

# Sustainable Tourism: Prospects and Challenges of Kuakata Sea Beach

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## **DECLARATION**

I thus certify that the material given in the thesis titled 'Sustainable Tourism: Prospects and Challenges for Kuakata Sea Beach' is an authentic representation of my own efforts. Additionally, I declare that the subject matter included in this thesis has not been submitted to any other university or institution for the granting of any other academic qualification or degree.

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## **CERTIFICATE**

This is to certify that the thesis entitled “Sustainable Tourism: Prospects and Challenges of Kuakata Sea Beach” submitted by Jashim Uddin Sarker to University of Dhaka, is a record of his original research conducted under my supervision in the Department of Tourism and Hospitality Management at the University of Dhaka. Mr. Sarker has worked diligently to prepare his thesis, which, in my view, is deserving of consideration for the granting of the Master of Philosophy in Tourism and Hospitality Management degree in line with the University's rules and regulations. This study, I believe, is unique and has not been presented anywhere else for consideration for a degree.

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## **Abstract**

Sustainable Tourism Development (STD) is a major goal for the tourism industry. Lack of sustainable tourism understanding is a challenge for implementing sustainable tourism development. The basic principles of sustainable tourism consist of economic, environmental and socio-cultural dimensions. It is apparent that different individuals have different perspectives on sustainable tourism development. Divergent perspectives among tourism stakeholders cause unanticipated conflicts while promoting sustainable tourism destinations. Before applying sustainable tourism concepts, it is important to know what major stakeholders think and how they feel about them. This research addresses the highly vulnerable sea beach in Kuakata in Patuakhali district of Bangladesh as the study context. Kuakata is the second largest beach in Bangladesh and has forests like mangroves, which are very important for tourism. The existing literature about the perceptions of sustainable tourism development of different major stakeholder groups of the Kuakata is very limited. It is also unknown what kind of challenges Kuakata is currently facing in the implementation of sustainable tourism and what new prospects are being created.

In order to fill research gaps, the aim of this thesis is to investigate what are the various prospects and challenges of sustainable tourism in Kuakata sea beach. In doing so, a mixed methods approach is used in this research to address the research aim and four objectives. In this research, it was used to produce quantitative data, the primary data set for achieving the first and second research objectives. Two distinct surveys were conducted: one of the tourists and another of the local residents. For both questionnaire surveys, the face-to-face interview method was selected for collecting data. In addition, qualitative methods used in this research consisted of semi-structured in-depth interviews with tourism business service providers, tour operators, government and non-government stakeholders. Factor Analysis, Mean Analysis, Independent Sample 't' Test, and one-way between-groups analysis of variance (ANOVA) were used to reach the first and second objectives. A judgmental sampling technique and thematic analysis was adopted to achieve the third and fourth objectives. Documents from a wide variety of sources were examined in order to add richness to the empirical data and to verify the participants' assertions.

From the tourist survey, five factors were extracted, namely: “Quality of Destination”, “Desirable Features”, “Condition of Supporting Service”, “Requisite Facilities”, and “Interest for STD”. The results of the Independent Sample “t” Test and One-Way ANOVA showed that there was no significant difference between the variables with respect to gender, age, and educational qualification, whereas the tourist’s house location from Kuakata sea beach and the monthly family income of the tourists made a significant difference in their perception towards sustainable tourism development.

Five distinct factors are generated from the resident survey by the rotated component matrix, namely: "Perceived Negative Impacts", "Community Satisfaction and Interest towards STD", "Perceived Positive Impacts", "Welfare Increase", and "Perceived Social Costs". The results of the Independent Sample ‘t’ test and One-Way ANOVA proved that for the perceptions of residents of STD at Kuakata sea beach in relation to the resident respondents’ demographic characteristics presented that there is a significant difference between the variables with respect to residents’ types, gender, age, residents’ house location from Kuakata sea beach, educational qualification and occupations. However, there is no significant difference between the perceptions of resident respondents with regard to monthly family income.

The thematic analysis identified five key challenges which have the potential to influence sustainable tourism development in Kuakata. These challenges are Kuakata’s environmental degradation, infrastructure and facilities development, socio-cultural issues, behavior problem/knowledge and awareness, and marketing, monitoring and evaluation. The most significant obstacle to promoting sustainable tourism in Kuakata is the fragile sea beach. Along with these challenges, this study has identified some new prospects. The new prospects include Char Bijoy, Payra Seaport, Community Based Tourism, and the ‘Kuakata Sea Beach-Deep Sea-Sundarbans’ tourist route. If these prospects are developed, well managed, and implemented, the future tourism industry in Kuakata will be more attractive to the tourists. The study comes to an end by proposing a strategic framework for sustainable tourism development in Kuakata, as well as future research directions.

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## List of Acronyms

ANOVA	Analysis of Variance
BPC	Bangladesh Parjaton Corporation
BTB	Bangladesh Tourism Board
BBS	Bangladesh Bureau of Statistics
BDT	Bangladesh Taka
BFRI	Bangladesh Forest Research Institute
CBT	Community-Based Tourism
CFA	Confirmatory Factor Analysis
CL	Common Language
COVID	Coronavirus Disease
DC	Deputy Commissioner
EC	Earth Council
FE	Financial Express
GoB	Government of Bangladesh
GDP	Gross Domestic Product
GNP	Gross National Product
HSD	Honestly Significant Difference
IFTO	International Federation of Tour Operators
ID	Identification
ILO	International Labour Organization
IUCN	International Union for the Conservation of Nature and Natural Resources
KMO	Kaiser-Meyer-Olkin
NGO	Non-Government Organization
PCA	Principal Component Analysis
SPSS	Statistical Package for the Social Sciences
STD	Sustainable Tourism Development
TBS	The Business Standard
TIES	The International Ecotourism Society
UN	United Nations

UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNWTO	United Nations World Tourism Organization
USD	United States dollar
WCED	World Commission on Environment and Development
WSSD	World Summit on Environment Programme
WTTC	World Travel and Tourism Council
WTO	World Tourism Organization

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*Chapter 1*

*Overview*

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## 1.1 Introduction

Tourism is the future economy of Bangladesh. 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). 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 opportunities to increase the participation of tourism in the GDP of Bangladesh in the coming days. Academics are very interested in this issue because of the positive impact it has on quality of life, the short-term and long-term rewards it provides, and the minimal long-term economic ramifications it has. As a consequence, sustainable tourism has been a focus of attention for researchers for developing a tourism destination.

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. Many scholars such as (Butler, 1998; Swarbrooke, 1999; Tosun, 2001; McKercher, 2003; Helmy, 2004; Telfer and Sharpley, 2008; Sharpley, 2009; Mowforth & Munt, 2009) have contributed to the study of sustainable tourism in the last two decades.

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 socio-cultural environment of the host destination (Pan et al., 2018). Thus, a comprehensive balance among environment, economy, and socio-cultural environment are required to ensure the 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).

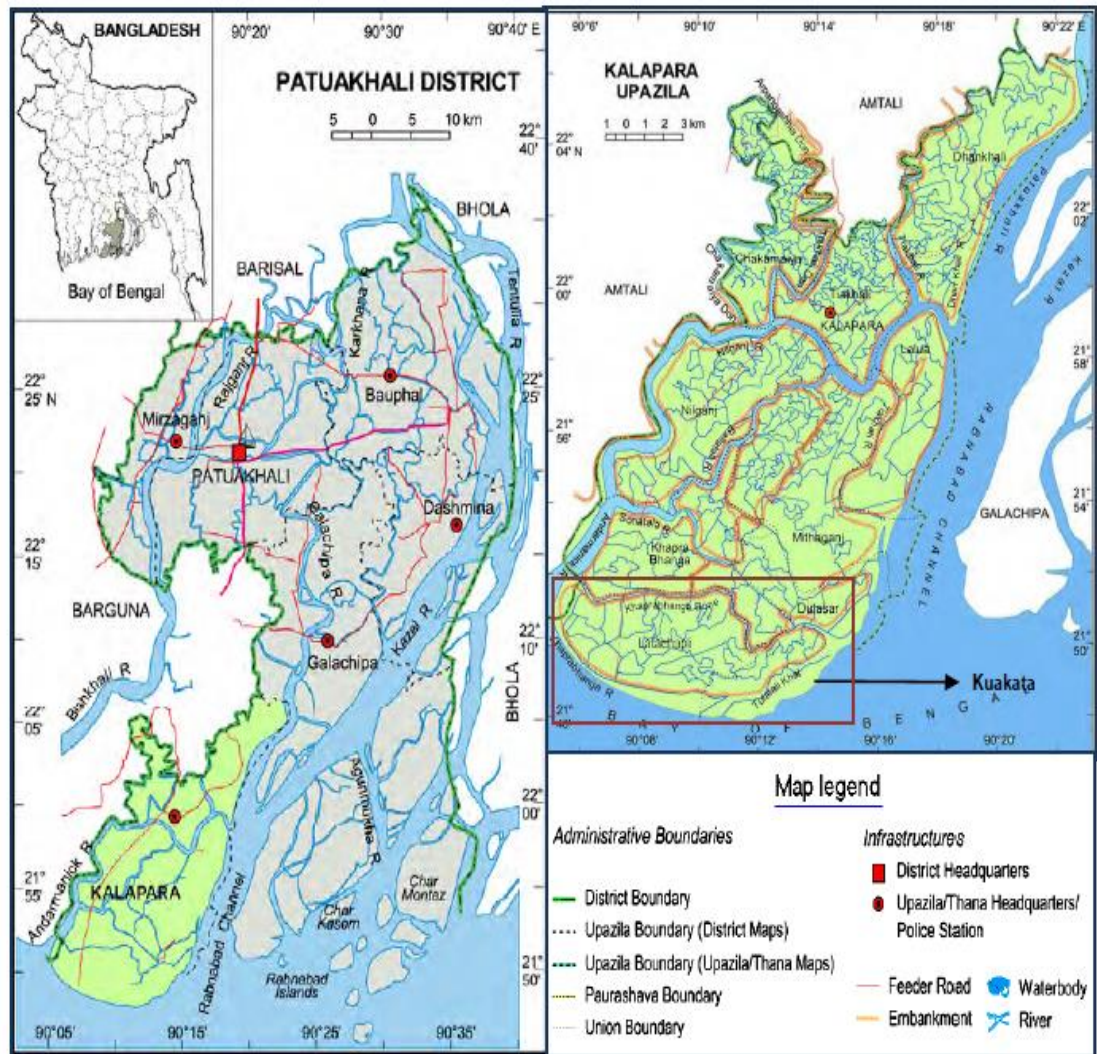
Hence, this research work attempts to shed light on the impacts of tourism in Kuakata by investigating the perceptions of the locals and visitors towards developing sustainable tourism while analyzing its prospects and challenges.

## **1.2 Context of the study: Kuakata**

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 (Map 1.1). This sandy sea beach is located at 21°48'55.98" north latitude and 90°07'18.62" east longitude. It is about 350 kilometers from the capital city of Dhaka.

The name Kuakata has a tale attached to it. In the 1780s, after being expelled from Arakan, numerous Rakhains settled near the seashore. Lacking fresh water, they built a well and were successful in providing fresh drinking water for their people. So, they named it Kuakata (Banglapedia, 2010).

The municipality of Kuakata was established on 15 December 2010 as a class C municipality. At present, it is an 8.11 square kilometer area with 9 wards and has a total population of 15,326 people (kalapara.patuakhali.gov.bd, 2021). The density of population in this area is growing day by day, not only because of the birth rate, but also because of the economic importance it has gained in recent years as a result of its transformation into a tourist destination and the expansion of commercial operations. According to BBS (2021), there are 2065 households and the literacy rate is 57.6 (Bangladesh Bureau of Statistics 2021).



Map 1.1: Location of Kuakata. (Modified from Banglapedia, 2021)

### 1.2.1 Ecology, flora and fauna

Kuakata beach is a sandy expanse that stretches for 18 kilometers (11 miles) in length and 3 kilometers (1.9 miles) in breadth (Rashid and Taskin 2018). Kuakata was once a part of the greater Sundarbans Forest in 1784 (BFRI, 2000). Presently, the Sundarbans are now a one-hour speed boat ride away. 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. Gongamati Reserved Forest is situated on the eastern side of the beach. The tamarisk (Jhau) trees have immensely increased the appeal of this beach even more. Kuakata is home to a large number of coconut trees. Like the Sundarbans, Gongamati's mangrove forest provides some shelter from tidal surges, but logging and deforestation are threatening it. The

forest has a diverse range of trees and plants, including the Keora, Gewa, Baen, Kankra, Goran, Hetal, and Golpata. There are a variety of animals including the deer, monkey, snakes, wild boar, forest owl, foxes, and many kinds of wild birds. Kuakata is also a haven for migrating winter birds, which use the area as a wintering ground.

Turtles, molluscs, crabs, freshwater dolphins (popularly known as Gangetic dolphins) and sea weeds: all are found in mangrove forests and the beach. Freshwater fish species have complicated migratory, spawning, and breeding behaviors that remain unknown. The most significant fish for the country's economy, hilsha, is one of them. Red crabs, one of the important species of crabs in Kuakata that attracts the tourists, are found in a place named "Lal-kakrar Char".

### **1.2.2 Socio-economic status of local communities**

Two decades ago, fishing and agriculture were the main economic activities of Kuakata. After developing the tourism industry in Kuakata, new job opportunities have emerged, such as those for beach photographers, tour guides, hotel boys, souvenir vendors, and other similar positions. At present about 74 percent of locals are working in tourism-related occupations (Farzana 2014). The Shutki Palli (dried fish market) is located seven kilometers west of Kuakata. Shutki Palli collects and processes a variety of sea fish throughout the winter season. The dry fish is distributed all over the country, even exported to the world market from here. Thousands of people are depending on the Shutki palli (Banglapedia, 2010).

The people of Kuakata have always been a conservative society. Statistics on social, cultural, and economic factors, such as the literacy rate, show that they are much lower than the national average. An Arakan ethnic group named Rakhain moved to Bangladesh in the late 1800s, and they settled in Patuakhali and Cox's Bazar. The Rakhine community has a thousand-year-old civilization and history. They are currently living in Misripara in Kuakata. Many of them are engaged in various professions and working as goldsmiths, engaged in trading, blacksmiths, carpenters, shipbuilding, painters, wood-carvers, masons, and metallurgical technicians. Farming and fishing are their main occupations. Kuakata is a pilgrimage site for many Hindus and Buddhists, who visit around the festivals of Rush Purnima and Maghi Purnima.

Bathing in Kuakata water, which they consider to be sacred, is a significant rite on the occasion.

### **1.2.3 Resources of Kuakata**

Kuakata has diversified natural and cultural elements that attract the tourists to visit this place. Geographical location, as well as varying climatic and geological conditions, lead to higher diversity among resource categories. The resources of Kuakata are classified into two types: i) natural resources, and ii) cultural resources.

Natural resources include: Fatra forest, Gangamati mangrove forest, Kuakata National Park, Jhau (tamarisk) forest, Laboor Char, Lal kakrar Char (Red Crab) and. Central-Shima Buddhist Temple, Misri para-Buddhist Temple, Ancient well (Kua in Bengali), Rakhain lifestyle, Rakhain handicrafts, religious festival "Rashmela and Maghi Purnima" are under cultural resources.

### **1.3 Research gaps: structuring aim and objectives**

This thesis addresses several important research gaps on sustainable tourism development in the current social science literature. First, it examines existing awareness, views, beliefs, perceptions, and knowledge regarding sustainable tourism development among the tourists of a Kuakata area as seen from the perspective of a developing country. Second, this research also explores the current beliefs, perceptions, awareness, views and knowledge regarding sustainable tourism development within a range of local residents of a Kuakata sea beach area as seen from the perspective of a developing country. The third research gap addressed in this thesis is the prospects and challenges of Kuakata sea beach based on sustainable tourism in relation to biodiversity, beach community, and tourism management. In order to fill research gaps, this study is intended to address an overall aim and four specific research objectives.



**Aim:**

The aim of this thesis is to explore the various prospects and challenges of sustainable tourism in Kuakata sea beach.

**Specific objective:**

1. To examine the perceptions of tourists in relation to sustainability of tourism in Kuakata sea beach
2. To measure the perceptions of residents toward sustainable tourism development in Kuakata sea beach
3. To explore the prospects of sustainable tourism development in Kuakata sea beach
4. To identify the challenges to sustainable tourism development in Kuakata sea beach

**1.4 Research approach**

This study investigates the research aims and objectives using pragmatism philosophical principles. According to pragmatism's research philosophy, it emphasizes the practical application and repercussions of the content of an idea (Mintz, 2004). In keeping within the philosophy of pragmatism, this research adopts a mixed method to collect empirical data. Face-to-face surveys (tourist and resident), semi-structured interviews and document analysis have been utilized to accomplish the research aim and objectives. It is expected that, this research will provide realistic solutions for Kuakata Sea Beach and its stakeholders concerned.

This research was done during the COVID-19 epidemic. It was conducted in the locations of the municipality of Kuakata in the Patuakhali district of Bangladesh in March 2021. In this research, a mixed method technique is used to address the study objectives and to produce quantitative data, the primary data set for achieving the first and second research objectives. Two distinct surveys were conducted: one of tourists and another of local residents. For both questionnaire surveys, the face-to-face interview method was selected for collecting data. In addition, qualitative methods consisting of semi-structured in-depth interviews with tourism business service providers, tour operators, government and non-government stakeholders were also

used in this research. A judgmental sampling technique and thematic analysis was adopted to achieve the third and fourth objectives. Documents from a wide variety of sources were examined to enrich the empirical information and validate the participants' assertions. Secondary data were critical in gaining this insight and were a necessary component of the research process.

