Prospects and Challenges at Kuakata Sea Beach for Sustainable Tourism Development: A Qualitative Analysis

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Abstract

Kuakata sea beach in Bangladesh has seen increased tourist growth since the Padma Bridge opened in 2022. Little is known about the obstacles and opportunities Kuakata has in implementing sustainable tourism. The purpose of this research is to look into the various prospects and challenges of sustainable tourism at Kuakata sea beach. The qualitative methods used in this study consisted of semi-structured stakeholder interviews; thematic analysis identified five key challenges such as environmental degradation, infrastructure and facilities development, socio-cultural issues, behaviour problems, and marketing, monitoring, and evaluation. The most significant obstacle to promoting sustainable tourism in Kuakata is beach erosion. Along with these challenges, this study has identified four new prospects such as exploring new tourist sites, developing community-based tourism, introducing a new tourist route, Payra seaport- new door to possibilities of tourism.

Keywords: Sustainable tourism, Sustainable tourism development, Qualitative analysis, Prospects, Challenges, Kuakata, Beach nourishment.

1. Introduction

Travel has become an integral part of human life. The desire to see the globe is unstoppable, even in the face of terrorism and other international crises. Tourism was identified as one of the economic sectors having the greatest potential to make a positive contribution toward attaining sustainable development at the 1992 United Nations Conference on Environment and Development (UNCED, 1992). Global tourism has far-reaching implications for economies, environmental systems, communities, and cultures (Nguyen et al., 2019, Pan et al., 2018; Wearing, Stevenson, & Young, 2010). It has the potential to play a role in the protection and promotion of the environment, as well as in the cultural appreciation and comprehension of other peoples (UNWTO, 2016). In many developing nations, sustainable development has lately emerged as a key topic on the development agenda for the tourism sector (Tosun, 2001; Helmy, 2004). Though tourism is one of the largest and fastest-growing industries in the world, there are many

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opportunities to increase the participation of tourism in the GDP of Bangladesh in the coming days. There is a great deal of interest in this topic among academics because of the impacts on quality of life, short-term gains, and limited long-term economic consequences. As a consequence, sustainable tourism has been a focus of attention for researchers for developing a tourism destination.

According to UNEP & UNWTO (2005, p. 12), sustainable tourism is understood as "a form of tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of tourists, the industry, the environment and host communities". Sustainable tourism development, like its parent paradigm of sustainable development, remains a highly discussed concept and it is seen as divisive, dividing the discussion between sustainable or 'good' forms of tourism and unsustainable, mass (or 'bad') types of tourism, as well as an inflexible blueprint that cannot be changed to different tourist development situations (Telfer & Sharpley, 2008). It is hardly surprising that sustainable tourism has become a recurring theme in tourism research, given that it aims to resolve existing tensions between economic gain, environmental conservation, and social equity. The activities of sustainable tourism primarily cover the environmental, economic, social and cultural aspects of development. Natural resources are being exploited in the tourism business and sometimes tourism activities have key impacts on the environment, economy, and sociocultural environment of the host destination (Pan et al., 2018). Thus, a comprehensive balance among environment, economy, and socio-cultural environment are required to ensure short- and long-term survival of the tourism sector. The principles of sustainable tourism should be used in a wide range of tourism activities and operations by setting long-term and short-term goals and programs (UNEP, 2002).

Kuakata is the second largest panoramic sea beach in Bangladesh. It is becoming more popular with tourists due to the fact that it offers a rare opportunity to see both the sunrise and sunset from the beach. Kuakata, locally known as "Shagor Kannya", means "Daughter of the Sea". It is situated in Kalapara upazila of Patuakhali district, on the western bank of the Meghna estuary. The adjacent Fatra and Gangamati Reserved mangrove forests (both of which are part of the Sundarbans) have contributed to the enhancement of biodiversity in this area. Red crabs are one of the important species of crabs in Kuakata that attract tourists, found in a place named "Lalkakrar Char". Rakhain, an ethnic group from Arakan, have a thousand-year ancient history and culture. The Rakhains currently live in Misripara in Kuakata. Kuakata is a pilgrimage site for many Hindus and Buddhists, who visit around the festivals of Rush Purnima and Maghi Purnima.

Every week, at least 50,000-60,000 tourists visit Kuakata sea beach during the tourist season (TBS Report, 2021). The Bangladesh government has already opened the Padma Bridge, the largest and most expensive bridge in Bangladesh, on June 25, 2022. As a consequence, the economy of the southern part of Bangladesh will change drastically and this will have an impact on the Kuakata tourism industry. On the other hand, Payra Port, close to the coast in Kuakata, is the third port in Bangladesh. There are a coal port, a coal-fired power plant, a railroad, several roads and bridges, and a community at Kuakata. At present, the government has plans to implement 19 projects based on this Payra seaport such as an economic zone, a readymade garment factory, a pharmaceutical industry, cement factories, a coal-fired power plant, a fish processing zone, a fertilizer factory, an oil refinery, and a shipbuilding industry (Khan & Noman, 2021). A large number of economic activities and new jobs will be generated as a consequence. Therefore, it is hoped that these activities would boost tourism in Kuakata.

At the same time, it is expected that many more tourists would visit Kuakata than at present. If the socio-cultural and environmental resources of a tourist destination are destroyed for any reason, then the tourists as well as service providers move to another destination. But local residents are unable to relocate because of their roots. In the absence of a comprehensive strategy for sustainable tourism development, this growing number of visitors are likely to have unfavorable effects on the local environment as well as sociocultural environment. However, research regarding identifying prospects and challenges of sustainable tourism on Kuakata sea beach remains limited. This paper addresses this gap by investigating the various prospects and challenges of sustainable tourism in Kuakata. The objectives of this study is mentioned below:

- To identify the challenges to sustainable tourism development in Kuakata sea beach
- To explore the prospects of sustainable tourism development in Kuakata sea beach

2. Literature review

There are many methods and definitions of sustainable tourism in the literature, and many of them begin by establishing a connection to the ideas of sustainability or sustainable development (Zamfir & Corbos, 2015). The term 'sustainable tourism' originated from the term 'sustainable development'

and the necessity for the tourism sector to be sustainable (Jackson & Morpeth, 2000). Despite the fact that the phrase "sustainable tourism" is associated with a post-Rio paradigm of sustainable development, the literature is undergoing development.

