

# SUSTAINABLE COASTAL AND MARINE TOURISM IN BANGLADESH: A QUALITATIVE EVALUATION

## Abstract

 **Mohammed Shahedul QUADER**, Professor  
Department of Marketing, University of Chittagong, Bangladesh

 **H.M. Kamrul HASSAN**, Associate Professor  
Department of Marketing, University of Chittagong, Bangladesh

 **Tareq MAHBUB**, Associate Professor  
(Corresponding Author)  
Department of Marketing and International Business, North South University, Bangladesh  
E-mail: tareq.mahbub@northsouth.edu

*Purpose* – The sustainable coastal and marine tourism can be regarded as a prerequisite for ensuring socioeconomic development and maintaining an ecological balance on the planet, and it has drawn keen attention among academicians, professionals, and stakeholders. This case-study-based qualitative research employed a multi-stakeholder approach, assessing the economic, socio-cultural, and environmental impacts, both positive and negative, on coastal destinations.

*Methodology* – Data have been primarily collected through direct observation and face-to-face interviews backed by secondary literature. Semi-structured questionnaires were employed to gather data from a variety of tourism-related stakeholders from Cox's Bazar and Saint Martin, considered as tourist hotspots in Bangladesh.

*Findings* – The results revealed critical economic, social, and environmental interdependent strategic issues responsible for the sustainable CMT industry.

*Significance of the research* – The study contributes to sustainability models through addressing how multi-stakeholder collaboration can boost sustainable practices in tourism, integrating actionable recommendations based on '10Ls' factors for execution by relevant authorities.

*Originality of the research* – The originality of the study is placed on its evaluation of sustainable practices in a tourism industry vulnerable to climate change. It presents a strategic framework that provides theoretical and managerial understandings, aiding stakeholders make informed decisions to enhance sustainable tourism.

**Keywords** sustainability, coastal and marine tourism, case study, Bangladesh, stakeholder theory.

## Original scientific paper

Received 18 January 2024

Revised 23 April 2024

8 August 2024

3 October 2024

Accepted 7 October 2024

<https://doi.org/10.20867/thm.31.2.9>

## INTRODUCTION

In the tourism industry, coastal and marine tourism (CMT) is one of the most significant and rapidly growing sectors worldwide, as it offers various activities that attract tourists (Carvache-Franco et al., 2020; Chen & Bau, 2016). People worldwide are showing tremendous interest in exploring the beauty of coastal and marine areas; as a result, the economy of the tourism industry in these areas is advancing remarkably. According to (Dwyer, 2018), CMT will generate approximately 26% of the market share by 2030 and create employment opportunities for 8.6 million people in the global maritime economy. CMT plays a pivotal role in the broader tourism industry. In Bangladesh, there exists considerable untapped opportunity for coastal tourism, where about 30 million individuals, including employees and their families, depend on the blue economy, which represents the sustainable use of coastal and marine natural resources (Islam & Sarker, 2021). However, it faces heightened vulnerability, primarily from climate variability, as it relies heavily on the quality of coastal and marine ecosystems, making it susceptible to threats such as climate change and biodiversity loss (Karani & Failler, 2020). Since different livelihoods of coastal communities depend significantly on the involvement of key stakeholders at all decision-making levels as well as mitigating coastal vulnerabilities, it is crucial to understand how different stakeholders perceive and respond to the impacts of climate change (Mamun et al., 2024; Sultana & Luetz, 2022).

Sustainability in tourism is a comprehensive framework that strategically addresses ecological, economic, and social considerations aiming at long-term viability and value creation to enhance the standards of sustainable living (Sun et al., 2020). Despite the global declaration of 2017 as a sustainable tourism year, Hall (2019) contended that the tourism sector is presently less resilient. Sustainable tourism is advocated to mitigate potential adverse impacts while simultaneously providing diverse and mutually beneficial opportunities for locals and tourists (Salazar & Cardoso, 2019; Wani et al., 2024). Focusing on coastal and marine areas, sustainable tourism development seeks a balanced approach to improve the quality of life of host communities and destinations, emphasising ecological protection, economic prospects, and social justice on a long-term basis (Hanafiah et al., 2021). Although tourist demand is crucial to sustainable tourism, this supply-side approach will not solve the sustainability problem; instead, a combined effort by governments, businesses, and local communities will be necessary to lessen the prevalence of unsustainable practices (Batool et al., 2024). However, earlier research studies have expressed significant concerns regarding the futility of sustainability initiatives in coastal and marine areas, as well as the absence of cross-sectoral commitment to ecological developments (Dimitrovski et al., 2021).

Tourism experts extensively analyse the interconnectedness between tourism and sustainable development, integrating the Sustainable Development Goals (SDGs) across diverse contexts and levels (Scheyvens, 2018). Dube (Dube, 2020) underscores the susceptibility of the tourism industry to environmental resource depletion, highlighting its potential to embrace the SDGs. Focused

on promoting sustainable tourism at destination levels, the GSTC Destination Criteria (GSTC-D) underscores the importance of preserving marine and coastal environments, establishing specific standards to mitigate pollution, conserve biodiversity, and engage local communities (Council, 2019). Destinations aligning with the 2030 Agenda for Sustainable Development can positively contribute to the seventeen SDGs by adhering to these criteria, as each criterion correlates with a specific SDG. The United Nations has delineated several goals emphasising economic growth (Goal 8), responsible consumption and production (Goal 12), climate action (Goal 13), and the conservation of marine and terrestrial resources (Goal 14) (United Nations Development Programme, 2019). Sustainable tourism primarily encompasses economic, social, and environmental dimensions, which serve as suitable policy alternatives for integrating these SDGs and establishing a robust platform for sustainable development initiatives (UNDG, 2013). Three targets from distinct SDG goals explicitly bolster the sustainable CMT sector (Table 1).

Table 1: **SDG goals in connection with tourism** (UN, 2015)

SDGs	Target
Goal 8	8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
Goal 12	12. b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
Goal 14	14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

Countries across Europe, Africa, and Southeast Asia are progressively integrating sustainable coastal tourism strategies, emphasising the importance of preserving their unique coastal habitats, endemic species, and cultural heritage at tourist destinations (Drius et al., 2019; Fabinyi et al., 2022; Lowe et al., 2019; Mejjad et al., 2022; Rizzi et al., 2016). Despite this trend, many nations struggle to ensure sustainable CMT due to a lack of proactive policy implementation and decisive actions (Marafa, 2008). In Bangladesh, a country abundant in natural beauty, historical sites, and cultural heritage, significant potential for tourism development exists (Al- Masud, 2015; Mondal, 2017). While the government actively promotes sustainable CMT, popular destinations like Cox's Bazar and Saint Martin<sup>1</sup> face challenges such as overcrowding and inadequate infrastructure, necessitating the implementation of sustainable development strategies to safeguard vulnerable coastal ecosystems (Ayyam et al., 2019; V. Y. C. Chen et al., 2019). However, despite having tourism potential, there remains a deficiency in sustainable foundations and multiple stakeholder engagement, hindering the advancement of CMT in Bangladesh (Adiyia et al., 2015; Hassan et al., 2020; Yanes et al., 2019). The tourism sector encounters obstacles in achieving maturity due to the absence of coordinated, sustainable initiatives and strategic decision-making involving different stakeholders (Ananya et al., 2020; Anika et al., 2020; M. M. Islam & Shamsuddoha, 2018). Numerous studies have adopted a multi-stakeholder approach, yet very few studies have considered sustainability using this integrative approach in emerging CMT areas since where it is crucial for identifying future disputes and growth prospects (Dimitrovski et al., 2021; Roxas et al., 2020).

To address the highlighted gaps, the current study utilise the stakeholder theory to assess the economic, socio-cultural, and environmental impacts—both positive and negative—on coastal destinations, particularly Bangladesh, a climate-prone country. Additionally, the study aims to broaden the understanding of coastal and marine tourism (CMT) by promoting sustainable practices in disaster-prone regions through multi-stakeholder engagement. The research employs two case studies, utilising observation and face-to-face interviews to elucidate sustainable values that enhance the appeal of these destinations. The results revealed critical economic, social, and environmental interdependent strategic issues responsible for the sustainable CMT industry. The study presents interesting insights based on “10Ls” factors relevant to both scholars in the hospitality field and professionals in the tourism industry, providing a comprehensive examination incorporating the responses of various stakeholders that highlights the economic, socio-cultural, and environmental impacts, both positive and negative, broadly focusing on CMT.

## 1. LITERATURE REVIEW

### 1.1. Sustainable coastal and marine tourism

Sustainable CMT encompasses a diverse range of recreational activities in both coastal and marine environments, catering to the preferences of tourists seeking sun, sea, and sand experiences (M. K. Hasan et al., 2019; Sangpikul, 2018; Williams et al., 2016). Coastal tourism, which focuses on beach-based activities within 10 km of the coastline, offers opportunities for wildlife observation, coastal walks, and various water-based activities, fostering social interaction and promoting cultural heritage (European Commission, 2016; Lueck & Orams, 2016; Yustika & Goni, 2020). Conversely, marine tourism emphasises water-based activities, such as sailing, scuba diving, and marine events, often centred around ocean-related attractions and resources (European Commission, 2016; Lueck & Orams, 2016). Coastal and marine areas, historically popular for tourism, are recognised as hubs for innovation and imagination because of their unique geographical, environmental, and biological features (Romero-Padilla et al., 2016; Tan et al., 2018).