### **1.5 Significance of the research**

This research will have a wide range of significance. It will contribute significantly to tourism research by showing how sustainable tourism development shapes an appropriate image of tourism in Kuakata. In the previous two decades, the tourism scenario of Kuakata has seen a significant transformation. Until now, little research on sustainable tourism and its effect on Kuakata has been conducted. In the context of Kuakata, sustainable tourism development is a critical concern. One of the main goals of this research is to develop sustainable tourism in Kuakata, which has not yet materialized significantly. So, this research has its own value in this context.

Basically, tourism research is seen from the viewpoint of visitors. The study looked at visitors not just from the perspective of the tourists, but also from that of the local people, local government, and tourism service providers, among others. As a consequence, these viewpoints will be valuable in the development of Kuakata tourist planning. This study incorporates both quantitative and qualitative research techniques.

The Bangladesh government hopes to launch the Padma Bridge, the largest and most expensive bridge in Bangladesh, by June 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. At that time, it is expected that many more tourists would visit to Kuakata than at present. If the tourism development of Kuakata is not conducted with a sustainable approach, the danger is imminent. Already Kuakata beach is vulnerable, and there are further environmental concerns. This research sheds light on the problems of Kuakata tourism and new possibilities for sustainable tourism.

## **1.6 Structure of the thesis**

A total of seven chapters are included in this thesis (**Figure 1.1**). Following the first chapter, this thesis is covering the literature review, research methodology, research findings, discussion and conclusion.

### **Chapter-2 Literature Review**

This chapter gives attention to the literature on sustainable development, tourism and sustainable tourism development (principles and challenges), and sustainable tourism indicators. The chapter also gives an overview of economic, socio-cultural and environmental sustainability of tourism based on sea beach tourism development.

### **Chapter-3 Research Methodology**

The chapter begins with a description of the research methodology and plan, and the mixed method that was adopted for this research. The quantitative and qualitative data collection methods and data analysis strategy are discussed along with the limitations of the research methodology. The chapter concludes with discussing the ethical issues of study and presentation of the results of this thesis.

### **Chapter-4 Data Analysis of Tourists**

This chapter discusses the tourist perceptions of sustainable tourism on the Kuakata sea beach. This portion of Chapter 4 is broken into three parts. The first section discusses the visitors' demographic characteristics. The second part deals with respondents' travel behavior as well as tourists' level of satisfaction. Finally, there is a section on Factor Analysis, Mean Analysis, Independent Sample 't' Test, and one-way between-groups analysis of variance (ANOVA).

### **Chapter-5 Data Analysis of Residents**

The chapter focuses on the viewpoints of the local inhabitants on the values that have an impact on the Kuakata sea beach and the long-term sustainability of tourist growth there. Like Chapter-4, this chapter discusses the demographic profile of the residents along with Factor Analysis, Mean Analysis, Independent Sample 't' Test, and one-way between-groups analysis of variance (ANOVA).

**Chapter-6 Prospects & Challenges**

This chapter examines the prospects and challenges of sustainable tourism development from the perspective of a range of stakeholders of Kuakata sea beach of Bangladesh, with a particular emphasis on the third and fourth research objectives to explore the prospects for sustainable tourism development on Kuakata sea beach and to identify the challenges for sustainable tourism development on Kuakata sea beach. The purpose of this chapter is to critically explore the potential and obstacles for sustainable tourism in Kuakata, Bangladesh, as seen by numerous stakeholders (tourism demand-supply side players; and local authorities and management agencies).

**Chapter-7 Discussion and Conclusion**

Chapter seven identifies the implications of the research findings and presents strategic framework for sustainable tourism development in Kuakata. The strategy framework tackles different phases of tourism development in order to ensure its sustainability in Kuakata. It also explains how to protect Kuakata's fragile sea beaches, which is the biggest challenge of developing sustainable tourism here. Later in the chapter, an overview of the research's cumulative findings with respect to the objectives is presented. Finally, the chapter discusses future research opportunities.

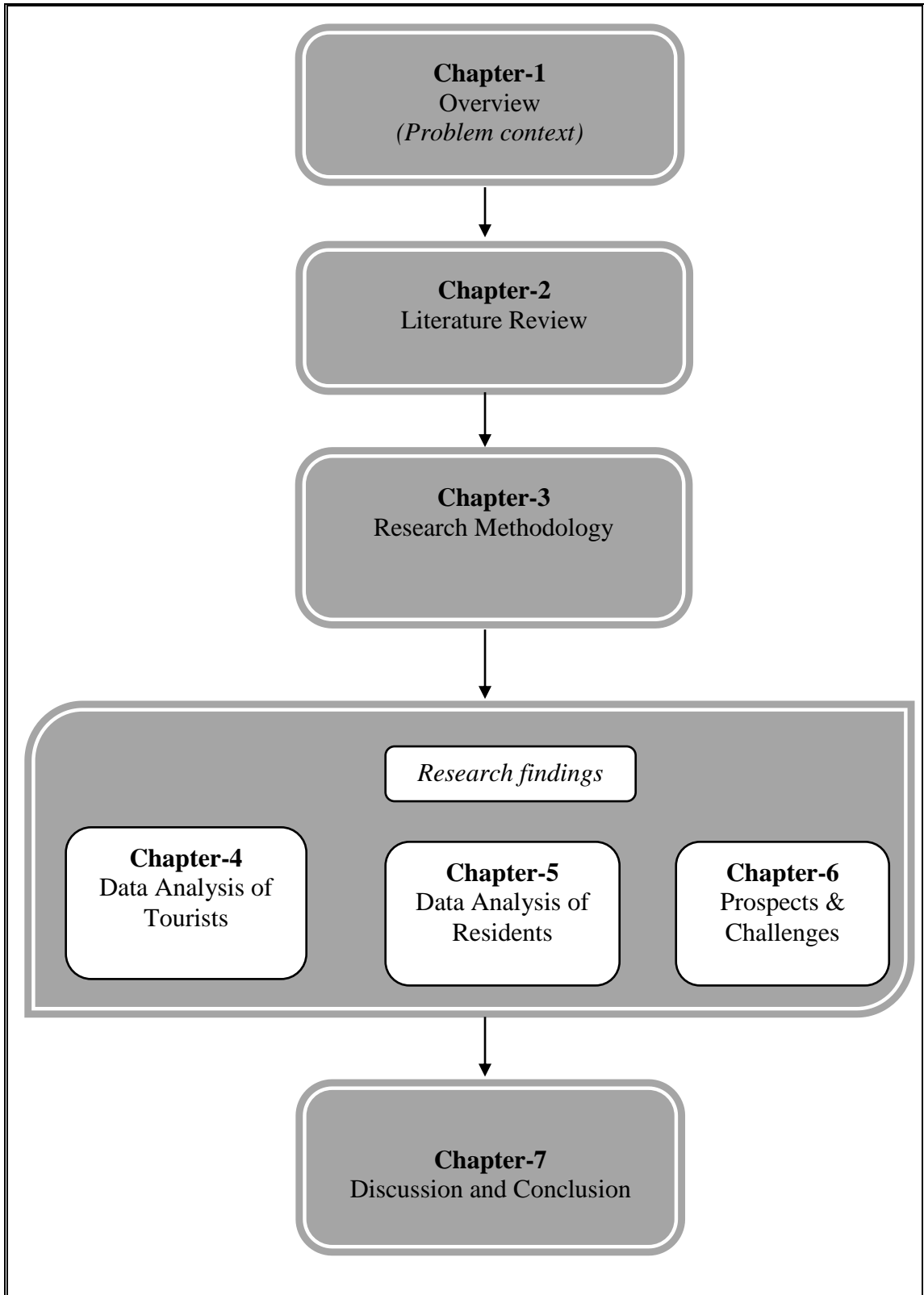


Figure 1.1: Structure of the thesis

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*Chapter 2*  
*Literature Review*

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## **2.1 Introduction**

Travel and tourism have been established as an essential element of human lives. Prior to the COVID-19 pandemic, tourism is an important activity that helps the expansion of a worldwide economy that accounts for 10.4% of global GDP (WTTC, 2021). For its wide array of applications, tourism has several distinct qualities that make it particularly useful as an agent for development. It increases the productive capacity and supply of employment in connection with the tourist value chain as a cross-sectional industry. It thrives, because of natural riches, varied climate, a rich cultural legacy, and plentiful human resources, all of which are comparative advantages for developing countries. However, tourism may also lead to environmental degradation and pollution (Green. et al., 1989), excessive energy consumption (Streimikiene et al., 2021), and a negative catalyst for social change (Satani, 2004). That is why it is critical that it be properly planned and managed, according to sustainable tourism standards.

## **2.2 Tourism and its significance**

Today, tourism is a global industry and in recent decades, international tourism has seen significant growth, with technical advancements, increasing living standards, and wider processes of globalization all contributing to the fast rise in the number of tourists (Milne & Ateljevic, 2001). About 1.4 billion people of the globe have traveled across the world in 2019 (UNWTO, 2019). Indeed, it is amazing that tourism has grown and developed during the past half century as a social and economic activity (Sharpley, 2009). Tourism consists of a composite of activities, services, and businesses that provide travel experiences: transportation, lodging, eating and drinking facilities, shopping, entertainment, as well as other hospitality services that allow visitors to enjoy their time away from home (Goeldner and Ritchie, 2012). It includes all businesses that offer tourist and visitor-related services. The world's travel business, encompassing all facets of the sector such as travel accommodations, transportation, and tourism marketing, serves the requirements and desires of travelers. Finally, tourism is the aggregation of tourist spending inside the boundaries of a country, state or region.

The tourism sector is generally considered to be the largest industry in the world. It is mind-boggling just how big and significant tourism is.

According to the United Nation World Tourism Organization in 2019 (UNWTO, 2019):

- Total international tourist arrivals 1460 million (4% increase from the previous year)
- Total international tourism receipts USD 1481 billion (3% increase from the previous year)
- Between 2009 and 2019, the real rise in international tourist receipts (54%) outpaced the growth in global GDP (44%)
- Worldwide tourism exported USD 1.7 trillion in 2019
- As a single day, tourism generates USD 5 billion in exports
- 7% of global export and 28% of world's services exports

The main motivation for encouraging tourism is its recognized function as the catalyst of development. Tourism has been regarded for a long time as a valuable source of revenue, foreign currency and employment and in particular, as an effective means of transferring wealth from the wealthy to the impoverished nations or areas; tourists' social mobility drives financial capital mobility via purchases of products and services and foreign or external investment in tourism infrastructure (Sharpley, 2009). Millions of dollars are spent each year on advertising and promotion of travel and tourism businesses (Mason, 2015).

In 2018, one in five jobs has been produced by the industry in the last five years, as the World Travel & Tours Council (2020) states, which makes Travel and Tourism the ideal partner for policymakers to generate jobs. As a result, tourism employs one in every ten people (319 million) worldwide and contributes 10.4% of global GDP as one of the world's third-largest export sectors, behind fuel and chemicals and ahead of automobiles and food (UNWTO, 2019).

### **2.3 Sustainable development: Paradigms of evolution**

The World Commission on Environment and Development (WCED) published a report in 1987, named *Our Common Future* (WCED, 1987). This report is also known as a Brundtland Report. This paper argued that a new strategy, called sustainable



development, has been adopted as the most effective means to 'square the circle of competition in environmental preservation and economic growth (Dresner, 2002). The most widely used and lasting definition is that included in the Brundtland Report. Sustainable development is (WCED, 1987, p.48),

*“...development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.*

In other words, it means making the best use of current resources while also making provisions for future generations.

Economic and social transformations are part of development. Physically sustainable development may potentially be pursued in a strict social and political environment. But physical sustainability cannot be ensured unless development plans take into account changes in resource availability and cost-benefit distribution. Even the limited concept of physical sustainability implies an interest in social justice across generations that, therefore, must be extended to equitable relationships within each generation. (WCED, 1987).

Brundtland's method is based on two fundamental concepts (Tinh, 2009): 'limitation of resources' and 'meeting subjective demand' for sustainable development and due to the scarcity of global resources, it is necessary to strike a balance between fulfilling the demands of current and future generations. On the other hand, Dresner (2002) critiques that it serves as a hub for environmentalists and developers. This means that sustainable development may be seen as a mixture of two processes, namely development and sustainability. Thus, sustainable development is about generating a quality of life for all people in ways that will be as viable in the future as they are now. In other words, sustainable development is predicated on the concepts of responsible resource management and fairness in the way those resources are utilized and the benefits derived from them are dispersed.

Sustainable development attempts to use technology and labor and energy inputs to optimize human well-being, security, and adaptability by using resources to their fullest extent and ensuring that their depletion is avoided (Barrow, 2018). However, sustainable development should be governed by the following principles on the premise that all forms of development should take place within the environmental limits (Telfer and Sharpley, 2008): *Holistic perspective, Futurity and Equity*. In terms of holistic perspective, development and sustainability are global challenges.

Futurity: focusing on the long-term future. Those researchers explain equity as fair and equitable development in and between generations. Three elements of sustainable development have been widely recognized (Harris, 2000):

- *Environmental sustainability*: Environmental sustainability is to manage and conserve nonrenewable resources while also managing renewable resources. Reducing pollution of air, land, and water, as well as conserving biological variety and natural heritage.
- *Economic sustainability*: A system that is economically sustainable must be in a position to continuously generate products and services, to maintain the management of government levels and foreign debt, and to prevent severe sectoral imbalances that harm farming or industrial output.
- *Social sustainability*: Social sustainability involves ensuring equitable rights and opportunity for everyone. It necessitates fair benefit sharing. This includes preserving and improving local communities' life support systems, honoring other cultures, and preventing exploitation.

It is essential to realize that these three elements are interdependent in various ways and may strengthen each other or compete against each other. Sustainable development involves finding a balance between them. Regardless, the three concepts stated above are sensible. They meet the previous criteria for a strong, readily understood idea with broad application. The world would be a better place if we could achieve this tripartite aim - yet we often fall short in all three areas. Unsustainability is simpler to detect than sustainability, and recognizing it may inspire us to take required legislative action.

Another researcher (Barrow, 2018) also identified three component objectives for sustainable development: economic development, social development, and environmental conservation. It is widely recognized that it entails maintaining environmental quality and ensuring that resource-use advantages be shared fairly among all groups of people in the present, while also ensuring that current actions do not jeopardize future generations' choices or degrade the environment.

## **2.4 Tourism and sustainable development: a unique connection**

The tourism industry has been boosted by technological developments in the transport sector (Mowforth and Munt, 1998), for example, the history of railroads in Great Britain in the 19th century, widespread motor car ownership in the 1950s and air transportation industry.

Despite the fact that the phrase "sustainable development" has grown in popularity since its debut in the Brundtland Report, it is noteworthy that the report makes no mention of tourism when discussing sustainable development (Butler, 1996). The United Nations Environment and Development Conference took place in Brazil in June 1992. This conference is known as Rio Conference. It has evolved into a symbol of the shared responsibility of all the nations of the globe (Spindler, 2013). There were a number of results of the Rio Earth Summit, especially: 'The Rio Declaration on Environment and Development (known as Rio Declaration)', 'Principles of Forest Management', 'The Framework Convention on Climate Change', 'The Convention on Biological Diversity', 'The Convention to Combat Desertification' and 'Agenda 21'. Furthermore, there was little mention of tourist development or tourism resources during the Rio Conference (Sadler, 1988).

However, the subsequent Agenda 21 process recognized travel/tourism as having the ability to contribute positively to a healthy world (United Nations, n.d.). Agenda 21 has a two-way impact on tourism (Isioma and Ashikodi, n.d): Firstly, specifically, it emphasizes tourism, which may contribute to sustainable development in fragile environments in certain communities. Secondly, Agenda 21 program of action has an influence on tourism since the policies, legal structure, and management practices under which it works can modify many of its effects.

It is wide approach to commerce is important to the tourist industry because it has a global perspective (Arden-Clarke, 1992). It is hoped that local Agenda 21 will enable tourism development planning and management to apply sustainable development concepts. If you think about it this way (Jackson & Morpeth, 2000), Agenda 21 does not talk much about tourism as a whole. But its connection to other areas of concern (like transportation and industry) is clear.

Tourism is well-positioned to assist in the efforts to implement sustainable development strategies, while offering unique opportunities as well (UNEP & WTO, 2005). Firstly, this is because of the sector's rapid and steady development, and the important role it plays in helping many countries and local areas. Secondly, since tourism is an activity that includes a unique connection between customers (visitors), the industry, the environment, and local communities, tourism creates a mutually beneficial exchange with other economic and social actors.

This unique connection between tourism and sustainable development exists because, in contrast to the majority of other industries, tourists go directly to the producer and product. The United Nations Environment Programme and World Tourism Organization (UNEP and WTO, 2005) identified three essential and distinctive elements of the tourism-sustainable development relationship. Firstly, *Interaction*, a significant amount of interaction, both direct and indirect, takes place when tourists, host communities, and the environment they encounter. Secondly, *awareness*, Tourism increases people's awareness (both tourists and hosts) of environmental problems and the distinctions between countries and cultures. This may impact attitudes and concerns about sustainability issues not just when traveling but throughout life. Thirdly, *dependency*, visitors wanting to experience clean and healthy surroundings, beautiful natural regions, genuine historical and cultural traditions, and kind hosts are the foundation of most of the tourism business. This industry depends on these qualities.

