

# The multi-stakeholder role in Asian sustainable ecotourism: a systematic review

Ecotourism in  
Asia:  
stakeholder  
roles

Ahmad Salman

*Faculty of Hospitality and Tourism, Prince of Songkla University, Phuket Campus,  
Phuket, Thailand*

Mastura Jaafar and Diana Mohamad

*Faculty of Housing Building and Planning, Universiti Sains Malaysia,  
George Town, Malaysia*

Andrew Ebekoziem

*Department of Construction Management and Quantity Surveying,  
University of Johannesburg, Johannesburg, South Africa, and*

Tareq Rasul

*Department of Marketing, Australian Institute of Business (AIB), Adelaide, Australia*

Received 10 May 2022  
Revised 31 July 2023  
16 November 2023  
Accepted 2 December 2023

## Abstract

**Purpose** – Over recent years, the multi-stakeholder role in sustainable ecotourism within Asia has emerged as a crucial narrative for sustainable ecotourism management across countries on the continent. This trend is perhaps due to the fact that ecotourism is one of the most rapidly growing sectors within the tourism industry. However, to date, no reviews have provided a comprehensive analysis related to the role of multi-stakeholders in the achievement of ecotourism sustainability, particularly in the Asian context. This study aims to fill this knowledge gap by examining the current knowledge regarding multi-stakeholder involvement in sustainable ecotourism within Asia.

**Design/methodology/approach** – A systematic review procedure was followed. 320 articles were finalized, from which 34 related pieces of research were selected from the Scopus and Web of Science databases.

**Findings** – Three themes emerged from this paper. Recommendations were highlighted to enhance sustainable ecotourism. The study concluded that a more enabling research environment should be provided to improve discourse and encourage policy interventions.

© Ahmad Salman, Mastura Jaafar, Diana Mohamad, Andrew Ebekoziem and Tareq Rasul. Published in *PSU Research Review*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>

The authors would like to convey special thanks to the participants for providing scholarly contributions to enhance the findings of this paper. Also, the authors appreciate the comments, suggestions and recommendations provided by the anonymous reviewers, which helped hone and strengthen the quality of this manuscript during the blind peer-review process. The following author affiliations were omitted: Dr Andrew Ebekoziem is at the Department of Quantity Surveying, Auchu Polytechnic, Auchu, Nigeria, and Development Planning and Management, School of Social Sciences, Universiti Sains Malaysia, Gelugor, Malaysia.

**Corrigendum:** It has come to the attention of the publisher that the article, Salman, A., Jaafar, M., Mohamad, D., Ebekoziem, A. and Rasul, T. (2024), "The multi-stakeholder role in Asian sustainable ecotourism: a systematic review", *PSU Research Review*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/PRR-05-2022-0048>, mistakenly reported an incorrect number of research articles included as 32 instead of 34 in the abstract, and the number of studies excluded as 54 instead of 53 in the Material and Methods section and Figure 1. These have now been corrected to reflect the accurate numbers. The authors sincerely apologise for any inconvenience caused.



---

**Originality/value** – No previous studies have explored the multi-stakeholder’s role in achieving Asian sustainable ecotourism, indicating a critical gap to be fulfilled. This paper uniquely contributes to the field by providing a comprehensive review of the roles and challenges of multiple stakeholders in sustainable ecotourism across Asia and proposing innovative policy solutions tailored to the region’s unique socio-economic and cultural context. Moreover, it puts forward potential solutions to bolster sustainable ecotourism within Asia, benefiting both stakeholders and the destination.

**Keywords** Asian countries, Possible solutions, Review, Stakeholders, Tourism

**Paper type** Literature review

---

## Introduction

The latest global trend in tourism is leaning towards a green economy. The United Nations Environmental Programme identifies ecotourism as an environmentally sustainable economic sector that has made significant strides in sustainability and green economy worldwide. Although ecotourism has several definitions, it is generally characterized as “nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable” (Allcock and Evans-Smith, 1994). This definition is adopted in this paper as it aptly suits the context discussed.

Ecotourism, arguably the most rapidly growing subsector in Asia’s tourism industry over recent decades, brings substantial benefits to the host area, contributing to job creation and providing a livelihood for the community (Salman *et al.*, 2020). Libosada (2009) posits that ecotourism effectively leverages natural resources and facilitates environmental development in communities around the tourist destination. However, the term “ecotourism” may be misunderstood or exploited, potentially leading to environmental degradation and adverse socio-cultural impacts on the host. Therefore, engaging multiple stakeholders is a key strategy in sustainable ecotourism that could address these concerns and steer the destination towards sustainability.

Tourism destinations consist of a multitude of stakeholders such as local communities, public sector organizations, nongovernmental organizations (NGOs) and businesses. Each of these stakeholders is impacted by the destination and can influence the project developed there (Salman *et al.*, 2021c). The stakeholder categorization by Goeldner and Ritchie (2011) and Weaver and Lawton (2002), including NGOs, tourists, residents, government agencies dealing with ecotourism and business owners, was employed in this study.

Despite the myriad studies on sustainable ecotourism and multi-stakeholder involvement in Asia, comprehensive analysis of these works remains limited. While there are studies on community engagement in sectors such as medicine (Lee *et al.*, 2019), entrepreneurship on sustainable development (Rahman, 2023; Rahman *et al.*, 2023), efficiency on sustainability (Uddin *et al.*, 2023), environmental sustainability and management (Rahman and Halim, 2022; Deb *et al.*, 2023) and environmental management and information technology (Wehn and Almomani, 2019), none on the multi-stakeholder role in sustainable ecotourism in the context of the Asian continent have been published. Moreover, the present studies have focused on the individual characteristics of either stakeholders or ecotourism, indicating a gap to be filled (Mammadova, 2017). It is critical to understand stakeholders’ roles and manage them if ecotourism locations are to remain viable in the long run. Long-term sustainability for ecotourism destinations is contingent on every stakeholder playing an active role and having a vested interest in the process (Simpson, 2008; McComb *et al.*, 2017; Wei and Yang, 2013). However, the existing tourism destinations, especially in Asia, have ignored the importance of understanding stakeholders’ roles and that is why many destinations in Asian countries such as Malaysia, Bangladesh, China and India are considered unsuccessful when it comes to achieving or implementing long-term ecotourism. According to Catibog-Sinha and Wen (2008), stakeholder participation is one of the criteria for the long-term sustainability of nature reserves (Salman *et al.*, 2022). Co-management is the most effective method for involving

communities in long-term ecotourism management (Salman *et al.*, 2021b). This research will bridge a significant theoretical gap in the literature about the role of multi-stakeholders in Asian sustainable ecotourism. This is significant because of the relationship between stakeholders' role and sustainable ecotourism. Several studies, for example, Chan and Baum (2007), Camacho *et al.* (2016), Salman *et al.* (2020) and Kim and Park (2017), have shown that the multi-stakeholder role has the capacity to improve sustainable ecotourism and attract more tourists. There is a scarcity of literature on multi-stakeholders role in sustainable ecotourism in Asian countries. Therefore, this study intends to fill the void by highlighting the significance of stakeholders in achieving sustainable ecotourism in Asia, describing obstacles facing sustainable ecotourism and proffering possible solutions. This is to strengthen the role of multi-stakeholders in Asian ecotourism. This research is important and timely because the global tourist trend is towards the Asian region. This demands potentially immediate remedies that will increase the resilience in the participation of multiple stakeholders in Asian ecotourism.

This study distinguishes itself from existing literature in several key ways. The present study offers an in-depth investigation of stakeholder involvement in sustainable ecotourism, with a specific emphasis on the Asian region. Prior scholarly investigations have touched upon this topic, but this research contributes by providing a more extensive analysis within the context of Asia. This regional focus allows for a more nuanced understanding of the unique challenges and opportunities presented by the diverse cultural, socio-economic and ecological contexts found across Asia. Secondly, this study goes beyond merely identifying the roles of stakeholders and the challenges they face. It also proposes practical, actionable solutions to enhance sustainable ecotourism. The proposed strategies, encompassing the development of local expertise and infrastructure, strengthening institutional capacities and fostering partnerships with private enterprises, are firmly rooted in the unique characteristics of the Asian context. As a result, these measures hold significant relevance for policymakers and practitioners operating within the region. Thirdly, this study emphasizes the importance of multi-stakeholder collaboration in achieving ecotourism sustainability. While the significance of stakeholder engagement is recognized in the existing literature, this study underscores the potential of collaborative partnerships among diverse stakeholders to contribute to environmental conservation, socio-cultural enhancement and economic development. Together, these contributions not only enrich the scholarly discourse but also offer practical insights for policymakers and practitioners in the field.

