

LITERATURE REVIEW

POST COVID-19 TOURISM BASED ON ENVIRONMENT CONSERVATION AND COMMUNITY EMPOWERMENT

Nuraeni

Faculty of Public Health, Universitas Indonesia
Depok, Jawa Barat, 16424, Indonesia

Email: nuraeni21@ui.ac.id

Dr Dwini Handayani

Faculty of Economics and Business, University of Indonesia
Depok, Jawa Barat, 16424, Indonesia

E-mail: dwini.handayani11@ui.ac.id

ABSTRACT

PURPOSE: This research aims to analyse the tourism sector through the lens of conservation and community empowerment, with Indonesia as an example that illustrates the impact of the COVID-19 pandemic on achieving these goals.

DESIGN/METHODOLOGY/Approach: The research employs descriptive and bibliometric analysis to address the research objectives. Data from the Central Statistics Agency (BPS) of the Republic of Indonesia (bps.go.id) are utilised for a simple descriptive analysis of the development of the tourism sector. The bibliographic analysis leverages Scopus.com data and processes it with the VOSviewer application to identify trends in ecotourism topics based on time and country factors.

FINDINGS: In line with the global impact of the COVID-19 pandemic, Indonesia experienced a decline in tourist arrivals at its outset, particularly in 2020. This trend coincided with a global rise in ecotourism development studies, a field where Indonesia emerged as one of the dominant countries.

CITATION: Nuraeni MKM, Handayani, D.(2024): Post COVID-19 Tourism Based on Environment Conservation and Community Empowerment. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 20, No. 2, pp. 105–122.

RECEIVED: 12 August 2023 / **REVISED:** 7 April 2024 / **ACCEPTED:** 8 April 2024 / **PUBLISHED:** 14 November 2024

COPYRIGHT: © 2024 by all the authors of the article above. The article is published as an open access article by WASD under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

ORIGINALITY/VALUE: This research indicates that ecotourism, a form of global tourism involving active community participation, offers a potential solution to tourism crises. Ecotourism can enhance social cohesion and capacity by empowering communities to face critical situations like the COVID-19 pandemic. Although the analysis is limited to a specific period during the pandemic, this study provides insights into tourism dynamics when confronted with crises that lead to mobility restrictions and policies significantly impacting the industry. Consequently, there is an urgency to integrate Sustainable Development Goals (SDGs) into tourism planning and development to increase the sector's resilience, sustainability, and responsiveness to future global challenges.

KEYWORDS: *Tourism; Ecotourism; Environment Conservation; Community; Empowerment; COVID-19*

INTRODUCTION

The COVID-19 pandemic has driven extraordinary transformations in every aspect of life, including health, social and economic (Antriandarti *et al.*, 2024). One specific aspect affected by the COVID-19 pandemic is tourism (Ioannides and Gyimóthy, 2020). Ioannides and Gyimóthy (2020) stated that the tourism crisis during the COVID-19 pandemic is an opportunity for society, entrepreneurs and academics to design and carry out a more environmentally friendly tourism transition. The debate then focused on recovery efforts, one of which was by intensifying community participation in ecotourism. Chueng *et al.* (2021) found that the COVID-19 pandemic influenced several sectors, including tourism. Sofield (2003) also stated that local community participation is essential to realise sustainable tourism, one of which is in the form of ecotourism proposed by The International Ecotourism Society (TIES) (2015).

This research also explores the impact of the pandemic on tourism and its implications for ecotourism research. Ecotourism is a multifaceted concept that embodies environmental preservation, community well-being and sustainable tourism principles. Every party participating in ecotourism and markets must adopt several principles, including building environmental awareness and respect for local cultures. This concept aligns with the environmentally friendly tourism industry defined in the United Nations' (UN) Sustainable Development Goals (UN, 2020).

The basis of ecotourism is community participation, but its implementation requires hard work. People's beliefs in the importance of protecting the environment, and their willingness to pay more for sustainable tourism, also influence the success of ecotourism (Nisa and Surtikanti, 2024). The orientation of community values influences pro-environmental attitudes (Lee, 2011). This continuum describes the extent of an individual's decision-making in choosing to sacrifice that individual's possessions for the benefit of others (Murphy and Ackermann, 2014). The existence of Social Value Orientation (SVO) within a community can strengthen pro-environmental behaviour and people's beliefs about the consequences of whatever they do to the environment (Joireman *et al.*, 2001). Increasing the community's SVO orientation towards the urgency of protecting the environment can influence the successful implementation of ecotourism. Therefore,



there is a need for a study that directly examines the concept of conservation-based tourism and community empowerment to determine its suitability for mitigating problems in the tourism sector, especially amid crises such as the COVID-19 pandemic.

In Indonesia, the COVID-19 pandemic prompted the implementation of national health emergency policies such as social restrictions in cities with high transmission rates, closure of international borders and prohibition of foreign nationals entering Indonesia. These measures quickly reduced the number of visits by foreign tourists (*Badan Pusat Statistika/Central Statistics Agency (BPS)*, 2023a). However, data from the World Economic Forum's (WEF) 2022 Travel and Tourism Competitiveness Index (TTCI) reveals that Indonesia achieved the most significant ranking increase globally, jumping 12 places from 44th in 2019 to 32nd in the world in 2022. This increase coincides with the implementation of a sustainable budget reduction policy due to the COVID-19 pandemic. Therefore, reviewing the causal aspects of Indonesia's tourism sector achievements is warranted.

This research examines the impact of the COVID-19 pandemic on the tourism sector, with a particular focus on Indonesia. By analysing research developments related to ecotourism development during the global pandemic, this research offers valuable insights for the tourism industry; these can inform policy decisions by government bodies. They can also guide strategic direction for business actors in determining sustainable tourism development through ecotourism based on community-based tourism as a crisis management solution due to the pandemic.