To minimize the negative effects of tourism and enhance its positive impact on the environmental, socio-cultural, and economic components of sustainability is the goal of the abovementioned conventional definition of sustainable tourism proposed by the UNEP and the UNWTO. If a destination is to be considered a sustainable tourist destination, it must protect the local economy and contribute to the preservation of the local cultural identity and there must be a steady stream of visitors as well as a good ecological and environmental impact (Das, 2019; Kuklina et al., 2021).

The phrase 'sustainable tourism development' is frequently used to reflect a more integral and less self-interested approach to tourism development and it is closely linked to sustainable tourism, however it focuses on the necessity to guarantee sustainable growth of tourism (McDonald, 2006). According to the WTO (1998, p. 21), sustainable tourism development is defined as follows: *"Sustainable tourism development meets the needs of present* tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological *diversity and life support systems"*.

The definition clearly states that successful sustainable tourism development requires sound environmental, social, and cultural resource management that meets the needs of all the stakeholders while protecting and conserving resources for present and future generations. These managerial, organizational, and pedagogical needs have come to be known as sustainable tourism development. Strong political leadership and informed engagement by all key stakeholders are required to achieve sustainable tourism development by broad participation and consensus building (UNWTO, 2004; UNEP & UNWTO, 2005). Achieving sustainable tourism is an ongoing process that needs continual impact control and, if required, the implementation of the appropriate preventative and/or corrective actions (UNWTO, 2004; UNEP & UNWTO, 2005). The notions of sustainable tourism and sustainable tourism development remain a topic of vigorous and occasionally contentious and cyclical ideological and political discussions (Moyle et al., 2020).

Sikkim, a tiny mountainous state in the Eastern Himalayas of India, had analyses of sustainable tourism and its issues and challenges (Das, 2019). Climate change, land degradation, overexploitation, and natural disasters with devastating consequences were the major challenges for developing sustainable tourism in Sikkim. It was also thought that a healthy relationship between tourism and the environment and the long-term success of tourism in the state requires sustainable planning that makes the best use of management. Allayarov et al. (2018), on the other hand, suggest that in order to improve the tourist industry in the Republic of Kazakhstan, it is necessary to first identify the current challenges encountered by the sector and then identify the government initiatives that started to improve it. Kazakhstan's tourism business suffers from a lack of supply chain and logistical facilities, infrastructure, and tourist services. Economical travelers also confront exorbitant prices while visiting Kazakhstan. Le (2016) research out of Vietnam divided up the places into categories and studied the environmental and non-environmental aspects of sustainable tourism. Positive and negative environmental consequences, economic effects, and sociocultural effects are only some of the six overarching themes that emerged. Sustainable tourism attempts to maximize the positive benefits and reduce the negative ones via rigorous and consistent implementation. In addition, three fundamental themes regarding the obstacles local stakeholders face in their involvement in sustainable tourism development in the area were discovered. These topics are as follows: operational, structural, and cultural.

The study conducted by Kisi (2019) centers on the formulation of an optimal sustainable tourism framework for Turkey. Only by shifting away from mass tourism and toward sustainable travel can we ensure the future of our planet's natural resources. Many studies have shown that long-term survival is possible only through environmentally, economically, and socially responsible practices. The only ethical method to restore the ecology and biodiversity is via sustainable tourism.

Sharpley has been advocating for the concept that sustainable development through tourism is unfeasible for more than 20 years (Sharpley, 2020). An avalanche of papers devoted to sustainable tourism has filled literature resources in the last decade (Niñerola et al., 2019). The problem is multifaceted and multi-relational, mostly linked to climate change (Moyle et al., 2020). To better understand the sustainability of the economy, researchers should focus on applied issues, rather than theoretical aspects ((Moyle et al., 2020; Kuklina et al., 2021).

3. Methodology

This empirical research was done during the COVID-19 pandemic. It was conducted in the locations of the municipality of Kuakata in the Patuakhali district of Bangladesh in March 2021. In the last few decades, researchers who study social issues have become more and more interested in qualitative research methods (Silverman, 2015). Qualitative data gives a more in-depth picture of a thing or subject, which helps us understand a problem better (Smith, 2015). The use of qualitative research methods is particularly valuable in situations where there is a significant lack of study in the existing literature (Mareeuw, Vaandrager, Klerkx, Naaldenberg, & Koelen, 2015). The qualitative research approach was adopted in this study because the researcher was more interested in explaining things than in measuring them or making generalisations about numbers (Kala & Bagri, 2018). Qualitative methods are helpful when there are many sources of evidence and the target group can easily say what they think. The present study used two qualitative research methods, namely face-to-face semi-structured interviews and document analysis, in order to collect data that would address the research aims. Conducting interviews and going through documents are two of the most common ways to obtain qualitative data (Chenail, 2011; Kvale, 2015).