As a consequence, everyone engaged in tourism must understand the importance of sustainable development. Tourism can do a lot of good. But it may also be the source of forces that threaten to undermine its assets. When tourism is developed without regard to sustainability, it may harm both society and the environment (UNEP & WTO, 2005), as well as contain the seeds of its own demise. The core conviction that tourism should only be developed according to sustainable development principles, at least theoretically, can argue little, but that idea is difficult to apply, if not impossible, to current regions of tourism (Butler, 1991).

**Figure 2.1** depicts a roadmap for linking the tourism sector with sustainable development efforts around the globe. At the 1992 Rio Conference, the United Nations (UN) announced a plan of action for "Sustainable Development Agenda

21." Following that, the UNWTO expressed their ideas on sustainable tourism. Another Agenda 21 for tourism was released in 1996, in collaboration with the UNWTO, the WTTC, and the EC (Earth Council). In 1997, the Berlin Declaration on "Biodiversity and Tourism", in 1999, the Commission on Sustainable Development, and in 2002, the Cape Town Conference on "Responsible Tourism" were held. Following that, the Quebec Declaration on "Ecotourism" was announced during the World Ecotourism Summit in 2002. After that, in 2007, the Davos Declaration on "Climate Change and Tourism Responding to Global Challenges" was issued. In the years leading up to the Rio+20 summit in 2012, the conclusion paper "The Future We Want" was mainly framed in the perspective of sustainable development and poverty eradication. The "The 2030 Agenda" was released by Uniter Nation in 2015.

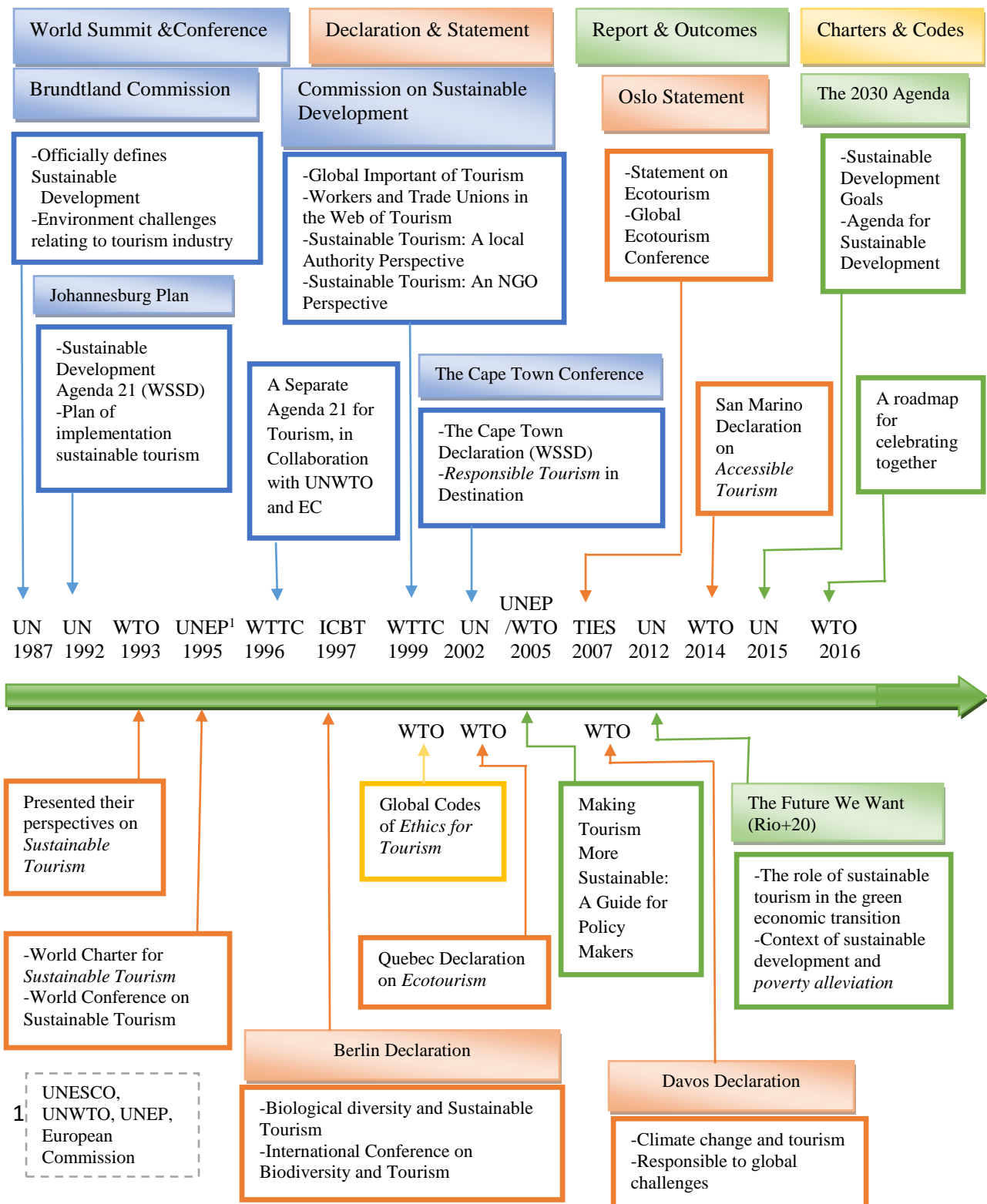


Figure 2.1: Tourism and Sustainable Development: A Global Roadmap (Adapt from Pan et al., 2018)

## 2.5 Sustainable tourism

The notion to sustainable development means that the natural, cultural, and other resources of tourism should be preserved for future use, as opposed to being depleted. This approach is critical since the majority of tourism development is based on attractions and activities linked to the destination's natural environment, historical legacy, and cultural pattern. If these resources are damaged or destroyed, tourism may lose its appeal.

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.

Prominent researchers and academics in tourism studies have proposed different meanings of sustainable tourism in the context of sustainability (Weaver, 2006; Sharpley, 2000; Butler, 1993).

Eminent professionals Richard W. Butler (1993, p. 29) defines sustainable tourism as

*“tourism in a form that can sustain its viability in a given area for an indefinite period of time”*

Swarbrooke (1999, p. 13) state that

*“tourism which is economically viable but does not destroy the resources on which the future of tourism will depend, notably the physical environment and the social fabric of the host community”;*

According to UNEP & UNWTO (2005, p. 12):

*“Sustainable tourism is 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”.*

To minimize its negative effects 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. There must be a steady stream of visitors as well as a good ecological and environmental impact. Finally, politicians (at both the national and local levels) should support the community (Lorant & Zoltan, 2008). Sustainable tourism is the creation of employment that does not overburden the local economy and damage the environment (Lane, 1991). While the concept of sustainable tourism recognizes environmental and societal issues, the word may be more strictly defined merely by referring to the economic capability of tourism with the passing of time (Jafari, 2000; Butler, 1993). In terms of long-term sustainability, tourism has the same competing needs for finite natural resources as any other economic activity and therefore it requires a wider view than continuing viability (Jafari, 2000).

Furthermore, sustainable tourism aims to manage the environmental, community and future economic impact of tourism in order to guarantee that its consequences are beneficial to future generations rather than negatively. It is a management strategy that is applicable to all kinds of tourism, whether in towns, cities, rural areas or on the coast (Jahan & Amin, 2014). However, sustainable tourism reduces tensions and conflicts between the tourism sector, visitors, the environment, and local people and it encompasses a long-term view of natural and man-made resource development (ŠTETIĆ et al., 2015). Some researchers give emphasis on economic activities and other scholars may give importance to socio-economic and environmental aspects, but sustainable tourism gives importance to all three aspects (Eber, 1992; Liu, 2003; McKercher, 2003). However, sustainable tourism theories, practices, and policies should be aimed towards finding a position for tourism in which it becomes a part of a broader holistic notion that encompasses the overall framework/concepts of sustainable development.

Sustainable tourism should not be seen as a strict framework. Instead, it should be thought of as an 'adaptive paradigm' that may legitimate a number of techniques depending on the current conditions (Hunter, 1997). It is not an inherent attribute of



any current form or scenario, but rather a goal toward which all tourism must aspire (Clarke, 2010). Alternatively, Sustainable tourism is based on the management practices of various locations and emphasizes tourist activities while taking a long-term view of all resources and accepting limits to growth (Bramwell and Lane, 1993). The lack of a national policy and strategic action plan on the principles of sustainable tourism is the most significant reason for the misuse of resources in regional areas (Page and Thorn, 1997).

The further discussion will continue regarding the specific meanings and usage of sustainable terms in tourism literature. The standards that should guide the usage of these terminology seem to be ignored on a regular basis. A rigid or absolute definition of sustainability, for example, may not be essential. Absolute definitions will always be accessible to many interpretations. The literature fails to acknowledge that stakeholders do not function in a defined manner. It may be more vital to recognize the basic principles of sustainability as absolute and attempt to apply them to tourism in stakeholders that run on actions.

## **2.6 Sustainable tourism development**

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). The World Tourism Organization did a bibliographic study of more than 100 books and 250 papers on sustainable tourism in 1999 (Cernat & Gourdon, 2007). Sustainable tourism development, as defined by the World Tourism Organization (WTO, 1998), is a widely used description among tourism planners and researchers. According to the WTO (1998, p. 21), sustainable tourism 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. To accomplish sustainable tourist development through wide involvement and consensus building, strong political leadership and informed engagement by all key stakeholders are essential. (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).

While Müller (1994) did not explicitly allude to sustainable development, researcher suggested: "Qualitative Growth" may be defined as any improvement in the quality of life accomplished by reducing the use of non-renewable resources and reducing environmental and human stress. This researcher established sustainable tourism development as a means of accomplishing sustainable development more broadly, and his theory has had an impact on this issue, since his idea has been referred to as the cornerstone of sustainability. That is, although maintaining tourism is necessary for sustainable development, it is subservient to the broader goal of sustainable tourism development. Additionally, this scholar proposed that sustainable tourism might be designed as a "magic pentagon" (**Figure 2.2**) where a balance among the five objectives (i.e., economic health, well-being of the local residents, resource conservation/unspoiled nature, optimal guest satisfaction and a healthy culture) is achieved, such that no one predominates.

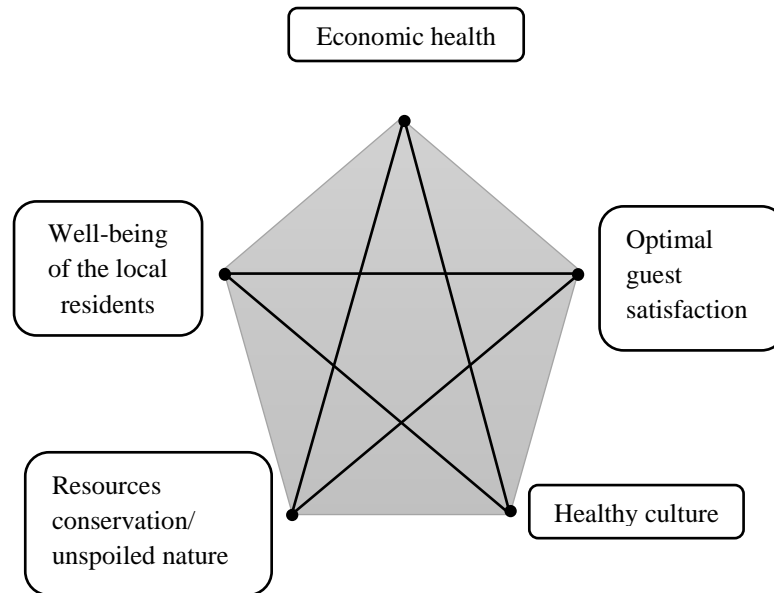


Figure 2.2: Magic pentagon (Adapt from Müller, 1994, p. 133)

### 2.6.1 Principles of sustainable tourism development

Tourism is one of the industries that is most equipped for embracing sustainable development as a guiding principle because: (1) tourism consumes no extra non-renewal resources aside from transport; (2) the resources of a society, such as its culture, customs, commerce, and recreational facilities, serve as the foundation for tourism; (3) tourism provides an excellent opportunity to fight poverty, generate jobs for the underprivileged, and revitalize the economy; (4) tourism can offer an economic incentive for the preservation of natural and cultural assets; and (5) tourism has been shown to promote better empathy and global awareness amongst individuals (McKercher, 2003). Therefore, sustainable tourism is a matter of identifying the best way to promote tourism while minimizing possible adverse impacts. In order to operationalize this concept, a set of principles have been established. These principles establish four pillars of sustainable tourism: economic, ecological, cultural, and community sustainability (Mckercher, 2003).

1. *Economic sustainability*: it is lucrative in both the short and long term.
2. *Ecological sustainability*: development consistent with the preservation of key ecological processes, biodiversity, and natural resources.

3. *Cultural sustainability*: It helps individuals gain more control over their lives and meshes with the local culture and values, benefiting the community as a whole.
4. *Local sustainability*: It is intended to help local communities by generating/retaining revenue in such areas.

The discussion on sustainable tourism and the wider function of tourism has been fraught with ambiguity as it seeks to make the idea appreciated by everyone (O'Brien, 2000). Recent conversations on the sustainability of tourism have been dominated by discussions about a new approach to tourism, differently referred to as eco, green, socially responsible, or alternative tourism. On the other hand, sustainable tourism development, in particular, may be seen as an expression of western hegemony (Sharpley, 2009) or, as in a strong criticism of ecotourism (Cater, 2006) or, as an environmental expression of sustainability. Though Cater focuses on ecotourism, in particular, this idea is directly applicable to sustainable tourism development more broadly. But, the purported sustainability of green tourism and eco-tourism is fiction and such innovations may simply duplicate or even aggravate the issues associated with mass tourism (Pattullo, 1996 and Budowski, 1992). Indeed, eco-tourism or green tourism may just be driving the business towards undeveloped regions – what Butler referred to as “the thin end of the edge” (Butler, 1998, p.37).

The UNWTO has established five pillars for sustainable tourism development based on many years of experience (UNWTO, 2013). These pillars, taken collectively, encompass the subject areas that may be addressed by future initiatives and interventions.

1. *Tourism policy and governance*: This pillar focuses on tourism's inclusion in sustainable development strategies, as well as the existence and execution of a defined tourism plan that adheres to sustainability principles. It looks at frameworks for tourism governance, and how they influence the sustainability and effectiveness of tourism ministries and institutions, and other sectors of government. Additionally, it takes into account the existence of institutions and processes for involving public, private, and local residents, at various levels.
2. *Economic performance, investment and competitiveness*: This pillar examines the environment of business and investment, as well as the effects of freer

trade on the local economy, small businesses, and long-term sustainability. It concentrates on access to the market, the quality of products, and sector stability.

3. *Employment, decent work and human capital*: This pillar addresses both the quality of jobs supplied and the planning of human resources to fulfill sector requirements.
4. *Poverty reduction and social inclusion*: It focuses on the importance of tourism in poverty alleviation. It uses tools such as value chain analysis to adopt a destination-level strategic approach to pro-poor tourism.
5. *Sustainability of the natural and cultural environment*: The key theme of this pillar is the important relationship between tourism and natural and cultural heritage. It gives special emphasis is placed on climate change mitigation and adaptation in the tourism industry.

Environmental resources such as scenery, a renowned landscape in the area, climate, and biological life are all utilized as integral components of tourism products (Bozkurt, 2015). The author gives examples of how it is generating income for the locals through the direct sales of products like coffee brewed in Brazil or cocoa produced in Congo. Any degradation of resources such as drinking water and air quality has a knock-on effect on the business, resulting in fewer visitors visiting the region. Health issues for residents and employees may also be a result of these environmental issues. The environmental harm may be irreversible or too expensive to repair (Bozkurt, 2015).

Because of its subliminal, multifaceted, and relative characteristics, sustainability of tourism is a rather difficult topic (Fernández & Rivero, 2009). To put it another way, the multidimensional nature of tourism sustainability is founded on three main concepts that are often associated with sustainable tourism development: environment, socio-cultural, and economic sustainability (ŠTETIĆ et al., 2015; White et al., 2006; Zamfir & Corbos, 2015; Kožić & Mikulić, 2011). As a consequence, sustainable tourism must adhere to the concepts of environmental, social, and economic principles of sustainability (Zamfir & Corbos, 2015). **Figure 2.3** shows the principles of sustainable tourism development.

Economic viability may be accomplished by restricting foreign investment and joint venture activity (De Haas, 2002). In order to be sustainable, tourism should stimulate a wide range of local economic activities, encourage employment, and preserve and enhance the biodiversity (Eber, 1992). Previous research has shown that the rise of large foreign-owned businesses in many places where tourism is becoming more popular can weaken local ties and reduce the positive effects that tourism has on local economies (Milne, 1987; De Haas, 2002). Local participation in tourism development ensures that the local community benefits from it, improves their quality of life, and improves their overall social security. Moreover, a part of the money generated by tourist development should be used to support the preservation, protection, and improvement of tourism resources, among other things (Wunder, 2000; Kontogeorgopoulos, 2005).