<sup>1</sup> Cox's Bazar is situated in the southeastern region of Bangladesh and home a beautiful sandy beach. It attracts more than a million visitors (local and foreigners) annually. Saint Martin with its pristine beaches, clear water and coral colonies is Bangladesh's one of the most popular tourist spots. It is a small island in the north eastern part of Bay of Bengal which is about 9 km south of the tip of Cox's Bazar.

Despite the increasing popularity of CMT in emerging destinations such as Bangladesh, there is a paucity of research examining its sociocultural, economic, and environmental impacts (Cavallaro et al., 2021; Heslinga et al., 2017). The growth of the tourism industry in Bangladesh's coastal and marine areas has brought about significant socioeconomic changes, marked by infrastructural development and business process reengineering, but also poses challenges, such as environmental sensitivity, climate variability, and the need to balance tourism activities with environmental hazards (M. Hasan et al., 2015; Mondal, 2017; Papageorgiou, 2016). To ensure the sustainability of CMT in Bangladesh, it is imperative to address constraints, such as inadequate planning, short-term sustainability focus, limited community participation, ecological awareness gaps, ineffective pollution control measures, stakeholder integration deficiencies, and insufficient publicity (Nobi & Majumder, 2019). Moreover, the sector faces global challenges related to anthropogenic impacts, including climate change, overfishing, and habitat degradation. Emerging nations are particularly vulnerable to the potential consequences of weather and climate change, rising sea levels, biodiversity loss, and ocean acidification (Belhabib et al., 2016; Bennett et al., 2019; Rashid Sumaila et al., 2019). Addressing these challenges requires comprehensive strategies to achieve CMT development goals.

## 1.2. Stakeholder Theory

Stakeholder theory posits a framework for deriving stakeholder obligations and emphasises that managers must consider the interests of the stakeholders in their decision-making processes (Donaldson, 1999; Phillips et al., 2003). According to Edward Freeman (Freeman, 2010), stakeholders refer to any person or organisation that can influence or be influenced by the organisation's goals. Based on stakeholder theory and organisational roles in multi-stakeholder networks, companies either prioritise their own welfare or address concerns influencing how they interact with other societal groups and organisations (Roloff, 2008). A multi-stakeholder network involves representatives from business, civil society, and the state collaborating to address specific issues affecting multiple societal sectors and nations (Fransen & Kolk, 2007; Roloff, 2008). In sustainable development and tourism, multiple stakeholder perspectives and actions are guided by stakeholder theory, making stakeholder analysis essential for understanding and effectively implementing sustainability initiatives (Waligo et al., 2013). Several researchers have discussed the multi-stakeholder approach (Brunetti et al., 2020; Eweje et al., 2021), but very few studies have addressed sustainability using the multi-stakeholder approach in emerging CMT areas (Dimitrovski et al., 2021). This study investigated the significance of multi-stakeholder involvement in promoting sustainable CMT, considering that a multi-stakeholder approach can develop a comprehensive CMT ecosystem by identifying potential conflicts and growth opportunities.

## 2. IMPACTS OF SUSTAINABLE COASTAL AND MARINE TOURISM

From a sustainability standpoint, three dimensions—economic, sociocultural, and environmental impacts with positive or negative consequences—have been widely discussed in earlier literature (Hall, 2001; Lee & Jan, 2019; Robinson et al., 2019).

### 2.1. Economic impact

CMT significantly contribute to the global economy, as evidenced by numerous studies highlighting their economic impact, including factors like geographical location (Duffy et al., 2016; Liu et al., 2018). Coastal countries tend to experience greater economic development benefits from tourism due to their geographical location than landlocked nations, which includes real GDP, foreign investments, and currency exchange rates (Adedoyin et al., 2022; Liu et al., 2018). Additionally, coastal tourism has been identified as a potential avenue for economic growth, particularly in transitioning livelihoods from traditional sectors like fishing to tourism (Fabinyi, 2020). However, the sustainability of coastal tourism is a critical concern. Coastal destinations are vulnerable to the impacts of climate change, which can lead to shifts in tourism flows and significant economic costs related to infrastructure protection and repairs (Pandy & Rogerson, 2021). It often fails to meet expectations, contributing substantially to ecological deterioration, community upheaval, and system disturbance (Lange, 2015). In earlier studies, several researchers have highlighted the tourism industry's economic impact in the context of Bangladesh's economy (Hai & Alamgir, 2017). From their analysis, it has been postulated that, in terms of the economic resources for tourism growth, Bangladesh is continuously striving to make great use of the opportunities.

### 2.2. Sociocultural Impacts

Addressing the myriad social sustainability challenges inherent in CMT development is a complex task, as social issues are often less clearly defined compared to economic and environmental concerns (Leposa, 2020). Despite the broad scope of social sustainability practices in tourism innovations, recent research only partially explores facets such as social equality, integration, involvement, safety, and well-being, with limited attention to the emotional well-being of local residents (Dempsey et al., 2011; Jordan et al., 2019). The development of the tourism industry brings about significant socio-cultural changes, fostering social reform, education, and preservation while also enriching destinations with diverse lifestyles, traditions, heritage, and cultural experiences (Aman et al., 2019; Kornilaki & Font, 2019; Salazar & Cardoso, 2019). It has been found in Bangladesh that the sustainable growth of marine tourism may ensure societal well-being by increasing living standards, advancing infrastructure, and improving public amenities (Bhuiyan et al., 2020). However, while visitors often appreciate the infrastructure and environmental

conditions of tourist destinations, locals may harbour scepticism about the long-term benefits of tourism growth, particularly regarding social issues such as homelessness, gambling, drug use, prostitution, increased violence, pollution, traffic congestion, and overcrowding (Kim et al., 2013; Piuchan et al., 2018; Sroyetch, 2016). Moreover, tourism-induced stress and tension can threaten cultural identity and social cohesion among local communities, impacting their well-being and sense of belonging (Hai & Alamgir, 2017). The southern coastal zone, particularly in the Sunderbans, already has a higher poverty rate; additionally, the shifting climate has caused working-age adults to relocate in search of better chances elsewhere, frequently leaving behind elderly carers and children. Therefore, while CMT can enrich social values and cultural experiences, it also necessitates careful consideration and management of its socio-cultural impacts to ensure the preservation of local identity and social harmony.

### 2.3. Environmental Impacts

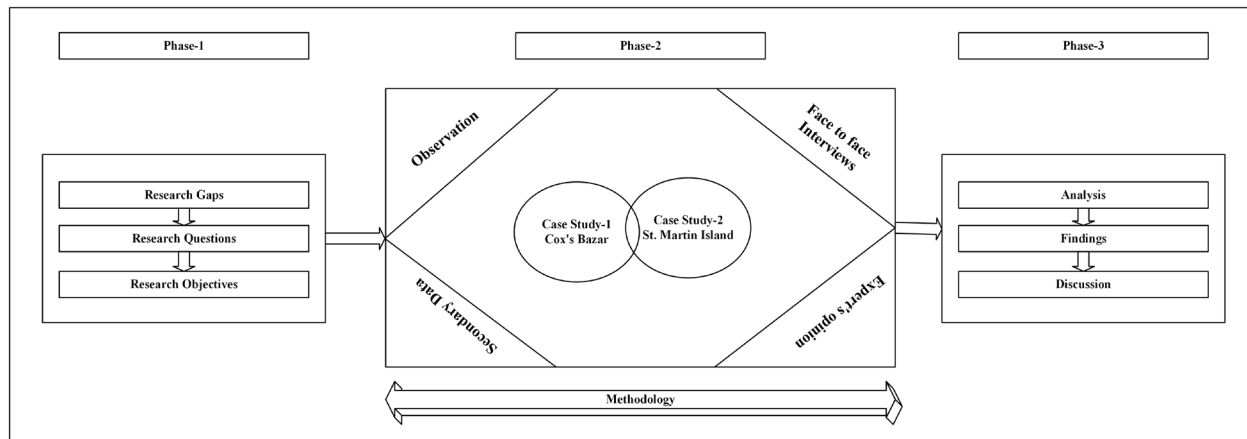
CMT plays a crucial role in sustainable development, offering opportunities for leisure and economic growth, yet it faces significant environmental challenges due to irresponsible tourist behaviour (Sultan et al., 2020). Conservation efforts are essential for maintaining coastal ecosystems and beaches, which provide natural spaces and attract tourists, contributing to the region's economic prosperity (Kenchington, 1993; Semeoshenkova & Newton, 2015). Understanding tourists' conscientiousness towards coastal destinations is vital for effective coastal and marine management (Juvan & Dolnicar, 2014). However, the long-term sustainability of CMT is threatened by climatic change impacts, such as rising sea levels affecting beach accessibility and tourism demand (Franzoni, 2015; Lew, 2017). In Bangladesh, unplanned tourism development is also leading to environmental pollution, including coastal erosion and degradation of mangrove forests (Dieke, 2003; Shampa et al., 2023). Particularly vulnerable are small islands like St. Martin, where tourism activities are concentrated and ecosystem changes are more noticeable (Robinson et al., 2019). Despite these challenges, nature-based recreation activities and increasing environmental awareness offer opportunities to minimise adverse impacts and promote sustainable practices. The effectiveness of mitigating environmental impacts relies on environmental assessment, resource management, corporate governance, and addressing critical ecological issues to ensure the long-term sustainability of CMT infrastructure.