Stakeholders from the supplier side, such as local residents, tourism business operators, and personnel of management agencies who are working on legal, administrative, communication, and safety-security aspects of sustainable tourism development, were selected as a sample. These stakeholders have lived in the area for a long time or worked in the tourism business; they can easily spot problems and find out more about them. The researcher conducted fieldwork in order to obtain a better knowledge of sustainable tourism development by carefully observing the surroundings while conducting interviews. In this study, the researcher used a nonprobability judgmental technique for selecting potential participants for a semistructured interview to meet the objectives. Malhotra (2010) describes a judgmental sampling method as one in which the researcher's judgment is the primary criterion for selecting participants for the interview program. The judgment was formed via a review of the literature, the researcher's own experience, and contact with various stakeholder groups. Several criteria (e.g., information availability, relative role and significance in achieving objectives) were established by the researcher for various groups of stakeholders to be included in the interview program.

In all, there were a total of 27 in-depth interviews conducted. The participants that were chosen had to be at least 18 years old. The duration of each interview ranged from 45 to 90 minutes, which was all done in the

Bengali language. For the interview script, a list of questions based on the theme of the study was made. According to the participants' consent, all interviews were digitally recorded. An extensive interview program yielded voluminous amounts of high-quality empirical data that shed light on the broader context of sustainable tourism development. The empirical materials were translated into English and transcribed.

The data were analyzed manually and used a four-step data analysis process, beginning with the identification of major themes (note taking), followed by the assignment of codes to major themes (coding), the classification of responses under major themes (sorting), and ultimately, themes and reactions are included in the research discussion (writing). Themes may be found at all phases of data collection and tend to be abstract in nature (Ryan and Bernard, 2003). Document analysis also helped identify themes that were pertinent to the study objectives. The study used thematic analysis to examine the empirical data collected from the interview programme, which identified two board themes to reveal the research objectives. All of these emerging themes and sub-themes are used to define the roles of sustainable tourism development and their respective efficiency of sustainable tourism at the Kuakata sea beach in Bangladesh. For the validity and reliability of the data, the interviews have been recorded digitally. A deductive thematic approach (Hassan et al., 2018; Patton, 2015) was used to analyse prospects and challenges for sustainable tourism development on Kuakata sea beach.

The first theme emerged from the analysis is titled 'Challenges of sustainable tourism development' with five sub-themes: (1) Managing environmental degradation, (2) Managing infrastructure and facilities development, (3) Managing Socio-Cultural issues, (4) Managing behaviour problem, and (5) Managing marketing, monitoring and evaluation. The second theme developed from the qualitative analysis is titled as, 'Prospects of sustainable tourism development' with four sub-themes: (1) Exploring new tourist sites, (2) Payra Seaport- new door to possibilities of tourism, (3) Developing community-based tourism (CBT), and (4) Introducing a new tourist route (Kuakata sea beach-deep sea-Sundarban).

4. Findings

4.1. Challenges of sustainable tourism development *4.1.1. Managing environmental degradation*

Environment and tourism are integral parts in many ways. The natural environment and climatic conditions have a significant role in defining a region's feasibility and appeal as a tourism destination (Dwyer and Kim, 2003). The effective management of environmentally sensitive areas could contribute to the sustainable tourism development of Kuakata sea beach. The main environmental deterioration trends in Kuakata include beach erosion, ineffective waste management and littering issues, arsenic-laced tube well water, the restaurants lacking basic hygiene, loss of biodiversity, and plastic pollution killing marine life.

a) Beach erosion

The Kuakata sea beach has been eroding for over the past two decades, generating considerable anxiety among investors, visitors, merchants, and local residents. According to the municipality of Kuakata, the sea is eroding away at least 30 to 100 feet of beach land every year (Jewel, 2020). All the participants in this study noticed significant changes on the sea beach of Kuakata. This beach is being broken every year. The beach was 18 kilometres long and 8 kilometres broad (Rashid and Taskin, 2018). Due to persistent erosion, the 8-kilometer-long beach has decreased to the point that visitors are unable to access it during high tide (Das, 2021).

...there is no soil here (Kuakata sea beach). Everything here is sand. When the waves hit, all the sand goes away. The waves on the shore hit the palm trees and all fell. - Hotel employee₂

A motor bike driver at the beach, said "We are dissatisfied with the erosion since it is threatening our livelihoods and our way of life." Saving the Kuakata sea beach is one of the biggest challenges for sustainable tourism here. If the sea beach is fragile, no tourists want to come here.

b) Ineffective waste management and littering issue

Despite the fact that the municipality of Kuakata is now eleven years old, there is no defined location for dumping trash and appropriate waste management. Managing litter is another major challenge in Kuakata.

So far, there is no specific place in Kuakata where municipal waste can be collected and burned, dumped or recycled. ... Municipal garbage is dumped at a place called Ghatla after midnight. ... Ghatla is a canal through which water from 8 wards or villages is drained. That canal has merged with the sea. - Tour operator₂

The majority of stakeholders focused on the littering problems on Kuakata sea beach that were impacting the environment. To indicate the situation, a local resident who is also the owner of a hotel in Kuakata, said, "Those who come on day-tour do not reserve a hotel. They throw all the waste on the road, which is detrimental to the environment. "

c) Loss of biodiversity

Climate change and tourism activities are both important reasons for the loss of biodiversity in Kuakata. Climate change exacerbates problems by increasing the abundance, distribution, recruitment, and mobility of aquatic animals such as invertebrates, fish, sea turtles, and cetaceans (FE Online Report, 2021). According to the Marine Journalists Network. at least 200 motorbikes carrying visitors travel to Kuakata every day, crushing at least 6,000 crabs beneath their wheels (FE Online Report, 2021). 90% of the plastic used by the tourists is dumped on the beach every day, causing a serious threat to the marine ecosystem in the region (TBS Report, 2021). S

Tourists' plastic polythene bags are floating into the mangrove forest. The trees are dying from the plastic being stuck in their *roots. The forest is being destroyed....* biodiversity such as red crabs is almost extinct. - Tour operator₂

4.1.2. Managing infrastructure and facilities development

a) Poor internal transportation system

A well-established transportation system is a prerequisite to developing sustainable tourism in any destination. Transportation is the primary impediment to Kuakata's tourist growth. Although Kuakata can be easily reached due to the Padma Bridge, the Kuakata-Kalapara-Patuakhali highway is in poor condition. The internal transportation system between different spots in Kuakata is also in very poor condition. Visitors can visit different spots by only riding motorcycles or vans. Right now, there is no specific place for a bus terminal. All the buses are parked near the road on the seabeach randomly. That's why there are constant traffic jams and a lot of noise and air pollution near the beach.