What we can see is, sustainable tourism development looks to have a lot of positive aspects. If properly implemented, the majority of the negative consequences of mass tourism might be eliminated, and many other kinds of tourism may be generated (Tosun, 2001). Nevertheless, There are several impediments to sustainable tourism growth in a developing country (Tosun, 2001).

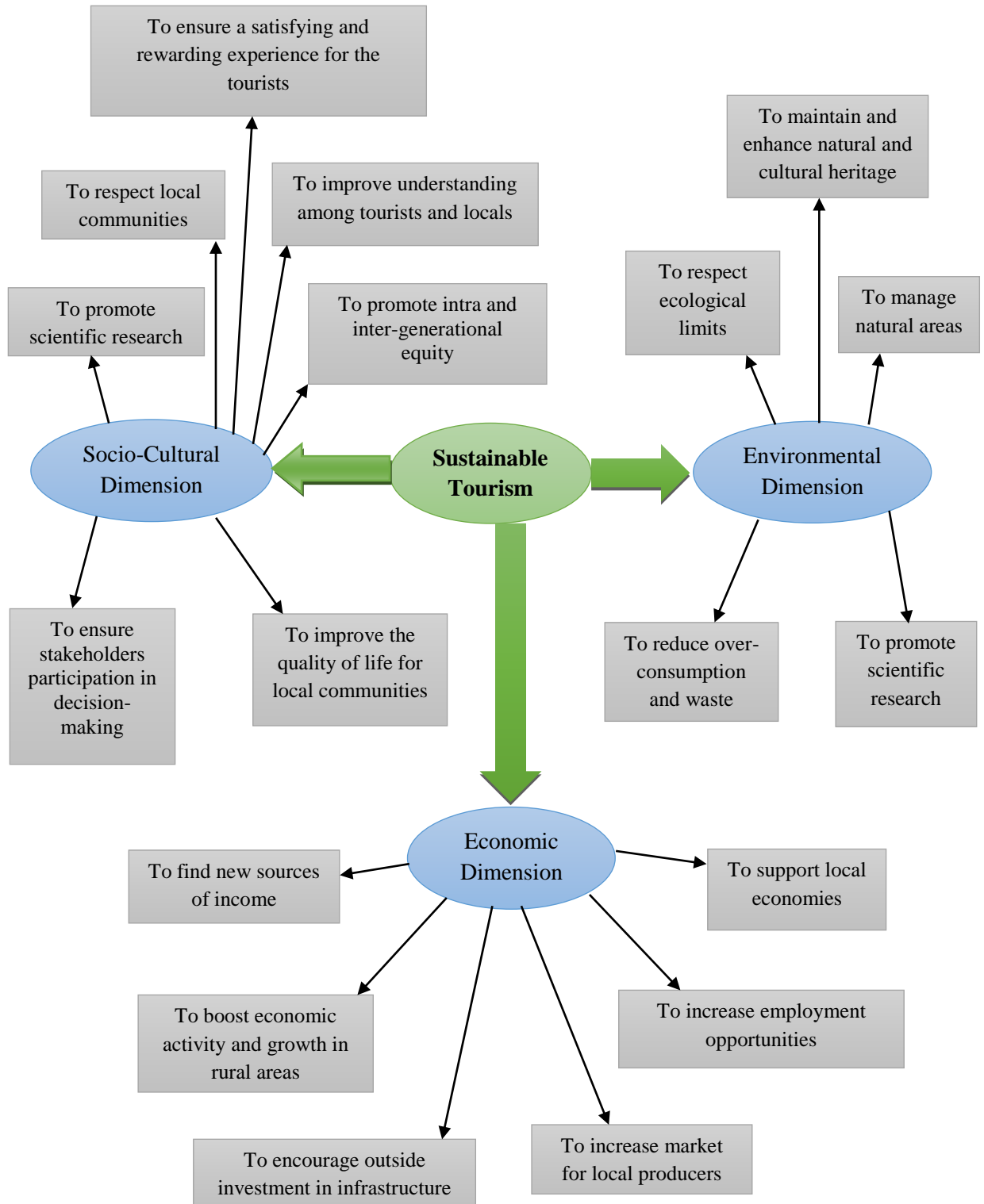


Figure 2.3: Principles of sustainable tourism. (Adapted from White et al., 2006, p. 4).

### 2.6.2 Challenges for implementing sustainable tourism

Tourism is a phenomenon made up of moments of production and consumption (Milne & Ateljevic, 2001). It is basically a global process that expresses itself locally and regionally and includes deliberately building the tourist destination. There are a number of challenges related to adopting the principles of sustainable tourism development ideas.

According to Tosun (2001), who used Turkey as a case study, developing nations have numerous challenges and constraints that may interfere with the implementation of sustainable tourism development. There are six main categories of challenges this face. Firstly, *Priorities of national economy*, developing countries have some internal constraints that hampered the success of sustainable tourism development; for instance, the need to improve their balance of payments, reduce their external debt, to enhance the economic well-being of their people, to generate employment and attract foreign direct investment. Large tourist businesses are frequently controlled by foreign partners, causing significant levels of economic leakage (McKercher, 2003). Secondly, *an absence of a modern tourism strategy*, one of the primary impediments in this respect is political instability, unclear policy, the inefficiency of the planning process, or lack of comprehensive planning, all of which contributed to the emergence of uneven tourist policies and planning practices.

Thirdly, *the structure of the public administration system*, in the context of developing countries, the public administration system is too bureaucratic to adequately address public demands. Thus, a weak local government with insufficient financial resources and authority is unable to balance the demands of the locals and the visitors. Therefore, it is very tough to achieve sustainable tourism development in developing countries without a political commitment to restructure the public administration system in favor of decentralization and community empowerment. Fourth, *the emergence of environmental matters*, unbalanced and geographically concentrated tourism development has led to numerous environmental issues at local tourist sites. For example: a) the development of uncontrolled hotel construction has occurred in coastal areas; b) due to a lack of steps to deal with the production of new or increasing waste residues, environmental pollution has become a significant issue at local tourist



sites; c) overcrowding, traffic jam and noise have created an inconvenience for the local residents; and d) the greatest damaging effect of tourism development and visitors has negatively impacted both fragile natural and man-made resources.

Fifth, *the emergence of over commercialization*, cultural heritage and traditional values were allegedly twisted and abused for commercial gain. Hotels and restaurant owners refuse highly trained artists because of the expensive cost and choose cheaper, unprofessional teams. Moreover, traditional handicrafts have also been mass-produced without any regard for their roots due to the "get-rich-quick" attitude brought forth by over-commercialization. Therefore, using cultural values at the wrong time and place has produced a false and harmful picture of the local communities in the tourist sites. Sixth, *the structure of the global tourism system*, the global tourism sector in developing countries is dominated by wealthy industrialized nations. Tourism growth in developing nations is heavily reliant on foreign tour companies. In this respect, it is possible to say that developing nations are decision-takers rather than decision-makers in terms of tourism development.

## **2.7 Stakeholder and sustainable tourism**

Tourism is a multifaceted industry with many different aspects and numerous different stakeholders that are potentially involved in or impacted by the industry, either directly or indirectly (UNWTO, 2013). To maintain the sustainable development of tourism, many authors (Bramwell & Sharman, 1999; Liu, 2003; Pjerotic, 2017) stress the importance of overcoming stakeholder subordination such as tourists, local residents, businessmen, local, regional, national management structures; which may be made possible by balancing their interests and devising strategies that respect them.

In context of management and organizational, a stakeholder is any group or person who can affect the organization's performance or who is affected by the achievement of the goals of the organization (Freeman, 1984). Stakeholders are defined as those groups or individuals with whom the organization interacts or is interdependent, as well as any individual or group who may influence or be influenced by the organization's actions, choices, decisions, policies, practices, or objectives (Carroll,

1993). Stakeholders may be divided into two categories (Clarkson, 1995): primary stakeholders and secondary stakeholders. A primary stakeholder group is one that the company cannot exist without their continued involvement; the corporation and its primary stakeholders are highly interdependent. Secondary stakeholder groups are varied and including individuals who are not directly involved in the economic operations of the organization but have the ability to exercise influence or are impacted by them (Clarkson, 1995). Sustainable tourism development faces numerous concerns and problems, including the desire for balanced tourism where no single actor (industry, host, or visitor) dominates; yet, the design, development, and practice of sustainable tourism development require the engagement of such stakeholders (Getz & Timur, 2005).

Bramwell and Sharman (1999) offer an analytical framework in the context of the Hope Valley in Britain's Peak District National Park that examines whether or not specific collaborations decrease power imbalances amongst stakeholders, and it introduces the notion of partial consensus. In an assessment of local collaboration arrangements, the authors proposed developing a visitor management strategy. In the area of sustainable tourism there are many stakeholders, though it is not completely predefined and is highly dependent on the nature and situation of a tourism location. The **Figure 2.4** depicts the main areas of stakeholders for sustainable tourism in a typical tourism destination.

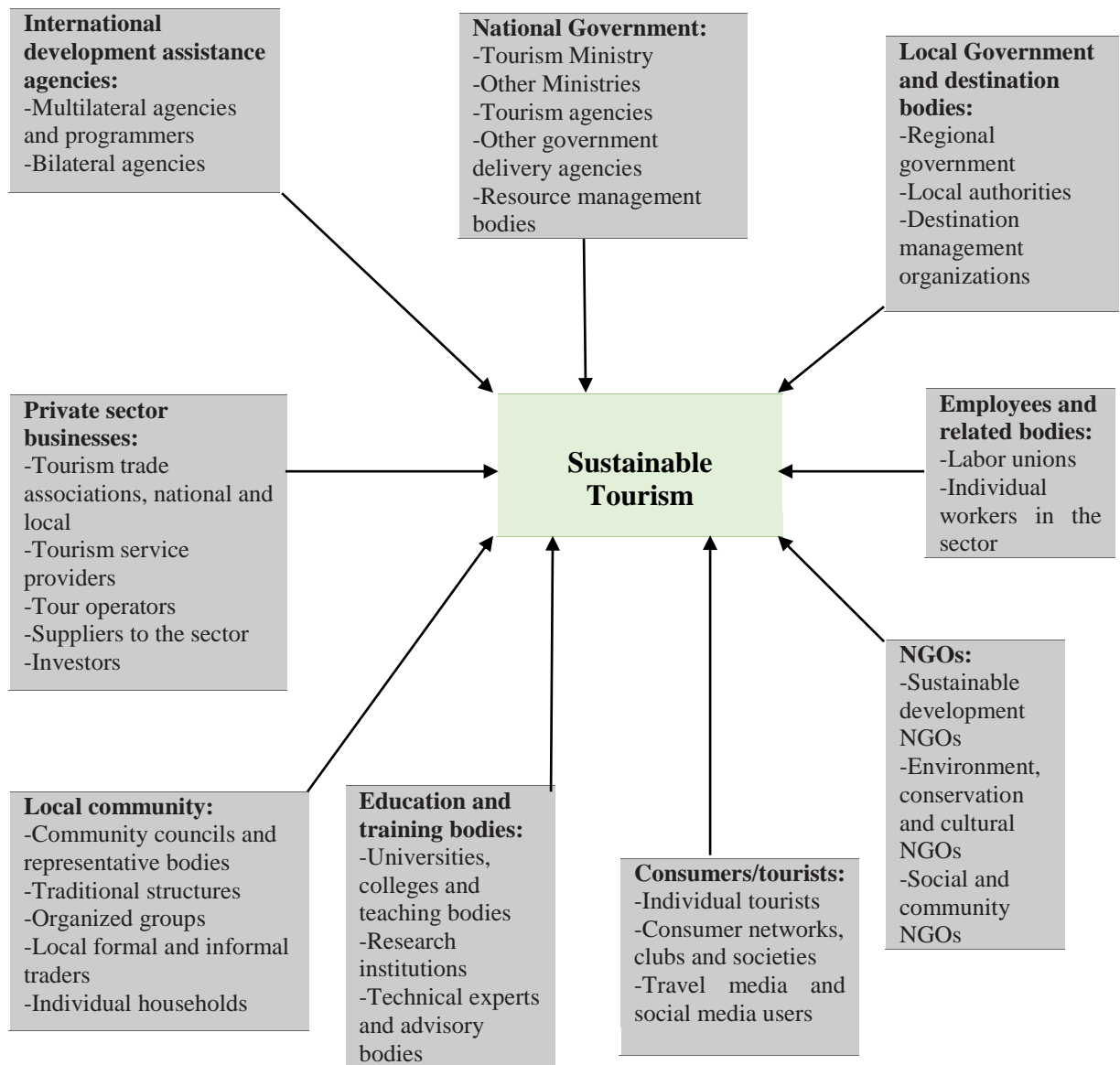


Figure 2.4: The key stakeholders in sustainable tourism (adapt from: UNWTO, 2013; p. 19)

After the 1980s, the measuring and comprehension of the views of community tourism inhabitants have been a major priority, as shown by the appearance of many pieces of literature on the topic (Choi & Murray, 2010). The number of research concerning the attitudes of residents to tourism within a sustainable framework is very few. Using social exchange theory and in the context of Texas, according to Choi and Murray (2009), three fundamental components of sustainable tourism, including long-term planning, complete community engagement, and environmental sustainability within tourism, might be important predictors of people's attitudes and behavioral

intent. Additionally, they revealed that the notion of community connection was advantageous for analyzing the links between support for greater tourism development and people's views of tourism. Moreover, the authors highlight important implications for local governments when promoting tourism, as well as show that strong community involvement and the key components of sustainability give a solid basis for further study of resident attitudes.

The management of stakeholders is the method of organizing the company to meet the needs of its stakeholders, because they may influence the plans and activities of the company (Husted, 1998). By incorporating stakeholder concerns into strategic planning, Freeman (1984) argues for stakeholder management and offers a four-step management approach for stakeholders. Based on researcher foundational work, Getz & Timur (2005) adapted it to tourism destinations within a sustainable tourism viewpoint. The first stage is to identify all of the main stakeholder groups involved in sustainable tourism development. The second step is to establish what each stakeholder group's stake is and how significant it is. The third step is to assess how well the business is presently meeting the requirements or expectations of each group. The final step is to adjust firm rules and priorities to accommodate stakeholder needs that are not being met presently.

The relevant authorities of any tourism destination must clearly consider the opinions of many stakeholders while developing tourism plans and regulations (Getz & Timur, 2005). Each stakeholder group has distinct demands and expectations that may lead to stakeholder disputes, which can harm a destination's competitiveness significantly. Stakeholder management is required to minimize or resolve clashes, and establishing a balanced viewpoint among stakeholder voices is always a challenge (Getz & Timur, 2005). One approach to balance all stakeholders' views is to disregard numerical power and focus on a system that treats all stakeholders' voices with equal importance.

### **2.7.1 Tourist satisfaction and destination loyalty**

Tourist satisfaction is defined as the degree to which pleasant emotions are evoked as a result of the destination experience (Jamaludin et al., 2012). Tourist satisfaction is regarded as one of the major criteria for maintaining competitive business in the tourism sector, since it influences tourist destination selection, product consumption, and service consumption (Kozak & Rimmington, 2000). Tourism research has focused on visitor satisfaction for many decades. A satisfied customer is more likely to make further purchases (Chi and Qu, 2008). The tourist satisfaction construct is often defined by researchers as visitors' evaluations of destination characteristics (Kozak et al., 2004; Pizam & Milman, 1993).

Two main methods are used in the tourism literature to assess tourists' satisfaction. These are the theory of disconfirmation and the performance-only approach (Fallon & Schofield, 2003; Wang & Qu, 2006). According to disconfirmation theory, satisfaction occurs when customers compare their sensations to their initial expectations. Adopting this idea necessitates a comparison between visitors' original expectations and perceived performance, with satisfaction occurring when performance exceeds expectations (Pizam & Milman, 1993). This theory is a complex approach to measurement of tourist satisfaction. On the other hand, in a performance-only method, tourist satisfaction may be assessed by adding up the visitors' ratings of each destination characteristic and calculating their overall satisfaction with the location (Kozak, 2003). Destination characteristics have a significant role in determining visitors' overall satisfaction with a location (Kozak and Rimmington, 2000).

The happy traveler is one who sees a better level of service than what was expected. If, however, consumers perceive service performance to be worse than expected, they are said to be dissatisfied (Coban, 2012). A good destination image leads to visitor satisfaction and has an impact on tourist behavioral intentions (Chi and Qu, 2008). Loyalty may be described as the guarantee of future purchases of a product or service (Çoban, 2012). Similarly, in the marketing literature, consumer loyalty is most commonly referred to as repeat purchases or referrals to others (Yoon & Uysal, 2005). Moreover, the authors state that, in the tourism context, travelers who are satisfied with a place would become more loyal to the destination. Destination loyalty, also

known as customer loyalty, is the behavioral desire of customers to return to and spread positive word of mouth about a certain destination to others (Ali et al., 2011). For a long time, academics and practitioners have utilized the notion of destination loyalty as a key benchmark for creating successful business strategies (Oppermann, 2000).