Therefore, this research will analyse secondary data through simple quantitative descriptive analysis and bibliometrics to answer the research objectives. Adopting a simple quantitative approach and presenting it on a graph will provide a clear picture of the disparities in visitor visits during and before the pandemic. Meanwhile, bibliometric analysis will describe the trend related to ecotourism and the implications of co-operative relationships between countries during a pandemic. This combined approach offers a comprehensive understanding of the evolving tourism landscape, considering the many political issues that evolved around the time of the COVID-19 pandemic.

THEORETICAL BACKGROUND

Ecotourism Concepts and Conservation Effort

Ecotourism is a form of tourism that supports nature, culture conservation, the welfare of local communities and encourages visitors' experiences and interpretations in understanding the environment and culture (TIES, 2015); it can bring various benefits to society. In addition to prioritising the preservation of natural areas with the concept of tourist destinations, ecotourism can provide economic income for local communities. These include income from entrance fees, increasing local jobs in ecotourism areas and income from tourist accommodation expenses. Furthermore, ecotourism projects can increase foreign exchange and promote economic growth in remote areas (Fennel, 1999). Studies conducted on the Osa Peninsula, Costa Rica, demonstrate

a positive correlation between the quality of life of local people and the development of ecotourism (Hunt *et al.*, 2015). The same thing also happened in Bhutan, where local farmers experienced an increase in agricultural production due to the development of ecotourism (Gurung and Seeland, 2011).

In Indonesia, the tourism sector has become one of the main drivers of national development (Indrawati *et al.*, 2020). Indonesia's geographical conditions and rich natural landscapes become the potential for successful ecotourism development. However, the implementation of ecotourism in Indonesia has not been maximised (Ross and Wall, 1999; Rahardjanto *et al.*, 2019). Even though ecotourism management strives for multidimensional sustainability, the economic dimension is still unsustainable.

Ecotourism can be an option for developing coastal areas, such as mangrove ecotourism that can preserve the environment. However, developing this kind of ecotourism requires environmentally sound facilities and infrastructure (Wardhani *et al.*, 2022). Community attitudes also greatly determine the sustainability of ecotourism, particularly those driven by environmental sustainability. All these factors must therefore be considered when developing appropriate strategies or recommendations for sustainable ecotourism development.

COMMUNITY PARTICIPATION AND SVO

While ecotourism positively influences the quality of life of local communities and people's awareness of the environment, only a few studies have proven the contribution of ecotourism in building a sustainable environment. Excessive use of ecosystems can also reduce the long-term benefits of ecotourism itself (Canteiro *et al.*, 2018). Local and rural communities must participate in managing the mangrove ecosystem as a marine tourism object. SVO is a continuum that describes the spectrum of decision-makers' sacrifice for the benefit of others (Murphy and Ackermann, 2014). Early research on SVO by Messick and McClintock (1968) established a framework for measuring motives related to social dilemmas. At that time, SVO was divided into three types: co-operative, individualistic and competitive. Dilemmas can present in various social interactions and can occur in various situations. A person's decision from the social dilemma they experience depends on their inherent SVO.

Research by Joireman *et al.* (2001) suggests that the collective SVO of a group of people strengthens their pro-environmental behaviour, strengthening people's belief that whatever they do to the environment has consequences. Other studies also prove that value orientation significantly affects the intention to carry out pro-environmental behaviour in everyday life (De Groot and Steg, 2010). In addition, as green awareness increases among the public, the support for environmental sustainability (Butar *et al.*, 2024), including pro-environmental behaviour, also grows. Furthermore, value orientation was a stronger predictor than motivation in influencing one's pro-environmental behaviour (De Groot and Steg, 2010). The same thing might happen when someone wants to participate in environmental preservation in ecotourism development.

Finally, ecotourism is an essential choice in handling the tourism crisis due to the COVID-19 pandemic. It is essential to see whether the topic has attracted the attention of researchers during the pandemic through bibliographic studies. In this context, concepts from previous research and concrete efforts by Indonesia require evidence-based assessments measuring the effectiveness of ecotourism practice. This research then examines it through secondary data originating from state institutions to ensure the authenticity and reliability of the data. Employing a two-pronged approach, namely through bibliometrics and statistics, this study addresses these gaps in proving the effectiveness of tourism crisis management practices based on tourist visit data and the evolution of ecotourism research topics. This research is essential in formulating strategies for handling future pandemic crises by governments and business actors. In particular, the data and results of the bibliographic analysis can be used as material for further and in-depth analysis by other researchers. Research findings can also contribute to a clear depiction of the COVID-19 pandemic's impact on Indonesia, as well as an in-depth study of ecotourism and its evolution during the pandemic. As this study relies on secondary data, it is unable to establish a direct relationship between causal and effect factors through direct evidence. Therefore, further research on the same topic using primary data could provide deeper insights into these causal relationships.

DATA AND METHOD

This research employs a mixed methods approach, namely simple descriptive analysis and bibliometrics. A simple descriptive analysis of time series data (2018–2022) from the Central Statistics Agency (BPS) of the Republic of Indonesia includes the number of domestic and foreign tourist visits to Indonesia before and during the COVID-19 pandemic. These data were obtained via the official BPS RI website (bps.go.id). Frequency analysis was performed using Microsoft Excel as a graphic visualisation application to depict data movements explaining the conditions before and during the COVID-19 pandemic.