There is no specific bus stand in Kuakata. All the buses are parked at random on the road, creating traffic jams and ruining the environment. - Hotel owner

b) Undeveloped tourist spots

Kuakata is still in the process of being developed into a viable tourist attraction. It is surrounded by several tourist sites, including the Gangamotir Forest, Fathrara Forest, the Misripara Buddhist Statue, Rakhain Palli (Village), and Shutki Palli (Dried Fish Village). As of right now, there are not enough tourist infrastructures in these sights. Only half a kilometer of the sea beach is lit after evening. As a result, tourists lack a sense of security and have little interest in spending extended periods of time in dark locations.

The washroom is a basic need for the visitors. There is no properly maintained hygienic washroom near the sea beach, nor is it there near the beach's surrounding tourist attractions. Even though Barisal to Kuakata is 120 kilometres away, there is no washroom beside the road for the passengers.

The 20-bed Kuakata Hospital is located three kilometres from the seaside. The hospital is run by a single doctor, and other personnel are in short supply. There is no ambulance service on the sea beach area under this hospital. In order to provide an idea of the present situation, a hotel employee said "There is no good medical service here. There is one doctor at the hospital in Kuakata. It is very depressing. You can get sick at any time of the night. There is no service for the tourists if they get sick at night."

c) Insufficient recreational facilities

Tourism, recreation, and leisure are all inextricably linked (Mandic et al., 2018). Recreational facilities are part of the physical infrastructure that supports economic and tourism development (Khadaroo and Seetanah: in Jafari and Xiao, 2016). Tourism has been active in Kuakata for over two decades, but no recreational facilities for such visitors have yet been developed. When travelling to Kuakata, tourists are limited to visiting the beach and nearby sites. There are no pleasant activities for the tourists. Kuakata has no theme park, movie theater, spa, bar, or gymnasium yet.

There are no five-star hotel-type facilities. But the guests will come and ask for these. But we are not able to give them these services. Higher-class tourists do not come here. The middleclass people are the most numerous in Kuakata. That's because the upper class doesn't come here. - Hotel employee₁

4.1.3. Managing socio-cultural issues

There is a strong correlation between cultural heritage tourism as well as the desire of certain visitors to immerse themselves in the local culture, art, and history, as well as sampling the food and meeting the people (Carter et al., 2015). Not only the sea beach but also cultural heritage is another attraction for tourists to Kuakata. Socio-cultural repercussions are those that occur as a consequence of tourist interaction with the host community. Historically, the Rakhine population in Kuakata has a tradition that dates back approximately to two hundred years in this region. For various reasons, the number of Rakhine is decreasing day by day. At the same time, their culture is also getting lost.

Rakhine people rarely get a chance to show off their cultural activities. Especially when an important person or minister comes, they get a chance to show the culture. During the data collection for this research, a 10-day cultural activity was going on at the beach under the supervision of the

Bangladesh Police Authority. But the Rakhine were not given any opportunity to do any cultural show.

a) Insufficient financing and marketing for Rakhine handicrafts

One of the attractions of tourist shopping is the variety of Rakhine handicrafts, clothes and rituals. Tourists have a great demand for their handicrafts. Rakhine garments and craftsmen are disappearing day by day. The two main problems in the production of Rakhine handicrafts and handicrafts are 1) the problem of finance and 2) the problem of marketing. Due to these two problems, the Rakhines are not able to present their products to the tourists in the proper way. A Rakhine leader mentioned: "our handicrafts, clothing, and ceremonies are one of the attractions of visitors' shopping. Our wares are in high demand for the tourists. Finance and marketing are the two primary concerns when it comes to creating handicrafts and weaving textiles. Due to these two issues, we are unable to properly produce our items for tourists".

b) Conflict between the Rakhine-Bengali

Conflicts between the Rakhine and Bengali people occur sometimes, which causes the Rakhines to become even more concerned. The tourist industry suffers as a result. In Misri Para, Bengalis are running shops in the place of the Rakhines, but they are not renting land to the Rakhines properly. As a result, when the Rakhine people want to rent their land, the Bengalis are filing cases against them. As a result, the conflict is growing.

4.1.4. Managing behavior problem

Sometimes, tourists are confronted with a variety of behavioural issues by destination marketers and tourism service providers. In the voice of a hotel owner, the misbehavior of the service provider became clearer. He said, "Tourists are facing misbehavior from two classes of professionals. One is the photographer and the other is the motorcyclist. They want to rob the tourists. They want to make a lot of money with a little service". The majority of the motorcyclists in Kuakata lack a valid licence. Many of them do not wear helmets when they drive, and that's dangerous. Riders under the age of 18 can be seen.

One tour operator mentioned that service providers are mistreating tourists. Sometimes tour operators cheat the tourists for visiting many sites. Actually, local tour operators take them to visit a few sites, but they proclaim too many sites' names.

