Their concern for these keywords is extensive, and numerous approaches and disciplines are employed to examine tourism interactions with dominant keywords. In their activities, they are attempting to map out new tourism governance in times of emergency, wise and correct policies to overcome the economic recession, increasing awareness of the environment and health

during the COVID-19 pandemic, and new adaptations to changes in the social structure of society.

By using the Pearson coefficient correlation, the results of the value between tourism and the six research topics confirm that this study is critical. It cause it has a significant impact on the sustainability of human activities and cannot be separated from the issues of ecology, economy, global change, and policy (Benjamin et al., 2020). A significant correlation was obtained from the second stage of statistical filtering using Nvivo12+ after the first results were imported into the software. Then automatic and manual queries with the Pearson Correlation Coefficient were performed, revealing the significance of Code A and B. We did this to reduce the double relationship of repeated checking, resulting in the number shown in Table 2. These discoveries became the new concept findings that we used to characterise the contents of Code B in detail, as illustrated in Figure 5.

Table 2. Relation of Sustainable Tourism Governance Topics

Code A	Code B	Pearson Correlation Coefficient
Tourism	Covid-19	0.848
Tourism	Ecology	0.816
Tourism	Economic Recession	0.781
Tourism	Global Change	0.765
Tourism	Policy	0.732
Tourism	Tourists	0.636

Source: Processed Research Result, 2022

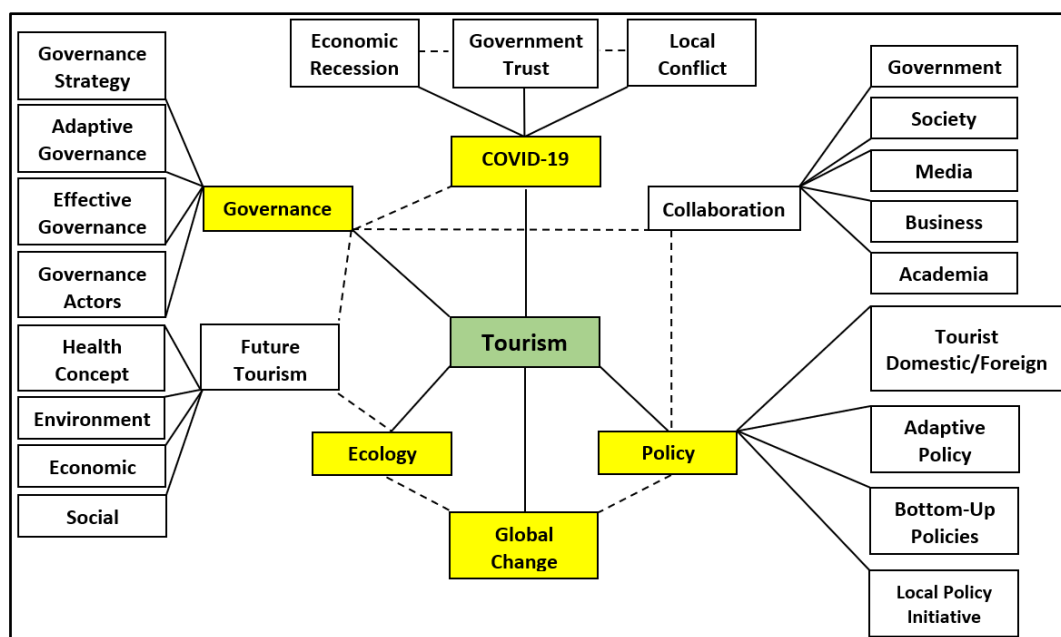
The relationship between tourism and tourism governance during the Covid-19 pandemic can be interpreted as a regulatory process that has high integration so that it can carry out the concept of sustainable tourism wisely and correctly, and this can be done by: Identifying clearly, and in detail, vulnerable tourism destinations disaster but has a significant advantage in the economic sector so that a review is needed so that the element of vulnerability can be suppressed as well as possible so that in the future, the tourism sector can survive internal or external disturbances. Pay attention to prioritising and inviting local communities in every decision-making process because sector tourism depends on local community activities' conditions. Developing the concept of ecotourism and Identifying data as a whole vertically (administrative structure) and horizontally (between institutions and local level units) to regulate the implementation and use of tourist areas.