## 3. METHODOLOGY

A qualitative research methodology was applied to meet the predetermined research objectives and to evaluate the current CMT industry in Bangladesh by combining two case studies from two distinct tourist destinations: Cox's Bazar and Saint Martin Island. Saint Martin Island and Cox's Bazar were chosen for the study due to their appropriateness for both marine and coastal tourism, as well as their potential to attract more visitors for marine activities. Cox's Bazar is widely recognised as the tourist capital of Bangladesh primarily because of its renowned sandy coastline, which spans an estimated 120 kilometres and draws more than one million visitors per year (Al Mamun et al., 2013; Saxena et al., 2020). Additionally, Saint Martin's Island, the only coral island in the country, situated in proximity to Cox's Bazar, is widely acknowledged and esteemed as a marine haven and a highly visited tourist destination in Bangladesh (Uddin et al., 2021). In methodological evaluation, the interpretative phenomenological paradigm is considered as it offers a perspective that enables the examination of the real experiences of stakeholders, with a particular emphasis on their perceptions, anticipations, actions, and adaptations (Bryman and Bell, 2011). Moreover, this technique investigates personal experiences and their meanings, shedding light on how people make sense of their professional lives and, as a result, producing legitimate knowledge based on subjective realities (Smith, 2011). Given the current context, it is necessary to determine 'how' and 'why' CMT industries perform their activities sustainably, for which the case study approach is considered appropriate (Remenyi et al., 2014). The case study approach is an evidence-based study investigating classical phenomena in a real-life context, where the limits between the phenomenon and background are not obvious, and sources of evidence have been used (Yin, 2018). Moreover, a case study under a specific circumstance is an extremely efficient 'mechanism that helps researchers analyse, evaluate, and view the multidisciplinary attributes of fundamental problems in a dynamic context' (Burton, 2012). This research adopts a qualitative, multiple case study methodology to investigate the current landscape of the CMT industry, emphasising sustainability. The case study selection process was guided by two key criteria: (1) the potential to explore the complex dynamics of sustainability through dialectic interviews capturing diverse perspectives, thus moving beyond mere description, and (2) the ability to enhance external validity by incorporating tourism locations that represent a broad spectrum of stakeholders, thereby offering a comprehensive reflection of the wider tourism industry. The study is structured around three interconnected objectives, each leveraging the strengths of the case study approach: Firstly, it seeks to analyse how local communities and various stakeholders legitimise the process of defining sustainable tourism locations. Secondly, the research aims to propose a robust qualitative methodology for integrating multiple stakeholder voices—including residents, socioeconomic entities, and governmental bodies—into a broader citizen dialogue on sustainable CMT development. Lastly, the study endeavors to illuminate the intricate relationships between multi-stakeholder engagement and the development of sustainable CMT. Through detailed case examinations, it explores how these factors contribute to the preservation of unique coastal habitats, cultural heritage, and overall sustainability at tourist destinations. Figure 1 illustrates the framework of the methodology.



Figure 1: **Methodological framework**



The current study has adopted a phenomenological approach to explore the subjective significance of concepts and events as perceived by participants, allowing for in-depth insights into their views and opinions (Moran, 2002). The utilisation of phenomenological research methodologies in a variety of real-world case studies illustrates a novel approach to acquiring insight and identifying new knowledge (Jeong & Othman, 2016). This method facilitated the investigation of participants' subjective experiences and redirected interviews to explore new avenues aligned with the research priorities, thereby enriching the qualitative data collection process. Convenient sampling, usually a cost-effective technique, was used in this case study-based qualitative research because the respondents were chosen based on accessibility and proximity (Bornstein et al., 2013). If the chosen respondent declined to be surveyed, the interview would proceed to the next respondent in the order of convenience. Forty-nine respondents have been considered for this study. In qualitative interview research on tourism, no predetermined universal formula governs sampling size; rather, they are determined creatively during the data collection, analysis, and interpretation processes (Czernek-Marszałek & McCabe, 2024). However, a comprehensive review of qualitative interviews indicates that 20-30 interviews are recommended for grounded theory studies, while 6-24 are suggested for individual case studies (Marshall et al., 2013; Teddlie & Tashakkori, 2009). Again, in another study, it is mentioned that a phenomenological inquiry may require ten to fifty explanations of a specific experience in order to identify its necessary and comprehensive aspects (Malterud et al., 2016).

Two real-world cases were used in the current study to analyse complex research issues, utilising primary and secondary sources. Primary and secondary data were considered for the critical assessment and detailed evaluation of sustainable CMT. Primary data were generated from observations and face-to-face interviews; secondary information was obtained from numerous authentic sources, i.e., referred journals, books, newspapers, documents from Bangladesh Parjatan Corporation, and various sources from the internet. In pursuit of authentic information for the study of sustainable CMT, systematic observation was employed as a qualitative method to understand tourist behaviours and their social consequences within the destination. The observation aimed to capture people's actions, thoughts, emotions, and social significance by employing a participant observation approach, in which researchers maintained professional distance to address potential biases associated with being part of the community under study (Fry et al., 2017). Face-to-face interviews were conducted to gather qualitative insights into the aspects of CMT. Grouping participants in interviews is essential to ensure that each individual's potential contribution is not inhibited by perceptions of status differences or the dominance of certain individuals or segments, thereby fostering a more inclusive and productive discussion (Saunders et al., 2009). Two distinct groups, tourists (Group A) and experts, hotel managers, and tour operators (Group B), were interviewed using semi-structured questionnaires in Cox's Bazar and Saint Martin (Table 2). Despite conducting face-to-face interviews categorised into two groups, it's imperative to note that all stakeholder groups were included. The first group centred around customers, encompassed not only tourists but also government employees, local religious leaders, lawyers, engineers, and businessmen. Similarly, the second group incorporated hotel managers, tour operators, and tour experts, ensuring a comprehensive representation of key stakeholders. No software was utilised in order to arrange the procedure; the coding was carried out manually.

Table 2: **Interview details**

Interview Phase	Time Schedule	Participants
Initial Phase (Group A)	January 2022 (First Week)	15 tourist (10 from Cox's Bazar, 5 from Saint Martin Island)
Second Phase (Group B)	September 2022 (Third Week)	10 tourist (6 from Cox's Bazar, 4 from Saint Martin Island)
Third Phase (Group C)	February 2023 (Second Week)	15 tourist (10 from Cox's Bazar, 5 from Saint Martin Island)
Additional Interviews	February 2023	3 Experts (Economist, Social Scientist, Environmentalist) 3 Tour Operators, 3 Hotel Managers

Total Participants: 49 (40 tourists, three experts, three tour operators, and three hotel managers)

The interview questions were open-ended and mainly focused on sustainability, exploring both positive and negative interrelated issues of Bangladesh CMT industry, particularly on Cox's Bazar and St. Martin Island. The interview questions have been adopted from (Momeni et al., 2018), which are enlisted in Table 3.

Table 3: **Interview details**

What are the strengths and weaknesses of sustainable coastal and marine tourism in Bangladesh?  
 What are the opportunities and threats to sustainable coastal and marine tourism in Bangladesh?  
 What are the private and public sector's problems in sustainable coastal and marine tourism in Bangladesh?  
 Is the necessary infrastructure to attract sustainable coastal and marine tourism in Bangladesh appropriate? Why or why not?  
 What are the management problems in the area of coastal and marine tourism in Bangladesh?  
 Can you think of any other factors that could be a barrier to development?

### 3.1. Validity and reliability

In employing qualitative research methods, the assessment of reliability and validity is paramount. (Golafshani, 2003) highlighted that integrating multiple data collection methods like observation, interviews, and recordings, incorporating multiple perspectives across different times and locations, is crucial for ensuring the intertwined reliability and validity essential for a comprehensive and authentic construction of realities. (Hesse-Biber, 2010) suggested that qualitative researchers can enhance reliability by comparing the consistency of responses to similar questions and assessing how well these responses address underlying issues. In this study, various techniques have been applied to ensure validity, such as meticulous sampling decisions, persistent observation, verbatim transcriptions, expert checking, audit trails, and supporting evidence for interpretation, as Whittemore et al. (2001) strongly suggested.

## 4. FINDINGS

### 4.1. Observational findings

Researchers have directly observed various positive and negative interrelated issues that impact the sustainability of the CMT industry in Cox's Bazar and St. Martin Island (Table 4). It has also been observed that many negative findings can be overcome by adopting appropriate measures, which in turn provide innovative opportunities and prospects for long-term sustainability in the CMT sector.