In addition, data from Scopus.com was utilised to conduct a bibliometric analysis. These data went through simple statistical analysis to observe journal citation trends. Bibliographic analysis was employed to see research trends related to ecotourism development and global conservation. The search query included the keywords “ecotourism” AND “development”, and was restricted to articles published between 2018 and 2020: 2018 describes the condition before the COVID-19 pandemic, 2019 describes the condition during the transition period before and during the COVID-19 pandemic, and 2020 describes the condition during the COVID-19 pandemic. Inclusion criteria for the search were limited to the “final” publication stage, the “journal” source type and the “English” language (Figure 1). A total of 1,052 documents were obtained from the data selection results. The data were then saved in CSV format and imported into the VOSviewer application to descriptively analyse the development of journal citation trends each year. Using the same data

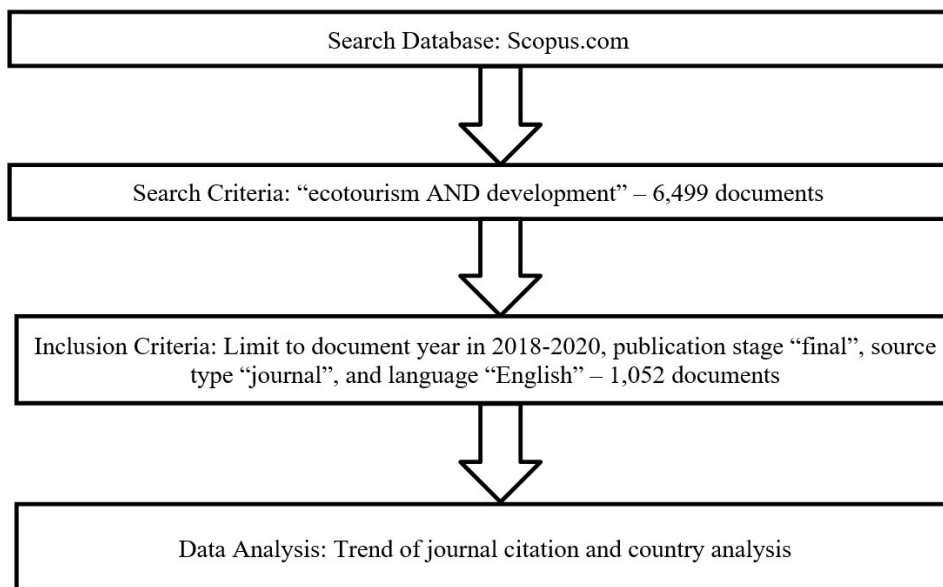


Figure 1 Steps to the Bibliographic Analysis Method

Source: Constructed by authors

and analytical applications, this research further analyses the development of ecotourism and conservation studies by country, and represents a visual network depicting the relationships of the analysed data. VOSviewer produces visualisations through a graphical network that displays countries as nodes (points) and relationships between countries as edges (lines). The larger the node in a country, the greater the trend of studying “ecotourism development” in that country; the sharper the colour that connects the two countries, the stronger the relationship between the two countries. The nodes and edges in the VOSviewer graphical visualisation demonstrate group patterns of closely connected countries and identify the countries that have a central role within the network or cluster of interconnected countries.

RESULTS

Analysis of the Development of Tourist Visits in Indonesia

Secondary data analysis was conducted to analyse the development of tourist visits from 2018 to 2022. Two categories were found, domestic and foreign tourists. For foreign tourists, data on entry points into Indonesia were also analysed.

Figure 2 depicts the variation in the volume of domestic tourism accumulated from reports of 34 provinces in Indonesia. The data revealed a steady increase in domestic tourist visits from 2018 to 2019. However, the curve slopes quite sharply, with a total of 524,571,392 visits in 2020,

coinciding with the implementation of the travel restriction policy. The curve then increased in 2021 until the following year. The curve continued to climb and exceeded the number of domestic tourist visits in 2019, with a total of 734,864,693 visits in 2022.

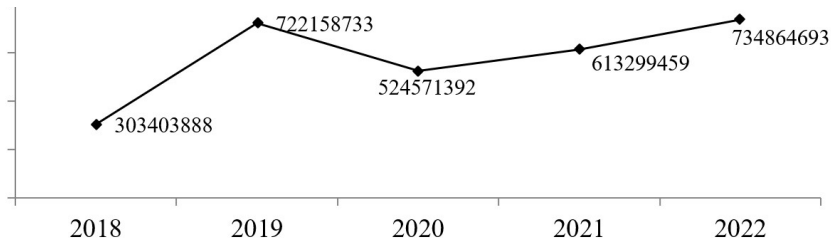


Figure 2 Development of Indonesia’s Domestic Tourist Visitation Number 2018–2022

Source: BPS, 2023b

We also analysed the number of foreign tourist visits from 2018 to 2022 using data from BPS, focusing on the arrival factor of foreign tourists based on the mode of entry, namely by air, sea and land. The graph shows that foreign tourist arrivals by air dominated from 2018 to 2022, except for 2021. In general, the entire curve started to slope down in 2020, marking the steepest decline compared to the previous year, namely 16,106,954 total visitors in 2019 to 4,052,923 total visitors in 2020. Meanwhile, 2021 marked the lowest number of foreign tourist arrivals (1,431,015), where the air arrival gate had the least access to visitors. A gradual increase in foreign tourist arrivals was observed in 2022 through air and sea arrivals. However, the increase in the curve has not yet surpassed the total arrival rate before the pandemic occurred in 2019 (Figure 3).

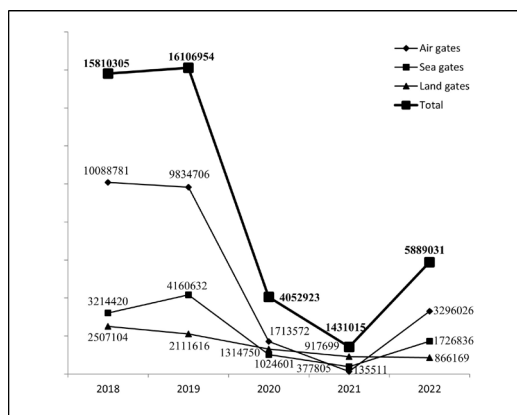


Figure 3 Development of the Number of Foreign Tourist Visits Based on Arrival Gates 2018–2022

Source: BPS, 2023a

Ecotourism Development Study Trends

Bibliometric analysis using Scopus data (2018–2020) revealed an upward citation trend of studies on ecotourism development and conservation. Figure 4 depicts an annual increase in journal citations related to ecotourism development. However, the increase was more significant in 2020 than the previous year, rising from 1,075 citations to 2,821 in 2020.