In order to provide a more robust evaluation of our findings, we have incorporated the Stakeholder Theory as a theoretical underpinning for our study. This theory, initially proposed by Freeman in 1984, posits that organizations are comprised of various stakeholders, each with their unique interests and objectives. In the context of sustainable ecotourism, these stakeholders include the local community, government bodies, NGOs and the private sector. Each stakeholder has a role to play in the successful implementation and management of sustainable ecotourism initiatives. By applying the Stakeholder Theory, we can better understand the dynamics between these stakeholders, their roles and their challenges. This theoretical framework thus provides a more comprehensive understanding of the multi-stakeholder role in sustainable ecotourism across Asia.

This study analyzes the current literature on the role of multiple Asian stakeholders in sustainable ecotourism. This section emphasized the significance of systematically reviewing the literature and justifying this study. The following section discusses the report titled Preferred Reporting Items for Scientific Review Papers and Meta-Analyses that was utilized. This includes the material and methods used. The third and final section thoroughly examines the literature to discover, select and evaluate the multi-stakeholder role in Asian sustainable ecotourism. This covers discussing the outcomes, the study's ramifications and prospective fields for future studies.

## Material and methods

This section outlines the methods and materials employed in the review paper. This includes research design, criteria for eligibility, search strategy and information sources, the process of systemic review and data inference and analysis.

### *Study design*

For the study design, the authors utilized and followed the Meta-analysis Of Observational Studies in Epidemiology (MOOSE) guidelines as adopted by [Stroup \*et al.\* \(2000\)](#) and [Moher \*et al.\* \(2009\)](#) in Preferred Reporting Items for Scientific Reviews and Meta-Analyses (PRISMA). It is a combination of MOOSE and Prisma. Besides reporting guidelines for any evidence synthesis, it emphasizes the valuable and valid evidence which emerges from past research beyond randomized control trials ([Batten and Brackett, 2022](#)). This paper evaluates the following research questions:

- (1) What is the role of the multi-stakeholders in achieving sustainable ecotourism in Asia?
- (2) What are the challenges in achieving sustainable ecotourism in Asia?
- (3) What policy solutions may be used to improve sustainable ecotourism in Asia?

### *Eligibility and exclusion criteria*

This study has considered and included papers that described multi-stakeholder roles in sustainable ecotourism in their nations within Asia. These comprise publications from 2001 until 2020. A twenty-year timeframe is sufficient to check the progress and important publications concerning the multi-stakeholder role and sustainable ecotourism on the Asian continent. This study is consistent with [Shaffril \*et al.\* \(2018\)](#), who used a twelve-year timeline (from 2007 to 2018) for a systematic review in Asia. Emphasis was placed on identifying and examining studies in peer-review publications.

The studies focused on the multi-stakeholder role across Asia's sustainable ecotourism. Meeting abstracts, case reports and expert views were exempted from this paper to maintain the standard of a systematic review. Also excluded were conference proceedings, book series, review articles and textbooks. The reason for the exclusion is that most times, peers have not evaluated the documents. Therefore, in line with the focus on Asian multi-stakeholders and sustainable ecotourism, only published papers germane to the topic were considered, as shown in [Table 1](#).

Criterion	Eligibility	Exclusion
Type of literature	Peer-reviewed journal articles, book chapters in books with editorial committees or doctoral theses with thesis committees	Journals (systematic review), book series, books, conference proceedings
Timeline	Between 2001 and 2020	<2001
Language	English	Non-English
Indexes	Social Science Citation Index, Emerging Sources Citation Index, Art and Humanities Index (Web of Science)	Science Citation Indexed Expanded (Web of Science)
Nations and territories	Asian nations	Non-Asian nations

**Table 1.**  
Criteria for inclusion and rejection

**Source(s):** Adapted from [Shaffril \*et al.\* \(2018\)](#), [Salleh \*et al.\* \(2020\)](#) and [Ebekoziem \*et al.\* \(2022\)](#)

### *Information sources and search approaches*

This study's search strategy at the preliminary stage faced a challenge but was resolved collaboratively by the authors and a specialized group. The latter offered assistance in refining language and suitable substitutions and also participated in reviewing the articles. The search for relevant databases was completed in January 2021. Search parameters included perceptual phrases such as "Asian countries," "stakeholders influence," "multi-stakeholder role," "sustainable ecotourism," "possible solutions," "tourism," and "stakeholders' participation." The Boolean operators "AND" and "OR" were employed in our search. The term "Asian countries" was linked to the other keywords using "AND," while "OR" connected the remaining keywords. This revised paper encompasses these search specifics. The literature examined spanned disciplines related to the multi-stakeholder role in sustainable ecotourism. An expert was engaged throughout this phase to mediate, with a focus on the predetermined eligibility criteria. Primary databases consulted included Scopus and Web of Science. Employing multiple databases for the search strategy ensures the review of a broader spectrum of relevant sources, consistent with the approach of [Salman et al. \(2020\)](#). The choice of these databases was influenced by the extensiveness of Scopus, which includes more than 22,800 worldwide journals ([Salleh et al., 2020](#)) and the comprehensiveness of Web of Science, covering at least 256 disciplines across no less than 21,000 journals. All papers retrieved from these sources underwent peer review.

### *Systematic review procedure*

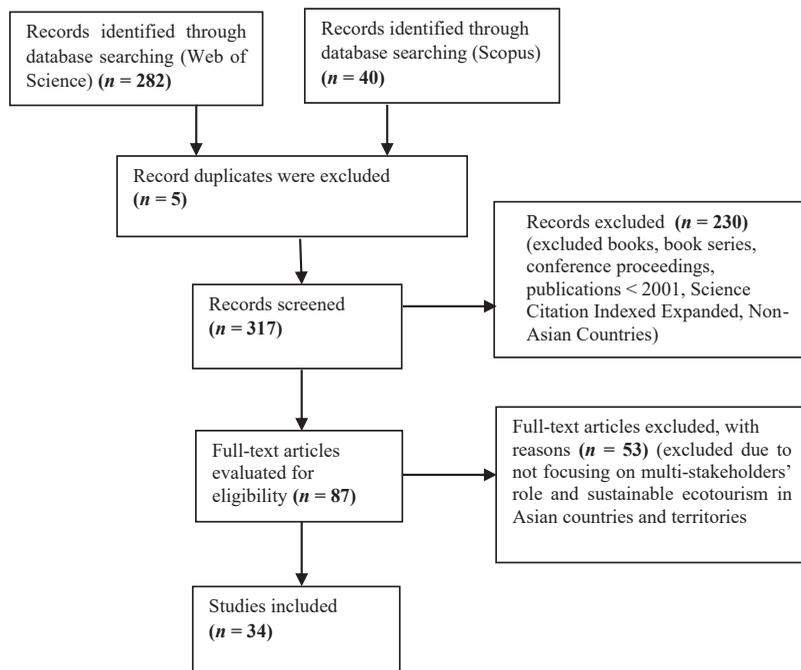
The systematic review was conducted in May 2021 and comprised four stages. The first stage involved determining search terms for the articles. In line with prior studies and thesauri, similar keywords pertaining to the multi-stakeholder role and sustainable ecotourism in Asian countries were employed, as specified in the previous subsection. This phase culminated with the elimination of five duplicate papers after careful examination. In the second stage (ongoing screening), 230 out of 317 shortlisted publications were discarded. The third stage (eligibility) led to the exclusion of an additional 53 studies, primarily due to their insufficient emphasis on community participation in biosphere reserve management. The final stage resulted in the selection and incorporation of 34 publications into this study, in alignment with the guidelines of [Moher et al. \(2009\)](#), [Rasul \(2019\)](#), [Ebekoziem \(2021\)](#), [Ebekoziem et al. \(2022\)](#) and [Madanaguli et al. \(2022\)](#). As illustrated in [Figure 1](#), the process begins with Phase 1 (identification), followed by the screening phase, with the final two phases representing the eligibility and inclusion stages.

### *Abstraction and analysis of data*

The selected published studies were appraised and examined. The data were extracted by evaluating first the abstracts and then the complete articles to identify acceptable topics and sub-themes related to multi-stakeholders' role in sustainable ecotourism in Asia. The themes were matched with the recognized research questions. The results of this research are discussed in the next section.