Table 4: **Observational Findings**

Observer	Constituents	Findings	
		Positive Findings	Negative Findings
R1	Economic dimension	<ul style="list-style-type: none"> <li>- Business generating spots</li> <li>- Various attractive tourist spots in coastal and marine areas</li> <li>- Broad prospects of pearl and other handicrafts along with processed seafood items</li> </ul>	<ul style="list-style-type: none"> <li>- Huge unplanned infrastructural development that hinders sustainability in coastal and marine areas</li> <li>- Improper government measures in coastal and marine areas</li> <li>- Insufficient management of tourist commodities</li> </ul>
	Social dimension	<ul style="list-style-type: none"> <li>- Cultural heritage conservation</li> <li>- Local community empowerment</li> <li>- Sharing values, customs and traditions</li> <li>- Inheriting rich socio-cultural heritage in coastal and marine areas.</li> </ul>	<ul style="list-style-type: none"> <li>- Gender discrimination</li> <li>- Less focus on social concerns</li> <li>- Human trafficking, prostitution and drug abuses</li> </ul>
	Environmental dimension	<ul style="list-style-type: none"> <li>- Affecting marine biodiversity</li> <li>- The strong initiative was taken by the Department of Environment, Bangladesh</li> </ul>	<ul style="list-style-type: none"> <li>- Unplanned urbanization in coastal and marine areas</li> <li>- Uncontrolled marine environmental pollution</li> <li>- Increased natural disasters in the sea and coastal and marine areas</li> <li>- Ocean warming</li> </ul>
R2	Economic dimension	<ul style="list-style-type: none"> <li>- The abundance of marine coastal and marine resources</li> <li>- Employment opportunities in the coastal and marine areas</li> <li>- Opportunities for empowering coastal and marine local communities</li> </ul>	<ul style="list-style-type: none"> <li>- Limited entertainment facilities</li> <li>- Inadequate facilities for foreign tourists</li> <li>- Unplanned supply chain management and logistics services in coastal and marine areas</li> </ul>
	Social dimension	<ul style="list-style-type: none"> <li>- Wide assortment of seafood and local cuisines</li> <li>- Scope of enhancing cultural diversity</li> <li>- Empowering local inhabitants</li> </ul>	<ul style="list-style-type: none"> <li>- Rohingya Crisis</li> <li>- The psychological conflict between local and migrated communities - Child abuse</li> </ul>
	Environmental dimension	<ul style="list-style-type: none"> <li>- The ecological balance of wildlife and nature in coastal and marine areas</li> <li>- Wide variety of coastal and marine ecosystem</li> </ul>	<ul style="list-style-type: none"> <li>- Improper solid waste management</li> <li>- Lack of environmental awareness</li> <li>- Inadequate role of Bangladesh Parjatan Corporation</li> <li>- Depletion of coral resources - Consequent coral bleaching</li> </ul>
R3	Economic dimension	<ul style="list-style-type: none"> <li>- Usage of local coastal and marine resources</li> <li>- Vast opportunities of public-private partnership in coastal and marine areas</li> <li>- The positive attitude of the government towards promoting sustainable CMT</li> </ul>	<ul style="list-style-type: none"> <li>- Unplanned and inadequate investment</li> <li>- Lack of coordination between different stakeholders</li> </ul>
	Social dimension	<ul style="list-style-type: none"> <li>- Strong cultural uniqueness</li> <li>- Religious harmony among different races</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of safety and security</li> <li>- Dismantling custom and cultural value - Political bias</li> </ul>
	Environmental dimension	<ul style="list-style-type: none"> <li>- Beautiful natural scenery</li> <li>- Diverse coral reef and rich marine ecosystem</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate role of law enforcing agencies</li> <li>- Limited environmental knowledge</li> <li>- Lack of initiatives to protect the natural environment</li> <li>- Insufficient tourism supportive environment</li> <li>- Severe marine pollution</li> </ul>

## 4.2. Interview Findings

While conducting the face-to-face interviews at Cox's Bazar and St. Martin Island, several critical issues were identified. Based on the discussion, opinions received from the interviewees were incorporated from economic, social, and environmental perspectives:

### 4.2.1. Economic impact

The participants reported that tourism has a significant economic influence on employment, gross revenue, and productivity. However, in their opinion, unscheduled and unregulated expansion in the tourism industry may not be the best path for long-term optimised growth.

Expert 1 (Economist) mentioned, '*Sustainable coastal and marine development requires institutions to rethink reevaluation of land use, sustainable food sourcing, and water conservation regulations as well as economic and market policies. Long-term economic success requires the active participation of industries such as tourism and fisheries, as well as power in biodiversity conservation and optimal utilisation of resources.*' (Interviewed)

Again, respondents highlighted the natural environment as a key platform for tourist demand; hence, it must be preserved to ensure potential growth in sustainable tourism development.

Expert 2 (Social Scientist) stated, '*We cannot directly influence local and international tourists' perceptions towards sustainability. Cox's Bazar and St. Martin Island both have challenges with social security, cleanliness and sanitation,*

*care services, entertainment facilities, transportation and logistics services, etc... Concerned policymakers should examine these socio-environmental challenges and adopt strategic actions to fix this problem to ensure sustainable tourist growth* '. (Interviewed in the first week of February 2023)

Respondents also addressed numerous problems and identified them as major obstacles that may hinder the progress of a sustainable CMT system in Bangladesh.

Tourist-13 (Politician): *'There is no doubt that tourism has not only a positive impact on the country's economy in the form of poverty alleviation through supporting local communities but also a negative impact on the ecosystem. Unplanned and uncontrolled tourism growth cannot generate expected output for economic sustainability* '. (Interviewed in the second week of February 2023)

Hotel Manager-1: *Safety and security at various coastal and marine tourist areas are vital issues. Safety at hotel areas, beaches, tourist spots, and transport systems within Cox's Bazar and Saint Martin need to be managed to ensure the psychological comfort of the tourists. Law enforcement agencies should be very active in enhancing social security for both the local community and tourists.* (Interviewed in the fourth week of February 2023)

As the tourism industry faces many challenges, the respondents recommended implementing a viable economic policy to ensure a sustainable CMT system in Bangladesh.

Hotel Manager 1: *'Millions of local and foreign Bangladeshis visit this coastal and marine area each year. Considering this, a variety of hotels, resorts, guesthouses, and motels have developed on the coast, which were established in an unplanned manner. In this connection, appropriate policy and sound planning should be considered to ensure economic sustainability and infrastructure development.* ' (Interviewed in the fourth week of February 2023)

Hotel Manager 3: *'Sustainable tourism development is a win-win strategy as it generates innovative opportunities in many ways such as employment generation, infrastructure development and overall sustainability of Bangladesh..... It is essential to create a favourable business environment, mitigating constraints, incentives for innovative entrepreneurs and knowledge for development can drive the growth of inbound tourism.* (Interviewed in the fourth week of February 2023)

Respondents also mentioned that marginalised and indigenous communities can play a crucial role in the local economy if they are given opportunities to participate in the tourism business. The government should focus on developing CMT that helps Indigenous communities economically and supports the nation.

Tour operator 2: *'I feel that sustainable coastal and marine-based tourism in this country creates employment opportunities for disadvantaged groups in different tourist destinations. The disadvantaged group of marginalised people of Cox's Bazar and Saint Martin could get tremendous opportunities to participate in different service sectors.* (Interviewed in the second week of February 2023)

Hotel Manager 3: *'Ecotourism plays a vital role in empowering and encouraging the local people to incorporate in the hotel industry. It addresses the environment and enhances the standard of living of deprived communities. Particularly, women could enjoy their empowerment by developing sustainable Ecotourism* '. (Interviewed in the fourth week of February 2023)

From the above interviews, it is clear that the CMT has an enormous socioeconomic impact on job creation, enhancing the standard of living in the local community, infrastructural development, business generation, and empowerment of local people. In this subsector, several hotels, motels, resorts, merchants, and street traders support visitors along the sea beaches at Cox's Bazar and Saint Martin Island by producing significant revenue and creating extensive income-generating opportunities, including accommodation, transportation, recreation, and other tour-related activities.

#### 4.2.2. Social impact

As a significant driver of social development, sustainable CMT may improve employment opportunities and enable residents to enhance their livelihoods, which may transform sociocultural values. Although natural coastal resources play a key role in driving sustainable CMT growth, the potential loss of marine resources further enhances socioeconomic and cultural disparities across tourism destinations. The opinions of the respondents reflected the same views:

Expert 2 (a social scientist) said, *'Tourism in the coastal and marine areas can assist in promoting the local traditions, history, and most specifically the real, local fishing culture, which may eventually help the natural environment and support local businesses* '. (Interviewed in the first week of February 2023)

Tour Operator 3 commented that *'It is vital to identify the constraints associated with sustainable tourism development... the policymakers should take the positive initiative to manage the coastal and marine areas through linking societies and environment by creating opportunities for the local people in order to improve their living standard to an acceptable level* '. (Interviewed in the second week of February 2023)



Many people have criticised the tourism industry for having negative social and cultural impacts on the local population, such as cultural change, increased crime, local people being driven out by price inflation, and begging and gambling.

Tourist-8 (Local Religious Leader) said, *'We should bear in mind that regarding sociocultural issues, local communities might well adopt international culture ignoring the local heritages, which might create long-term detrimental effects in tourism'*. (Interviewed in the third week of May 2022)

Later, tourist-12 (Lawyer) opined that *'Tourism behaviour can adversely affect the lives of the local community, including the traffic congestion and pollution, drug abuses, prostitution and escalated rates of crime'*. (Interviewed in the second week of December 2022)

#### 4.2.3. Environmental impact

Marine tourism may have direct or indirect negative consequences on biodiversity and the natural environment, causing ecosystem degradation through habitat loss due to the construction of tourism infrastructure, environmental damage induced by tourism activity, increased usage of nonrenewable energy and water resources, and the complexity of disposing solid and liquid garbage from restaurants, bars, and hotels (González-Morales et al., 2021). The experts' opinions reflect the same views:

Expert-3 (Environmentalism) said, *'Local people in the coastal and marine areas lack knowledge about the ecological balance, that's why huge pollution is found in the beach areas of Cox's Bazar and Saint Martin. On the other hand, tourists and local businessmen are very reluctant about proper wastage management'*. (Interviewed in the first week of February 2023)

Tour Operator 3 commented, *'It was very evident that the island has ruined its capacity to hold all tourism-related activities. An increasing number of inhabitants and careless tourists have been highlighted as the key concern that significantly burdens the island's infrastructure'*. (Interviewed in the second week of February 2023)

Tourist-11 (Businessman) mentioned, *'I've seen that the total environment of Cox's Bazar is not pollution-free.....the seawater, air, sound, soil, etc. are polluted because tourists discard non-degradable substances in the beach area; as a result, it affects environmental sustainability'*. (Interviewed in the second week of December 2022)

St. Martin Island has recently experienced drastic shifts in the growth and extension of local tourism and land sales. Approximately 20 years after protection, the island has not yet undergone significant government measures to preserve and sustain the biodiversity that controls the island and maritime ecosystems. Consequently, uncontrolled tourism severely threatens marine biodiversity.