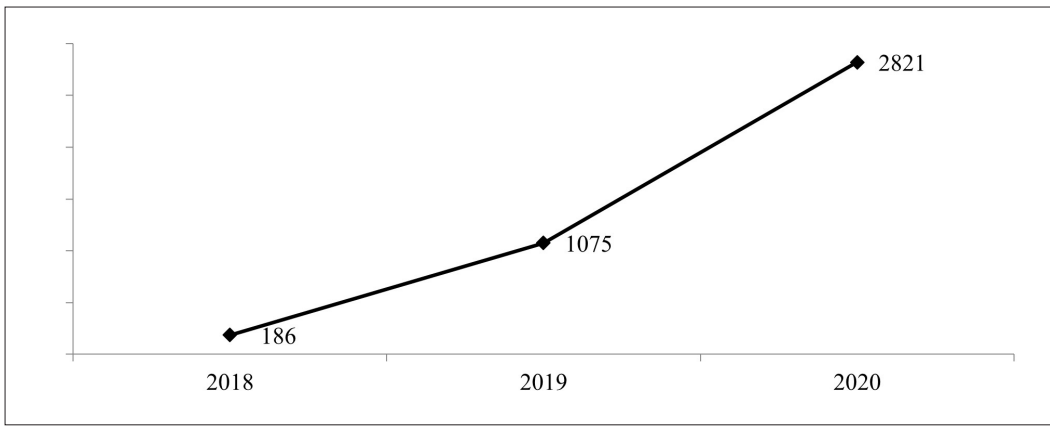


Figure 4 Trend of Journal Citation on Ecotourism Development in 2018–2020

Source: Scopus.com

Furthermore, bibliographic analysis based on publication location identified trends in ecotourism development and conservation studies. Figure 5 shows that trends in studies related to the topic of “ecotourism development” experienced rapid development within countries with relatively large populations. These were China and Indonesia (the two countries with the largest population in Asia), the United States (with the largest population in North America) and the United Kingdom and Italy (representing European countries).

DISCUSSION

Recovery of the Tourism Sector During the COVID-19 Pandemic

Each country’s unique natural and cultural wealth can invite tourists to gain new experiences that will have a positive economic impact on local communities and state revenues. However, immature tourism planning can result in the exploitation of nature and a decrease in the quality of tourist sites. The United Nations World Tourism Organization (UNWTO) and all United Nations member

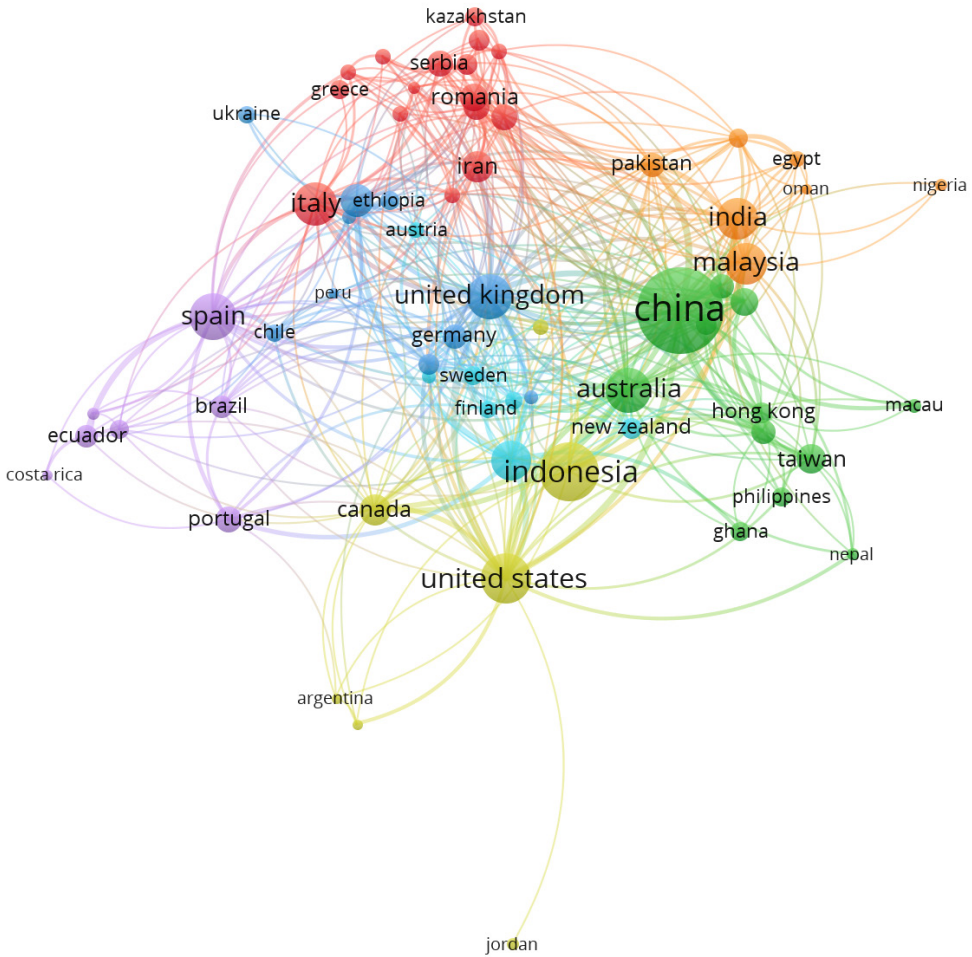


Figure 5 Bibliography Coupling by Country

Source: Constructed by authors

countries are trying to implement sustainable tourism. Sustainable tourism is tourism development that optimises the use of natural resources, maintains the ecology, preserves knowledge and local communities and creates a stable and just economy for all stakeholders (UNWTO, 2013).