The various tour operators here promise the tourists to go around 18 spots, but there are no 18 spots here. Isn't that cheating? The behaviour of the local people with the tourists should be good. - Tour $operator_2$

4.1.5. Managing marketing, monitoring and evaluation

Though Kuakata sea beach is one of the few places in the world where you can see both the sunrise and the sunset, there is no proper marketing for this place. Kuakata depends on the local tourists and very few international tourists come here. The sea beach welcome the visitors for only six months (October to March), and the service providers are waiting for the guests for the rest of the year. Development starts with planning. Any development work will go well if it follows the master plan. The 2014 gazette issued Kuakata's master plan. People have constructed buildings wherever they like. Kuakata risks sustainable tourism if things are not rigorously regulated.

The Patuakhali Deputy Commissioner chairs the Kuakata Beach Management Committee, which oversees the beach. Local stakeholders claim the beach management committee is inefficient and has many problems. This committee does not arrange meetings regularly and does not monitor them properly. The mayor of Kuakata wants to restructure and strengthen the beach committee locally.

4.2 Prospects of sustainable tourism development

4.2.1. Exploring new tourist sites

Char Bijoy is a mesmerizing island in the Bay of Bengal, located around 40 kilometres southeast of the Gangamati forest and east of Kuakata. This island was found in December 2017 by a group of traveling explorers in the Patuakhali district. After its discovery in the month of Victory, the island was dubbed "Char Bijoy" or "The Victory Island." Char Bijoy Island is around 5,000 acres in size and is 10 kilometres in length and 3 kilometres in width. It is the habitat of red crabs, thousands of migrating birds, and an abundance of marine fish. This deserted island captivates all tourists with its spectacular beauty and the great expanse of water. That is why adventure-seeking travellers have elevated Char Bijoy to the top of their list of ideal camping spots. The island is about an hour and a half away by an enginedriven trawler or speedboat from Kuakata.

Recently, an island southeast of Kuakata beach was seen. We gave it the name "Char Vijay." Char Vijay is about 10 kilometres long. Although no construction has begun there, several tourist boats visit on a daily basis. I went there. I spotted many large white birds that looked like ducks. Again, lots of red crabs have been seen. If the government and various non-governmental organizations work on it, more visitors will arrive. - Security Officer

4.2.2. Payra seaport- new door to possibilities of tourism

Payra Port is a third seaport in southern Bangladesh, located near the seashore at Kuakata. The Payra port's development is accompanied by the building of a coal terminal, a coal power plant, a train line, bridges and roads, and a settlement. The government intends to construct an airport in the area, which will be located around the Payra Port and Kuakata. The outcome is that, passengers will have an easier time travelling to Payra harbour and Kuakata for tourist purposes. Among the planned projects to construct are an eco-park, a foreigner-exclusive tourist zone, a marine drive, a marine park, a sea aquarium, a stadium of international standard, a golf course, a tennis court, a convention centre, a hotel-motel zone, and resort, a shopping mall, and a picnic area, among other recreational facilities (Khan & Noman, 2021). At present, the government has plans to implement 19 projects based on this Payra seaport. This includes an economic zone, a readymade garment factory, the pharmaceutical industry, cement factories, a coal-fired power plant, a fish processing zone, a fertilizer factory, an oil refinery, and the shipbuilding industry (Khan & Noman, 2021). As a result, huge economic activity and employment will be created in this area. Therefore, these activities will hopefully have a positive effect on Kuakata's tourism industry.

4.2.3. Develop community-based tourism (CBT)

The Rakhines are a minor ethnic group in Kuakata. They migrated from Arakan of Myanmar about 200 years ago. Misripara, Keranipara and Amkholapara are among the villages that make up Rakhine Palli. Community based tourism (CBT) is the bast way to see their way of life, culture, and tradition in their natural environment. CBT promotes local communities by spurring economic development, promoting cultural preservation, and enhancing their quality of life (Hossain & Uchinlayen, 2017). These, in turn, reinforce good attitudes and actions toward sustainable tourist growth among communities. It has a lot of opportunities to flourish through community-based tourism in Kuakata, centered around the Rakhine community.

Once upon a time, the Rakhines were the owner of the land in this area. They are now reaping significant benefits because of *tourism.* ... We proposed to establish "Community Based Tourism" to create a connection between them and tourism ... Before, they had no educated children. Now they have. They, too, want to benefit from this tourism. - Tour operator₁

4.2.4. Introducing a new tourist route (Kuakata sea beach-deep sea-Sundarban)

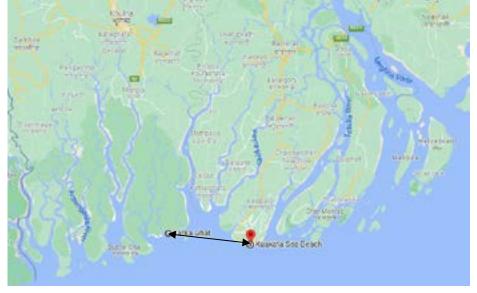
Bangladesh has a diverse range of tourism products and many tourist destinations. Numerous tour operators offer a variety of trips. However, there

is currently no circular or ring tour that connects Sea Beach, Deep Sea, and Forest. In Kuakata, such circular trips may be organized, which will boost tourism in this area.

By the sea, the distance between Kuakata Sea Beach and the Sundarbans (largest mangrove forest in the world), is about 40 kilometres (Map 1). It takes about three hours by ship to cross this path. Visitors can visit Kuakata and Deep Sea before heading to the Sundarbans (Katak), or vice versa. Therefore, tourists can start their journey from Kuakata sea beach, watch the deep sea, and end the trip at Sundarbans. Tourists will be able to experience both romance and adventure on this trip.