## **Results and discussion**

This section discusses the findings and analyses of the systematically evaluated articles over the many themes that emerged. When it comes to Asian sustainable ecotourism, three themes emerged from the results of the reviewed publications, with an emphasis on the role of multi-stakeholders. The themes are the role of multi-stakeholders in achieving sustainable ecotourism, obstacles facing sustainable ecotourism and prospective policy measures to improve sustainable ecotourism in Asia, as shown in [Table 2](#). This section also discusses the



**Figure 1.** Systematic evaluation of papers on Asian multi-stakeholder role in sustainable ecotourism

**Source(s):** Adapted from Moher *et al.* (2009) and Jaafar *et al.* (2021)

paper's implications, shortcomings and recommendations for future research. The findings provided a comprehensive examination of multi-stakeholders' role in promoting sustainable ecotourism in Asian communities. As per [Table 2](#), seven studies focused on sustainable ecotourism in Malaysia and five on sustainable ecotourism in the Philippines. Four studies focused on stakeholders' participation in sustainable ecotourism in Nepal. Six studies focused on stakeholders' participation in sustainable ecotourism in China and three on stakeholders' participation in sustainable ecotourism in Thailand. Three studies concentrated on stakeholders' participation in sustainable ecotourism in Japan, Jordan and Taiwan, respectively. Lastly, one study focused on stakeholders' participation in sustainable ecotourism in India, Indonesia and Korea. Regarding the research design used, three articles employed a mixed-methods technique, seven reviewed papers used a quantitative method and 24 reviewed papers used a qualitative approach. Concerning the year of publication, one paper was published in 2021, five papers were published in 2019 or 2018, followed by three papers published in 2012 or 2008 and two studies published in each of the years 2017, 2014, 2013, 2011 and 2006. One study was published in each of the years 2020, 2016, 2015, 2010, 2007, 2004, 2002 and 2001.

#### *Role of multi-stakeholders in achieving sustainable ecotourism*

This section concentrates on multi-stakeholders' role in achieving sustainable ecotourism across Asian countries. Within the study's scope, 23 out of 34 articles focused on stakeholders' roles in sustainable ecotourism. Findings show that multi-stakeholders' role in achieving sustainable ecotourism across Asia cannot be over-emphasized. There is a need to strengthen a collaborative partnership. This will serve as an instrument for problem-solving

Authors	Country	Main design	Multi-stakeholders' role in sustainable ecotourism	Obstacles facing sustainable ecotourism in Asia	Possible solutions to enhance sustainable ecotourism
			EC ES PC ED LD CN FV IF LE WC TM SA LK EE SF IC IE PS DP CS IB IC RL LF	IF LE WC TM SA LK EE SF IC IE PS DP CS IB IC RL LF	DP CS IB IC RL LF
Xu <i>et al.</i> (2014)	China	QL	✓	✓	✓
Zhuang <i>et al.</i> (2011)	China	QL	✓	✓	✓
Nianyong and Zhuge (2001)	China	QN	✓	✓	✓
Su <i>et al.</i> (2014)	China	MM	✓	✓	✓
Weng <i>et al.</i> (2019)	China	QL	✓	✓	✓
Zhu <i>et al.</i> (2021)	China	MM	✓	✓	✓
Clifton and Benson (2006)	Indonesia	QL	✓	✓	✓
Chan <i>et al.</i> (2020)	Japan	QL	✓	✓	✓
Jones <i>et al.</i> (2018)	Japan	QL	✓	✓	✓
Alazaizeh <i>et al.</i> (2019)	Jordan	QL	✓	✓	✓
Tarawneh and Wray (2017)	Jordan	QL	✓	✓	✓
Kim and Park (2017)	Korea	QN	✓	✓	✓
Thompson <i>et al.</i> (2018)	Malaysia	QL	✓	✓	✓
Chan and Baum (2007)	Malaysia	QL	✓	✓	✓
Kayat (2002)	Malaysia	QL	✓	✓	✓
Azmi and Awang (2012)	Malaysia	QL	✓	✓	✓
Che Aziz <i>et al.</i> (2013)	Malaysia	QL	✓	✓	✓
Gan <i>et al.</i> (2019)	Malaysia	QL	✓	✓	✓
Jamal <i>et al.</i> (2011)	Malaysia	QN	✓	✓	✓
Baral <i>et al.</i> (2008)	Nepal	QN	✓	✓	✓
Acharya and Halpenny (2013)	Nepal	QL	✓	✓	✓
KC <i>et al.</i> (2015)	Nepal	QN	✓	✓	✓
Musa <i>et al.</i> (2004)	Nepal	QN	✓	✓	✓
Lai and Nepal (2006)	Nepal	QN	✓	✓	✓
Liu <i>et al.</i> (2019)	Taiwan	QL	✓	✓	✓
Catibog-Sinha (2010)	Philippines	QL	✓	✓	✓
Okazaki (2008)	Philippines	MM	✓	✓	✓
Camacho <i>et al.</i> (2016)	Philippines	MM	✓	✓	✓
Balatibat (2008)	Philippines	QL	✓	✓	✓
Nolan and Rotherham (2012)	Philippines	QL	✓	✓	✓

(continued)

## Ecotourism in Asia: stakeholder roles

**Table 2.** Main findings from studies on multi-stakeholder role in Asian sustainable ecotourism

Table 2.

Authors	Country	Main design	Multi-stakeholders' role in sustainable ecotourism EC ES PC ED LD CN FV IF LE WC TM SA LK EE SF IC IE PS DP CS IB IC RL LF	Obstacles facing sustainable ecotourism in Asia	Possible solutions to enhance sustainable ecotourism
Dabphet <i>et al.</i> (2012)	Thailand	QL		✓	✓
Pookhao Sonjai <i>et al.</i> (2018)	Thailand	QL	✓	✓	✓
Palmer and Chuamuangphan (2018)	Thailand	QL	✓	✓	✓
Cabral and Dhar (2020)	India	QL		✓	✓
Multi-stakeholders' role in sustainable ecotourism					
Encumbrances facing sustainable ecotourism			Possible solutions to enhance sustainable ecotourism		
EC = Environmental conservation	IF = Inadequate infrastructure			IE = Mechanism to make it all-inclusive irrespective of the educational background	
ES = Enhancement of society	LE = Lower education			PS = Partnership with the private sector	
PC = Preservation of culture	WC = Weak collaboration			DP = Different patterns of ecotourism should be encouraged and promoted	
ED = Economic development	TM = Top-down imposition of western model			CS = Cultural sensitivity in the imposition of top-down Western model	
LE = Livelihood enhancement	SA = Lack of local capacity to proffer solution to environmental stress			IB = Investment in building local skills and infrastructural facilities	
CN = Cultural and natural heritage features	LK = Limited knowledge about sustainable ecotourism			IC = Enhancement of institutional capabilities	
FV = Educational/Functional value	EE = Lack of enabling policy environment/???			RL = Research and learning	
	SF = Shortage of funds			LF = Formulation of a legal framework for ecotourism	
	IC = Fear of environmental degradation				
<b>Note(s):</b> QN, Quantitative; QL, Qualitative; MM, Mixed method					
<b>Source(s):</b> Table created by authors					

---

within a problematic realm and mitigate the spirit of independent behavior by individual key stakeholders. The findings from the examined literature were that the stakeholders' role in environmental conservation, the preservation of culture, livelihood enhancement and economic development, among other aspects, contributed to the achievement of sustainable ecotourism. The authors agree that stakeholders' interdependence has potential mutual benefits, and the outcome is enhanced sustainable ecotourism. In China, ecotourism was introduced in 1992, but over the years, the Chinese practice of ecotourism has differed from that in the Western (Xu *et al.*, 2014; Su *et al.*, 2014; Zhu *et al.*, 2021). One of the unique features of China's ecotourism is promoting health with an emphasis on human art and artifacts. This feature enhances nature (Donohoe and Lu, 2009). The State Tourism Administration designated 1999 as the "Year of China's Eco-Tour" (Nianyong and Zhuge, 2001; Zhu *et al.*, 2021). The global influence enhances the growth of ecotourism in China, modernizing it and including environmental and ecological movements, and stakeholders play a vital part in this. In Jordan, Alazaizeh *et al.* (2019) found that one of the tourist centers (Petra) provides a combination of cultural and natural heritage features. The City of Petra was listed as a World Heritage Site in 1985 (Tarawneh and Wray, 2017).

In Malaysia, several studies, for example, Gan *et al.* (2019), have established that the multi-stakeholder's role in achieving sustainable ecotourism is critical and significant. The authors found that inadequate management of the lead institution of Temengor in Perak State Parks Corporation created unrestricted access to guests and solid waste dumping in Temengor sites. The authors suggested the need for the appropriate authorities/agencies to demonstrate leadership while collaborating with other multi-stakeholders. Similarly, Chan and Baum (2007) affirmed that Malaysia's ecotourism is the fastest-growing tourism subsector. In the study, the authors attempted to explore the ecotourists' perceptions. The authors found that the participants' hedonic answers were evident and closely related to nature, the environment and ecotourism tasks. KC *et al.* (2015) found that the role of the stakeholders in the Annapurna conservation area in Nepal has helped in socio-economic development and environmental protection. One of the outcomes is enhanced livelihoods and the preservation of the people's culture. In addition, the authors found that employment opportunities increased from multi-stakeholders participation in sustainable ecotourism.