Tour Operator-1 commented, *'Efficient usage of natural attributes for the sustainable national economy, culture, and policy systems might be a dynamic challenge that can be supported through successfully integrated, ecosystem-based coastal and marine resource conservation'*. (Interviewed in the second week of February 2023)

Tourist-14 (Businessman) mentioned, *'The hotel and resort adjacent to the island's western beach has directly connected its drainage system to the sea that contains surface water and significantly impacts the island's ecological balance'*. (Interviewed in the second week of December 2022)

Tourist-15 (Local government official) mentioned that *'Geologically, the island of St Martin and its diverse ecosystems face serious threats because of the increasing cyclones, depletion of coral and recent human activities. It eventually results in the island gradually decreasing yearly instead of expanding as it might be'*. (Interviewed in the second week of December 2022)

## 5. DISCUSSION

The study employed a multi-stakeholder approach to assess the economic, socio-cultural, and environmental impacts on coastal destinations in Bangladesh,, which highlights both positive and negative impact, and emphasises the importance of CMT in developing sustainable practices in this disaster-prone nation. The observations and interviews highlighted the significant economic impact of CMT in Bangladesh, notably in employment generation, revenue increase, and productivity enhancement. However, the unregulated expansion of the industry presents long-term challenges to sustainable growth. Experts advocate for sustainable development through policy reforms, emphasising the involvement of marginalised and indigenous communities for economic empowerment, as supported by previous studies (Jeyacheya & Hampton, 2020; Tosun et al., 2023). The findings also highlight the social benefits and challenges of CMT in Bangladesh. While promoting local traditions and history through tourism can support both the natural environment and local businesses, concerns arise regarding negative social and cultural impacts, including cultural change and crime, echoing findings from earlier studies (Brennan & Germond, 2024; Patel, 2024). Critics also warn against the risk of adopting international culture over local heritage. Addressing these challenges necessitates policy interventions to manage coastal areas and create opportunities for local residents while preserving their cultural identity.

Additionally, the environmental impacts of CMT in Bangladesh are recognised, with sustainable practices contributing to conservation efforts. However, concerns about pollution, habitat degradation, and ecosystem disruption persist, as highlighted in previous studies (Matias et al., 2022; Qiang et al., 2020). Proactive measures are needed to mitigate these impacts and align with Sustainable Development Goals (SDGs). Sustainable tourism in Bangladesh, particularly in Cox's Bazar and Saint Martin Island, offers significant environmental advantages, highlighting the importance of maintaining natural sites and involving local communities in management activities. Despite challenges such as ecological damage and safety concerns, stakeholders recognise the dynamic nature of CMT and its potential to reshape strategic frameworks for greater sustainability. Sustainable CMT is viewed as an opportunity to promote harmony, preserve cultural values, and foster local awareness while ensuring industry sustainability.

### 5.1. Implications

The current study has encompassed stakeholder theory by highlighting the importance of multi-stakeholder engagement in CMT. It emphasised how multi-stakeholders (government, local and foreign NGOs, private sectors and local communities) can collaborate to focus on multiplex challenges in developing countries, presenting a broad understanding of stakeholder dynamics in a sustainable tourism context. The study also contributed to sustainability models by highlighting how engagement from multi-stakeholders can improve sustainable practices in CMT. Moreover, it refines existing models to include the roles of multi-stakeholders in promoting environmental stewardship and socioeconomic benefits. It also might help residents by encouraging them to participate in decision-making processes and ensuring that tourism development is associated with their interests, providing tangible economic benefits for society. The current study also serves as a basis for policymakers to develop models integrating multi-stakeholders, ultimately leading towards better tourism planning by mitigating the negative impacts of tourism and promoting conservation efforts through multi-stakeholder action. Policymakers should be prepared to identify critical interrelated strategic issues that must be redesigned for implementation to establish a sustainable CMT. In this regard, several recommendations based on '10Ls' factors have been incorporated here for execution by the concerned authority (Table 5):

Table-5: **10Ls Factor**

<b>10Ls Factors</b>	<b>Recommended Actions</b>
Leadership qualities of entrepreneurs in the coastal and marine areas	The leadership power and dynamic capabilities of the corporate level are required to influence and induce others towards achieving predetermined sustainable entrepreneurial goals to satisfy multiple stakeholders in the coastal and marine areas.
Level of capabilities of tour operators performing in the coastal and marine areas	The degree of knowledge, skills, experiences, and innovativeness of the tour operators organising tours in the coastal and marine areas to fulfil the requirements of tourists to enhance their satisfaction and the orientation towards sustainability.
Long-term sustainable investment in the coastal and marine areas	Long-term investment and portfolio management, both for public and private sectors, are required to establish adequate infrastructure and manage the CMT business to ensure profitability, growth, and sustainable development. In this connection, public-private partnerships need to be encouraged for adequate investment.
Linkage within value-generating sustainable strategic activities	Integrating the interdependent primary and support activities to deliver value competitively to gain and sustain competitive advantage in the ever-changing CMT market.
Legal support and securities in coastal and marine areas to ensure sustainability	Setting rules and regulations enforced by environmental agencies to control the unexpected behaviour of tourists in the coastal and marine areas. Therefore, regulatory bodies and law enforcement agencies are required to play an active role in coastal and marine area-based tourist destinations.
Level of service quality in coastal and marine areas	A pragmatic service-quality framework of strategy considering efficiency, sensitivity, consistency, tangibility, and empathy must be implemented. Service efficiency considers marine biodiversity, landscapes, traditions, and culture, the linkages to the industry, activities, experiences, and the structural system of sustainable CMT.
Logistics and travelling support system	It is the art and science of management, engineering, and technical activities concerned with the adequate flow of goods and services from the point of origin to the end of consumption, along with related information in achieving tourists' expectations and satisfaction with a keen focus on sustainability in perspective of CMT.

10Ls Factors	Recommended Actions
Locational beauty and coastal and marine resources	Coastal and marine tourist destinations should be treated as strategic locations with distinctive natural beauty. These infrastructural or cultural features will attract tourists to gain experience, education, and entertainment for a sustainable period through proper resource and environmental management and planned infrastructure development.
Learning tourist behaviour	The human psychology of tourists, which consists of personality, attitude, values, norms, beliefs, emotions, etiquette, and behaviour, should be changed to drive them towards individual and group decision-making towards sustainable CMT.
Leverage of competitive strategies	The process of acquiring, integrating, configuring, and allocating the coastal and marine-based resources is required to achieve predetermined objectives competitively, considering the dynamic environment and satisfying multiple stakeholders in a sustainable manner through cost leadership, focus, and differentiation strategy.

## CONCLUSION

This study underscores the contemporary global emphasis on sustainable development, particularly in sustainable CMT sectors, which is viewed as an innovative approach in emerging countries. It highlights the positive sociocultural and economic impacts of such tourism, emphasising key contributors, such as sustainable tourist locations, well-organised accommodations, diverse cuisines, and traditional tax-free items. Effective communication and logistics are crucial for sustained tourism growth, and overall performance hinges on maintaining socioeconomic and operational stability. This study advocates a comprehensive plan that considers economic, social, and environmental factors with active stakeholder involvement to achieve long-term sustainable development. Emphasis on critical success factors and harmonising policy and practice is recommended for a favourable position in the competitive market. This study underscores the value of integrated support systems for CMT by providing opportunities for tourists to explore Bangladesh's natural beauty and cultural heritage sites. Authorities are urged to address managerial and ecological concerns regarding balanced and sustainable economic development.

This study had several limitations that should be considered when interpreting the results. First, the findings were derived from a combination of secondary data, observations, and face-to-face interviews conducted during periodic visits to Cox's Bazar and Saint Martin Island. Second, owing to time and budget constraints, the study focused on no more than two coastal and marine destinations, which affected the breadth and depth of data collection and interpretation. Third, despite the vastness of the tourism industry, this study investigated only CMT destinations. Fourth, there is the potential for further research by integrating different tourism destinations with diverse cultural, geographical, and ecological identities. In conclusion, this study emphasises the use of qualitative data and suggests that future research should incorporate hypothesis-driven quantitative analyses using appropriate statistical methods to validate its findings. Future research should encompass a range of tourism destinations with diverse cultural, geographical, and ecological characteristics to achieve a more comprehensive analysis. It should also include hypothesis-driven quantitative analyses using appropriate statistical methods to validate qualitative findings. Additionally, employing mixed methods approaches that combine secondary data with primary data from observations and interviews can enhance the robustness of the research.

To obtain a sustainable competitive advantage, coastal and marine tourist resources should be evaluated from a sustainable development viewpoint based on how well they are integrated and allocated. The government and relevant authorities should initiate feasible actions to resolve sustainable development issues, thereby assuring a solid tourism business mechanism, competitiveness, and a strong brand identity.