Currently, the UNWTO is developing efforts to recover world tourism affected by COVID-19 through micro steps (such as applying for permits and implementing mitigation measures if exposed to COVID-19), and macro steps (such as developing recommendations for assistance for international tourists in emergency situations). The UNWTO also issued a study of the One Planet Sustainable Tourism Programme entitled *One Planet Vision for a Responsible Recovery of Tourism* (UNWTO, 2020), integrating a multi-sector approach during and after the pandemic took place.

In Indonesia, the implementation of ecotourism adheres to the Regulation of the Minister of Tourism and Creative Economy No. 14 of 2016 concerning Guidelines for Sustainable Tourism Destinations. Sustainable tourism adopted by Indonesia is in line with the UNWTO. Seeing the decline in the tourism sector due to the COVID-19 pandemic, as evidenced by the data visualisation in Figures 2 and 3, the Indonesian Government implemented a tourism recovery strategy. This strategy includes economic stimulus and medium-term strategies in the 2020-2024 Strategic Plan. The Coordinating Ministry for the Economy of the Republic of Indonesia also provides a tourism stimulus of IDR 3.3 trillion, including interest subsidies and tourism KUR (*Kementerian Pariwisata dan Ekonomi Kreatif RI/Ministry of Tourism and Creative Economy of the Republic of Indonesia (Kemenko Perekonomian RI, 2021)*). On a macro level, the Indonesian Ministry of Tourism and Creative Economy encourages increasing the number of tourists by integrating nature conservation, infrastructure development, human resource development, local economy improvement and collaboration between stakeholders. In addition, the Ministry of Tourism and Creative Economy has developed six strategies related to the recovery of the tourism sector:

- (1) tourism grant stimulus;
- (2) COVID Free Corridor (opening of visitor restrictions);
- (3) extraordinary economic development;
- (4) digitisation programme for creative economy actors;
- (5) tourism village development; and
- (6) vaccination for tourism and creative economy actors (Kemenparekraf RI, 2021a).

Kemenparekraf has recognised a shift in tourist preferences during the pandemic era, reflected in their launch of the NEWA (Nature, Eco, Wellness, and Adventure) concept in 2021. This innovation departs from the awareness that there has been a shift in tourist preferences during the pandemic era. Tourism trends based on health and safety priorities, and the possibility of boredom at home in the early post-pandemic period encourage tourists to leave their homes to enjoy fresh air and natural beauty. The concept aligns with the principles of ecotourism, promoting outdoor activities and natural environments that inherently minimise health risks and enable physical distancing (Kemenparekraf RI, 2021b).

Indonesia's implementation of the Carbon Footprint Program in 2022 encouraged awareness and concern for tourism industry stakeholders in implementing sustainable management. The pilot programme is running in five Indonesian tourist destinations: Plataran Menjangan West Bali National Park, Tembudan Berseri Mangrove in Berau, 3 Colours Beach in Malang, Peramun Hill in Belitung and Klawalu Mangrove Tourism Park, in Sorong. The programme's positive impact is especially evident in Bali, where 69% of tourists are committed to reducing their carbon footprint, 90% of visitors come to Bali to become more familiar with the concept of ecotourism and 83% of tourists visit because they believe that sustainable tourism is necessary. Furthermore, Indonesia's

prioritisation of tourism villages, which embody the wisdom of local communities, aligns with its focus on sustainable tourism development. Tourism villages were the prima donna during the pandemic, where around 44% of tourists were more attracted to tourist villages than other types of tourism. In addition, there was an increase of 30% in tourist village visits during the pandemic (Kemenparekraf RI, 2022).

Therefore, the Indonesian government is encouraging sustainable tourism as a solution to the tourism crisis resulting from the COVID-19 pandemic. The visualisation in Figure 5 also depicts that Indonesia is ranked second with the most research trends related to ecotourism development. Other evidence demonstrates that Indonesia is experiencing a tourism revenge phenomenon, as observed through the drastic increase in people's enthusiasm for travelling. One illustration of this phenomenon occurred at the end of 2021 and the beginning of 2022, when there was a surge in tourist traffic leading to Indonesia's ecotourism areas (Kemenparekraf RI, 2022).

Community-Based Tourism and Sustainable Tourism

Sustainable tourism has emerged as a promising strategy for reviving the tourism sector due to the COVID-19 pandemic. One of the community-based areas of sustainable tourism is ecotourism. This is reflected in the increased focus of ecotourism development studies observed in the visualisation of Figures 4 and 5. However, there are several obstacles preventing the implementation of ecotourism, such as a lack of information and training on transformative ecotourism, complex tax plans, requirements and procedures and the government's ignorance of its role and future potential. These findings highlight the importance of increased knowledge and understanding among all stakeholders involved in ecotourism development. Furthermore, the government needs to create an environment that supports the development of transformative ecotourism (Vidickienė *et al.*, 2021).

Mendoza-Moheno *et al.* (2021) illustrate a successful example of ecotourism development through a community-based tourism village; encouraging full participation in building community norms regarding community-based tourism management. Third-party intervention only serves as a facilitator who ensures that there is no conflict of interest in the community. This management creates socio-technical innovations that empower people and aid knowledge transfer by attending meetings and holding leadership positions (Komber *et al.*, 2024). Furthermore, strong linkages between technical and social systems are crucial for driving social change within community-based tourism organisations.