It can be observed that the studies have identified different roles of multi-stakeholders according to the destination. This is because multi-stakeholders have diverse roles to play, but their involvement can be subject to their interests. Nevertheless, the studies mentioned above have highlighted some critical roles multi-stakeholders play in achieving ecotourism sustainability. Researchers such as Salman *et al.* (2021c) and Jaafar *et al.* (2021) have noted that multiple stakeholders are key to implementing ecotourism; therefore, their roles should be adequately understood. This calls for leadership among multi-stakeholders. Leadership roles can protect the destination from unwanted external influences and also guide other stakeholders of the destination towards conservation activities in the region. On the other hand, weak leadership or an absence of leadership for the destination will culminate in conflict among institutions, communities and tourists and generate inadequate income alternatives.

Additionally, as noted in Table 2, the studies mentioned above pointed out that multiple stakeholders can collaborate to achieve ecotourism sustainability in the destination. This stakeholder collaboration to achieve ecotourism sustainability can occur at different levels, such as governmental, private, or personal, but achieving collaboration among multiple stakeholders is difficult due to the presence of diverse interests among them. However, collaboration among multiple stakeholders will help to achieve ecotourism goals in the destination and result in the greater good of the destination. Collaboration can lead to a potential increase in resources, enhance management in the destination, introduce innovation in the region and help make the destination competitive. Most importantly, collaboration can

---

result in aligning stakeholders towards the same goal, which is achieving ecotourism sustainability in the destination. Additionally, this can help resolve environmental problems, which is considered one of the most significant roles of stakeholders in an ecotourism destination. Sustainable ecotourism brings these benefits, but achieving them without stakeholders clearly understanding their roles is impractical. Therefore, stakeholders play a crucial role in achieving the destination's environmental, socio-cultural and economic goals.

---

#### *Obstacles facing sustainable ecotourism*

This section focuses on the obstacles facing multi-stakeholders in sustainable ecotourism in Asian countries. Twenty-one studies reported that there are obstacles facing the stakeholders in sustainable ecotourism in Asian countries. There are eight major obstacles, as identified in [Table 2](#). They include inadequate infrastructure, weak collaboration among the stakeholders, top-down imposition of the Western model, the lack of enabling policy environment, a shortage of funds and limited knowledge about sustainable ecotourism. Many studies in China, such as [Xu et al. \(2014\)](#) and [Nianyong and Zhuge \(2001\)](#), found the top-down imposition of the Western conservation model with insignificant consideration of Chinese culture to be the key factor hindering sustainable ecotourism. The implementation of the Western conservation model sometimes goes beyond imposition, but decisions were also made and actions executed under the imposed and external regulators. One of the negative impacts is that it erodes existing local skills and knowledge. While the “Westernised” knowledge may become mandatory to the executors, there are some complications. [Xu et al. \(2014\)](#) found that although there are some modifications to local conservation administration, the basic conservation philosophies are the same as those promulgated by the International Union for Conservation of Nature. [Nianyong and Zhuge \(2001\)](#) identified a shortage of funds, weak scientific research and a lack of unified policy and planning, among other challenges facing China's nature reserves. In India, economic leakages, a lackadaisical government approach, a lack of environmental education, poor infrastructure, conflicts between stakeholders and fear of environmental degradation, among other factors, were identified by [Cabral and Dhar \(2020\)](#) as challenges facing sustainable ecotourism. In Jordan, [Tarawneh and Wray \(2017\)](#) identified political violence in the region, limited institutional capacity, inadequate implementation of strategic planning activities, inadequate building regulations and poor-quality tourism products, among other factors, as the challenges facing sustainable ecotourism.

In Malaysia, [Thompson et al. \(2018\)](#) identified competition and resentment among stakeholders, governance operations, environmental issues and socio-economic challenges as the significant challenges facing sustainable ecotourism in Langkawi, Malaysia. The authors noted that the consensus achieved by [Weaver and Lawton \(2007\)](#) might be true academically, but achieving it practically is challenging. [Thompson et al. \(2018\)](#) arrived at this conclusion because of the findings of their study exploring entrepreneurs' perspectives on environmental and economic sustainability in Langkawi, Malaysia. Their findings show that some of the key stakeholders (entrepreneurs) are not unavoidably tying environmental matters to entrepreneurial opportunity. The entrepreneurs seem to view the “eco” in ecotourism as a competitive platform rather than a sustainable transformer to conventional forms of tourism. This brings us to the debatable issue of the incompatibilities between entrepreneurship and ecotourism, but this is not within the scope of this paper. [Gan et al. \(2019\)](#) found inadequate management of the lead institution of Temengor, allowing visitors free entry and the relaxed regulation of solid waste disposal in Temengor forest sites as significant issues. This is one of the outcomes of the dual governance structure and created tension between various policies that protect the decisions of the Perak State. [Camacho et al. \(2016\)](#) found that changing needs, the interests of the locals and the proliferation of government programs to modernize farming technologies are the challenges facing

---

sustainable ecotourism in the Philippines. The authors suggested that the government, NGOs and other concerned stakeholders should support pro-sustainable ecotourism programs with an emphasis on the protection of the culture and heritage of the people while the environment is protected.

As stated above, the main obstacles found in the study were the lack of infrastructure, poor knowledge about ecotourism, the lack of an enabling policy environment, a shortage of funds and trying to implement the Western model in Asian settings. The destinations that were not successful in the implementation also faced these issues later on and became examples of destinations that failed to implement ecotourism adequately. Policymakers have to consider these obstacles to ensure that they do not repeat the same mistake as pointed out by the authors above; otherwise, these issues will pose a threat to successful conservation and ecotourism development in the area.

#### *Possible policy solutions to enhance sustainable ecotourism*

Out of 34 studies, 29 examined potential solutions to improve the role of stakeholders in sustainable ecotourism. Several studies, including [Nianyong and Zhuge \(2001\)](#), [Zhuang \*et al.\* \(2011\)](#), [Su \*et al.\* \(2014\)](#), [Kim and Park \(2017\)](#), [Thompson \*et al.\* \(2018\)](#), [Alazaizeh \*et al.\* \(2019\)](#), [Gan \*et al.\* \(2019\)](#) and [Zhu \*et al.\* \(2021\)](#) acknowledged the role of stakeholders in sustainable ecotourism and biodiversity conservation. Amongst the key suggestions by the Asian authors is the formulation of a legal framework for ecotourism, the enhancement of institutional capabilities and government and private sector investment in building local skills and infrastructural facilities. They also suggested that government tourism sites should partner with the private sector. In China, [Xu \*et al.\* \(2014\)](#) recommended different patterns of ecotourism practices. This should be encouraged and promoted. The authors suggested a rethink for a more culturally sensitive setting concerning the imposition of a top-down model on the protected areas by some of China's authorities. Since a majority of the ecotourism locations are rural areas, the government needs to enhance institutional capabilities and sustainable rural development ([Zhuang \*et al.\*, 2011](#)). [Nianyong and Zhuge \(2001\)](#) suggested a four-way approach to developing ecotourism in China: development, investment, learning and research. In this context, development entails the creation of ecotourism infrastructure, demonstration sites, policies and regulations, while investment should be from both the private and public sectors. In India, [Cabral and Dhar \(2020\)](#) advocated for community-based ecotourism and said that major stakeholders should encourage environmentally friendly technologies. Technology can help to improve the access to information, knowledge and education for the local communities and other stakeholders involved in ecotourism development. For instance, digital platforms, mobile apps and online courses can provide relevant and updated information on ecotourism best practices, market trends and environmental issues ([Alauddin \*et al.\*, 2022](#)). Technology can also help to enhance the transparency and accountability of ecotourism management and governance. For example, big data, artificial intelligence and blockchain can enable data-driven decision making, performance monitoring and stakeholder participation ([Hossain \*et al.\*, 2022a](#); [Tushar \*et al.\*, 2022](#)). Moreover, technology can also help to foster the innovation and competitiveness of ecotourism products and services. For example, virtual reality, augmented reality and gamification can create immersive and interactive experiences for tourists, while also raising their awareness and appreciation of the natural and cultural heritage of the destinations ([Hossain \*et al.\*, 2022b](#)).

[Tarawneh and Wray \(2017\)](#) affirmed that sustainable development is an international standard for nations like Jordan that rely on the economic benefits of tourism. The authors recommended that there should be a balance between the economic, environmental and socio-cultural impacts of tourism. In Malaysia, [Gan \*et al.\* \(2019\)](#) suggested that leadership is key

---

even in multi-actor collaboration concerning the environmental management of sustainable ecotourism destinations. The authors opined that in a dual governance structure, there is a need for the leadership structure to be well-defined. In Nepal, [Baral \*et al.\* \(2008\)](#) found that an increase in the gate fee would probably provide extra resources for biodiversity conservation and the sustainable development of the location without extreme costs to the communities. The outcome might be a more equitable distribution of benefits via the broader engagement of communities through conservation and development projects. In Taiwan, [Lai and Nepal \(2006\)](#) recommended a holistic strategy to integrate the political, socio-economic and ecological contexts into sustainable ecotourism.