There is empirical evidence in the tourism business that visitor satisfaction is a significant predictor of their intentions to return to the particular destination and recommend the location to others (Kozak & Rimmington, 2000; Kozak, 2003; Kozak et al., 2004; Yoon & Uysal, 2005; Valle et al., 2006). Depending on the business sector, a 5% increase in client retention rates may boost profitability on an average from 25% to 85% (Reichheld and Sasser, 1990). Getting new customers is more expensive than keeping old ones (Schiffman and Kanuk, 2007), because

- loyal tourists are less price sensitive and pay less attention to competitors' destinations;
- loyal tourists repeat visit;
- serving current customers who are familiar with the destination is less expensive; and
- loyal tourists spread positive word-of-mouth.

Valle et al., (2006) develops the affiliation between tourist satisfaction and destination loyalty intention (**Figure 2.5**) based on earlier research such as those conducted by Kozak and Rimmington (2000) and Yoon and Uysal (2005) corroborate this relationship. The authors state that three observable variables named (i) general destination satisfaction, (ii) mean satisfaction level in terms of destination attributes; and (iii) whether destination expectations were met are utilized in this study to quantify tourist satisfaction. Another two indicators, (a) revisiting intention and (ii) willingness to recommend, are used to measure destination loyalty intention. According to the findings of this research, visitor satisfaction is one of the major reasons that can influence future destination loyalty.

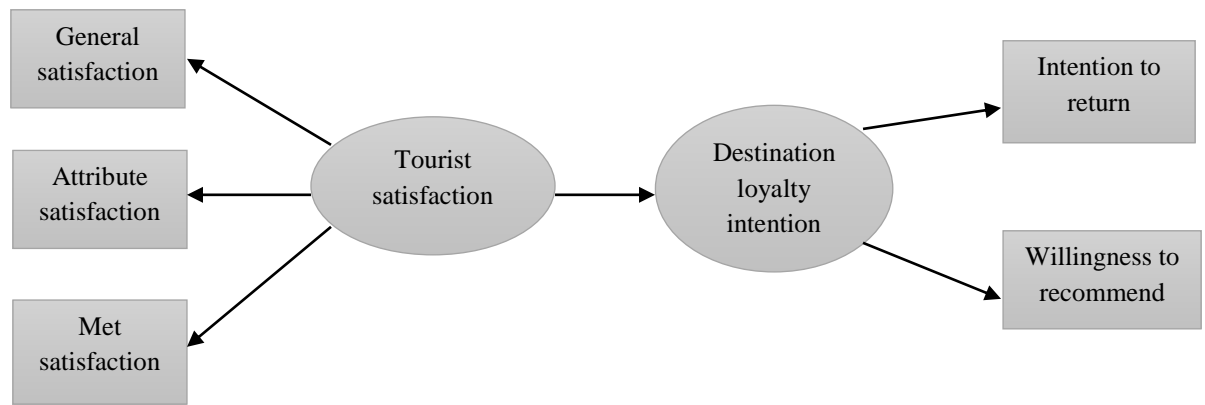


Figure 2.5: Tourist satisfaction on destination loyalty intention (adapt from: Valle et al., 2006 p.28)

### 2.7.2 Community participation and perception of tourism

Local community participation is a procedure that involves all stakeholders in order to share decision-making (Haywood, 1988). A community as being characterized by its size, sector, interest, and degree of power, as well as a variety of other characteristics that reflect its diversity and heterogeneity (Mowforth & Munt, 2009). The development of tourism relies heavily on the active participation of local communities. Many researchers indicated that in order to achieve long-term tourism growth, local populations must be involved in the decision-making process (Eshliki & Kaboudi, 2012; Nagarjuna, 2015; Muganda et al., 2013; Okazaki, 2008). The local people are frequently left out of the planning, decision-making, and operation of tourist schemes (Mowforth & Munt, 2009).

Tourism development has been recognized as a viable strategy for revitalizing a destination's economy, whether rural or urban (Chen & Chen, 2010). Nevertheless, tourism is highly reliant on the goodwill of the local people. Their support is required for tourism's growth and effective operation, particularly for a destination's sustainability. It is necessary to understand host community's responses to tourism development and the variables that may affect their reactions in order to secure the local community's support for tourism development (Yoon et al., 2001). Besides, a participatory approach with the local community for tourism development has long been recommended as a necessary component of sustainable tourism development (Okazaki, 2008). The author also states that the inclusion of local residents in the tourism planning process is encouraged as a strategy for achieving sustainable tourism. Therefore, tourism researchers have spent a considerable volume of time

studying local responses to tourists (Almeida-García et al., 2016; Chen & Chen, 2010; Okazaki, 2008; Yoon et al., 2001).

Residents who have a favorable view of tourism are more likely to support its expansion and therefore be open to exchanging goods and services with tourists (Yoon et al., 2001). Alternatively, if they think that tourist growth will result in more expenses than advantages, they are more inclined to be against it. For the tourism industry's long-term viability, encouraging local communities to participate is a critical component. Muganda et al. (2013) examined local people's perspectives on their involvement in tourism development using the case study of Barabarani village in Tanzania. According to the results, they found that local communities desire to be engaged in tourism policy making to ensure that policies satisfy stakeholder requirements and remove their concerns. Additionally, they want to be involved in decisions about tourism development so that their requirements are taken into account. Furthermore, local communities want to have a say in development, so that they may safeguard community interests and enhance transparency and accountability, and also eliminate embezzlement and abuse of office, which are commonplace among decision-makers (Muganda et al., 2013).

While tourism development brings economic benefits for local communities, it also affects the communities in many negative ways. Traffic congestion, rising crime, the production of waste water, and a rise in living expenses, all affect communities negatively (Nunkoo & Ramkissoon, 2010). So, residents' attitudes or perceptions toward tourism are very important because a satisfied community is more inclined to promote tourism development and welcome visitors (Okazaki, 2008; Nagarjuna, 2015). Understanding community attitudes and perceptions are critical for effective and sustainable tourism development because decision makers would benefit from knowing how these attitudes and perceptions are developed towards tourism development (Eshliki & Kaboudi, 2012). The community is the most critical stakeholder, since they are the ones who will be most impacted by tourist planning and development, either favorably or adversely (Freeman, 1984; Liu, 2003).

In the perspective of developing countries, the concept of community-participatory tourism development approach has several constraints to establishing that method,



which includes: operational, structural, and cultural constraints, but they are not present in every tourist location (Tosun, 2000). The author proposed that in order to overcome these obstacles and design and to execute the participatory tourist development strategy, many developing nations' sociopolitical, legal, administrative, and economic institutions must be completely changed.

## **2.8 Sustainable tourism indicators: Monitoring and evaluating**

Though the sustainability of tourism is a complex concept that cannot be directly measured, a synthetic composite indicator with sub-indicators has been created which is used as a model for assessing the sustainability of tourism (Ivan Kožić & Josip, 2011). Tourism is a sector in which developing nations have historically had weak statistical data, and the issues presented by sustainable development studies add an extra layer of ambiguity to the situation (Ceron & Dubois, 2003). However, sustainable tourism indicators may be developed to enhance underlying data and give the idea of sustainable tourist development greater substance (Helmy, 2004).

According to UNWTO (2004, p. 8), that

*“Indicators are measures of the existence or severity of current issues, signals of upcoming situations or problems, measures of risk and potential need for action, and means to identify and measure the results of our actions.”*

Specifically, indicators in the perspective of sustainable tourism development are time series information that is critical to the long-term viability of a destination, the asset value of that location, and, therefore, the fortunes of the tourist industry (UNWTO, 2004). Sustainable tourism indicators are anticipated to capture and communicate a complex situation of sustainable tourism development, as well as to enable trend analysis and comparisons across tourism sector stakeholders (Ceron and Dubios, 2003). Tourism organizations in different countries have different priorities when it comes to setting up sustainable tourism metrics. Another significant priority for national travel and tourism organizations is to develop meaningful sustainable tourism indicators. By identifying issue areas in the tourism industry, the notion of sustainable tourism is rendered meaningless without indicators (Twining-Ward and Butler, 2002); indicators can be used to assess the performance of government programs and

initiatives, as well as to identify the problem areas in the tourism sector that need management attention.

Regardless of the destination, the best indicators are those that address critical risks and concerns about tourism's sustainability while also providing data that may assist in explaining problems and tracking solutions (UNWTO, 2004). One typically uses indicators to address problems such as a destination's natural resources and environment, economic viability, cultural assets and social values, and more generally, organizational and management challenges (UNWTO, 2004).

The industry has created so many indications that it seems to be paralyzed by choice, resulting in inactivity, poor decision-making, or the selection of the simplest alternative (Agyeiwaah et al., 2017). The United Nations World Tourism Organization (UNWTO) effort to promote a more sustainable tourism industry by publishing "Indicators of Sustainable Development for Tourism Destinations: A Guidebook" (UNWTO, 2004) brings attention to the issue. In this handbook, 13 broad dimensions of sustainability are identified with more than 40 key sustainability problems covered, from natural resource management to development control, visitor contentment and host community satisfaction to cultural asset preservation and seasonality, economic leakages and global climate change (Agyeiwaah et al., 2017). A total of over 150 components and more than 700 indicators are probably identified in this guidebook. The researchers criticize that the UNWTO publication is a typical example of choice of overload. Despite the fact that there is no one ideal collection of indications. The authors (Agyeiwaah et al., 2017) identified six key indicator themes for sustainable tourism named (i) employment, (ii) business viability, (iii) quality of life, (iv) water quality and water management, (v) solid waste management energy conservation, and (vi) maintenance of integrity of local communities. These key indicators have connections associated with possible measures.

Following extensive studies of sustainable tourism indicators, it has been discovered that there are many connections between the characteristics of a tourism sector and the adoption of sustainable tourism practices, local communities' participation, and government efforts.

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*Chapter 3*

*Research Methodology*

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### **3.1 Introduction**

The purpose of this thesis is to investigate the various prospects and challenges of sustainable tourism on Kuakata sea beach. The first objective reveals issues regarding the sustainability of tourism in Kuakata sea beach in terms of tourists' perception; the second objective investigates issues regarding the observations of residents toward sustainable tourism development; the third objective discovers the prospects; and the fourth objective considers issues regarding the challenges for sustainable tourism development on Kuakata sea beach. This chapter elaborates on the research methodology and techniques that have been used to achieve the aim and objectives of this study.

The chapter begins with a discussion of the research methodology and plan, and then examines the methods utilized to collect quantitative and qualitative data from a variety of public and private sector stakeholders, and from tourists visiting Kuakata sea beach. Different procedures have been utilized to conduct the questionnaire survey, as well as semi-structured in-depth interviews with these stakeholders are described. Later, it explains how the empirical materials are analyzed and interpreted. The chapter concludes with discussing the ethical issues of study and presentation of the results of this thesis.

### **3.2 Research paradigm**

Researchers often adhere to a particular and suitable philosophical concept, referred to as the research paradigm (Creswell, 2014; Denzin & Lincoln, 2002). A research paradigm is a combination of beliefs, attitudes, and behaviors around the world (Goodson & Phillimore, 2004; Jennings, 2005; Kuhn, 1996). Another researcher (Bryman, 1988) points out that a paradigm is a collection of beliefs and mandates that determine what should be investigated, how research should be performed, and how scientists in a certain field should interpret their findings. According to Henn et al., (2006), there are two main types of paradigms used in social research:

- the positivist paradigm (often linked with quantitative research methods) and
- the interpretive paradigm (often linked with qualitative research methods)

Social researchers believe that positivist theory works on the assumption and it has an objective reality that can be implied and described by enquiry as well as quantifiable characteristics over which the researcher has no influence. The proponents of the positivist paradigm assert that "...there is a reality out there to be explored, grasped, and comprehended..." (Denzin & Lincoln, 1998, p.8). The rationale for using a positivist research strategy is that it explains phenomena and test theories and also attempts to explain mechanisms of cause and effect. Researchers should follow scientific methods that highlight control, standardization and neutrality in order to ensure their research (Henn et al., 2006). Assumption is the foundation of positivist paradigm; thus, the theme of research is independent by the researcher and as a result, the researcher must be "capable of analyzing the item without affecting or being affected by it" (Guba and Lincoln, 1994, p. 204).

When conducting positivist research, quantitative research technique is one of the principal methods. Bell (1995) mentions that researchers may use scientific methods to discover the quantify facts and they can also try to generalize the findings, if feasible. Quantitative methods often include large sample sizes; thus, the outcome could be: compared, analyzed statistically and generalized to a large population (Seep-Aims, 2000).

On the other hand, interpretivism and constructivism are the foundation elements of the qualitative approach and it is founded on the collection of qualitative data such as words, documents, images, and so on (Sale et al., 2002; Johnson and Christensen, 2012). The primary goal of the qualitative method, which is generally linked with interpretive research, is to comprehend a specific instance, which may be a specific scenario, set of circumstances, choice, or even behavior. As a result, it is more essential to get background or very comprehensive information. Therefore, the primary objective of interpretive research "is not to explain why something happens, but to explore or build up an understanding of something we have little or no knowledge of. We ultimately put together a hypothesis by putting together such an understanding..." (Henn, 2006, p. 15).

Though each approach has its own strengths and weaknesses, which approach we use depends on the research objectives and context (Seep-Aims,2000). Because many

methodologies need a lot of expertise, researchers typically choose to follow the same processes. The more one learns about a particular technique, the more one learns about its flaws and limits. Researchers, therefore, combine various approaches to acquire complementary knowledge while filling gaps (Yeasmin & Rahman, 2012; Johnson & Christensen 2012). This is called mix-methods research (Sale et al. 2002; Johnson & Christensen 2012; Creswell 2003; Tashakkori & Teddlie 1998).

### **3.3 The research choice: Mixed-methods research**

Mixed-method research has been described as a third research paradigm that seeks to bridge the gap between quantitative (positivist) and qualitative (interpretivist) research (Baškarada and Koronios 2018). Mixed-methods studies are "studies that are products of the pragmatic paradigm and that blend qualitative and quantitative methodologies at various stages of the research process," according to Tashakkori & Teddlie (2008, p.22). Pragmatism is a research philosophy that emphasizes the practical application and repercussions of a concept's substance (Mintz, 2004). While it is claimed that mixed method research is a synthesis of concepts from qualitative and quantitative methods, the specific nature of the synthesis and how it is accomplished remain unclear (Baškarada and Koronios 2018). Thus, a significant benefit of mixed methods research is that it allows the researcher to validate and create theory in the same study by concurrently answering confirmatory and exploratory questions (Teddlie and Tashakorri, 2003).

Tourism is considered among the most complicated topics in social science and researchers who study it, examine it from many perspectives, and use a range of techniques to gather and analyze data (Smith 2010). This research is focused on sustainable tourism development. When conducting research on sustainable tourism, it is challenging to find appropriate research methods. These problems emerge as a result of the large amount of information required to evaluate the concept of sustainable tourism and to solve the difficulties, some may demand a quantitative paradigm while others may need qualitative (Tinh 2009).

A mixed-methods study is suitable for this project since it elucidates the research objectives. In the first and second objectives, rather than just knowing the state of knowledge regarding sustainable tourism, this study explores perceptions of tourists

and residents toward sustainable tourism development in the destination. Since these objectives include revealing various realities and related views of sustainable tourism development, a quantitative paradigm is more likely to provide the necessary study results. In the third and fourth objectives, this study reveals the prospects and challenges for sustainable tourism development. For examining complex, deep, multi-dimensional topics such as prospects and challenges, qualitative research is an effective technique (Mason, 2002). Qualitative interviews are useful when the sample strategy must include the key stakeholders such as managers and local authorities (Phillips, 2014). A deductive thematic approach (Hassan et al., 2018) was used to analyze prospects and challenges for sustainable tourism development on Kuakata sea beach.

### **3.4 Data collection methods**

This study applied one quantitative research method, face-to-face survey (tourist and resident), and two qualitative research methods, face-to-face semi-structured interviews and document analysis, to collect data in order to meet the demands of the research aim and objectives. Tourist questionnaire survey was used to satisfy the first objective; residents questionnaire surveys were applied for the second objective and both interviews and document analysis were utilized for the third and fourth objectives. Visitors do not have enough time for lengthy conversations during their vacations, so a questionnaire survey was deemed the most suitable technique for gathering their opinions (Kimbu 2010). Along with the tourist survey, a questionnaire survey tool was used for collecting general local resident's perceptions about sustainable tourism. On the other hand, semi-structured interviews were conducted with other stakeholders who live in Kuakata, Patuakhali. Primary data for this research were acquired in Kuakata from February to March 2021 via visitor and local household questionnaire surveys, semi-structured interviews, and field observation visits to the site and surrounding areas for sustainable tourism development. However, the research aims and objectives had to be established and modified before collecting primary data utilizing the aforementioned techniques, and this was done after the analysis of secondary data (also called documents analysis) from many sources.

### **3.4.1 Documents analysis**

Document analysis is a systematic procedure for reviewing or assessing documents, both printed and electronic, such as computer-based and internet-based content (Bowen 2009). This study used publications, brochures, fliers, billboards, academic articles, newspaper articles, maps, policy documents, manuals, handbooks, photographs, magazines, and books on sustainable tourism development, as well as internet-based information like websites, YouTube videos, and Facebook pages. Document analysis is an inexpensive method for obtaining empirical data in an unobtrusive and nonreactive manner. In order to reduce bias and establish trustworthiness, the documented evidence is supplemented with interview and observation data (Bowen 2009). In this research, information collection is the secondary aim of document analysis.