There are plans to open a route between Kuakata and the Sundarbans next year. We are interested in organizing a ring tour. Tourists may enter Khulna through Dhaka and make their way to Kuakata. Alternatively, you may enter the Sundarbans from Dhaka through Kuakata and return to Dhaka via Khulna. Tourists feel bored on a one-way tour. If a circular tour is designed for this, visitors will be able to see the sea beach, the deep sea, and the Sundarbans forest all at once. - Tour operator₁





5. Discussion

This study identified five challenges: Kuakata's environmental degradation, infrastructure and facilities development, socio-cultural issues, behaviour problem/Knowledge and awareness, and marketing, monitoring and evaluation which have the potential to influence sustainable tourism

development in Kuakata. It is only by bringing them together and analysing their interactions that a clear picture of the fundamental challenges plaguing Kuakata's tourism becomes visible. These issues are critical to Kuakata's sustainable development and must be addressed if sustainable tourism is to materialize.

Beach erosion, inadequate waste management and littering, and biodiversity loss are the most prevalent challenges in Kuakata's environmental deterioration, which creates tensions between government, non-government, community, and tourist stakeholders. Findings from this research demonstrate that most tourists are accountable for littering problems, especially same-day visitors. Same-day visitors do not take any kind of accommodation, and they come here in a picnic mood. So, they throw plastic bottles and plastic lunch boxes everywhere. On the other hand, an adequate number of dustbins are not here. Every day, motorbikes transporting tourists drive to the sea beach smashing red crabs under their wheels in the process.

Numerous tourism scholars have already highlighted the critical role of service infrastructure, particularly transportation, lodging, catering, people services, recreational facilities, and tourist spot development, in the overall expansion of tourism from both a geographical and economic standpoint. The principal socio-cultural challenges in Kuakata include conflict between the Rakhine and Bengali peoples, difficulties in the manufacture of Rakhine handicrafts, the decline of the Rakhine population and as a consequence, the risk of losing their culture, and the litany of mistreatment faced by the tourists from the service providers.

5.1. Beach erosion-the biggest challenge for developing sustainable tourism in Kuakata

Tourist attractions in Kuakata are mainly based on the sea beach and the surrounding area. But the regret is that the sea beach is constantly breaking down. Simultaneously, more than two lakh trees of two thousand acres of forest have been lost in the sea due to the erosion of the sea beaches in 13 years (Das, 2021). Preventing the erosion of Kuakata Sea Beach is one of the most difficult issues to overcome. If the erosion of sea beach is not controlled, the tourism industry in this region may be wiped out at some point. There should be a coordinated effort by the Forest Department, the Water Development Board, the District Administration, the Local Administration, and the Bangladesh Tourism Board to maintain the forest and stop beach erosion. Aside from that, fresh afforestation must be carried out. The forest department should take the initiative to plant salt-tolerant trees to protect the forest from tidal surges. However, under the supervision of the Water Development Board, urgent repairs are being carried out in the

surrounding erosive areas, including the Zero Point area of the beach, by dropping sand-filled geo-bags. However, this is just a short-term solution to the problem of erosion on the beach. That is insufficient to ensure the beach's long-term conservation and development. This requires mega projects with modern technology.

Many countries around the world whose beaches are eroding have solved this problem through "beach nourishment." Beach nourishment is the process of replenishing beaches with imported sand and is one of the most effective methods of rehabilitating beaches when erosion has become an issue (Rahman et al., 2013). Nourishment is popular because it protects beach resources and avoids the detrimental impacts of hard constructions. Beach nourishment has become one of the most well-known ways of coastal protection in both the United States and Europe to address the issue of beach erosion (Rahman et al., 2013).

If the various prospects of sustainable tourism in Kuakata are developed, improved, and well managed, the future tourism industry in Kuakata will be more attractive to tourists. These prospects have a significant impact on the tourism industry's future development and growth. When the government places a greater emphasis on promoting tourism, it, too, develop and strengthen this aspect of the economy. The relevance and influence of these concerns on sustainable tourism development will be assessed afterwards, relying on current theoretical models to explore how they may be modified to aid the growth of tourism in Kuakata.

6. Conclusion

The prospects for the growth of tourism in the Kuakata are very promising due to the territory's abundance of distinct tourist destinations. Despite the prevalence of numerous attractions in Kuakata, tourism in the area is still in its infancy. Considering the relevant concept of sustainable tourism development, this research focuses on the various prospects and challenges of sustainable tourism at Kuakata sea beach with a belief in established literature so that it can be managed through proper initiatives by the stakeholders. The mechanism of tourism is an open system that is impacted by complex interactions and interrelationships. The notion of sustainable tourism development refers to the management of all tourism resources in such a manner that they meet the economic, social, and aesthetic demands of stakeholders while also preserving the cultural integrity and ecological diversity of the destination (Bramwell & Lane, 1993; WTO, 1998; McKercher, 2003). Environmental sustainability in tourism is achieved through protection of biological diversity, effective use of energy, water availability and management, waste disposal and wastewater treatment, controlling atmospheric pollution, and appropriate management of infrastructure development and landscape. It also achieved the socio-cultural dimension of sustainability of tourism on the host community through local public safety, the local community's capacity to carry out its social responsibilities, cultural heritage preservation, and overall quality of life. Moreover, economic sustainability is attained by taking into account the economic benefits of tourism for the host community, ensuring tourist satisfaction, planning an appropriate tourism-related strategy, and enforcing an efficient institutional regulation and monitoring system ((Durovic & Lovrentjev, 2014). Beach erosion is the greatest barrier to the development of sustainable tourism in Kuakata. The government should immediately start the "beach nourishment" project to save the Kuakata sea beach.

Sustainable tourism development should not be seen as a goal in itself, but rather as a process. The concept of sustainable tourism, from theory to practice, is faced with a long road to implementation because of the various challenges that the tourist sector has to overcome in order to embrace sustainable practices, as determined by a great number of studies (Tosun, 2001; Le et al., 2006). This study examines the various prospects and challenges of sustainable tourism in the context of a highly vulnerable developing nation so that it can meet the tourism needs of future generations.