The points are being implemented to ensure that future tourism sustainability plans are compliant and operating properly. By examining the relationship between tourism governance and policies, particularly local policies, it is clear that tourism management policies vary according to each actor's location, approach, and interests. As a result, the policy must be tailored to the ecological, cultural, social, and political contexts; it must also address concerns about the sustainability of tourism in each location. This concept can be implemented by integrating general and local knowledge in policymaking (Lee et al., 2020), focusing on local decision-making processes for using destinations that rely on local land, and utilising technical resources to support local institutions (Rinaldi et al., 2020). Additionally, gaining knowledge from these insights enables the advancement of new approaches and the improvement of existing tourism management policies.

Theme Mapping for Sustainable Tourism Governance Studies

The review results that the researchers conducted on 78 articles using the Nvivo 12+ software matrix framework feature revealed that the study of the theme of sustainable tourism governance is related to 5 main topics: tourism during a pandemic, ecology, economic

recession, global change, and policy. Furthermore, the researchers elaborated on each theme with several explanatory indicators. First, the discussion on local issues in the tourism sector was influenced by the relationship processor relations between the government and the community. With its power, the government is directly related to the community to influence tourism development at the local level. Then it discusses a) regional conflicts that arise as a result of tourism or environmental management, b) mechanisms used by local governments as tourism managers to foster trust in policies and financial support provided by local governments, and c) how government activities contribute to the development of adaptive policies in tourism management during and after the COVID-19 pandemic. As illustrated in Figure 5, the theme of tourism sustainability governance during COVID-19 is multifaceted, complex, and interconnected. Additionally, because it is a component of the primary problem affecting the economic sector and human life, its management is highly dependent on the government's and other stakeholders' ability to formulate tourism policies during the COVID-19 pandemic.



(Source: Processed Research Result, 2022)

Figure 5. Tourism Governance Model

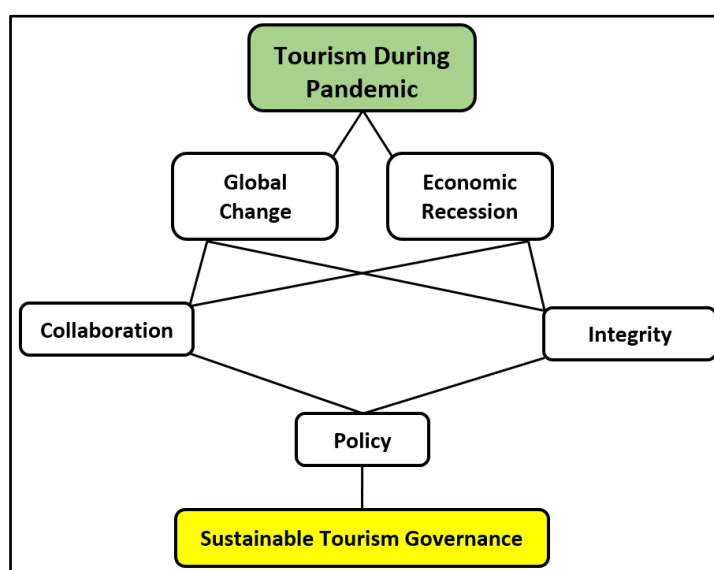
Additionally, Figure 5 illustrates the tourism sustainability governance that must be implemented in greater detail to ensure the tourism sector's future viability. A solid line denotes a direct relationship between the given points, whereas a dashed line symbolises an opportunity to progress from one place to another. For example, a new tourist policy has helped to cross-sector collaboration for a new, more leveraged governance. Furthermore, all stakeholders must actively contribute to recovering the tourism sector in an emergency.

As a prerequisite for implementation, the primary objective is to engage all stakeholders (government, business, media, academia, and the community) in tourism management (Purnomo et al., 2021), with the participation of these stakeholders ensuring accountability for performance and policies implemented producing more tangible results. Public policy is concerned with designing and implementing tourism management policies by various levels of government during the COVID-19 pandemic. Numerous models demonstrate high community, media, business, and academic involvement. The government demonstrated its adaptability to community demands while developing tourism management policies after the COVID-19

pandemic. Additionally, the private sector, such as businesses, must be involved to ensure that tourism management considers economic and environmental sustainability.

In general, the accountability from the collaboration between government and society, business, the media, and academia increases the desire to incorporate tourism management into environmental conservation policies to ensure the tourism industry's future sustainability. Finally, in this case, management of the approaches taken can reconcile the interests of all stakeholders. Additionally, collaboration is the primary determinant of effective governance regarding the strategic actors involved, the ongoing power relations, the strategies employed, and the effectiveness of the resulting policies, as it ensures that all actors involved act coherently. Such a model will also result in effective policies that balance tourism with the long-term viability of biological and human ecosystems. Thus, in order to ensure sustainable tourism governance during the COVID-19 pandemic, a participatory and collaborative approach is required to ensure that the tourism sector does not contribute to conflict through strict emergency regulations because sustainable tourism governance is the result of the interaction of actors, networks, and game rules within a management framework.