### **3.4.2 Primary data**

The major techniques utilized for the collection of primary data during fieldwork were two questionnaire surveys (tourists and local residents), semi-structured interviews and field observations. Prior to the commencement of primary data collection, the fieldwork instruments (questionnaires and interviews) were prepared and tested.

#### **3.4.2.1 Questionnaire survey**

Survey research is one of the most often utilized methods for gathering primary data (Zikmund, 2003). Questionnaires are the most significant and widely utilized tool for collecting tourism data (Smith 2010 p. 61). In this research, it was used to produce quantitative data - the primary data set for achieving the research objectives. Two distinct surveys were carried out: one of the tourists and another of the local residents. For both questionnaire surveys, the face-to-face interview method was selected for collecting data instead of online, telephone, or mail interviews. However, this approach is a comparatively time-consuming and costly method of surveying.

Pretests must be conducted prior to undertaking large-scale surveys. Peterson (2000) suggests that questionnaires should be designed using generally recognized methods in social research; pre-testing is one of these steps that takes place before the formal



survey is conducted. Before conducting the tourists and the local residents survey, two pilot tests were performed. Twenty respondents participated in each pilot test. The initial questionnaire was somewhat modified in light of the pilot test responses before the full sample was completed. The seven-point Likert scale (1 = strongly disagree to 7 = strongly agree) was utilized in the questionnaire survey conducted among both visitors and local residents to get quantitative information on sustainable tourism development in Kuakata sea beach.

### ***Tourist survey:***

The tourist survey covers the following matters:

- Demographic Profile of Tourists
- Travel Characteristic of Tourists
- Travel Behavior of Tourists
- Level of Satisfaction of Tourists, and
- Perception of Sustainable Tourism Development (STD)

The 28 statements addressed sustainable tourism-related issues such as visitors' attitudes and interactions, marketing and advertising, conservation and preservation of the environment, and service infrastructure quality. All the questions were closed ended (Appendix 1). For tourism developments, feedback from the tourists about the destination is usually essential. The collected data from the visitors reflects the present situation in the destination. The main emphasis of the interviews was on the beach area. Additionally, other places have been engaged, such as restaurants, hotel, motels, pagoda and souvenir stores. The researcher had distributed 400 self-completion questionnaires to the tourists and 215 questionnaires were fully answered. The response rate was 53.75%. COVID-19 pandemic affected the response rate throughout the study period.

### ***Local resident survey***

The purpose of the local resident survey was to determine local residents' perceptions about sustainable tourist development on Kuakata sea beach. As a sustainable tourism development issue in Kuakata, there were three main sub issues: economic, socio-cultural and environmental. These three sub issues were related to 30 statements that

were included in the household survey questionnaires (Appendix 2). The main emphasis of the interviews was on the surrounding residents of the Kuakata sea beach area. Residents in the area were unwilling to participate in the resident survey because of the COVID-19 outbreak. So, the researcher took help of a local NGO named “Padakhep Manabik Unnayan Kendra”. This NGO is very popular in Kuakata and the staff of this NGO are well-known to the local residents. Three staff of this NGO participated in the data collection for the resident survey. The researcher delivered 300 self-administered questionnaires to the residents and 245 questionnaires were fully answered.

### **3.4.2.2 Semi-structured interviews**

Semi-structured interviews are being used as a data collection strategy based on the assumption that the viewpoints of tourism stakeholders are important, valuable, comprehensible, insightful and clear, and will have a beneficial impact on the study (Frechtling & Sharp, 1997). Smith (1995) states that, researchers often utilize semi-structured interviews to obtain an extensive picture of a respondent's ideas, perceptions, or descriptions of a specific subject. Researchers conducting face-to-face interviews in the study area must cover a component in which they see the study arena (Gubrium & Holstein, 2002; Seidman, 2013 – cited by Hassan 2019). Using interviews to gain a personal understanding of social issues as well as insights into the nature of organizational engagement from people who are closely involved with such issues (Smith, 2010).

The researcher informed the prospective respondents to ensure the eligibility to be included in this study before beginning an interview. The researcher started the interview by explaining the objectives of the research. The researcher used the ‘listen more, speak less’ approach when conducting the interviews (Seidman, 2013). 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 semi-structured interview to meet the third and fourth objectives. The judgment was formed via a review of the literature, the researcher's own experience, and contact with various stakeholder groups. There were

many diverse factors used while selecting participators from various stakeholder groups.

Twelve semi-structured interviews were done to meet the third and fourth objectives of this research as well as time and financial restrictions. The sample was broken down into interviews with 2 members of the local government, 1 tourist police, 3 accommodation service providers, 1 leader of Hotel-Motel Owners' Association, 2 transportation service providers and 2 tour operator and tourism-related service providers, 1 tribal leader. The interviews have been recorded digitally with the participants' full permission. The significance of tape recordings is that, while our memories enable us to provide a summary of what was said, it is not feasible to recall all the specific details or subtleties, such as pauses, overlaps, and emotions (Silverman 2000). Most of the questions addressed the participants' thoughts on how sustainable tourism may grow and what the possibilities and difficulties could play out in Kuakata.

### **3.5 Data analysis and interpretation**

While data collection is critical to the outcome of any research, data analysis is an equally important factor. Dey (1993) states that data analysis is defined as the process of dividing data into its basic components in order to expose its distinctive features and structure. The method for analyzing the data in 2 stages is described in this section. The first stage was to analyze the tourist and resident survey questionnaires, which was a quantitative data analysis. The second stage was an analysis of data taken from semi-structured interviews collected during the field work.

#### **3.5.1 The first stage of data analysis: tourist and local resident survey (to fulfill the first and second objectives)**

At this stage, first of all, the researcher collected the raw data from two separate surveys. The raw data was analyzed separately; one was a tourist survey questionnaire and the other was a local resident survey questionnaire. Both of the survey questionnaires were analyzed in the same way. Information was checked to ensure data entry mistakes had not occurred and the data's consistency with descriptive statistics such as the statistical assumptions related to missing data, outliers, and

normalcy, homoscedasticity, multicollinearity, and dependability was checked. Correlation analysis was performed to express the relationship between the variables. Various statistical techniques and procedures were used from the Statistical Package for the Social Sciences (SPSS) software version 25.0 for data analysis and hypothesis testing. Finally, using this software, the data were investigated by factor analysis.

Prior to entry in the computer software, completed surveys questionnaires were checked and edited. After checking and editing, coding is needed to ensure that data is stored in a systematic manner (Zikmund, 2003). Before analyzing the data, data cleaning is required. It includes consistency checks of data and the treatment of missing responses.

Descriptive statistics give a more complete picture of the summary data that were used to measure tourists' and locals' opinions on sustainable tourism development in Kuakata. This research used frequency distribution, mean, and standard deviation to give a clear understanding of the data. In this study, to evaluate the hypotheses, Independent Sample T-test, Pearson Chi-Square (F-test) and one-way analysis of variance (ANOVA) were used with the threshold of statistical significance set at 95 percent ( $\alpha = 0.05$ ).

Factor Analysis was also performed in this study. To find the structural skeleton of all variables in the study and to examine how the underlying dimensions relate to one another were the primary goals of this research. In the light of these considerations, exploratory factor analysis was determined to be suitable and justified. As a general guideline, Hair et al., (2006) recommend that the minimum number of observations be at least five times the number of variables being examined. The majority of loaded variable correlations should be 0.3 or higher (Pallant, 2007). As a result of this caution, factor loadings less than 0.30 and eigenvalues less than 1.0 were removed from the analysis; which should enhance the statistical significance of the results of this research. In order to identify the lowest number of factors that describe the highest number of variances, the Principal Component Analysis with Varimax method for orthogonal rotation was carried out as the factor extraction method. In Chapters 4 and 5, the outcomes of the data analysis are provided.

### **3.5.2 The second stage of data analysis: Semi-structured interviews (to fulfill the third and fourth objectives)**

Qualitative data analysis is an interpretive, invisible, and complex brainwork to find the outlines, similarities, differences, patterns, logic, causes, and actions of a huge amount of text (data) to explain the outcomes to respond to the research question (Hassan, 2019). Data was collected from semi-structured interviews in the form of texts and images rather than numbers. Qualitative research assumes that language analysis is an objective fact that must be discovered by the researcher (Lacity and Janson, 1994).

The interviews were done entirely in the Bengali; transcribed the audio recordings of the digitally recorded interviews and then translated into English. It was a very time-consuming process to complete the transcription. The transcription time will take 3 to 6 hours for each hour of tape (Atkinson, 1998). During this study, the transcription of interviews performed was no different. The interviews were partly transcribed because only the very unnecessary and irrelevant conversation was omitted. Therefore, it improves the efficiency of the analysis procedure

In this research, the qualitative data were analyzed manually and thematic analysis was also used here. The study 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 collecting 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 aim of coding was to view all relevant empirical data under certain notions at once. With coding, researchers found patterns, structures, identification of similarities, and commonalities of empirical data (Seidel & Kelle, 1995). For developing themes, coded empirical materials were analyzed. The results of the data analysis were written up and presented in Chapter 6.

### **3.6 Limitations of the research**

Nothing is beyond limitations. The critical constraints on this research are time and money. In addition, owing to its broad range, this research suffers from some constraints. Firstly, the fieldwork for this research was completed in the first quarter of 2021, a COVID-19 pandemic situation. During the pandemic, no foreign tourists were in Kuakata and tourists and local residents did not willingly participate. Secondly, the respondents talked more about the pandemic and less about sustainable tourism in the interviews due to the existing pandemic situation. Thirdly, all of the interviewees in this study were from operating stakeholders and management agencies engaged in tourism operations or contextual management rather than policymaking. An in-depth knowledge of sustainable tourism development can be gained by conducting interviews with policy-makers (e.g. ministers, secretaries, and members of parliament). Fourthly, a relatively small sample was used in the research and while more information may be obtained, it is not expected to reflect the larger population.

### **3.7 Ethical considerations**

Without access to the respondents and the fieldwork environment, doing research is difficult. The capacity to interact with people and sites is one of the most significant parts of the research process. So, ethical issues arise when conducting these activities for research purposes. This study strictly maintained any ethical concerns regarding human participation. Universal principles of ethics include honesty and respect for the rights of people, and maintaining these values in the research should reduce the incidence of ethical issues (Veal, 1997). Both honesty and respect for the rights of people were given importance during the data collection process. Throughout the study period, the confidentiality of participants' identities was preserved and protected via the use of codes. Before each interview and conducting the survey, participants were informed of how the confidentiality of their information would be protected during the study and thereafter.

### **3.8 Presentation of thesis findings**

The findings of this thesis and the necessary theoretical and contextual background are presented in Chapters 4 to 6. The chapters are presented independently yet in relation to one another. Each chapter focuses on a particular objective along with

stakeholders' groups, number of participants and specific research methods. The results of the thesis are presented in the manner shown in Table 3.1.

**Table 3.1 Presentation of the four findings chapters of the thesis**

<b>Findings chapter</b>	<b>Research Objectives</b>	<b>Stakeholder groups</b>	<b>No. of participants</b>	<b>Methods utilized</b>
<b>Chapter-4 Data Analysis of Tourists</b>	1.To examine the perceptions of tourists in relation to sustainability of tourism in Kuakata sea beach	-Tourists	215	-Structured Questionaries -Quantitative Analysis
<b>Chapter-5 Data Analysis of Residents</b>	2.To measure the perceptions of residents toward sustainable tourism development in Kuakata sea beach	-Local Residents	245	-Structured Questionaries -Quantitative Analysis
<b>Chapter-6 Prospects and Challenges</b>	3.To explore the prospects of sustainable tourism development in Kuakata sea beach  4.To identify the challenges to sustainable tourism development in Kuakata sea beach	-Tourism business -Transportation -NGOs -Tourist Police -Researchers -Local Authority -Indigenous Leader	12	-Semi-structured interview -Document analysis  -Qualitative Analysis

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*Chapter 4*

*Data Analysis of Tourists*

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#### 4.1 Introduction

When there is a consistent flow of the tourists throughout the year, the tourism business may be profitable and long-lasting. Kuakata sea beach is the only sea beach in Bangladesh where you can see the sunrise and sunset. This research attempts to determine if visitors simply visit this location because of its amazing seashore features or for other reasons, while also measuring their satisfaction levels at the location. Additionally, it evaluates perceptions of the tourists towards Sustainable Tourism Development (STD) in order to ensure a tourism-friendly location.

There are three sections in Chapter 4. The first part discusses the demographic profile of the tourists. The second section explains respondents' travel behavior as well as tourists' level of satisfaction. The final section includes Factor Analysis, Mean analysis, Independent Sample 't' Test, and one-way between-groups analysis of variance (ANOVA).

#### 4.2 Demographic profile of tourists

The characteristics of the tourists are crucial for the development of sustainable tourism in any destination like Kuakata sea beach. Several authors are using demographic and travel behavior characteristics (Lee, 2011; Master & Prideaux, 2000). The demographic profiles of the visitors say a lot about the diverse characteristics of individual respondents. In the Table 4.1, about 75 percent of the sample populations were male and around 25 percent were female. This gender breakdown happened when the majority of female visitors did not wish to complete the questionnaire and passed through to their husbands to complete.

**Table 4.1: Classifications of tourists based on gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Female	54	25.1
Male	161	74.9
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

Every year, a large number of tourists is being visited at Kuakata sea beach. The age range of tourist respondents typically tends to determine which age category of visitors arrives at the destination the most. Table 4.2 show that majority of about 34%

of the visitors were from the age group of 18 to 25 years, it was 73 respondents; around 21 percent respondents between 26 to 30 years; 19.5 percent respondents between age limit 31 to 35 years; 10 percent between age limit 36 to 40 years; 8.4 percent respondents between age limit 41 to 45 years; followed by 46 to 50 years (2.3 percent); 51 to 60 years (3.3 percent) and 61 years and older (1.4 percent).

**Table 4.2: Distribution of the respondents according to their age**

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>
18 – 25	73	34.0
26 – 30	44	20.5
31 – 35	42	19.5
36 – 40	23	10.0
41 – 45	18	8.4
46 – 50	5	2.3
51 – 60	7	3.3
60 and above	3	1.4
<b>Total</b>		<b>100.0</b>

Source: Field Survey

No foreign tourists were found during the data collection due to the COVID-19 Pandemic. So, all the tourists (265 respondents) in this study were Bangladeshi in nationality.

While observing the living location of the tourists from Kuakata Sea Beach in Table 4.3 about 39 percent of the tourists' living location from Kuakata sea beach were 251 km or more; followed by about 25 percent from Kuakata sea beach were between 201-250 km; 14.4 percent of the tourists travel between 151-200 km; travel between 101-150km (11.2 percent); journey between 51-100 km (8.4%) and around 3 percent of the respondents travel between 0-50 km.

**Table 4.3: Distribution of the tourist's living location from Kuakata sea beach**

<b>Tourist's House Location from Kuakata Sea Beach</b>	<b>Frequency</b>	<b>Percent</b>
0-50 km	6	2.8
51-100 km	18	8.4
101-150 km	24	11.2
151-200 km	31	14.4
201-250 km	53	24.7
251 km or more	83	38.6
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

Table 4.4 shows, the majority of the tourists (33.5 %), who visit Kuakata sea beach, were graduate followed by about 25 percent of the visitors who were Post Graduates or above; about 22 percent of the tourists went to College; about 9% of tourists had a Professional Degree; almost 5% had completed high school; about 3% of the respondents had other educational qualification; 1.4% of tourist respondents were literate, meaning they could read and write and fewer than 1% of tourist had completed Primary education.

**Table 4.4: Distribution of tourists based on educational qualifications**

<b>Educational Qualification</b>	<b>Frequency</b>	<b>Percent</b>
Literate	3	1.4
Primary School	2	0.9
High School	10	4.7
College	48	22.3
Professional Degree	20	9.3
Graduate	72	33.5
Post Graduate or above	54	25.1
Others	6	2.8
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

When looking at the monthly income of the visitors on the Kuakata sea beach in Table 4.5, 40% of respondents had monthly income ranging from BDT 50,001 or

above as against around 34 percent between BDT 35001-50000; approximately 16 percent between BDT 25001-35000; BDT 15001-25000 (6.5 percent) and only 3.7 percent had an income below BDT 15000.

**Table 4.5: Distribution of tourists by monthly income**

Monthly Income (BDT)	Frequency	Percent
BDT below 15000/-	8	3.7
BDT 15001-25000/-	14	6.5
BDT 25001-35000/-	34	15.8
BDT 35001-50000/-	73	34.0
BDT 50001/- or above	86	40.0
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

### 4.3 Travel characteristics of tourists

#### 4.3.1 Purchase of souvenir/ artifact

The majority (87%) of the 215 tourist respondents listed in Table 4.6 purchased souvenirs or antiques as a memento of their travels, while the remaining 13% did not. This data proves that the popularity of local handicrafts among tourists has resulted in the money being injected into the local economy.

**Table 4.6: Purchase of souvenir/artifacts**

Souvenir/Artifact	Frequency	Percent
Purchased	186	87
Not Purchased	29	13
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.3.2 Attachment of tourists in revisiting

The survey result in Table 4.7 reveal that, more than half of the tourists (61%) were not sure to revisit Kuakata sea beach in future. On the other hand, only 32.1%

respondents said that they would return to Kuakata sea beach during their free time to partake different fun and frolic activities that would revitalize and renew them.