In the Philippines, [Catibog-Sinha \(2010\)](#) found that there is a government initiative to integrate biodiversity conservation and sustainable ecotourism. This has been documented in their National Ecotourism Strategy via the national tourism policy framework. Other Asian countries could copy this novel approach from the Philippines concerning biodiversity and natural heritage protection via sustainable ecotourism. This is one of the unique ways to develop sustainable ecotourism. Partnerships in conservation and tourism involving communities, the tourism sector, administrative agencies, non-government organizations and research institutes should be strengthened. Also recommended is the supply of viable technical and financial support to strengthen the implementation of policies and programs via empowering the community in sustainable ecotourism development and biodiversity conservation. This is because the Philippines is a biologically rich nation regarding biodiversity and conservation. In the Philippines, [Okazaki \(2008\)](#) developed a model that may give better directives on achieving community-based sustainable ecotourism in practice. The model will enhance stakeholders' knowledge concerning community participation in sustainable ecotourism. Also, [Nolan and Rotherham \(2012\)](#) suggested improving the management of volunteer consumer dimensions. This will enhance volunteer ecotourism's sustainability by enhancing the potential for destination loyalty. In Thailand, [Dabphet \*et al.\* \(2012\)](#) suggested that for sustainable ecotourism development, key multi-stakeholders should be encouraged to start thinking about the long term, with an emphasis on conserving the local cultural and natural surroundings, along with the local community. Also, [Palmer and Chuamuangphan \(2018\)](#) recommended that local participants in ecotourism should be recognized. This would lead to wider social structures, values and practices.

Moreover, workshops or implementing environmental education at the school level can enhance awareness and understanding ([Baloch \*et al.\*, 2023](#)). Proper infrastructure in the destination not only makes the destination successful but also helps to make the destination sustainable ([Santos \*et al.\*, 2022](#)). Therefore, infrastructure development should be the key focus of policymakers, along with environmental protection policies. Additionally, every destination has its specific conditions, and it is vital for policymakers to understand those conditions. Just because the policies worked well in the West does not mean that they will also work well in Asian settings. Regional factors such as culture and environment have to be studied, and policies should be made accordingly.

## Conclusion

The multi-stakeholder role has become the essential narrative in existing sustainable ecotourism management practices worldwide. Ecotourism helps to enhance forest cover, preserve flora and fauna, increase greenery and intensify the practice of sustainability. Existing studies have established that sustainable ecotourism is one of the popular approaches to ecotourism development across Asia. However, this paper has reservations regarding the level at which multi-stakeholders, especially the host communities, understand the principles and possible implementation of ecotourism. This aspect of the debate is not within the scope of this paper. However, findings show that an enhanced

multi-stakeholder role in sustainable ecotourism is critical for better ecotourism governance and “conservation with Asian attributes” would enhance modern ecological sustainable ecotourism. “Asian attributes” emphasizes that culture should be protected while standardization for ecotourism is observed. The paper identified environmental conservation, the enhancement of society, the preservation of culture, economic development and livelihood enhancement, among other functions, as the stakeholders’ role in achieving sustainable ecotourism. The findings indicate that with increased stakeholder engagement in sustainable ecotourism across Asia, environmental conservation, economic growth and protection measures might potentially expand. Hence, the rationale for this study, along with some plausible potential solutions, removes impediments and strengthens stakeholders’ roles in sustainable ecotourism.

Some of the potential solutions derived from this study are that the government and private sectors should invest in building local skills and infrastructural facilities for these tourism sites and increase the institutional capabilities concerning the tourism sites. Partnership with the private sector is also recommended for ecotourism managers/custodians. Furthermore, international partnership mechanisms with a sensitivity to cultural and heritage preservation should be encouraged. This will close the previously unnoticed gaps in implementing the Western model in specific areas. Thus, the importance of enhancing regional and international cooperation to advance conservation and development throughout Asia cannot be overstated. Collaboration among the stakeholders is also germane to the success of sustainable ecotourism. This is because of the diversity of stakeholders. Without enhanced collaboration and cooperation among the stakeholders, the empowerment of communities via sustainable ecotourism will be complex. One possible reason is that collaborative efforts may promote the well-being of communities and their environment, including their cultural sensitivity. As a result, it is critical for scholars and policymakers to build and formulate a legal framework through ecotourism policies and management activities that will represent indigenous peoples’ economic and future interests while placing a premium on environmental and cultural sustainability. One of the benefits will be the creation of long-term employment possibilities for residents living near tourism destinations. This study makes a significant contribution by providing a comprehensive review of the multi-stakeholder role in sustainable ecotourism across Asia, a topic that has been under-explored in the existing literature. The geographical focus of this research is particularly important, as it addresses a gap in the literature and offers insights that are directly relevant to the region’s unique cultural, environmental and socio-economic conditions. The findings of this study, which identify key obstacles and propose innovative policy solutions, have the potential to significantly influence policy and practice in the region. It not only identifies the key roles of stakeholders and the challenges they face but also proposes practical solutions for enhancing sustainable ecotourism. Moreover, the study underscores the critical role of stakeholders in achieving ecotourism sustainability, leading to environmental conservation, socio-cultural enhancement and economic development. This insight, which extends beyond the academic discourse to have practical implications for policy-making, positions this study as a valuable resource for both scholars and practitioners. This paper concludes that an effective stakeholders’ role would enhance sustainable ecotourism and preservation of the cultural heritage of the locals and improve the management efficiency of the tourist sites. The result would benefit communities and stakeholders throughout Asia and, by extension, the rest of the world. Therefore, this paper will unravel extra integrative and strategic techniques for the sustainable growth and management of ecotourism for countries within Asia while focusing on cultural heritage for future sustainability. This is one of the possible ways the concept and principles of ecotourism can be translated into the real world.

---

*Paper implications*

This study enriches the existing literature on the multi-stakeholder role in sustainable ecotourism within the Asian context, extending its implications and overall significance in three primary ways. The research provides a thorough examination of the multi-stakeholder's involvement in the advancement of sustainable ecotourism in Asia, encompassing several prominent countries in accordance with the framework proposed by Shaffril *et al.* (2018). Although a multitude of studies have explored the multi-stakeholder role in sustainable ecotourism, there remains a dearth of comprehensive review efforts. This research seeks to bridge this gap, offering an insight into the roles of the multi-stakeholders, the challenges of achieving sustainable ecotourism and potential avenues for its enhancement. Furthermore, the study's findings can contribute to the existing body of knowledge on ecotourism in Asia by shedding light on the various themes that have emerged. These themes offer valuable insights into the roles, difficulties and potential solutions that are specific to the Asian environment. The aforementioned addition serves to enhance the current corpus of information regarding tourism in the Asian region. This research presents a comprehensive analysis of information, discourse and potential strategies to improve comprehension of stakeholder responsibilities in the field of ecotourism.

After a meticulous analysis of various studies, identifying main issues concerning stakeholder roles and the implementation of ecotourism, the study presents potential solutions and actionable insights to policymakers and NGOs that are specifically relevant to the Asian context. NGOs play a critical role in community engagement, conservation efforts and raising awareness about sustainable tourism practices. Businesses should adopt sustainable operational practices, actively involve local communities and innovate in eco-friendly tourism offerings. This information can assist in managing stakeholders more effectively, thus facilitating the process of ecotourism implementation.

Secondly, the research findings provide policymakers and stakeholders with a fresh perspective on the importance of the multi-stakeholder role in promoting sustainable ecotourism across Asia. Thirdly, the study undertakes a comprehensive exploration of the challenges faced by multi-stakeholders in promoting sustainable ecotourism throughout Asia and proposes policy solutions.

This research, furthermore, extends its implications to environmental activists and other stakeholders engaged in sustainable ecotourism in Asia and beyond, offering guidance for their roles in sustainable ecotourism. The study also presents further evidence of sustainable ecotourism, suggesting a collaborative partnership among multi-stakeholders for its enhancement, providing practical implications for policymakers in the region.

Lastly, this research underlines the importance of understanding stakeholder roles in achieving ecotourism sustainability. This understanding could assist in implementing ecotourism at the destination, creating alternative income sources for the local community. Furthermore, an understanding of stakeholder roles could promote environmental awareness, improve the socio-cultural impact of tourism and facilitate efficient natural resource management to ensure the area's long-term viability.