Then with the COVID-19 pandemic, there has been a complete global change in all life sectors, including tourism activities. As a strategic sector and the primary sector in supporting a country's economy, the tourism sector must survive even in a crisis because there are human interests and needs, especially local communities who depend on running tourism activities. Therefore, to maintain it, it is required to carry out tourism activities by emphasising sustainability with health protocols with established standards, limiting visiting hours, limiting the number of tourists, limiting tourist destinations, and prioritising goals with outdoor or natural concepts. For example, Malaysia's implementation and Indonesia's massive restrictions at the beginning of the emergence of COVID-19 limited human mobility for three months, closed access to air, sea, and land transportation, and strict supervision of local and foreign communities. It resulted in an economic sector decline because the state relies on the tourism sector for the national economy. After that, the government implemented the tourism concept by prioritising health protocols: tourist restrictions, limiting visiting hours, and prioritising natural destinations. This application is also fully supported by interest actors because it is hoped that it will drive the local and national economy even though it is only on a low-scale by applying this concept.



(Source: Processed Research Result, 2022)

Figure 6. The Connectivity in the Proposed Tourism Governance Model

The final result of this study is that the study of tourism governance leads to efforts in realising sustainable tourism management that is resistant to internal-external pressures and natural/non-natural disasters, which can be formulated based on the connectivity of a broad study. (1) Reviewing input from the impact of tourism during the COVID-19 pandemic, which resulted in changes in various sectors globally, including the tourism sector, and resulted in an economic recession. (2) This can be overcome slowly by carrying out intense collaboration between interest actors who have high integrity, (3) thus creating a policy that can manage the tourism sector in the future with the concept of sustainability. As the final part of the discussion, the study process on tourism governance is a study that is explained based on the current situation that can be presented from a policy perspective during the pandemic, changes in global structures, institutions, actors, and actors, and emerging collaborations and networks during the COVID-19 pandemic. In this study, researchers hope to achieve sustainable tourism governance because it is a proportional area for an area or country.

E. CONCLUSION

This research focuses on discussing the governance of the tourism sector during the COVID-19 pandemic. From 78 publications of Scopus indexed articles, the researchers found 71 discussion concepts, which the researchers divided into 6 clusters, namely (1) clusters related to tourism development, accommodation, and marketing, (2) clusters that focus on ecology, health, and social restrictions, (3) focus on economic recession, economic development, and global economic development, (4) global change, hospitality, and tourism behaviour, (5) focus on policymaking, management, and mental health, (6) the last cluster of focus on domestic tourism. Then, five dominant topics studied have solid ties and linkages with tourism sustainability governance: tourism governance, economic impact, collaboration with integrity, tourism governance (health), and future tourism policies.

Furthermore, this research can contribute to mapping tourism governance in the future, which provides a clear picture of the topics discussed. Specifically, this research explains tourism governance from the perspective of tourism governance during the COVID-19 pandemic and the actors who play a role. COVID-19, namely government, private sector, academia, society, and media. Therefore, the primary key to tourism governance during the COVID-19 pandemic is participation and collaboration because the government is the main actor who controls and is the centre of power in tourism management. Furthermore, the government must involve other important actors, namely business, academia, the community, and the media, in an integrated form of collaboration and provide positive synergies to prevent the future tourism sector's vulnerability. However, the limitation of this research is that the articles analysed are only sourced from the Scopus database. Therefore, in the end, it is necessary to conduct relevant research focusing on comparative studies involving the Scopus database and the Web of Science (WoS).

Contributorship

Conceptualisation ATF, NAA and EPP; methodology ATF, NAA and SAT; software ATF, NAA and RA; Validation EPP and RA; formal analysis ATF; writing-original draft preparation ATF, NAA, EPP; writing-review and editing ATF, SAT, RA; visualisation, ATF and NAA. All authors have read and agreed to the published version of the manuscript.

REFERENCES

Aimagambetov, E., Bugubaeva, R., Bepayeva, R., & Tashbaev, N. (2017). Model of Sustainable Development of Tourism Industry in Kazakhstan (Regional Perspective). *Public Policy and Administration*, 16(2), 179–197. <https://doi.org/10.13165/VPA-17-16-2-02>.