**Table 4.7: Distribution of tourists' opinion in revisiting Kuakata sea beach**

<b>Revisiting Kuakata Sea Beach</b>	<b>Frequency</b>	<b>Percent</b>
Yes	70	32.6
No	14	6.5
Maybe	131	60.9
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.3.3 Recommending Kuakata sea beach to others

Table 4.8 shows that most of the visitors who visited Kuakata sea beach were pleased and this figure was 93 percent. It is a good sign for the destination and these visitors play as an ambassador in suggesting to their friends, relatives and colleagues etc. to visit the Kuakata sea beach. On the other hand, only 7 percent of visitors were unhappy with the physical or non-physical characteristics of Kuakata sea beach.

**Table 4.8: Distribution of tourists in recommending Kuakata sea beach to others**

<b>Recommending Kuakata Sea Beach</b>	<b>Frequency</b>	<b>Percent</b>
Yes	200	93.0
No	15	7.0
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.3.4 Types of visits

The survey result shows in Table 4.9 that, around 42% of the respondents who visited Kuakata sea beach were repeat visitors, while the remaining 58% were first-time visitors. This statement hints that the Kuakata Beach is a popular tourist site since travelers like visiting there again and again.

**Table 4.9: Distribution of tourists respondents based on types of visits**

<b>Types of Visits</b>	<b>Frequency</b>	<b>Percent</b>
First Visit	128	57.7
Repeat Visit	91	42.3
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.3.5 Source of information

A total of 413 responses were generated from the sample of 215 respondents (Table 4.10). The Percent of Responses column presents the number of respondents who selected each of the seven sources of information (Source of Information column) as a percentage of the total number of responses generated. The 161 respondents identified the internet as an essential source of information for visiting Kuakata sea beach, representing 39% of the total number of responses (413) generated. About 35 percent of the total number of tourist respondents used oral source for information. The crosstab data clearly reveal that the Internet and word-of-mouth were the most common methods of acquiring domestic visitors.

**Table 4.10: Distribution of source of information**

<b>Source of Information</b>	<b>Responses N</b>	<b>Percent</b>
Magazine	8	1.9%
Newspaper	31	7.5%
Word of Mouth	145	35.1%
Internet	161	39.0%
T. V	44	10.7%
Travel Agent	20	4.8%
Others	4	1.0%
<b>Total</b>	<b>413</b>	<b>100.0%</b>

Source: Field Survey

#### 4.4 Travel behavior of tourists

The purpose of this study is to identify the travel behaviors of tourists on the Kuakata sea beach. Expanding domestic tourism is a prerequisite for developing international tourism so that it helps to build the destination country's infrastructure and welcomes incoming travelers (Hassan, 2012). And therefore, recognizing the travel behavior of the tourist is helpful to create new developing strategy for domestic tourism. The tourist travel behaviors such as purpose of visit, length of stay, travel arrangement, types of accommodation, travel companion and group size were analyzed here.

##### 4.4.1 Purpose of visit

The survey gives a strong message that Kuakata sea beach is a holiday destination. Around 66 percent respondents come to Kuakata sea beach for making holidays. Another interesting thing is about 21 percent visitors visit the destination for educational purpose. Table 4.11 shows the purpose of visit to Kuakata sea beach.

**Table 4.11: Purpose of visit to Kuakata sea beach**

<b>Purpose of Visit</b>	<b>Frequency</b>	<b>Percent</b>
Holidays	141	65.6
Business	13	6.0
Education	44	20.5
Visiting Friends/Relatives	6	2.8
Historical & Cultural	8	3.7
Others	3	1.4
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

##### 4.4.2 Length of stay

Table 4.12 shows that the majority of the tourists (72%) stayed on the Kuakata sea beach for two to three days, followed by an overnight stay (14.4 percent) and a stay of four to six days (5.1 percent). Only 8.4 percent of the respondents were day tour visitors.

**Table 4.12: Duration of stays of tourists in Kuakata sea beach**

<b>Length of Stay</b>	<b>Frequency</b>	<b>Percent</b>
Day Tour	18	8.4
Overnight stay	31	14.4
(2-3) days	154	71.6
(4-6) days	11	5.1
(7-10) days	1	0.5
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.4.3 Travel arrangement

The survey gives a strong message that about 91 percent (Table 4.13) of the total respondents (215) visited Kuakata sea beach with their own travel arrangements. On the other hand, few respondents used package tour services from tour operators, with this figure hovering around 8% and below 1 percent had made their travel by other ways.

**Table 4.13: Travel arrangement by tourist**

<b>Travel Arrangement</b>	<b>Frequency</b>	<b>Percent</b>
Self	196	91.2
Tour Operator	17	7.9
Others	2	0.9
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.4.4 Selection of accommodation

One of the operating components of the tourism business is accommodation and accounts for a significant portion of visitor spending. Kuakata offers a broad selection of accommodations options for travelers according to their financial capacity and willingness to spend. Table 4.14, revealed that about 70 percent of the tourist respondents stayed budget hotel at Kuakata and around 14 percent selected star category hotel. About 7 percent of the total tourist respondents preferred guest house.



**Table 4.14: Used accommodation of tourists in Kuakata sea beach**

<b>Selection of Accommodation</b>	<b>Frequency</b>	<b>Percent</b>
Star Category Hotel	29	13.5
Budget Hotel	151	70.2
Friends/Relatives House	11	5.1
Guest House	16	7.4
Others	8	3.7
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.4.5 Travel companion

According to Choo and Petrick (2015), companionship is often characterized by shared activities and interactions conducted primarily for the purpose of pleasure. Travel companion is an important factor for tourist that affect the level of satisfactions and the perceptions of tourists and also in turns revisit intentions. Four different forms of travel companion including alone, family, friends, colleagues and affinity members and others were presented in Table 4.15. More than 50 percent of the total respondents were accompanied by family members followed by about 37 percent ravel with their friends or relatives. On the other hand, 4.2 percent of total tourist respondents were also accompanied by their colleagues or affinity members and around 7 percent of tourists visited Kuakata alone.

**Table 4.15: Travelling pattern of tourists**

<b>Travel Companion</b>	<b>Frequency</b>	<b>Percent</b>
Alone	14	6.5
Family	111	51.6
Friends	80	37.2
Colleagues/Affinity Members	9	4.2
Others	1	0.5
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### 4.4.6 Group size

The survey result show in Table 4.16 that, about 43 percent of tourists groups visiting Kuakata consisted of 3 to 5 members and almost 28 percent of the tourist respondents

traveling with two members. The findings furthermore indicated that 6% of the visitors were traveling on their own.

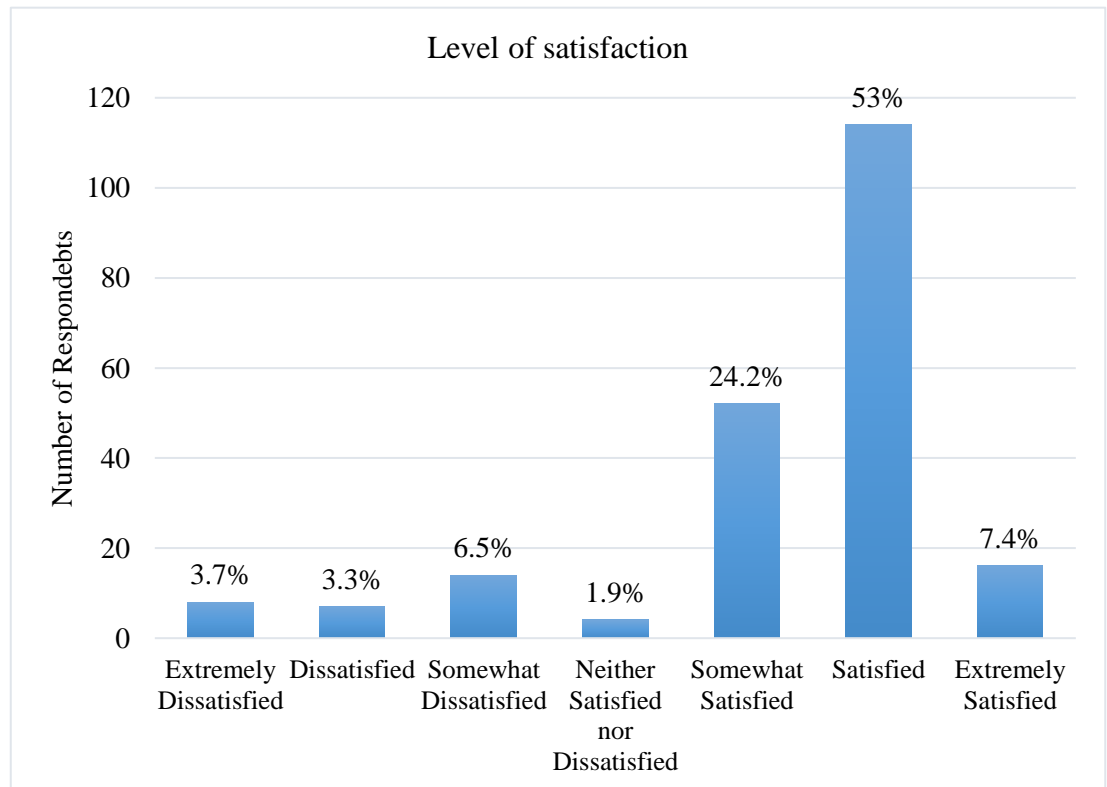
**Table 4.16: The group size of travelling tourists in Kuakata sea beach**

<b>Group Size</b>	<b>Frequency</b>	<b>Percent</b>
Only me	13	6.0
Two	60	27.9
3 to 5	93	43.3
6 to 10	27	12.6
11 to 20	14	6.5
21 or more	8	3.7
<b>Total</b>	<b>215</b>	<b>100.0</b>

Source: Field Survey

#### **4.4.7 Level of tourist satisfaction**

Measuring visitor satisfaction plays a vital part in promoting tourism goods and services (Hassan 2012), since destination factors have been shown to have a major impact on visitor satisfaction. In Table 4.17 show that, majority of 53 percent respondents were satisfied with their stay in Kuakata sea beach. Around 14 percent (3.7+3.3+6.5) respondents were extremely dissatisfied, dissatisfied and somewhat dissatisfied respectively. Few tourists (1.9%) responded neutral opinion.

**Table 4.17: Level of satisfaction**

Source: Field Survey 2021

#### 4.5 Reliability of data

The degree to which a scale is devoid of random errors is measured by its reliability (Pallant, 2007). Both alpha and split half techniques were used to verify the reliability of data. The reliability results of the data set are shown in Table 4.18 and Table 4.19.

**Table 4.18: Reliability statistics (applying the Cronbach's alpha method)**

Reliability Statistics	
Cronbach's Alpha	No. of Items
0.787	28

Source: SPSS output

The test was conducted to determine and validate the questionnaire items' reliability and internal consistency by calculating the Cronbrach Alpha score. According to the Malhotra N. K., Dash S. (2016), Cronbach Alpha score of at least 0.70 indicates that the data in research is reliable. The current research discovered that the Cronbrach

Alpha value for the 28 items was 0.787, which indicates the reliability of the gathered data.

**Table 4.19: Reliability statistics (applying the split-half method)**

<b>Reliability Statistics</b>			
Cronbach's Alpha	Part 1	Value	.747
		N of Items	14*
	Part 2	Value	.550
		N of Items	14*
	Total N of Items		
Correlation Between Forms			.584
Spearman-Brown Coefficient	Equal Length		.737
	Unequal Length		.737
Guttman Split-Half Coefficient			.726

Source: SPSS output

\* The identified 28 items (predictors) were separated into two parts. Each of the parts consists of 14 items and shows reliable score for the respective parts.

#### **4.6 Factor analysis for tourist perception towards Sustainable Tourism Development (STD)**

Factor analysis is a “data reduction techniques” of SPSS package (Pallant 2007). This approach is used to diminish a large number of observable variables into a small number of latent components or factors (Rummel, 2002, Pallant 2007). A set of 28 variables related to the views of the visitor respondents on the perception of Sustainable Tourism Development on the Kuakata sea beach and it was reduced using factor analysis to create a smaller number of factors that may be utilized to shape tourism development strategy. To examine the perception of the respondents, the variables were provided in the form of statements using a seven-point Likert scale, where 7 indicated strongly agree and 1 indicated strongly disagree.

But prior to Factor Analysis, Kaiser-Meyer-Olkin (KMO) testing is necessary to ensure that there is adequate data to conduct the analysis. KMO and Bartlett’s test measure of sampling adequacy. Generally, KMO value greater than 0.5 is desirable (Malhotra N. K., Dash S. 2016). Table 4.20 presents the KMO and Bartlett’s test of 28

variables relating to Sustainable Tourism Development. Here, the KMO value for this research is 0.743 ( $>0.5$ ), indicating that Factor Analysis is applicable for this investigation. The significance level of Bartlett's Sphericity test is 0.000 (.0005). However, it is shown that the data is quite valid for applying Principal Component Analysis (PCA) together with a rotated component matrix of Factor Analysis.

**Table 4.20: KMO and Bartlett's test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.743
Bartlett's Test of Sphericity	Approx. Chi-Square	1532. 798
	df	378
	Sig.	0.000

Source: SPSS output

The Total Variance Explained table was helpful in estimating the number of factors among the total 28 variables. 45.46% of the variance is explained by five components whose Eigen values are larger than one. Thus, the PCA approach is utilized for extraction, while the varimax approach is employed for rotation. Table 4.21 presents the Total Variance Explained.

**Table 4.21: Total Variance Explained**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.983	17.795	17.795	3.176	11.343	11.343
2	2.763	9.868	27.663	2.741	9.789	21.132
3	1.848	6.599	34.262	2.543	9.081	30.213
4	1.604	5.728	39.990	1.975	7.052	37.265
5	1.531	5.469	45.459	1.859	6.638	43.903

Extraction Method: Principal Component Analysis.

Source: SPSS output

Five distinct factors are generated from the rotated component matrix namely 'Factor 1: Quality of Destination', 'Factor 2: Desirable Features', 'Factor 3: Condition of Supporting Service', 'Factor 4: Requisite Facilities' and 'Factor 5: Interest for STD'.

The Cronbach's Alpha value of Factor 5: Interest for STD is 0.439 ( $< .6$ ). According to Pallant (2007) Cronbach's Alpha value is highly dependent on the number of items on the scale. Only three variables are loading on factor 5. On this occasion, the mean inter-item correlation for the items could be more suitable to report. Briggs and Cheek (1986) recommend a range of .2 to .4 for the interitem correlation. Here the mean inter-item correlation for Factor 5: Interest for sustainable tourism development is .248. So, this factor is considerable for factor analysis.

**Table 4.22** summarizes these factors and sub-factors in terms of respective factor loadings. Except for the statements 'Hotel, Lodge and Restaurants are adequately available', 'Visitors can see and experience the local culture and lifestyle', 'I like to purchase goods produced by the local people' and 'Evening and nightlife are not dull', all statements are loaded on these five criteria.

**Table 4.22: Factors along with respective variables pertaining to sustainable tourism development (STD)**

<b>Variables</b>	<b>Factor Loadings</b>	<b>Eigen Values</b>	<b>Variance (%)</b>	<b>Cumulative Variance (%)</b>	<b>Cronbach's Alpha</b>
<b>Factor 1: Quality of Destination</b>		<b>4.983</b>	<b>17.795</b>	<b>17.795</b>	<b>.732</b>
Sea water quality is good	0.639				
Kuakata Sea Beach is overcrowded with the visitors	0.636				
Accommodation facilities are good	0.610				
Seating arrangements at the destination are sufficient	0.576				
Kuakata sea beach is neat and clean	0.571				
Kuakata is safe	0.550				
<b>Factor 2: Desirable Features</b>		<b>2.763</b>	<b>9.868</b>	<b>27.663</b>	<b>.708</b>
Price of the product and service are reasonable	0.700				
Visitors mostly use the dustbins	0.634				
Quality of food is good	0.603				
Services at the hotel, motel, guest house and restaurant are prompt	0.524				
<b>Factor 3: Condition of Supporting Service</b>		<b>1.848</b>	<b>6.599</b>	<b>34.262</b>	<b>.669</b>
Medical and first-aid services are adequate	0.717				
Parking area is sufficient	0.671				
Transportation system is good	0.639				
Ticket counter, money exchange and internet services are tourists friendly	0.549				
Untreated drainage water entering into the sea causing pollution	0.543				
<b>Factor 4: Requisite Facilities</b>		<b>1.604</b>	<b>5.728</b>	<b>39.990</b>	<b>.579</b>
Dustbins are placed at the right places	0.620				

Tourist police or guards are helpful to the visitors	0.592				
Publicity to sensitize visitors about the negative effects of tourism is minimum	0.473				
Local people are friendly	0.437				
Tourists are conscious about natural, cultural heritages and sits	0.411				
<b>Factor 5: Interest for sustainable tourism development</b>		<b>1.531</b>	<b>5.469</b>	<b>45.459</b>	<b>.439**</b>
Tourist prefer to stay in hotels that are doing good for the environment	0.664				
Revenue generated from tourism can be spent for garbage cleaning and village development	0.659				
Tourists are conscious of the use of resources such as the electricity and water	0.602				

Source: SPSS output

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

\*\*Mean Inter-item Correlation 0.248

## 4.7 Mean analysis

### 4.7.1 Quality of destination

The first component consists of six things that describe the quality of destination at Kuakata sea beach. **Table 4.23** displays six elements and their related mean values and Std. Deviation. This aspect has a mean value of 5.49 of tourist respondents in terms of good accommodation facilities, which is one of the major components of tourists need. The statements Kuakata sea beach is overcrowded with the visitors and Kuakata is safe respectively obtained mean value of 5.42 and 5.39 respectively. It clearly indicates that the quality of the destination plays a vital role in the tourism



sector, and that travelers are more attracted to the destination when it is of higher quality.