The implementation of community-based tourism goes through several stages. In the initial stage, the community focuses on distributing economic benefits and protecting the environment by increasing community capacity in providing environmentally friendly tourism services (Imbaya *et al.*, 2019). In addition, the community, as a tourism manager, must plan routes that can encourage tourists to

appreciate natural and cultural resources through signs and local guides. At the development and consolidation stage, monitoring of social carrying capacity and issues related to environmental preservation is required. In the final stage, managers must develop and plan zone boundaries, including recreational and organisational areas, to protect the privacy of the tourists' daily lives (Lee and Jan, 2019). Tourism-based development requires collaboration between stakeholders to significantly benefit society in a sustainable manner (Roxas *et al.*, 2020; Lee and Jan, 2019).

Crisis and Recommendations for Management in Tourism

The COVID-19 pandemic is not the first global health crisis to disrupt the tourism sector. Previous outbreaks, for example, swine flu in 2009, cost the tourism sector US\$2.8 billion in Mexico (Wut *et al.*, 2021), the Ebola outbreak in Africa in 2014–2015 reduced GDP by 5%, and the Dengue Haemorrhagic Fever outbreak reduced the economy by US\$8.9 billion. The accumulation of these conditions without being accompanied by effective crisis management will influence all sectors including the hotel and tourism industry, which will be difficult to recover.

Community-based ecotourism, such as village tourism, presents a promising approach to building resilience within the tourism sector by incorporating social capital for collaborative tourism management (Rafi and Herdiansyah, 2020). According to Musavengane and Kloppers (2020), community resilience has three challenges: government capacity, finances and community capabilities. Meanwhile, solid social capital can encourage community resilience in managing natural resources communally, coupled by collaboration to strengthen social cohesion through member ties.

Social cohesion describes the relationship between humans to help each other (Chan *et al.*, 2006). Wakil *et al.* (2021) developed the concept of co-flourishing; this emphasises strengthening community capacity during a crisis by integrating community resilience and tourism development with six types of community capital: human, social, natural, physical, financial and psychological. The concept of co-flourishing is particularly relevant in the context of the COVID-19 pandemic, as shown in Figure 4, where the space for interacting and exchanging views knows no national boundaries and political relationships.

The tourism crisis during the COVID-19 pandemic caused losses that opened up opportunities for a post-pandemic shift away from capitalistic tourism models, or, as Everingham and Chassagne (2020) called it, a warning for business tourism. Many researchers have extensively studied and formulated crisis management in the tourism sector, encouraging hotels to redesign their operating systems by introducing new protocols and launching programmes in collaboration with health and hygiene experts (Kim and Pomirleanu, 2021). Casado-Aranda *et al.* (2021) highlight a shift towards community development in the wake of COVID-19. This includes promoting small-scale lodging for

local communities, easy access to health facilities and developing information and communication technology to enhance the tourist experience. E-hospitality, e-tourism and automated services that minimise individual interactions are examples of such ICT applications. According to Ramkissoon (2023), the impact of the COVID-19 pandemic must be balanced with the quality of life of the people who are involved and depend on this sector. In European countries, domestic tourism promotion efforts that rely on factors supporting the mental and physical well-being of the population as well as their quality of life have succeeded in curbing the spread of COVID-19.

The experience of tourism management during and after disasters has resulted in community-based crisis resolution through increasing social cohesion and community capacity in building self-adaptation measures. Communities are encouraged to have crisis management strategies in tourism, such as helping affected communities by using collective funds and capabilities. In addition to using financial assistance provided by the government and NGOs, people within the community who are not involved in tourism can also help with the financial recovery. Research by Qiu *et al.* (2020) proves that the collapse of tourism requires collective recovery where people who have recovered can channel their empathy through financial donations to revive the tourism sector. However, there has been no community or government intervention in crisis anticipation. Therefore, the emerging concepts appear to be reactive measures developed in response to past crises. In developing community-based tourism, the community must have income reserves that can fulfil their needs and prevent the total loss of livelihoods during a crisis. Therefore, more appropriate efforts to ensure the fulfilment of people's living needs are urgently needed for future studies.

Sustainable tourism management strategies are essential for achieving Sustainable Development Goals (SDGs). The COVID-19 pandemic's impact on tourism development, especially ecotourism, underscores the need for integrating tourism management strategies with SDGs. This integrated approach has the potential to provide critical responses not only to economic recovery aspects but also to environmental and social dimensions of sustainability. The SDGs' multifaceted nature encompasses various dimensions of human life, including eradicating poverty (SDG 1), increasing economic prosperity (SDG 8) and empowering local communities (SDG 11). Furthermore, it is also essential to consider environmental protection (SDG 13 and SDG 15) and inclusive economic recovery (SDG 10) so that post-crisis tourism development can be sustainable and equitable. Tourism sector management, especially ecotourism, can anticipate future crises by enhancing its adaptation to climate change (SDG 13) and intervening in the community's capacity to face crises and multi-sector co-ordination (SDG 17). Therefore, a tourism management strategy oriented towards the SDGs will encourage sustainable and inclusive tourism development worldwide. This approach encourages holistic recovery efforts in an integrated manner to restore post-crisis conditions, including community economic conditions, as well as environmental, social and cultural conditions.

CONCLUSIONS

Indonesia's tourism sector, like many others globally, experienced a drastic decline in the number of foreign tourist arrivals in 2020 due to the implementation of travel restrictions. Arrivals through the dominant air gate passed by foreign tourists experienced the sharpest decline. Conversely, this period also witnessed a surge in research trends related to ecotourism development, with Indonesia as one of the dominant countries studying them. This increased focus on ecotourism can be interpreted as Indonesia's strategic response to the decline of the tourism sector.