- Benjamin, S., Dillette, A., & Alderman, D. H. (2020). "We Can't Return To Normal": Committing to Tourism Equity in the Post-Pandemic Age. *Tourism Geographies*, 22(3), 476–483. <https://doi.org/10.1080/14616688.2020.1759130>.
- Bonaccorsi, G., Pierri, F., Cinelli, M., Flori, A., Galeazzi, A., Porcelli, F., Schmidt, A. L., Valensise, C. M., Scala, A., Quattrociochi, W., & Pammolli, F. (2020). Economic and Social Consequences of Human Mobility Restrictions under COVID-19. *Proceedings of the National Academy of Sciences of the United States of America*, 117(27), 15530–15535. <https://doi.org/10.1073/pnas.2007658117>.
- Canh, N. P., & Thanh, S. D. (2020). Domestic Tourism Spending and Economic Vulnerability. *Annals of Tourism Research*, 85(October), 103063. <https://doi.org/10.1016/j.annals.2020.103063>.
- Collins-Kreiner, N., & Ram, Y. (2020). National Tourism Strategies during the Covid-19 Pandemic. *Annals of Tourism Research*, 103076. <https://doi.org/10.1016/j.annals.2020.103076>.
- Cucculelli, M., & Gof, G. (2015). Does Sustainability Enhance Tourism Destination Competitiveness? Evidence from Italian Destinations of Excellence. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2014.12.069>.
- Fotiadis, A., Polyzos, S., & Huan, T. C. T. C. (2021). The Good, the Bad and the Ugly on COVID-19 Tourism Recovery. *Annals of Tourism Research*, 87, 1. Matandirotya NR. Research trends in the field o. <https://doi.org/10.1016/j.annals.2020.103117>.
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, Tourism and Global Change: A Rapid Assessment of COVID-19. *Journal of Sustainable Tourism*, 0(0), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>.
- Grilli, G., Tyllianakis, E., Luisetti, T., Ferrini, S., & Turner, R. K. (2021). Prospective Tourist Preferences for Sustainable Tourism Development in Small Island Developing States. *Tourism Management*, 82 (June 2020), 104178. <https://doi.org/10.1016/j.tourman.2020.104178>.
- Hall, C. M. (2019). Constructing Sustainable Tourism Development: The 2030 Agenda and the Managerial Ecology of Sustainable Tourism. *Journal of Sustainable Tourism*, 27(7), 1044–1060. <https://doi.org/10.1080/09669582.2018.1560456>.
- Hamid, M. A., & Isa, S. M. (2020). Exploring the Sustainable Tourism Practices among Tour Operators in Malaysia. *Journal of Sustainability Science and Management*, 15(1), 68-80.
- Higgins-Desbiolles, F., Carnicelli, S., Krolikowski, C., Wijesinghe, G., & Boluk, K. (2019). Degrowing Tourism: Rethinking Tourism. *Journal of Sustainable Tourism*, 27(12), 1926–1944. <https://doi.org/10.1080/09669582.2019.1601732>.
- Huang, L., & Zhang, M. (2020). Conformance Quality of the Dual-Channel Tourism Supply Chain under Tourists' Quality Preference. *Journal of China Tourism Research*, 00(00), 1–26. <https://doi.org/10.1080/19388160.2020.1792383>.
- Kamaludin, N. K., Purnomo, E. P., Salsabila, L., Fathani, A. T., & Kawuryan, M. W. (2021). Analysis Strategy of Tourism Development During the Pandemic in Yogyakarta. *ICICM '21: Proceedings of the 11th International Conference on Information Communication and Management*, 142–148. <https://doi.org/10.1145/3484399.3485667>.
- Kapera, I. (2018). Sustainable Tourism Development Efforts by Local Governments in Poland. *Sustainable Cities and Society*, 40, 581–588. <https://doi.org/10.1016/j.scs.2018.05.001>.
- Kawuryan, M. W., Fathani, A. T., Purnomo, E. P., Salsabila, L., Azmi, N. A., Setiawan, D., & Fadhlurrohman, M. I. (2022). Sustainable Tourism Development in Indonesia: Bibliometric Review and Analysis. *Indonesian Journal of Geography*, 54(1). <https://doi.org/10.22146/ijg.64657>.
- Kim, M. J., Bonn, Mark., & Hall, Michael C (2021). What Influences COVID-19 Biosecurity