## REFERENCES

- Adedoyin, F. F., Erum, N., & Bekun, F. V. (2022). How does institutional quality moderates the impact of tourism on economic growth? Startling evidence from high earners and tourism-dependent economies. *Tourism Economics*, 28(5), 1311–1332. <https://doi.org/10.1177/1354816621993627>
- Adiyia, B., Stoffelen, A., Jennes, B., Vanneste, D., & Ahebwa, W. M. (2015). Analysing governance in tourism value chains to reshape the tourist bubble in developing countries: The case of cultural tourism in Uganda. *Journal of Ecotourism*, 14(2–3), 113–129. <https://doi.org/10.1080/14724049.2015.1027211>
- Al Mamun, M. A., Hasan, M. K., & Hossain, S. (2013). Image of Cox's Bazar Beach as a tourist destination: an investigation. *International Review of Business Research Papers*, 9(5).
- Al Mamun, M. A., Li, J., Cui, A., Chowdhury, R., & Hossain, M. L. (2024). Climate-adaptive strategies for enhancing agricultural resilience in southeastern coastal Bangladesh: Insights from farmers and stakeholders. *Plos One*, 19(6).
- Al-Masud, T. Md. M. (2015). Tourism marketing in Bangladesh: What, why and how. *Asian Business Review*, 5(1), 13–19. <https://doi.org/10.18034/abr.v5i1.47>
- Aman, J., Abbas, J., Mahmood, S., Nurunnabi, M., & Bano, S. (2019). The influence of Islamic religiosity on the perceived socio-cultural impact of sustainable tourism development in Pakistan: A structural equation modeling approach. *Sustainability (Switzerland)*, 11(11). <https://doi.org/10.3390/su11113039>
- Ananya, S. A., Al Muneem, A., & Hassan, A. (2020). Tourism Policy Analysis of Required Tourist Facilities in Bangladesh. In *Tourism Policy and Planning in Bangladesh* (pp. 53–69). [https://doi.org/10.1007/978-981-15-7014-8\\_4](https://doi.org/10.1007/978-981-15-7014-8_4)
- Anika, J. J., Khan, M. Y. H., & Hassan, A. (2020). The Role of Local Government in Tourism Development: Evidence from Kuakata, Bangladesh. In Shueb-Ur-Rahman, M., & Hassan, A. (Eds), *Tourism Policy and Planning in Bangladesh* (pp. 33–50). [https://doi.org/10.1007/978-981-15-7014-8\\_3](https://doi.org/10.1007/978-981-15-7014-8_3)

- Ayyam, V., Palanivel, S., Chandrakasan, S., Ayyam, V., Palanivel, S., & Chandrakasan, S. (2019). Strategies and Collaborations for Management of Coastal Areas. In Ayyam, V., Palanivel, S., & Chandrakasan, S. (Eds), *Coastal Ecosystems of the Tropics - Adaptive Management* (pp. 261–286). [https://doi.org/10.1007/978-981-13-8926-9\\_13](https://doi.org/10.1007/978-981-13-8926-9_13)
- Batool, N., Wani, M. D., Shah, S. A., & Dada, Z. A. (2024). Tourists' attitude and willingness to pay on conservation efforts: evidence from the west Himalayan eco-tourism sites. *Environment, Development and Sustainability*, 1–19. <https://doi.org/10.1007/S10668-024-04679-2/TABLES/4>
- Belhabib, D., Campredon, P., Lazar, N., Sumaila, U. R., Baye, B. C., Kane, E. A., & Pauly, D. (2016). Best for pleasure, not for business: Evaluating recreational marine fisheries in West Africa using unconventional sources of data. *Palgrave Communications*, 2. <https://doi.org/10.1057/palcomms.2015.50>
- Bennett, N. J., Cisneros-Montemayor, A. M., Blythe, J., Silver, J. J., Singh, G., Andrews, N., Calò, A., Christie, P., Di Franco, A., Finkbeiner, E. M., Gelcich, S., Guidetti, P., Harper, S., Hotte, N., Kittinger, J. N., Le Billon, P., Lister, J., López de la Lama, R., McKinley, E., ... Sumaila, U. R. (2019). Towards a sustainable and equitable blue economy. *Nature Sustainability*, 2(11), 991–993. <https://doi.org/10.1038/s41893-019-0404-1>
- Bhuiyan, M. A. H., Darda, A., Habib, M. W., & Hossain, M. B. (2020). *Marine tourism for sustainable development in Cox's Bazar, Bangladesh*. ADBI Working Paper Series.
- Bornstein, M. H., Jager, J., & Putnick, D. L. (2013). Sampling in developmental science: Situations, shortcomings, solutions, and standards. In *Developmental Review*, 33(4), 357–370. <https://doi.org/10.1016/j.dr.2013.08.003>
- Brennan, J., & Germond, B. (2024). A methodology for analysing the impacts of climate change on maritime security. *Climatic Change*, 177(1), 15. <https://doi.org/10.1007/s10584-023-03676-0>
- Brunetti, F., Matt, D. T., Bonfanti, A., De Longhi, A., Pedrini, G., & Orzes, G. (2020). Digital transformation challenges: Strategies emerging from a multi-stakeholder approach. *The TQM Journal*, 32(4), 697–724. <https://doi.org/10.1108/TQM-12-2019-0309>
- Bryman, A., & Bell, E. (2011). *Business Research Methods* (4th edition), Oxford University Press.
- Burton, D. (2012). Research training for social scientists. *Research Training for Social Scientists*. <https://doi.org/10.4135/9780857028051>
- Carvache-Franco, W., Carvache-Franco, M., Carvache-Franco, O., & Hernández-Lara, A. B. (2020). Motivation and segmentation of the demand for coastal and marine destinations. *Tourism Management Perspectives*, 34. <https://doi.org/10.1016/j.tmp.2020.100661>
- Cavallaro, F., Irranca Galati, O., & Nocera, S. (2020). Climate change impacts and tourism mobility: A destination-based approach for coastal areas. *International Journal of Sustainable Transportation*, 15(6), 456–473. <https://doi.org/10.1080/15568318.2020.1762951>
- Chen, C. L., & Bau, Y. P. (2016). Establishing a multi-criteria evaluation structure for tourist beaches in Taiwan: A foundation for sustainable beach tourism. *Ocean and Coastal Management*, 121, 88–96. <https://doi.org/10.1016/j.ocecoaman.2015.12.013>
- Chen, V. Y. C., Lin, J. C. L., & Tzeng, G. H. (2019). Assessment and improvement of wetlands environmental protection plans for achieving sustainable development. *Environmental Research*, 169, 280–296. <https://doi.org/10.1016/j.envres.2018.10.015>
- Council, G. S. T. (2019). GSTC destination criteria. <https://www.gstccouncil.org/gstc-criteria/>
- Czernek-Marszałek, K., & McCabe, S. (2024). Sampling in qualitative interview research: criteria, considerations and guidelines for success. *Annals of Tourism Research*, 104, 103711. <https://doi.org/10.1016/j.annals.2023.103711>
- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 19(5), 289–300. <https://doi.org/10.1002/sd.417>
- Dieke, P. U. C. (2003). Tourism in Africa's economic development: policy implications. *Management Decision*, 41(3), 287–295. <https://doi.org/10.1108/00251740310469468>
- Dimitrovski, D., Lemmetyinen, A., Nieminen, L., & Pohjola, T. (2021). Understanding coastal and marine tourism sustainability-A multi-stakeholder analysis. *Journal of Destination Marketing & Management*, 19, 100554. <https://doi.org/10.1016/j.jdmm.2021.100554>
- Donaldson, T. (1999). Making stakeholder theory whole. *Academy of Management Review*, 24(2), 237–241. <https://doi.org/10.5465/amr.1999.1893933>
- Drius, M., Bongiorno, L., Depellegrin, D., Menegon, S., Pugnetti, A., & Stifter, S. (2019). Tackling challenges for Mediterranean sustainable coastal tourism: An ecosystem service perspective. *Science of the Total Environment*, 652, 1302–1317. <https://doi.org/10.1016/j.scitotenv.2018.10.121>
- Dube, K. (2020). Tourism and sustainable development goals in the African context. *International Journal of Economics and Finance Studies*, 12(1), 88–102. <https://doi.org/10.34109/ijefs.202012106>
- Duffy, L. N., Stone, G., Charles Chancellor, H., & Kline, C. S. (2016). Tourism development in the Dominican Republic: An examination of the economic impact to coastal households. *Tourism and Hospitality Research*, 16(1), 35–49. <https://doi.org/10.1177/1467358415613118>
- Dwyer, L. (2018). Emerging ocean industries: Implications for sustainable tourism development. *Tourism in Marine Environments*, 13(1), 25–40. <https://doi.org/10.3727/154427317X15018194204029>
- European Commission. (2016). *The European Tourism Indicator System*. Publications Office of the European Union: Luxembourg.
- Eweje, G., Sajjad, A., Nath, S. D., & Kobayashi, K. (2021). Multi-stakeholder partnerships: A catalyst to achieve sustainable development goals. *Marketing Intelligence & Planning*, 39(2), 186–212. <https://doi.org/10.1108/MIP-04-2020-0135>
- Fabinyi, M. (2020). The role of land tenure in livelihood transitions from fishing to tourism. *Maritime Studies*, 19(1), 29–39. <https://doi.org/10.1007/s40152-019-00145-2>
- Fabinyi, M., Belton, B., Dressler, W. H., Knudsen, M., Adhuri, D. S., Aziz, A. A., Akber, M. A., Kittitornkool, J., Kongkaew, C., & Marschke, M. (2022). Coastal transitions: Small-scale fisheries, livelihoods, and maritime zone developments in Southeast Asia. *Journal of Rural Studies*, 91, 184–194. <https://doi.org/10.1016/j.jrurstud.2022.02.006>
- Fransen, L. W., & Kolk, A. (2007). Global rule-setting for business: A critical analysis of multi-stakeholder standards. *Organization*, 14(5), 667–684. <https://doi.org/10.1177/1350508407080305>
- Franzoni, S. (2015). Measuring the sustainability performance of the tourism sector. *Tourism Management Perspectives*, 16, 22–27. <https://doi.org/10.1016/j.tmp.2015.05.007>
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
- Fry, M., Curtis, K., Considine, J., & Shaban, R. Z. (2017). Using observation to collect data in emergency research. *Australasian Emergency Nursing Journal*, 20(1), 25–30. <https://doi.org/10.1016/j.aenj.2017.01.001>
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597–607.
- González-Morales, O., Santana Talavera, A., & Domínguez González, D. (2021). The involvement of marine tourism companies in CSR: the case of the island of Tenerife. *Environment, Development and Sustainability*, 23(8), 11427–11450. <https://doi.org/10.1007/s10668-020-01120-2>
- Hai, A., & Alamgir, B. (2017). Local Community Attitude and Support Towards Tourism Development at Saint Martin Island, Bangladesh. *International Journal of Tourism and Hospitality Management in the Digital Age*, 1(2), 32–41. <https://doi.org/10.4018/ijthmda.2017070103>
- Hall, C. M. (2001). Trends in ocean and coastal tourism: The end of the last frontier? *Ocean and Coastal Management*, 44(9–10), 601–618. [https://doi.org/10.1016/S0964-5691\(01\)00071-0](https://doi.org/10.1016/S0964-5691(01)00071-0)
- Hall, C. M. (2019). Constructing sustainable tourism development: The 2030 agenda and the managerial ecology of sustainable tourism. *Journal of Sustainable Tourism*, 27(7), 1044–1060. <https://doi.org/10.1080/09669582.2018.1560456>
- Hanafiah, M. H., Jamaluddin, M. R., & Kunjuran, V. (2021). Qualitative assessment of stakeholders and visitors perceptions towards coastal tourism development at Teluk kemang, port dickson, Malaysia. *Journal of Outdoor Recreation and Tourism*, 35, 100389. <https://doi.org/10.1016/j.jort.2021.100389>
- Hasan, M. K., Abdullah, S. K., Lew, T. Y., & Islam, M. F. (2019). The antecedents of tourist attitudes to revisit and revisit intentions for coastal tourism. *International Journal of Culture, Tourism, and Hospitality Research*, 13(2), 218–234. <https://doi.org/10.1108/IJCTHR-11-2018-0151>
- Hasan, M., Mamun, M., & Islam, M. (2015). Market Segmentation And Targeting Strategy For Promoting Cox's Bazar Beach In Bangladesh As A Tourists' Destination. *British Journal of Marketing Studies*, 3(4), 73–86.
- Hassan, A., Kennell, J., & Chaperon, S. (2020). Rhetoric and reality in Bangladesh: Elite stakeholder perceptions of the implementation of tourism policy. *Tourism Recreation Research*, 45(3), 307–322. <https://doi.org/10.1080/02508281.2019.1703286>