These findings indicate the need to improve and formulate strategies in dealing with crises, such as the COVID-19 pandemic, through a transition towards environmentally friendly and sustainable tourism. Ecotourism aligns with this environmental preservation and Indonesia's global tourism concept. However, to ensure sustainability, it is crucial to build citizen participation through increasing social cohesion and crisis adaptation by considering the SDGs dimensions. Therefore, crisis intervention through policy formulation and community empowerment efforts can trigger a process of experiential learning interaction between stakeholders, including collaboration across borders.

FUNDING

This research was funded by Kementerian Riset dan Teknologi/Badan Riset dan inovasi nasional, grant number 8/E1/KP.PTNBH/2021 and grant number NKB 045/UN2.RST/HKP.05.00/2021 Research and Development (Risbang), Universitas Indonesia.

REFERENCES

- Antriyandarti, E., Barokah, U., Rahayu, W., Herdiansyah, H., Ihsannudin, I. and Nugraha, F.A. (2024): The economic security of households affected by the COVID-19 pandemic in rural Java and Madura. *Sustainability*, Vol. 16, No. 5, p.2091.
- BPS (2023a): *Jumlah Kunjungan Wisatawan Mancanegara per bulan ke Indonesia Menurut Pintu Masuk, 2017 - sekarang (Kunjungan)*. Available at: <https://www.bps.go.id/id/statistics-table/2/MTE1MCMY/jumlah-kunjungan-wisatawan-mancanegara-per-bulan-ke-indonesia-menurut-pintu-masuk--2017---sekarang--kunjungan-.html>.
- BPS (2023b): *Jumlah Perjalanan Wisatawan Nusantara Menurut Provinsi Asal (Perjalanan)*. Available at: <https://www.bps.go.id/id/statistics-table/2/MTE4OSMy/jumlah-perjalanan-wisatawan-nusantara-menurut-provinsi-asal--perjalanan-.html>.
- Butar, S.B., Ambarita, N. and Haniva, R. (2024): Green awareness and green product: A direction for sustainable consumption. *Applied Environmental Science*, Vol. 1, No. 2, pp.87–102.

- Canteiro, M., Córdova-Tapia, F. and Brazeiro, A. (2018): Tourism impact assessment: A tool to evaluate the environmental impacts of touristic activities in Natural Protected Areas. *Tourism Management Perspectives*, Vol. 28, pp.220–227.
- Casado-Aranda, L.A., Sánchez-Fernández, J., Bastidas-Manzano, A.B. (2021): Tourism Research after the COVID-19 Outbreak: Insights for More Sustainable, Local and Smart Cities. *Sustainable Cities and Society*, Vol. 73, p.103126.
- Chan, J., To, H.P. and Chan, E. (2006): Reconsidering Social Cohesion: Developing a Definition and Analytical Framework for Empirical Research. *Social Indicators Research*, Vol. 75, No. 2, pp.273–302.
- Cheung, C., Takashima, M., Choi, H., Yang, H. and Tung, V. (2021): The impact of COVID-19 pandemic on the psychological needs of tourists: Implications for the travel and tourism industry. *Journal of Travel and Tourism Marketing*, Vol. 38, No. 2, pp.155–166.
- De Groot, J.I. and Steg, L. (2010): Relationships between value orientations, self-determined motivational types and pro-environmental behavioural intentions. *Journal of Environmental Psychology*, Vol. 30, No. 4, pp.368–378.
- Everingham, P. and Chassagne, N. (2020): Post COVID-19 ecological and social reset: Moving away from capitalist growth models towards tourism as Buen Vivir. *Tourism Geographies*, Vol. 22, No. 3, pp.555–566.
- Fennell, D.A. (1999): *Ecotourism: An Introduction*. New York: Routledge.
- Gurung, D.B. and Seeland, K. (2011): Ecotourism benefits and livelihood improvement for sustainable development in the nature conservation areas of Bhutan. *Sustainable Development*, Vol. 19, No. 5, pp.348–358.
- Hunt, C.A., Durham, W.H., Driscoll, L. and Honey, M. (2015): Can ecotourism deliver real economic, social, and environmental benefits? A study of the Osa Peninsula, Costa Rica. *Journal of Sustainable Tourism*, Vol. 23, No. 3, pp.339–357.
- Imbaya, B.O., Nthiga, R.W., Sitati, N.W. and Lenaiyasa, P. (2019): Capacity building for inclusive growth in community-based tourism initiatives in Kenya. *Tourism Management Perspectives*, Vol. 30, pp.11–18.
- Indrawati, E., Ruchiat, R., Indrawati, D. and Febriyani, S. (2020): Integrated Agriculture-Based Agrotourism Model with Eco-Friendly Environmentalism on Carik Injeman land in Cibodas Village. *Journal of Environmental Science and Sustainable Development*, Vol. 3, No. 1, pp.177–194.
- Ioannides, D. and Gyimóthy, S. (2020): The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, Vol. 22, No. 3, pp.624–632.
- Joireman, J.A., Lasane, T.P., Bennett, J., Richards, D. and Solaimani, S. (2001): Integrating social value orientation and the consideration of future consequences within the extended norm activation model of pro environmental behaviour. *British Journal of Social Psychology*, Vol. 40, No. 1, pp.133–155.
- Kemenko Perekonomian RI (2021): *Pemerintah Gelontorkan Berbagai Stimulus Dorong Pemulihan Sektor Pariwisata*. Available at: <https://ekon.go.id/publikasi/detail/1559/pemerintah-gelontorkan-berbagai-stimulus-dorong-pemulihan-sektor-pariwisata>.

Kemendikbud RI (2021a): *Tren Industri Pariwisata 2021*. Kemendikbud RI, Jakarta.

Kemendikbud RI (2021b): *Siaran pers: Mendikbud Siapkan langkah strategis untuk pemulihan desa wisata*. Available at: <https://pedulicovid19.kemendikbud.go.id/siaran-pers-mendikbud-siapkan-langkah-strategis-untuk-pemulihan-desa-wisata/>.