- Behaviour for Tourism?. In *Current Issues in Tourism*, 25(1), 21-27. <https://doi.org/10.1080/13683500.2021.1883558>.
- Lapointe, D. (2020). Reconnecting Tourism After COVID-19: The Paradox of Alterity in Tourism Areas. *Tourism Geographies*, 22(3), 633–638. <https://doi.org/10.1080/14616688.2020.1762115>.
- Lazarus, J. V., Ratzan, S. C., Palayew, A., Gostin, L. O., Larson, H. J., Rabin, K., Kimball, S., & El-Mohandes, A. (2021). A Global Survey of Potential Acceptance of a COVID-19 Vaccine. *Nature Medicine*, 27(2), 225–228. <https://doi.org/10.1038/s41591-020-1124-9>.
- Lee, P., Hunter, W. C., & Chung, N. (2020). Smart Tourism City: Developments and Transformations. *Sustainability*, 12(10). <https://doi.org/10.3390/SU12103958>.
- Marome, W., & Shaw, R. (2021). COVID-19 Response in Thailand and its Implications on Future Preparedness. *International Journal of Environmental Research and Public Health*, 18(3), 1–11. <https://doi.org/10.3390/ijerph18031089>.
- Mei, C. (2020). Policy Style, Consistency, and the Effectiveness of the Policy Mix in China's Fight Against COVID-19. *Policy and Society*, 39(3), 1–17. <https://doi.org/10.1080/14494035.2020.1787627>.
- Mulyani, S., Dewi, R., Ahsani, P., & Wijaya, D. N. (2021). Collaborative Governance on Ecotourism : Towards Sustainable Tourism Development. *Jurnal Borneo Administrator*, 17(148), 319–334. <https://doi.org/10.24258/jba.jba.v17i3.958>.
- Niñerola, A., Maria-vict, S., & Hern, A. (2019). Tourism Research on Sustainability : A Bibliometric Analysis. *Sustainability (Switzerland)*, 11, 1–17. <https://doi.org/10.3390/su11051377>.
- Oldekop, J. A., Horner, R., Hulme, D., Adhikari, R., Agarwal, B., Alford, M., Bakewell, O., Banks, N., Barrientos, S., Bastia, T., Bebbington, A. J., Das, U., Dimova, R., Duncombe, R., Enns, C., Fielding, D., Foster, C., Foster, T., Frederiksen, T., ... Zhang, Y.-F. (2020). COVID-19 and the Case for Global Development. *World Development*, 134, 105044. <https://doi.org/10.1016/j.worlddev.2020.105044>.
- Pan, X., Yan, E., Cui, M., & Hua, W. (2018). Examining the Usage, Citation, and Diffusion Patterns of Bibliometric Mapping Software: A Comparative Study of Three Tools. *Journal of Informetrics*, 12(2), 481–493. <https://doi.org/10.1016/j.joi.2018.03.005>.
- Purnomo, E. P., Aditya, F., Fathani, A. T., Salsabila, L., & Rachmawatie, D. (2021). Penta-Helix Approach as a Strategy to Recovery Tourism in Bali Due to Covid-19 Pandemic. *2021 The 11th International Conference on Information Communication and Management*, 122–127. <https://doi.org/10.1145/3484399.3484417>.
- Purnomo, E. P., Fathani, A. T., Kasiwi, A. N., & Tenorio, C. B. (2022). How Does Government Policy Support Sustainable Tourism in Dealing with COVID-19 Pandemic? *Journal of Sustainability Science and Management*, 17(2), 170–186. <https://doi.org/10.46754/jssm.2022.02.013>.
- Purnomo, E. P., Fathani, A. T., Setiawan, D., Fadhlurrohman, M. I., & Nugroho, D. H. (2021). Penta-Helix Model in Sustaining Indonesia's Tourism Industry. In: *Antipova, T. (eds) Advances in Digital Science. ICADS 2021. Advances in Intelligent Systems and Computing, vol 1352*. Springer, Cham. https://doi.org/10.1007/978-3-030-71782-7_42.
- Purnomo, E. P., Ramdani, R., Salsabila, L., & Choi, J. W. (2020). Challenges of Community-Based Forest Management with Local Institutional Differences between South Korea and Indonesia. *Development in Practice*, 30(8), 1–12. <https://doi.org/10.1080/09614524.2020.1749561>.
- Ranasinghe, R., Damunupola, A., Wijesundara, S., Karunarathna, C., Nawarathna, D., Gamage, S., Ranaweera, A., & Idroos, A. A. (2020). Tourism After Corona: Impacts of Covid 19 Pandemic and Way Forward for Tourism, Hotel and Mice Industry in Sri Lanka. *SSRN Electronic Journal*, 1–19. <https://doi.org/10.2139/ssrn.3587170>.