*Limitations and future research directions*

Despite the significant implications and contributions of this study, there are a few limitations that future studies should address. This paper's analysis was based on a systematic review of past scholarly findings. This tactic was utilized to fill a present gap in the literature regarding the role of multi-stakeholders in sustainable ecotourism in Asian countries. This paper recognizes the shortcomings of the systematic review approach but that does not compromise the robustness of this study. As this research is limited to understanding the roles of stakeholders in Asia, to understand the roles in a different

geographical context, future research should consider other review objectives and expand the research to other continents. Moreover, other than the roles, future studies could focus on the key indicators for ecotourism success; identifying the key factors from the perspective of Asian ecotourism could lead on to a global perspective. This would increase the generalizability of the findings for future studies. Additionally, the COVID-19 pandemic has impacted tourism destinations and stakeholders residing in those destinations (Salman *et al.*, 2021a) because of travel restrictions and lockdowns worldwide. It would be interesting to find out how the roles of stakeholders have changed because of the pandemic. Therefore, future researchers could investigate this novel area. Lastly, looking ahead, the future of ecotourism in Asia hinges on adapting to global eco-conscious trends and technological advancements, while contending with challenges like climate change and balancing cultural preservation with modernization. Collaborative efforts for sustainability and sustainable destination management strategies will be key in maintaining the region's ecological and cultural integrity, ensuring the longevity and success of its ecotourism sector.

## References

- Acharya, B.P. and Halpenny, E.A. (2013), "Homestays as an alternative tourism product for sustainable community development: a case study of women-managed tourism product in rural Nepal", *Tourism Planning and Development*, Vol. 10 No. 4, pp. 367-387, doi: [10.1080/21568316.2013.779313](https://doi.org/10.1080/21568316.2013.779313).
- Alauddin, M., Hossain, S.F.A. and Mowla, M.M. (2022), "Mobile technology and applications in the tourism and hospitality industry of Hong Kong", in *Technology Application in Tourism in Asia: Innovations, Theories and Practices*, Springer Nature Singapore, Singapore, pp. 255-266.
- Alazaizeh, M.M., Hallo, J.C., Backman, S.J., Norman, W.C. and Vogel, M.A. (2019), "Giving voice to heritage tourists: indicators of quality for a sustainable heritage experience at Petra, Jordan", *Journal of Tourism and Cultural Change*, Vol. 17 No. 3, pp. 269-284, doi: [10.1080/14766825.2018.1455693](https://doi.org/10.1080/14766825.2018.1455693).
- Allcock, A. and Evans-Smith, D. (1994), *National Ecotourism Strategy*, Commonwealth Department of Tourism, Canberra.
- Azmi, K.M. and Awang, K.W. (2012), "Sustainable tourism development and stakeholders' networking: a case study on medical tourism in Malaysia", *Current Issues in Hospitality and Tourism Research and Innovations*, pp. 571-574.
- Balatibat, J.B. (2008), "Wildlife diversity studies and conservation efforts in the Philippines", *Forest Science and Technology*, Vol. 4 No. 1, pp. 1-4, doi: [10.1080/21580103.2008.9656331](https://doi.org/10.1080/21580103.2008.9656331).
- Baloch, Q.B., Shah, S.N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S. and Khan, A.U. (2023), "Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism", *Environmental Science and Pollution Research*, Vol. 30 No. 3, pp. 5917-5930, doi: [10.1007/s11356-022-22496-w](https://doi.org/10.1007/s11356-022-22496-w).
- Baral, N., Stern, M.J. and Bhattarai, R. (2008), "Contingent valuation of ecotourism in Annapurna conservation area, Nepal: implications for sustainable park finance and local development", *Ecological Economics*, Vol. 66 Nos 2-3, pp. 218-227, doi: [10.1016/j.ecolecon.2008.02.004](https://doi.org/10.1016/j.ecolecon.2008.02.004).
- Batten, J. and Brackett, A. (2022), "Ensuring rigor in systematic reviews: part 6, reporting guidelines", *Heart and Lung*, Vol. 52, pp. 22-25, doi: [10.1016/j.hrtlng.2021.11.002](https://doi.org/10.1016/j.hrtlng.2021.11.002).
- Cabral, C. and Dhar, R.L. (2020), "Ecotourism research in India: from an integrative literature review to a future research framework", *Journal of Ecotourism*, Vol. 19 No. 1, pp. 23-49, doi: [10.1080/14724049.2019.1625359](https://doi.org/10.1080/14724049.2019.1625359).
- Camacho, L.D., Gevaña, D.T., Carandang, A.P. and Camacho, S.C. (2016), "Indigenous knowledge and practices for the sustainable management of Ifugao forests in Cordillera, Philippines",

- 
- International Journal of Biodiversity Science, Ecosystem Services and Management*, Vol. 12 Nos 1-2, pp. 5-13, doi: [10.1080/21513732.2015.1124453](https://doi.org/10.1080/21513732.2015.1124453).
- Catibog-Sinha, C. (2010), "Biodiversity conservation and sustainable tourism: philippine initiatives", *Journal of Heritage Tourism*, Vol. 5 No. 4, pp. 297-309, doi: [10.1080/1743873X.2010.517841](https://doi.org/10.1080/1743873X.2010.517841).
- Catibog-Sinha, C. and Wen, J. (2008), "Sustainable tourism planning and management model for protected natural areas: Xishuangbanna biosphere reserve, South China", *Asia Pacific Journal of Tourism Research*, Vol. 13 No. 2, pp. 145-162, doi: [10.1080/10941660802048431](https://doi.org/10.1080/10941660802048431).
- Chan, J.K.L. and Baum, T. (2007), "Ecotourists' perception of ecotourism experience in lower Kinabatangan, Sabah, Malaysia", *Journal of Sustainable Tourism*, Vol. 15 No. 5, pp. 574-590, doi: [10.2167/jost679.0](https://doi.org/10.2167/jost679.0).
- Chan, C.S., Nozu, K. and Cheung, T.O.L. (2020), "Tourism and natural disaster management process: perception of tourism stakeholders in the case of Kumamoto earthquake in Japan", *Current Issues in Tourism*, Vol. 23 No. 15, pp. 1864-1885, doi: [10.1080/13683500.2019.1666809](https://doi.org/10.1080/13683500.2019.1666809).
- Che Aziz, R., Abdul, M., Abdul Aziz, Y. and Abd Rahman, A. (2013), "Appreciative inquiry: an alternative re-search approach for sustainable rural tourism development", *Journal of Tourism, Hospitality and Culinary Arts*, Vol. 5 No. 2, pp. 1-18.
- Clifton, J. and Benson, A. (2006), "Planning for sustainable ecotourism: the case for research ecotourism in developing country destinations", *Journal of Sustainable Tourism*, Vol. 14 No. 3, pp. 238-254, doi: [10.1080/09669580608669057](https://doi.org/10.1080/09669580608669057).
- Dabphet, S., Scott, N. and Ruhanen, L. (2012), "Applying diffusion theory to destination stakeholder understanding of sustainable tourism development: a case from Thailand", *Journal of Sustainable Tourism*, Vol. 20 No. 8, pp. 1107-1124, doi: [10.1080/09669582.2012.673618](https://doi.org/10.1080/09669582.2012.673618).
- Deb, B.C., Rahman, M.M. and Rahman, M.S. (2023), "The impact of environmental management accounting on environmental and financial performance: empirical evidence from Bangladesh", *Journal of Accounting and Organizational Change*, Vol. 19 No. 3, pp. 420-446, doi: [10.1108/JAOC-11-2021-0157](https://doi.org/10.1108/JAOC-11-2021-0157).
- Donohoe, H.M. and Lu, X. (2009), "Universal tenets or diametrical differences? An analysis of ecotourism definitions from China and abroad", *International Journal of Tourism Research*, Vol. 11 No. 4, pp. 357-372, doi: [10.1002/jtr.697](https://doi.org/10.1002/jtr.697).
- Ebekozien, A. (2021), "Maintenance practices in Nigeria's public health-care buildings: a systematic review of issues and feasible solutions", *Journal of Facilities Management*, Vol. 19 No. 1, pp. 32-52, doi: [10.1108/JFM-08-2020-0052](https://doi.org/10.1108/JFM-08-2020-0052).
- Ebekozien, A., Aigbavboa, C., Thwala, W.D., Amadi, C.G., Aigbedion, M. and Ogbaini, I.F. (2022), "A systematic review of green building practices implementation in Africa", *Journal of Facilities Management*, Vol. ahead-of-print No. ahead-of-print, doi: [10.1108/JFM-09-2021-0096](https://doi.org/10.1108/JFM-09-2021-0096).
- Gan, J.E., Nair, V. and Hamzah, A. (2019), "The critical role of a lead institution in ecotourism management: a case of dual governance in Belum-Temengor, Malaysia", *Journal of Policy Research in Tourism, Leisure and Events*, Vol. 11 No. 2, pp. 257-275, doi: [10.1080/19407963.2018.1516076](https://doi.org/10.1080/19407963.2018.1516076).
- Goeldner, R. and Ritchie, B. (2011), *Tourism: Principles, Practices, Philosophies*, 12th ed., Wiley, New York.
- Hossain, S.F.A., Ahsan, F.T., Nadi, A.H., Ahmed, M. and Neyamah, H. (2022a), "Exploring the role of technology application in tourism events, festivals and fairs in the United Arab Emirates: strategies in the post pandemic period", in *Technology Application in Tourism Fairs, Festivals and Events in Asia*, Springer Singapore, Singapore, pp. 313-330, doi: [10.4028/www.scientific.net/amm.291-294.1447](https://doi.org/10.4028/www.scientific.net/amm.291-294.1447).
- Hossain, S.F.A., Ahsan, F.T., Mohiuddin, K., Nadi, A.H., Neamah, H., Ahmed, M. and Hassan, A. (2022b), "Technology application in the tourism and hospitality industry of the Middle East Asia", in *Technology Application in Tourism in Asia: Innovations, Theories and Practices*, Springer Nature Singapore, Singapore, pp. 109-125.