Kemendikbud RI (2022): *Tren Industri Pariwisata 2022*. Kemendikbud RI, Jakarta

Kim, E.J. and Pomirleanu, N. (2021): Effective redesign strategies for tourism management in a crisis context: A theory-in-use approach. *Tourism Management*, Vol. 87, p.104359.

Komber, L.L.S., Situmoran, E.R., Aninam, J. and Wurarah, R.N. (2024): Community participation in the utilization of Mansinam Island as an ecotourism object. *Jurnal Bisnis Kehutanan dan Lingkungan*, Vol. 1, No. 2, p.88–100.

Lee, K. (2011). The role of media exposure, social exposure and biospheric value orientation in the environmental attitude-intention-behavior model in adolescents. *Journal of Environmental Psychology*, Vol. 31, No. 4, pp.301–308.

Lee, T.H. and Jan, F-H. (2019): Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of sustainability. *Tourism Management*, Vol. 70, pp.368–380.

Mendoza-Moheno, J., Cruz-Coria, E. and Gonzales-Cruz, T.F. (2021): Socio-technical innovation in community based tourism organization: A proposal for local development. *Technological Forecasting and Social Change*, Vol. 171, pp.120949.

Messick, D.M. and McClintock, C.G. (1968): Motivational bases of choice in experimental games. *Journal of Experimental Social Psychology*, Vol. 4, No. 1, pp.1–25.

Murphy, R.O. and Ackermann, K.A. (2014): Social value orientation: Theoretical and measurement issues in the study of social preferences. *Personality and Social Psychology Review*, Vol. 18, No. 1, pp.13-41.

Musavengane, R. and Kloppers, R. (2020): Social capital: An investment towards community resilience in the collaborative natural resources management of community-based tourism schemes. *Tourism Management Perspectives*, Vol. 34, p.100654.

Nisa, A. and Surtikanti, H.K. (2024): Environmental ethics of Kuta traditional village community in preserving the environment and its future prospects. *Interaction, Community Engagement, and Social Environment*, Vol. 1, No. 2, pp.108–115.

Qiu, R., Park, J., Li, S. and Song, H. (2020): Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, Vol. 84, p.102994.

Rafi, F. and Herdiansyah, H. (2020): The impact of Koja cliff development on social-cultural and economic: Case of community-based tourism, Banten, Indonesia. *GeoJournal of Tourism and Geosites*, Vol. 28, No. 1, pp.164–174.

- Rahardjanto, A., Husamah, H., Fatmawati, D., Miharja, F.J. and Setyawan, D. (2019): The problematic implementation of community-based ecotourism in Indonesia: A case study in ecotourism of Gili Labak-East Java. *African Journal of Hospitality, Tourism and Leisure*, Vol. 8, pp.1–18.
- Ramkissoon, H. (2023): Perceived social impacts of tourism and quality-of-life: A new conceptual model. *Journal of Sustainable Tourism*, Vol. 31, No. 2, pp.442–459.
- Ross, S. and Wall, G. (1999): Evaluating ecotourism: the case of North Sulawesi, Indonesia. *Tourism Management*, Vol. 20, No. 6, pp.673-682.
- Roxas, F.M.Y., Rivera, J.P.R. and Gutierrez, E.L.M. (2020): Mapping stakeholders' roles in governing sustainable tourism destinations. *Journal of Hospitality and Tourism Management*, Vol. 45, pp.387–398.
- Sofield, T.H.B. (Ed.) (2003): *Empowerment for Sustainable Tourism Development*, Oxford: Emerald Group Publishing .
- The International Ecotourism Society (TIES) (2015): *What is ecotourism?* Available at: <http://www.ecotourism.org/what-is-ecotourism>. Accessed 14 May 2023.
- United Nations (UN) (2020): *Sustainable tourism*. Available at: <https://sdgs.un.org/topics/sustainable-tourism>. Accessed 14 May 2023.
- United Nations World Tourism Organization (UNWTO) (2013): *Sustainable Tourism for Development Guidebook*. Madrid: UNWTO.
- United Nations World Tourism Organization (UNWTO) (2020): *Recommendations for the Assistance to International Tourists in Emergency Situations*. Madrid: UNWTO.
- Vidickienė, D., Gedminaitė-Raudonė, Z., Vilke, R., Chmielinski, P. and Zobena, A. (2021): Barriers to Start and Develop Transformative Ecotourism Business. *European Countryside*, Vol. 13, No. 4, pp.734–749.
- Wakil, M.A., Sun, Y. and Chan, E.H. (2021): Co-flourishing: Intertwining community resilience and tourism development in destination communities. *Tourism Management Perspectives*, Vol. 38, p.100803.
- Wardhani, M.K., Rosyid, D.M. and Armono, H.D. (2022): Land use change of mangrove forest for ecotourism in the South Coastal, Bangkalan, East Java-Indonesia. *International Journal of GEOMATE*, Vol. 23, No. 98, pp.136–146.
- World Economic Forum (WEF) (2022): *Travel & tourism development index 2021: Rebuilding for a sustainable and resilient future*. World Economic Forum. Available at: https://www3.weforum.org/docs/WEF_Travel_Tourism_Development_2021.pdf. 91pp.
- Wut, T.M., Xu, J.B. and Wong, S.M. (2021): Crisis management research (1985–2020) in the hospitality and tourism industry: A review and research agenda. *Tourism Management*, Vol. 85, p.104307.

BIOGRAPHY



Nuraeni is a master's graduate in Public Health at the Faculty of Public Health, University of Indonesia. Her research interests lie in the fields of public health, environment and tourism.



Dr Dwini Handayani is a lecturer at the Faculty of Economics and Business, University of Indonesia. She is also a senior researcher in the field of economics and development, currently researching in the fields of gender, tourism and economic development.