References

- Bowen, Glenn A. 2009. "Document Analysis as a Qualitative Research Method." *Qualitative Research Journal* 9(2): 27–40.
- Bramwell, B. & Lane, B. (1993). Sustainable Tourism: An Evolving Global Approach. *Journal of Sustainable Tourism*, 1(1), 1–5.
- Butler, R. W. (1998). Sustainable Tourism Looking Backwards in order to Progress? In C. M. Hall & A. A. Lew (Eds.), Sustainable Tourism: A Geographical Perspective (pp. 25–34). Edinburgh Gate, UK: Wesley Longman Limited.
- Cater, E. and Goodall, B. (1992). Must tourism destroy its resource base? In: L. France (ed). The Earthscan Reader in Sustainable Tourism (pp. 85-89). London: Earthscan Publications.
- Chenail, R. (2011). Interviewing the Investigator: Strategies for Addressing Instrumentation and Researcher Bias Concerns in Qualitative Research. *The Qualitative Report*, 16(1), 255-262.
- Das, S. (2019). Towards the Development of Sustainable Tourism in Sikkim, India: Issues and Challenges. *International Journal of Research in Social Sciences*, 9(2).

- Das, S. (2021, August 25). Two thousand acres of the forest area have been lost on Kuakata beach (Translated). *The Daily Prothom Alo.* https://www.prothomalo.com/bangladesh/environment/ 2-Thousand-Acres-Forest Area-Lost (Translet from Bangla).
- Dornhelm, R. (2004). "Beach Master". Invention & Technology Magazine (American Heritage Publishing) 20 (1).
- Durovic, M., & Lovrentjev, S. (2014). Indicators of sustainability in cultural tourism. *The Macrotheme Review*, *3*(7), 180–189. http://macrotheme.com/yahoo_site_admin/assets/docs/19MR37mj.2 02135138.pdf
- Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism*, 6(5), 369–414. https://doi.org/10.1080/13683500308667962
- FE Online Report. (2021, May 28). Kuakata under threat of losing tourism potential due to pollution, mismanagement. *The Financial Express*. https://thefinancialexpress.com.bd/economy/kuakata-under-threat-of-losing-tourism-potential-due-to-pollution-mismanagement-1622203999
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 191– 215). Thousand Oaks, CA: Sage.
- Hassan, Kamrul, James Higham, Ben Wooliscroft, and Debbie Hopkins. 2018. "Climate Change and World Heritage: A Cross-Border Analysis of the Sundarbans (Bangladesh–India)." *Journal of Policy Research in Tourism, Leisure and Events* 11(2): 196–219.
- Helmy, E. (2004). Towards integration of sustainability into tourism planning in developing countries: Egypt as a case study. *Current Issues in Tourism*, 7(6), 478–501. https://doi.org/10.1080/1368350050408668199
- Hossain, M. A., & Uchinlayen. (2017). Rural Community-Based Tourism Development in Bangladesh: The Conceptual Issues. *International Journal of Management and Business Research*, 7(1), 11–19. https://doi.org/10.14419/ijet.v7i2.29.13657
- Hossain, M. A., & Uchinlayen. (2017). Rural Community-Based Tourism Development in Bangladesh: The Conceptual Issues. *International Journal of Management and Business Research*, 7(1), 11–19. https://doi.org/10.14419/ijet.v7i2.29.13657
- Jackson, G., & Morpeth, N. (2000). Local Agenda 21. Reclaiming community ownership in tourism or stalled process? In G. Richards & D. Hall (Eds.), *Tourism and sustainable community development* (pp. 120). London: Routledge.

- Jewel, M. J. I. (2020). Kuakata beach erosion takes a bad turn. *The Business Standard*. https://www.tbsnews.net/environment/kuakata-beach-erosion-takes-bad-turn-156943
- Johnson, B., & Christensen, L. (2012). Educational Research: Quantitative, Qualitative, and Mixed Approaches (4th ed., Vol. 2010, p. 621). SAGE.
- Kala, D. & Bagri, D. K. (2018). Barriers to local community participation in tourism development: Evidence from mountainous state Uttarakhand, India. *TOURISM, Vol. 66*(No. 3), 318 - 333.
- Khadaroo, J., Seetanah, B. (2008), "Transport Infrastructure and Tourism Development: A dynamic gravity model approach", *Tourism Management*, Vol. 29, pp. 831-840. In: Jafari, J., Xiao, H. (eds.), (2016), *Encyclopaedia of Tourism*, Springer Reference, Switzerland
- Khan, S., & Noman, M. (2021, April 19). Payra downgraded to seaport from deep seaport. *The Business Standard*. https://www.tbsnews.net/bangladesh/infrastructure/payradowngraded-seaport-deep-seaport-234118
- Kimbu, Albert Nsom. 2010. "Sustainable Tourism Development Management in Central Africa: A Case Study of the Tourism Industry in Cameroon." Nottingham Trent University. https://search.proquest.com/dissertations-theses/sustainabletourism-development-management/docview/2389776180/se 2?accountid=41849%0Ahttp://irep.ntu.ac.uk/id/eprint/185/.
- Kisi, N. (2019). A Strategic Approach to Sustainable Tourism Development Using the A'WOT Hybrid Method: A Case Study of Zonguldak, Turkey. *Sustainability (Switzerland)*, *11*(4). https://doi.org/10.3390/su11040964
- Kuklina, M., Trufanov, A., Krasnoshtanova, N., Urazova, N., Kobylkin, D., & Bogatyreva, M. (2021). Prospects for the development of sustainable tourism in the okinsky district of the republic of buryatia. *Sustainability (Switzerland)*, *13*(14), 1–16. https://doi.org/10.3390/su13148042
- Kvale, S. (2015). InterViews : learning the craft of qualitative research interviewing (Third edition. ed.): Sage Publications.
- Le, Y., Hollenhorst, S., Harris, C., Mclaughlin, W. & Shook, S. (2006). Environmental Management: A Study of Vietnamese Hotels. *Annals* of *Tourism Research*, 33(2), 545–567.
- Le, Minh Duc. (2016). Developing sustainable tourism: critical perspectives from Baria- Vungtau Province, Vietnam.
- Malhotra, N. K. (2010). *Marketing research: an applied orientation* (6th ed. ed.). Upper Saddle River, N.J. London: Pearson.