- Jaafar, M., Ebekoziien, A., Mohamad, D. and Salman, A. (2021), "A systematic review of Asian community participation in biosphere reserves", *PSU Research Review*, Vol. 7 No. 3, pp. 184-200, doi: [10.1108/PRR-12-2020-0040](https://doi.org/10.1108/PRR-12-2020-0040).
- Jamal, S.A., Othman, N.A. and Muhammad, N.M.N. (2011), "The moderating influence of psychographics in homestay tourism in Malaysia", *Journal of Travel and Tourism Marketing*, Vol. 28 No. 1, pp. 48-61, doi: [10.1080/10548408.2011.535443](https://doi.org/10.1080/10548408.2011.535443).
- Jones, T., Beeton, S. and Cooper, M. (2018), "World heritage listing as a catalyst for collaboration: can mount Fuji's trail signs point the way for Japan's multi-purpose national parks?", *Journal of Ecotourism*, Vol. 17 No. 3, pp. 220-238, doi: [10.1080/14724049.2018.1503769](https://doi.org/10.1080/14724049.2018.1503769).
- Kayat, K. (2002), "Exploring factors influencing individual participation in community-based tourism: the case of Kampung relau homestay program, Malaysia", *Asia Pacific Journal of Tourism Research*, Vol. 7 No. 2, pp. 19-27, doi: [10.1080/10941660208722116](https://doi.org/10.1080/10941660208722116).
- KC, A., Rijal, K. and Sapkota, R.P. (2015), "Role of ecotourism in environmental conservation and socioeconomic development in Annapurna conservation area, Nepal", *International Journal of Sustainable Development and World Ecology*, Vol. 22 No. 3, pp. 251-258, doi: [10.1080/13504509.2015.1005721](https://doi.org/10.1080/13504509.2015.1005721).
- Kim, K.H. and Park, D.B. (2017), "Relationships among perceived value, satisfaction, and loyalty: community-based ecotourism in Korea", *Journal of Travel and Tourism Marketing*, Vol. 34 No. 2, pp. 171-191, doi: [10.1080/10548408.2016.1156609](https://doi.org/10.1080/10548408.2016.1156609).
- Lai, P.H. and Nepal, S.K. (2006), "Local perspectives of ecotourism development in tawushan nature reserve, taiwan", *Tourism Management*, Vol. 27 No. 6, pp. 1117-1129, doi: [10.1016/j.tourman.2005.11.010](https://doi.org/10.1016/j.tourman.2005.11.010).
- Lee, D., Heffron, J.L. and Mirza, M. (2019), "Content and effectiveness of interventions focusing on community participation poststroke: a systematic review", *Archives of Physical Medicine and Rehabilitation*, Vol. 100 No. 11, pp. 2179-2192, doi: [10.1016/j.apmr.2019.06.008](https://doi.org/10.1016/j.apmr.2019.06.008).
- Libosada, C.M. Jr (2009), "Business or leisure? Economic development and resource protection—concepts and practices in sustainable ecotourism", *Ocean and Coastal Management*, Vol. 52 No. 7, pp. 390-394, doi: [10.1016/j.ocecoaman.2009.04.004](https://doi.org/10.1016/j.ocecoaman.2009.04.004).
- Liu, C.R., Lin, W.R., Wang, Y.C. and Chen, S.P. (2019), "Sustainability indicators for festival tourism: a multi-stakeholder perspective", *Journal of Quality Assurance in Hospitality and Tourism*, Vol. 20 No. 3, pp. 296-316, doi: [10.1080/1528008X.2018.1530165](https://doi.org/10.1080/1528008X.2018.1530165).
- Madanaguli, A., Srivastava, S., Ferraris, A. and Dhir, A. (2022), "Corporate social responsibility and sustainability in the tourism sector: a systematic literature review and future outlook", *Sustainable Development*, Vol. 30 No. 3, pp. 447-461, doi: [10.1002/sd.2258](https://doi.org/10.1002/sd.2258).
- Mammadova, A. (2017), "Biosphere reserve as learning sites for biocultural conservation education: Case of Mount Hakusan Biosphere Reserve in Japan", *European Journal of Sustainable Development*, Vol. 6 No. 4, 487, doi: [10.14207/ejsd.2017.v6n4p487](https://doi.org/10.14207/ejsd.2017.v6n4p487).
- McComb, E.J., Boyd, S. and Boluk, K. (2017), "Stakeholder collaboration: a means to the success of rural tourism destinations? A critical evaluation of the existence of stakeholder collaboration within the Mournes, Northern Ireland", *Tourism and Hospitality Research*, Vol. 17 No. 3, pp. 286-297, doi: [10.1177/1467358415583738](https://doi.org/10.1177/1467358415583738).
- Moher, D., Liberati, A., Tetzlaff, J. and Altman, D.G. and The PRISMA Group (2009), "Preferred reporting Items for systematic reviews and meta-analyses: the PRISMA Statement", *PLoS Medicine*, Vol. 6 No. 7, e1000097, doi: [10.1371/journal.pmed.1000097](https://doi.org/10.1371/journal.pmed.1000097).
- Musa, G., Hall, C.M. and Higham, J. (2004), "Tourism sustainability and health impact in high altitude ACE destinations: a case study of Nepal's Sagarmatha National Park", *Journal of Sustainable Tourism*, Vol. 12 No. 4, pp. 306-331, doi: [10.1080/09669580408667240](https://doi.org/10.1080/09669580408667240).
- Nianyong, H. and Zhuge, R. (2001), "Ecotourism in China's nature reserves: opportunities and challenges", *Journal of Sustainable Tourism*, Vol. 9 No. 3, pp. 228-242, doi: [10.1080/09669580108667400](https://doi.org/10.1080/09669580108667400).