- Heslinga, J. H., Groote, P., & Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *Journal of Tourism Futures*, 3(1), 23–38. <https://doi.org/10.1108/JTF-10-2015-0047>
- Hesse-Biber, S. (2010). Qualitative approaches to mixed methods practice. *Qualitative Inquiry*, 16(6), 455–468. <https://doi.org/10.1177/1077800410364611>
- Islam, M. M., & Shamsuddoha, M. (2018). Coastal and marine conservation strategy for Bangladesh in the context of achieving blue growth and sustainable development goals (SDGs). *Environmental Science and Policy*, 87, 45–54. <https://doi.org/10.1016/j.envsci.2018.05.014>
- Islam, M. W., & Sarker, T. (2021). *Sustainable coastal and maritime tourism: A potential blue economy avenue for Bangladesh*. ADBI Working Paper.
- Jeong, H., & Othman, J. (2016). Using interpretative phenomenological analysis from a realist perspective. *The Qualitative Report*, 21(3), 558–570. <https://doi.org/10.46743/2160-3715/2016.2300>
- Jeyacheya, J., & Hampton, M. P. (2020). Wishful thinking or wise policy? Theorising tourism-led inclusive growth: Supply chains and host communities. *World Development*, 131, 104960. <https://doi.org/10.1016/j.worlddev.2020.104960>
- Jordan, E. J., Spencer, D. M., & Prayag, G. (2019). Tourism impacts, emotions and stress. *Annals of Tourism Research*, 75, 213–226. <https://doi.org/10.1016/j.annals.2019.01.011>
- Juvan, E., & Dolnicar, S. (2014). The attitude-behaviour gap in sustainable tourism. *Annals of Tourism Research*, 48, 76–95. <https://doi.org/10.1016/j.annals.2014.05.012>
- Karani, P., & Failer, P. (2020). Comparative coastal and marine tourism, climate change, and the blue economy in African Large Marine Ecosystems. *Environmental Development*, 36. <https://doi.org/10.1016/j.envdev.2020.100572>
- Kenchington, R. (1993). Tourism in coastal and marine environments-a recreational perspective. *Ocean and Coastal Management*, 19(1), 1–16. [https://doi.org/10.1016/0964-5691\(93\)90073-8](https://doi.org/10.1016/0964-5691(93)90073-8)
- Kim, K., Uysal, M., & Sirgy, M. J. (2013). How does tourism in a community impact the quality of life of community residents? *Tourism Management*, 36, 527–540. <https://doi.org/10.1016/j.tourman.2012.09.005>
- Kornilaki, M., & Font, X. (2019). Normative influences: How socio-cultural and industrial norms influence the adoption of sustainability practices. A grounded theory of Cretan, small tourism firms. *Journal of Environmental Management*, 230, 183–189. <https://doi.org/10.1016/j.jenvman.2018.09.064>
- Lange, G. M. (2015). Tourism in Zanzibar: Incentives for sustainable management of the coastal environment. *Ecosystem Services*, 11, 5–11. <https://doi.org/10.1016/j.ecoser.2014.11.009>
- Lee, T. H., & Jan, F. H. (2019). Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of the sustainability. *Tourism Management*, 70, 368–380. <https://doi.org/10.1016/j.tourman.2018.09.003>
- Leposa, N. (2020). Problematic blue growth: a thematic synthesis of social sustainability problems related to growth in the marine and coastal tourism. *Sustainability Science*, 15(4), 1233–1244. <https://doi.org/10.1007/s11625-020-00796-9>
- Lew, J. M. C., & Cheer, J. M. (2017). *Tourism, Resilience and Sustainability : Adapting to Social, Political and Economic Change*. Routledge.
- Liu, A., Song, H., & Blake, A. (2018). Modelling productivity shocks and economic growth using the Bayesian dynamic stochastic general equilibrium approach. *International Journal of Contemporary Hospitality Management*, 30(11), 3229–3249. <https://doi.org/10.1108/IJCHM-10-2017-0686>
- Lowe, J., Tejada, J. F. C., & Meekan, M. G. (2019). Linking livelihoods to improved biodiversity conservation through sustainable integrated coastal management and community based dive tourism: Oslob Whale Sharks. *Marine Policy*, 108, 103630. <https://doi.org/10.1016/j.marpol.2019.103630>
- Lueck, M., & Orams, M. (2016). Coastal tourism. In Jafari, J., & Xiao, H. (Eds), *Encyclopedia of Tourism* (pp. 157–157). [https://doi.org/10.1007/978-3-319-01384-8\\_247](https://doi.org/10.1007/978-3-319-01384-8_247)
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Marafa, L. M. (2008). Integrating sustainable tourism development in coastal and marine zone environment. *Études Caribéennes*, 9–10. <https://doi.org/10.4000/etudescaribeennes.1373>
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), 11–22. <https://doi.org/10.1080/08874417.2013.11645667>
- Matias, T. P., Leonel, J., & Imperador, A. M. (2022). A systemic environmental impact assessment on tourism in island and coastal ecosystems. *Environmental Development*, 44, 100765. <https://doi.org/10.1016/j.envdev.2022.100765>
- Mejjad, N., Rossi, A., & Pavel, A. B. (2022). The coastal tourism industry in the Mediterranean: A critical review of the socio-economic and environmental pressures & impacts. *Tourism Management Perspectives*, 44, 101007. <https://doi.org/10.1016/j.tmp.2022.101007>
- Momeni, K., Janati, A., Imani, A., & Khodayari-Zarnaq, R. (2018). Barriers to the development of medical tourism in East Azerbaijan province, Iran: A qualitative study. *Tourism Management*, 69, 307–316. <https://doi.org/10.1016/j.tourman.2018.05.007>
- Mondal, Md. S. H. (2017). Swot Analysis and Strategies To Develop Sustainable Tourism in Bangladesh. *UTMS Journal of Economics*, 8(2), 159–167.
- Moran, D. (2002). Introduction to Phenomenology. In *Introduction to Phenomenology*. London: Routledge. <https://doi.org/10.4324/9780203196632>
- Nobi, M. N., & Majumder, M. A. (2019). Coastal and marine tourism in the future. *Journal of Ocean and Coastal Economics*, 6(2). <https://doi.org/10.15351/2373-8456.1101>
- Pandy, W. R., & Rogerson, C. M. (2021). Coastal tourism and climate change: Risk perceptions of tourism stakeholders in south africa's garden route. *Geo Journal of Tourism and Geosites*, 37(3), 730–739. <https://doi.org/10.30892/gtg.37301-703>
- Papageorgiou, M. (2016). Coastal and marine tourism: A challenging factor in Marine Spatial Planning. *Ocean and Coastal Management*, 129, 44–48. <https://doi.org/10.1016/j.ocecoaman.2016.05.006>
- Patel, R. (2024). Securing development: Uneven geographies of coastal tourism development in El Salvador. *World Development*, 174, 106450. <https://doi.org/10.1016/j.worlddev.2023.106450>
- Phillips, R., Freeman, R. E., & Wicks, A. C. (2003). What stakeholder theory is not. *Business Ethics Quarterly*, 13(4), 479–502. <https://doi.org/10.5840/beq200313434>
- Piuchan, M., Wa Chan, C., & Kaale, J. (2018). Economic and socio-cultural impacts of Mainland Chinese tourists on Hong Kong residents. *Kasetsart Journal of Social Sciences*, 39(1), 9–14. <https://doi.org/10.1016/j.kjss.2017.11.004>
- Qiang, M., Shen, M., & Xie, H. (2020). Loss of tourism revenue induced by coastal environmental pollution: A length-of-stay perspective. *Journal of Sustainable Tourism*, 28(4), 550–567. <https://doi.org/10.1080/09669582.2019.1684931>
- Rashid Sumaila, U., Tai, T. C., Lam, V. W. Y., Cheung, W. W. L., Bailey, M., Cisneros-Montemayor, A. M., Chen, O. L., & Gulati, S. S. (2019). Benefits of the Paris agreement to ocean life, economies, and people. *Science Advances*, 5(2). <https://doi.org/10.1126/sciadv.aau3855>
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (2014). Doing research in business and management: An introduction to process and method. In *Doing Research in Business and Management: An Introduction to Process and Method*. Sage. <https://doi.org/10.4135/9781446280416>
- Rizzi, J., Gallina, V., Torresan, S., Critto, A., Gana, S., & Marcomini, A. (2016). Regional Risk Assessment addressing the impacts of climate change in the coastal area of the Gulf of Gabes (Tunisia). *Sustainability Science*, 11, 455–476. <https://doi.org/10.1007/s11625-015-0344-2>
- Robinson, D., Newman, S. P., & Stead, S. M. (2019). Community perceptions link environmental decline to reduced support for tourism development in small island states: A case study in the Turks and Caicos Islands. *Marine Policy*, 108. <https://doi.org/10.1016/j.marpol.2019.103671>
- Roloff, J. (2008). Learning from multi-stakeholder networks: Issue-focussed stakeholder management. *Journal of Business Ethics*, 82, 233–250. <https://doi.org/10.1007/s10551-007-9573-3>
- Romero-Padilla, Y., Navarro-Jurado, E., & Malvárez-García, G. (2016). The potential of international coastal mass tourism destinations to generate creative capital. *Journal of Sustainable Tourism*, 24(4), 574–593. <https://doi.org/10.1080/09669582.2015.1101125>
- Roxas, F. M. Y., Rivera, J. P. R., & Gutierrez, E. L. M. (2020). Mapping stakeholders' roles in governing sustainable tourism destinations. *Journal of Hospitality and Tourism Management*, 45, 387–398. <https://doi.org/10.1016/j.jhtm.2020.09.005>
- Salazar, A., & Cardoso, C. (2019). Tourism planning: impacts as benchmarks for sustainable development plans. In *Worldwide Hospitality and Tourism Themes*, 11(6), 652–659. <https://doi.org/10.1108/WHATT-08-2019-0048>