- Mandic, A., Mrnjavac, Ž., & Kordic, L. (2018). Tourism infrastructure, recreational facilities and tourism development. *Tourism and Hospitality Management*, 24(1), 41–62. https://doi.org/10.20867/thm.24.1.12
- Mareeuw, F. V. d. D., Vaandrager, L., Klerkx, L., Naaldenberg, J., & Koelen, M. (2015). Beyond bridging the know-do gap: a qualitative study of systemic interaction to foster knowledge exchange in the public health sector in The Netherlands.(Research article)(Report). BMC Public Health, 15, 922.
- McDonald, J. R. (2006). Understanding sustainable tourism development from a complex systems perspective : A case study of the Swan River , Western Australia. Edith Cowan University.
- McKercher, B. (2003). Sustainable Tourism Development Guiding Principles for Planning and Management. *National Seminar on Sustainable Tourism Development*, Bishkek Kyrgyzstan, 5–9 November, 2003.
- Mowforth, M., & Munt, I. (2009). *Tourism and sustainability: development, globalisation and new tourism in the third world* (3rd ed.). Routledge. ttps://doi.org/10.4324/9781315795348-13
- Moyle, B., Moyle, C. lee, Ruhanen, L., Weaver, D., & Hadinejad, A. (2020). Are we really progressing sustainable tourism research? A bibliometric analysis. *Journal of Sustainable Tourism*, 29(1), 106– 122. https://doi.org/10.1080/09669582.2020.1817048
- Niñerola, A., Sánchez-Rebull, M. V., & Hernández-Lara, A. B. (2019). Tourism research on sustainability: A bibliometric analysis. *Sustainability (Switzerland)*, *11*(5), 1–17. https://doi.org/10.3390/su11051377
- Nguyen, T. Q. T., Young, T., Johnson, P., & Wearing, S. (2019). Conceptualising networks in sustainable tourism development. *Tourism Management Perspectives*, 32(September). https://doi.org/10.1016/j.tmp.2019.100575
- Pan, S. Y., Gao, M., Kim, H., Shah, K. J., Pei, S. L., & Chiang, P. C. (2018). Advances and challenges in sustainable tourism toward a green economy. *Science of the Total Environment*, 635, 452–469. https://doi.org/10.1016/j.scitotenv.2018.04.134
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice
- (Fourth edition. ed.). Thousand Oaks, CA: Sage.
- Rahman, M. A., Mitra, M. C., & Akter, A. (2013). Investigation on erosion of Kuakata sea beach and its protection design by artificial beach nourishment. *Journal of Civil Engineering*, *41*(*1*), 1–12.

- Rashid, Md. Mamunur, and Raihana Taskin. 2018. "Tourism in Kuakata, Bangladesh:Understanding Current Status and Future Prospects." *Ottoman Journal of Tourism and Management Research* 3(1): 235–44.
- Sharpley, R. (2009). Tourism, Development and the Environment:Beyond Sustainability? Earthscan. https://doi.org/10.21832/9781845414740-011
- Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. Journal of Sustainable Tourism, 28:11, 1932-1946, DOI: 10.1080/09669582.2020.1779732
- Silverman, R. M. (2015). *Qualitative research methods for community development* (1 edition. ed.): Routledge.
- Smith, J. A. (2015). *Qualitative psychology : a practical guide to research methods* (3rd ed.). London: SAGE Publications Ltd.
- Swarbrooke, J. (1999). Sustainable Tourism Managment. CABI Publishing. CABI Publishing
- TBS Report. (2021, May 27). 6, 000 crabs die per day in Kuakata during tourist season: Report. *The Business Standard*. https://www.tbsnews.net/environment/6000-crabs-die-day-kuakataduring-tourist-season-report-251887
- Telfer, David J., and Richard Sharpley. 2008. Tourism and Development in the Developing World *Tourism and Development in the Developing World*. New York: Routledge.
- Tosun, C. (2001). Challenges of sustainable tourism development in the developing world: the case of Turkey. *Tourism Management*, 22, 289–303.
- United Nations Conference on Environment & Development (UNCED) (1992) *Rio Declaration on Environment & Development*. Rio de Janeiro, Brazil: UNCED
- UNEP, 2002. International Year of Ecotourism. United Nations Environment Programme Paris
- UNEP and UWTO. (2005). "Making Tourism More Sustainable: A Guide for Policy Makers."
- UNWTO. (2004). Indicators of Sustainable Development for Tourism Destinations: A Guidebook. World Tourism Organization.
- UNWTO (2016). Tourism and the sustainable development goals. (Retrieved from Madrid,

Spain:).

Wearing, S. L., Wearing, M., & McDonald, M. (2010). Understanding local power and interactional processes in sustainable tourism: Exploring village-tour operator relations on the Kokoda track, Papua New Guinea. Journal of Sustainable Tourism, 18(1), 61–76.

- World Tourism Organisation (WTO) (1998). Guide for Local Authorities on Developing Sustainable Tourism. Madrid: World Tourism Organisation.
- Zamfir, A., & Corbos, R. A. (2015). Towards sustainable tourism development in urban areas: Case study on Bucharest as tourist destination. *Sustainability*, 7(9), 12709– 12722.https://doi.org/10.3390/su70912709