- 
- Nolan, R. and Rotherham, I. (2012), "Volunteer perceptions of an ecotourism experience: a case study of ecotourism to the coral reefs of Southern Negros in the Philippines", *Journal of Ecotourism*, Vol. 11 No. 3, pp. 153-172, doi: [10.1080/14724049.2012.709248](https://doi.org/10.1080/14724049.2012.709248).
- Okazaki, E. (2008), "A community-based tourism model: its conception and use", *Journal of Sustainable Tourism*, Vol. 16 No. 5, pp. 511-529, doi: [10.2167/jost782.0](https://doi.org/10.2167/jost782.0).
- Palmer, N.J. and Chuamuangphan, N. (2018), "Governance and local participation in ecotourism: community-level ecotourism stakeholders in Chiang Rai province, Thailand", *Journal of Ecotourism*, Vol. 17 No. 3, pp. 320-337, doi: [10.1080/14724049.2018.1502248](https://doi.org/10.1080/14724049.2018.1502248).
- Pookhao Sonjai, N., Bushell, R., Hawkins, M. and Staiff, R. (2018), "Community-based ecotourism: beyond authenticity and the commodification of local people", *Journal of Ecotourism*, Vol. 17 No. 3, pp. 252-267, doi: [10.1080/14724049.2018.1503502](https://doi.org/10.1080/14724049.2018.1503502).
- Rahman, M.M. (2023), "Impact of taxes on the 2030 agenda for sustainable development: evidence from Organization for Economic Co-operation and Development (OECD) countries", *Regional Sustainability*, Vol. 4 No. 3, pp. 235-248, doi: [10.1016/j.regsus.2023.07.001](https://doi.org/10.1016/j.regsus.2023.07.001).
- Rahman, M.M. and Halim, M.A. (2022), "Does the export-to-import ratio affect environmental sustainability? Evidence from BRICS countries", *Energy and Environment*, 0958305X2211349, doi: [10.1177/0958305X221134946](https://doi.org/10.1177/0958305X221134946).
- Rahman, M.M., Hasan, J.M., Deb, C.B., Rahman, S.M. and Kabir, S.A. (2023), "The effect of social media entrepreneurship on sustainable development: evidence from online clothing shops in Bangladesh", *Heliyon*, Vol. 9 No. 9, e19397, doi: [10.1016/j.heliyon.2023.e19397](https://doi.org/10.1016/j.heliyon.2023.e19397).
- Rasul, T. (2019), "The trends, opportunities and challenges of halal tourism: a systematic literature review", *Tourism Recreation Research*, Vol. 44 No. 4, pp. 434-450, doi: [10.1080/02508281.2019.1599532](https://doi.org/10.1080/02508281.2019.1599532).
- Salleh, N.M., Salim, N.A.A., Jaafar, M., Sulieman, M.Z. and Ebekozién, A. (2020), "Fire safety management of public buildings: a systematic review of hospital buildings in Asia", *Property Management*, Vol. 38 No. 4, pp. 497-511, doi: [10.1108/PM-12-2019-0069](https://doi.org/10.1108/PM-12-2019-0069).
- Salman, A., Mastura, J. and Mohamad, D. (2020), "Strengthening sustainability: a thematic synthesis of globally published ecotourism frameworks", *African Journal of Hospitality, Tourism and Leisure*, Vol. 9 No. 3, pp. 246-258, doi: [10.46222/ajhtl.19770720-16](https://doi.org/10.46222/ajhtl.19770720-16).
- Salman, A., Kamerkar, U., Jaafar, M. and Mohamad, D. (2021a), "Empirical analysis of COVID-19 induced socio cognitive factors and its impact on residents of Penang Island", *International Journal of Tourism Cities*, Vol. 8 No. 1, pp. 210-222, doi: [10.1108/IJTC-05-2020-0091](https://doi.org/10.1108/IJTC-05-2020-0091).
- Salman, A., Jaafar, M. and Mohamad, D. (2021b), "Understanding the importance of stakeholder management in achieving sustainable ecotourism", *Pertanika Journal of Social Sciences and Humanities*, Vol. 29 No. 1, pp. 731-753.
- Salman, A., Jaafar, M., Mohamad, D. and Malik, S. (2021c), "Ecotourism development in Penang Hill: a multi-stakeholder perspective towards achieving environmental sustainability", *Environmental Science and Pollution Research*, Vol. 28 No. 31, pp. 1-14, doi: [10.1007/s11356-021-13609-y](https://doi.org/10.1007/s11356-021-13609-y).
- Salman, A., Jafaar, M. and Mohamad, D. (2022), "Perspectives of key stakeholders on ecotourism sustainability and stakeholder management: a case study of penang hill", *E-Review of Tourism Research*, Vol. 19 No. 2, pp. 159-193.
- Santos, M.C., Veiga, C., Santos, J.A.C. and Águas, P. (2022), "Sustainability as a success factor for tourism destinations: a systematic literature review", *Worldwide Hospitality and Tourism Themes*, Vol. 14 No. 1, pp. 20-37, doi: [10.1108/whatt-10-2021-0139](https://doi.org/10.1108/whatt-10-2021-0139).
- Shaffril, H.A.M., Krauss, S.E. and Samsuddin, S.F. (2018), "A systematic review on Asian's farmers' adaptation practices towards climate change", *Science of the Total Environment*, Vol. 644, pp. 683-695, doi: [10.1016/j.scitotenv.2018.06.349](https://doi.org/10.1016/j.scitotenv.2018.06.349).
- Simpson, M.C. (2008), "Community benefit tourism initiatives-a conceptual oxymoron?", *Tour Management*, Vol. 29 No. 1, pp. 1-18, doi: [10.1016/j.tourman.2007.06.005](https://doi.org/10.1016/j.tourman.2007.06.005).

- Stroup, D.F., Berlin, J.A., Morton, S.C., Olkin, I., Williamson, D.G., Rennie, D., Becker, B.J., Sipe, T.A. and Thacker, S.B. (2000), "Meta-analysis of observational studies in epidemiology: a proposal for reporting", *JAMA*, Vol. 283 No. 15, pp. 2008-2012, doi: [10.1001/jama.283.15.2008](https://doi.org/10.1001/jama.283.15.2008).
- Su, M.M., Wall, G. and Ma, Z. (2014), "Assessing ecotourism from a multi-stakeholder perspective: xingkai lake national nature reserve, China", *Environmental Management*, Vol. 54 No. 5, pp. 1190-1207, doi: [10.1007/s00267-014-0360-5](https://doi.org/10.1007/s00267-014-0360-5).
- Tarawneh, M.B. and Wray, M. (2017), "Incorporating Neolithic villages at Petra, Jordan: an integrated approach to sustainable tourism", *Journal of Heritage Tourism*, Vol. 12 No. 2, pp. 155-171, doi: [10.1080/1743873X.2016.1165231](https://doi.org/10.1080/1743873X.2016.1165231).
- Thompson, B.S., Gillen, J. and Friess, D.A. (2018), "Challenging the principles of ecotourism: insights from entrepreneurs on environmental and economic sustainability in Langkawi, Malaysia", *Journal of Sustainable Tourism*, Vol. 26 No. 2, pp. 257-276, doi: [10.1080/09669582.2017.1343338](https://doi.org/10.1080/09669582.2017.1343338).
- Tushar, H., Hossain, S.F.A., Vuong, B.N., Mohsin, A.K.M. and Horaira, M.A. (2022), "Ubiquitous role of technology based social media application in the Vietnamese tourism industry", in *Technology Application in Tourism in Asia: Innovations, Theories and Practices*, Springer Nature Singapore, Singapore, pp. 311-325.
- Uddin, K.M.K., Rahman, M.M. and Saha, S. (2023), "The impact of green tax and energy efficiency on sustainability: evidence from Bangladesh", *Energy Reports*, Vol. 10, pp. 2306-2318, doi: [10.1016/j.egy.2023.09.050](https://doi.org/10.1016/j.egy.2023.09.050).
- Weaver, D. and Lawton, L. (2002), *Tourism Management*, 2nd ed., Wiley, NY.
- Weaver, D.B. and Lawton, L.J. (2007), "Twenty years on: the state of contemporary ecotourism research", *Tourism Management*, Vol. 28 No. 5, pp. 1168-1179, doi: [10.1016/j.tourman.2007.03.004](https://doi.org/10.1016/j.tourman.2007.03.004).
- Wehn, U. and Almomani, A. (2019), "Incentives and barriers for participation in community-based environmental monitoring and information systems: a critical analysis and integration of the literature", *Environmental Science and Policy*, Vol. 101, pp. 341-357, doi: [10.1016/j.envsci.2019.09.002](https://doi.org/10.1016/j.envsci.2019.09.002).
- Wei, M. and Yang, R.R. (2013), "A research on eco-tourism development models based on the stakeholder theory", *Appl Mech Mater*, Vols 291-294, pp. 1447-1450, doi: [10.4028/www.scientific.net/amm.291-294.1447](https://doi.org/10.4028/www.scientific.net/amm.291-294.1447).
- Weng, L., He, B.J., Liu, L., Li, C. and Zhang, X. (2019), "Sustainability assessment of cultural heritage tourism: case study of Pingyao ancient city in China", *Sustainability*, Vol. 11 No. 5, 1392, doi: [10.3390/su11051392](https://doi.org/10.3390/su11051392).
- Xu, H., Cui, Q., Sofield, T. and Li, F.M.S. (2014), "Attaining harmony: understanding the relationship between ecotourism and protected areas in China", *Journal of Sustainable Tourism*, Vol. 22 No. 8, pp. 1131-1150, doi: [10.1080/09669582.2014.902064](https://doi.org/10.1080/09669582.2014.902064).
- Zhu, G., Li, X. and Zhang, Y. (2021), "Multi-stakeholder involvement mechanism in tourism management for maintaining terraced landscape in important agricultural heritage systems (iahs) sites: a case study of Dazhai village in Longji terraces, China", *Land*, Vol. 10 No. 11, 1146, doi: [10.3390/land10111146](https://doi.org/10.3390/land10111146).
- Zhuang, H., Lassoie, J.P. and Wolf, S.A. (2011), "Ecotourism development in China: prospects for expanded roles for non-governmental organisations", *Journal of Ecotourism*, Vol. 10 No. 1, pp. 46-63, doi: [10.1080/14724041003686813](https://doi.org/10.1080/14724041003686813).

### Corresponding author

Ahmad Salman can be contacted at: [ahmad.salman111@gmail.com](mailto:ahmad.salman111@gmail.com)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)