- Sangpikul, A. (2018). The effects of travel experience dimensions on tourist satisfaction and destination loyalty: The case of an island destination. *International Journal of Culture, Tourism, and Hospitality Research*, 12(1), 106–123. <https://doi.org/10.1108/IJCTHR-06-2017-0067>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
- Saxena, G., Mowla, M. M., & Chowdhury, S. (2020). Spiritual capital (Adhyatmik Shompatti)—a key driver of community well-being and sustainable tourism in Cox's Bazar, Bangladesh. *Journal of Sustainable Tourism*, 28(10), 1576–1602. <https://doi.org/10.1080/09669582.2020.1745216>
- Scheyvens, R. (2018). Linking tourism to the sustainable development goals: a geographical perspective. In *Tourism Geographies*, 20(2), 341–342. <https://doi.org/10.1080/14616688.2018.1434818>
- Semeoshenkova, V., & Newton, A. (2015). Overview of erosion and beach quality issues in three Southern European countries: Portugal, Spain and Italy. *Ocean and Coastal Management*, 118(A), 12–21. <https://doi.org/10.1016/j.ocecoaman.2015.08.013>
- Shampa, M. T. A., Shimu, N. J., Chowdhury, K. M. A., Islam, M. M., & Ahmed, M. K. (2023). A comprehensive review on sustainable coastal zone management in Bangladesh: Present status and the way forward. *Heliyon*, 9(8). <https://doi.org/10.1016/j.heliyon.2023.e18190>
- Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, 5(1), 9–27. <https://doi.org/10.1080/17437199.2010.510659>
- Sroyetch, S. (2016). The mutual gaze: Host and guest perceptions of socio-cultural impacts of backpacker tourism: A case study of the Yasawa Islands, Fiji. *Journal of Marine and Island Cultures*, 5(2), 133–144. <https://doi.org/10.1016/j.imic.2016.09.004>
- Sultan, M. T., Sharmin, F., Badulescu, A., Stiubea, E., & Xue, K. (2020). Travelers' responsible environmental behavior towards sustainable coastal tourism: An empirical investigation on social media user-generated content. *Sustainability*, 13(1), 56. <https://doi.org/10.3390/su13010056>
- Sultana, N., & Luetz, J. M. (2022). Adopting the local knowledge of coastal communities for climate change adaptation: A case study from Bangladesh. *Frontiers in Climate*, 4, 823296. <https://doi.org/10.3389/fclim.2022.823296>
- Sun, Y., Garrett, T. C., Phau, I., & Zheng, B. (2020). Case-based models of customer-perceived sustainable marketing and its effect on perceived customer equity. *Journal of Business Research*, 117, 615–622. <https://doi.org/10.1016/j.jbusres.2018.09.007>
- Tan, W. J., Yang, C. F., Château, P. A., Lee, M. T., & Chang, Y. C. (2018). Integrated coastal-zone management for sustainable tourism using a decision support system based on system dynamics: A case study of Cijin, Kaohsiung, Taiwan. *Ocean and Coastal Management*, 153, 131–139. <https://doi.org/10.1016/j.ocecoaman.2017.12.012>
- Teddle, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.
- Tosun, C., Çalişkan, C., Şahin, S. Z., & Dedeoğlu, B. B. (2023). A critical perspective on tourism employment. *Current Issues in Tourism*, 26(1), 70–90. <https://doi.org/10.1080/13683500.2021.2021155>
- Uddin, M. M., Schneider, P., Asif, M. R. I., Rahman, M. S., & Mozumder, M. M. H. (2021). Fishery-based ecotourism in developing countries can enhance the social-ecological resilience of coastal fishers—a case study of Bangladesh. *Water*, 13(3), 292. <https://doi.org/10.3390/w13030292>
- UN. (2015). *Transforming our world: The 2030 agenda for sustainable development: Sustainable development knowledge platform*. <https://sdgs.un.org/2030agenda>
- UNDG. (2013). *A Million Voices: The World We Want*.
- United Nations Development Programme. (2019). *Background of the Sustainable Development Goals | UNDP*. Fragile States Index.
- Waligo, V. M., Clarke, J., & Hawkins, R. (2013). Implementing sustainable tourism: A multi-stakeholder involvement management framework. *Tourism Management*, 36, 342–353. <https://doi.org/10.1016/j.tourman.2012.10.008>
- Wani, M. D., Dada, Z. A., & Shah, S. A. (2024). The impact of community empowerment on sustainable tourism development and the mediation effect of local support: a structural equation Modeling approach. *Community Development*, 55(1), 50–66. <https://doi.org/10.1080/15575330.2022.2109703>
- Williams, A. T., Rangel-Buitrago, N. G., Anfuso, G., Cervantes, O., & Botero, C. M. (2016). Litter impacts on scenery and tourism on the Colombian north Caribbean coast. *Tourism Management*, 55, 209–224. <https://doi.org/10.1016/j.tourman.2016.02.008>
- Yanes, A., Zielinski, S., Cano, M. D., & Kim, S.-Il. (2019). Community-based tourism in developing countries: A framework for policy evaluation. *Sustainability*, 11(9). <https://doi.org/10.3390/su11092506>
- Yin, R. K. (2018). *Case study research and applications* (Vol. 6). Sage Thousand Oaks, CA.
- Yustika, B. P., & Goni, J. I. C. (2020). Network Structure in Coastal and Marine Tourism: Diving into the Three Clusters. *Tourism Planning and Development*, 17(5), 515–536. <https://doi.org/10.1080/21568316.2019.1673809>

Please cite this article as:

Quader, M.S., Hassan, H.M.K. & Mahbub, T. (2025). Sustainable Coastal and Marine Tourism in Bangladesh: A Qualitative Evaluation. *Tourism and Hospitality Management*, 31(2), 279-292, <https://doi.org/10.20867/thm.31.2.9>



Creative Commons Attribution – Non Commercial – Share Alike 4.0 International