- Rasoolimanesh, S. M., Jaafar, M., Kock, N., & Ahmad, A. G. (2017). The Effects of Community Factors on Residents' Perceptions Toward World Heritage Site Inscription and Sustainable Tourism Development. *Journal of Sustainable Tourism*, 25(2), 198–216. <https://doi.org/10.1080/09669582.2016.1195836>.
- Rastegar, R., Higgins-Desbiolles, F., & Ruhanen, L. (2021). COVID-19 and a Justice Framework to Guide Tourism Recovery. *Annals of Tourism Research*, 91(2021), 1–4. Matandirotya NR. Research trends in the field o. <https://doi.org/10.1016/j.annals.2021.103161>.
- Rinaldi, C., Cavicchi, A., & Robinson, R. N. S. (2020). University Contributions to Co-Creating Sustainable Tourism Destinations. *Journal of Sustainable Tourism*, 30(9), 2144–2166. <https://doi.org/10.1080/09669582.2020.1797056>.
- Roxas, F. M. Y., Rivera, J. P. R., & Gutierrez, E. L. M. (2020). Framework for Creating Sustainable Tourism using Systems Thinking. *Current Issues in Tourism*, 23(3), 280–296. <https://doi.org/10.1080/13683500.2018.1534805>.
- Sahu, S., Sindhu, N. J., & Sharma, P. K. (2014). Review on Solid Waste Management of Art. *International Journal of Innovative Research and Development*, 3(3), 261–268.
- Subekti, D., Purnomo, E. P., Teguh, A., & Salsabila, L. (2022). How can Indonesia Government Handle the Natural Disaster during COVID-19 Pandemic : Analysis of Twitter Account. *Proceedings of the International Conference on Public Organization (ICONPO 2021)*, 209 (Iconpo 2021), 231–240.
- Suntikul, W., Pratt, S., Kuan, W. I., Wong, C. I., Chan, C. C., Choi, W. L., & Chong, O. F. (2016). Impacts of Tourism on the Quality of Life of Local Residents in Hue, Vietnam. *Anatolia: An International Journal of Tourism and Hospitality Research*, 27(4), 405–420. <https://doi.org/10.1080/13032917.2016.1138234>.
- Uğur, N. G., & Akbıyık, A. (2020). Impacts of COVID-19 on Global Tourism Industry: A Cross-Regional Comparison. *Tourism Management Perspectives*, 36(2020), 1–13. <https://doi.org/10.1016/j.tmp.2020.100744>.
- Uno, S. (2021). *Statistik Kunjungan Wisatawan Mancanegara 2020*. Kementerian Pariwisata dan Ekonomi Kreatif. Retrieved from <https://www.kemendparekraf.go.id/statistik-wisatawan-m mancanegara/Statistik-Kunjungan-Wisatawan-Mancanegara-2020>.
- UNWTO. (2017). *Definition of Sustainable Development of Tourism*. United Nations Worlds Tourism Organization. Retrieved from <http://sdt.un-wto.org/content/about-us-5>.
- Utami, B. A., & Kafabih, A. (2021). Sektor Pariwisata Indonesia di Tengah Pandemi Covid 19. *Jurnal Dinamika Ekonomi Pembangunan*, 4(1), 383–389. <https://doi.org/10.33005/JDEP.V4I1.198>.
- Wahyuni, H., Purnomo, E. P., & Fathani, A. T. (2021). Social Media Supports Tourism Development in the COVID-19 Normal Era in Bandung. *Jurnal Studi Komunikasi*, 5(3), 600–616. <https://doi.org/10.25139/jsk.v5i3.3805>.
- Waligo, V. M., Clarke, J., & Hawkins, R. (2013). Implementing Sustainable Tourism: A Multi-Stakeholder Involvement Management Framework. *Tourism Management*, 36(June 2013), 342–353. <https://doi.org/10.1016/j.tourman.2012.10.008>.
- Yeh, S. (2020). Tourism Recovery Strategy Against COVID-19 Pandemic. *Tourism Recreation Research*, 46(2), 1–7. <https://doi.org/10.1080/02508281.2020.1805933>.