**Table 4.23 Mean value of quality of destination components**

Sl. No.	Component of “Quality of Destination” Factor	Mean	Std. Deviation	Rank
1	Sea water quality is good	5.38	1.133	4
2	Kuakata Sea Beach is overcrowded with the visitors	5.42	1.286	2
3	Accommodation facilities are good	5.49	1.216	1
4	Seating arrangements at the destination are sufficient	5.22	1.178	5
5	Kuakata sea beach is neat and clean	5.14	1.333	6
6	Kuakata is safe	5.39	1.088	3

Source: SPSS output

#### 4.7.2 Destination desirable features

The mean values of Kuakata sea beach's destination desirable attributes are shown in **Table 4.24** the highest value of mean rank in the case of the statement- Quality of food is good with a mean score of 4.71. It was deduced that Kuakata sea beach served quality food as an important desirable feature of a destination. The remaining statements obtained a mean value of more than 4.00 except the statement — Visitors mostly use the dustbins with a ~~least~~ mean value of 3.22. It explains most visitors do not use dustbins.

**Table 4.24 Mean value of destination desirable features**

Sl. No.	Components of Desirable Features of a Destination	Mean	Std. Deviation	Rank
1	Price of the product and service are reasonable	4.26	1.631	3
2	Visitors mostly use the dustbins	3.22	1.563	4
3	Quality of food is good	4.71	1.572	1
4	Services at the hotel, motel, guest house and restaurant are prompt	4.67	1.552	2

Source: SPSS output

### 4.7.3 Condition of supporting service

The mean study of the condition of supporting service factor revealed that the statement “Untreated drainage water entering into the sea causing pollution” had a maximum mean value of 3.95. Thus, it is inferred that the sewerage system is not well developed in the destination and it is leading to the dissatisfaction of the tourists. The statement “Medical and first-aid services are adequate” is the least mean value of 2.70. **Table 4.25** represent the mean value of condition of supporting service.

**Table 4.25 Mean value of condition of supporting service**

Sl. No.	Component of Condition of Supporting Service	Mean	Std. Deviation	Rank
1	Medical and first-aid services are adequate	2.70	1.270	5
2	Parking area is sufficient	3.51	1.629	3
3	Transportation system is good	3.47	1.718	4
4	Ticket counter, money exchange and internet services are tourist friendly	3.80	1.532	2
5	Untreated drainage water entering into the sea causing pollution	3.95	1.891	1

Source: SPSS output

### 4.7.4 Basic requirements of tourists

The mean analysis of the fourth factor “Requisite Facilities” is presented in **Table 4.26**. It displays the mean value of 5.35 on the statement of “Tourist police or guards are helpful to the visitors”. It indicates that the security system is quite good and most of the visitors feel safe visiting Kuakata sea beach. The tourist respondents felt that local people were very much friendly in Kuakata with mean value of 5.34 in this study, tourists claim that dustbins were not places at the right placed with least mean value of 2.46.

**Table 4.26 Mean value of requisite facilities of tourists**

Sl. No.	Components of Requisite Facilities	Mean	Std. Deviation	Rank
1	Dustbins are placed at the right places	2.46	1.376	5
2	Tourist police or guards are helpful to the visitors	5.35	1.224	1
3	Publicity to sensitize visitors about the negative effects of tourism is minimum	5.13	1.499	3
4	Local people are friendly	5.34	1.136	2
5	Tourists are conscious about natural, cultural heritages and sits	3.70	1.530	4

Source: SPSS output

#### 4.7.5 Tourist interest for sustainable tourism development (STD)

This factor represents three items explaining the interest towards sustainable tourism development in Kuakata. **Table 4.27** presents three items along with corresponding mean values. The highest mean value of 6.39 on the statement “I feel revenue generated from tourism can be spent for garbage cleaning and village development”. It indicates that the tourists are more concerned for waste management and also participate in the village development.

**Table 4.27 Mean Value of sustainable tourism development components**

Sl. No.	Components of Tourists' Interest Towards STD Factor	Mean	Std. Deviation	Rank
1	I prefer to stay in hotels that are doing good for the environment	5.97	1.056	2
2	I feel revenue generated from tourism can be spent for garbage cleaning and village development	6.39	0.795	1
3	Tourists are conscious of the use of resources such as the electricity and water	4.64	1.567	3

Source: SPSS output

## 4.8 Perceptions of tourists on sustainable tourism development (STD)

### Hypothesis 1

**H0: There is no significant mean difference in the perceptions of tourists towards STD in Kuakata Sea Beach with respect to key demographic profiles.**

#### 4.8.1 Difference between tourists' gender and perception towards sustainable tourism development (STD)

An independent samples t-test was used to compare the mean sustainable tourism development (STD) score of males ( $n=161$ ) and females ( $n=54$ ) in Kuakata sea beach. Neither Shapiro-Wilk statistic was significant, showing that the normality assumption had not been violated. Levene's test was also non-significant, implying that both groups had an identical variance. The t-test was statistically insignificant, with mean STD score of males ( $M=132.2$ ,  $SD=15.11$ ) was not significantly higher (mean difference 2.50, 95%  $CI$  [-7.1, 2.04]), than the females ( $M=134.7$ ,  $SD=13.56$ ),  $t(213) = -1.091$ ,  $p > .05$ , two-tailed (**Table 4.28**). So, fail to reject null hypothesis and there is no significant difference between gender and their perceptions of sustainable tourism development on the Kuakata sea beach.

**Table 4.28 Results of independent sample 't' Test between gender and STD**

Gender	N	Mean	SD	t	Df	Sig. (2tailed)
Male	161	132.2	15.11	-1.091	213	0.276
Female	54	134.7	13.56			

Source: SPSS output

#### 4.8.2 Difference between age and perception towards sustainable tourism development (STD)

A one-way between-groups analysis of variance (ANOVA) was used to investigate difference between the age of tourists and their perceptions towards sustainable tourism development on the Kuakata sea beach. The skewness, kurtosis, and Shapiro-Wilk statistics revealed that the dependent variable's (STD total score) normalcy

assumption was not violated. Levene's statistic was insignificant,  $F = 1.270$ ,  $p = .266$ , thus the assumption of homogeneity of variance can be assumed.

From ANOVA **Table 4.29** it has been found that the P-value corresponding to the age group is **0.153** ( $p > .05$ ). Hence, it is concluded that there is no significant difference in the perceptions of tourists towards sustainable tourism development with respect to the age. Using eta squared, the effect size was 0.049.

**Table 4.29 Results of ANOVA between age and perception towards STD**

Age of Tourists	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2313.502	7	330.500	1.547	.153
Within Groups	44232.433	207	213.683		
Total	46545.935	214			

Source: SPSS output

Post-hoc comparisons (**Table 4.30**) using the Tukey HSD test indicated that the mean score for third age (31-35 year) group ( $M = 127.26$ ,  $SD = 17.46$ ) was significantly lower from others seven age groups. The highest mean score was the eighth age (61 years and above) group ( $M = 138$ ,  $SD = 18.52$ ). Thus, tourist responders aged 61 and above had a more positive view of sustainable tourism development at Kuakata sea beach than other age groups.

**Table 4.30 Results of Post-Hoc analysis between age and STD**

Age group		N	Mean	Std. Deviation
1 <sup>st</sup> Age Group	18- 25 years	73	134.5342	13.62298
2 <sup>nd</sup> Age Group	26-30 years	44	136.1136	15.30195
3 <sup>rd</sup> Age Group	31-35 years	42	127.2619	17.45944
4 <sup>th</sup> Age Group	36-40 years	23	131.3478	13.63354
5 <sup>th</sup> Age Group	41-45 years	18	130.5000	8.65176
6 <sup>th</sup> Age Group	46-50 years	5	137.0000	14.81553
7 <sup>th</sup> Age Group	55-60 years	7	134.0000	15.15476
8 <sup>th</sup> Age Group	61 years or above	3	138.0000	18.52026
	<b>Total</b>	<b>215</b>	<b>132.8465</b>	<b>14.74803</b>

Source: SPSS output

#### 4.8.3 Difference between tourist's house location from Kuakata sea beach and perceptions towards sustainable tourism development (STD)

A one-way between-groups analysis of variance (ANOVA) was used to examine difference between tourist's house location and their perceptions towards sustainable tourism development on the Kuakata sea beach. The skewness, kurtosis, and Shapiro-Wilk statistics revealed that the dependent variable's (STD total score) normalcy assumption was not violated. The findings of the One-Way ANOVA (**Table 4.31**) demonstrated a significant difference ( $0.02 < 0.05$ ) in tourist perceptions of sustainable tourism development with respect to their house location from Kuakata Sea Beach. Using eta squared, the effect size was determined to be 0.06.

**Table 4.31 Results of ANOVA between Tourist's house location from Kuakata sea beach and perceptions towards STD**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	2861.207	5	572.241	2.738	.020
Within Groups	43684.728	209	209.018		
Total	46545.935	214			

Source: SPSS output

#### 4.8.4 Difference between educational qualification and perceptions towards sustainable tourism development (STD)

The One-Way ANOVA was used to investigate the hypothesis that there was any difference in visitors' views of sustainable tourism development at Kuakata sea beach based on educational qualifications. The skewness, kurtosis, and Shapiro-Wilk statistics revealed that the dependent variable's (STD total score) normalcy assumption was not violated.

The ANOVA test findings indicate that there is no statistically significant difference ( $0.407 < 0.05$ ) between the educational qualifications of the visitors and their perceptions of sustainable tourism development. This result indicates the need for additional public awareness campaigns to improve the mentality of the visitors while visiting the destination. The effect size was determined to be 0.034, when using eta squared. **Table 4.32** presents the results of the One-Way ANOVA.

**Table 4.32 Results of ANOVA between Educational Qualification and STD**

<b>Educational Qualification</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	1575.874	7	225.125	1.036	.407
Within Groups	44970.061	207	217.247		
Total	46545.935	214			

Source: SPSS output

#### 4.8.5 Difference between monthly income and perceptions towards sustainable tourism development (STD)

A one-way between-groups analysis of variance (ANOVA) was used to investigate the difference in the perceptions of tourists towards sustainable tourism development in Kuakata sea beach with respect to the monthly family income. The skewness, kurtosis, and Shapiro-Wilk statistics revealed that the dependent variable's (STD total score) normalcy assumption was not violated. Levene's statistic was insignificant,  $F = 0.414$ ,  $p = 0.799$ , thus the assumption of homogeneity of variance can be assumed.

From ANOVA **Table 4.33** it has been found that the P-value corresponding to the monthly income is **0.017** ( $p < .05$ ). Hence, it is concluded that there is a significant difference in the perceptions of the tourists towards sustainable tourism development with respect to their monthly family income. Using eta squared, the effect size was determined to be 0.056.

**Table 4.33 Results of ANOVA between monthly family income and STD**

<b>Monthly Income</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	2597.759	4	649.440	3.103	.017
Within Groups	43948.176	210	209.277		
Total	46545.935	214			

Source: SPSS output

The Duncan Test of post-hoc comparisons show that there are two homogenous subgroups among the five monthly family income levels of the tourist respondents

in terms of their views of sustainable tourism development at Kuakata sea beach. Both the groups include monthly family income such as 3<sup>rd</sup> Group and 4<sup>th</sup> Group with the mean value of 134.6322 and 136.3750 respectively. The mean value of 1<sup>st</sup> Group and 2<sup>nd</sup> Group are 127.4848 and 131.0959 respectively as the first sub group and 5<sup>th</sup> Group (141.5000) is another second sub groups. **Table 4.34** presents the results of Post-Hoc with the Duncan Test between monthly family income and perceptions of STD.

**Table 4.34: Results of Post-Hoc analysis between monthly family income and STD**

Group	Monthly Family income	N	Subset for alpha = 0.05	
			1	2
1 <sup>st</sup> Group	BDT 25001-35000/-	33	127.4848	
2 <sup>nd</sup> Group	BDT 35001-50000/-	73	131.0959	
3 <sup>rd</sup> Group	BDT 50001/- or above	87	134.6322	134.6322
4 <sup>th</sup> Group	BDT below 15000/-	8	136.3750	136.3750
5 <sup>th</sup> Group	BDT 15001-25000/-	14		141.5000
	Sig.		.078	.160

Source: SPSS output

#### 4.8.6 Result of comparison of means

The findings of Independent Sample 't' test and One-Way ANOVA (**Table 4.35**) for the perceptions of the tourists of sustainable tourism development at Kuakata sea beach in relation to the tourist demographic characteristics presented that there is a significant difference between the perceptions of the tourist with regard to tourist's house location from Kuakata sea beach and monthly family income where  $p < 0.05$ .



**Table 4.35: Results of Independent Sample ‘t’ Test and One-Way ANOVA**

<b>Sl. No</b>	<b>Tourist Demographic Variables</b>	<b>Significant Value</b>	<b>Inference of Hypothesis</b>
<b>1</b>	Gender	.276 (t= -1.091)	Accepted
<b>2</b>	Age	.153 (F= 1.547)	Accepted
<b>3</b>	Tourist’s House Location from Kuakata Sea Beach	.020 (F= 2.738)	Rejected
<b>4</b>	Educational Qualification	.407 (F= 1.036)	Accepted
<b>5</b>	Monthly Family income	.017 (F= 3.103)	Rejected

Source: SPSS output

However, there is no significant difference between the variables in relation to gender, age and educational qualification where  $p > 0.05$ . Therefore, out of five demographic variables three variables are fail to reject null hypothesis. Table 4.35 shows the test results of Independent Sample ‘t’ test and One-Way ANOVA between demographic variables and perceptions towards sustainable tourism development.

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*Chapter 5*

*Data Analysis of Residents*

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## **5.1 Introduction**

Travel and tourism, as a human dynamic that transforms a tourist destination into an activity hub, occurs through contact between the visitors and the local residents. Tourism has an influence on their quality of life through influencing changes in their value system, family affairs, behavioral patterns, and expressive rituals for individuals and the local people of the culture (Maryetti, Sulistyadi, Damanik, and Nurhidayati, 2016). Locals also play an important role in tourist destinations by actively participating in tourist businesses and activities. As a result, big companies must accept the independent development of small and medium enterprises (Mowforth & Munt, 1998). The businessmen, who provide goods and service to the tourists, must be accountable for preserving resources for the next generations. If the socio-cultural and environmental resources of a tourist destination are destroyed for any reason, then the service provider moves to another destination. But local residents are unable to relocate because of their roots. Thus, this study attempts to determine the impact of tourism on Kuakata by evaluating residents' views in relation to their socioeconomic characteristics.

There are three sections in Chapter 5. The first part describes the demographic profile of the resident. The second section explains Mean analysis of 30 variables. The final section includes Factor Analysis, Independent Sample 't' Test, and one-way between-groups analysis of variance (ANOVA).

## **5.2 Profile of resident respondents**

### **5.2.1 Resident respondents by nativity**

Table 5.1 shows that the majority of the local residents (91 percent) in Kuakata are natives of this area by birth. On the other hand, only 9 percent of the respondents were non-native residents. It has been discovered that very few people who migrate for work opportunities tend to become less settled in the long term.

**Table 5.1: Distribution of resident respondents by nativity**

<b>Nativity of Residents</b>	<b>Frequency</b>	<b>Percent</b>
Native Residents	223	91.0
Non-Native Residents	22	9.0
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

**5.2.2 Resident respondents by duration of stay**

The vast majority of the residents of Kuakata is natives. Table 5.2 shows that, around 76 percent of the residents are living in Kuakata for more than 21 years or more. Approximately 12 percent belonged to the interval 16-20 years and about 6 percent between 4-6 years. However, less than 1% of total resident respondents reported staying for less than a year.

**Table 5.2: Distribution of resident respondents by duration of stay**

<b>Residents Duration of Stay</b>	<b>Frequency</b>	<b>Percent</b>
(0-3) years	2	.8
(4-6) years	11	4.5
(7-10) years	10	4.1
(11-15) years	7	2.9
(16-20) years	29	11.8
21 years or more	186	75.9
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

**5.2.3 Resident respondents by family size**

When the total family members of each respondent were analyzed, it was discovered that over 53% of respondents lived with 6 to 10 members in a family, while only 47% had 5 or less individuals. This finding demonstrates that the majority of households in Kuakata are joint families. Table 5.3 displays the distribution of resident respondents by family size.

**Table 5.3: Distribution of resident respondents by family size**

<b>Family Size</b>	<b>Frequency</b>	<b>Percent</b>
Less Than Five Members	115	46.9
Six to Ten Members	130	53.1
More Than Ten Members	00	00
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

### 5.2.4 Resident respondents on the basis of occupations

The study results show that almost 27% of Kuakata individuals are businesspeople, with 20.8% of them being vehicle drivers, and about 7% working in government and private sector jobs. It also seems that fishing (16.3%) and farming (9%) have been in decline for many years, and the inhabitants now want more tourism-oriented opportunities, such as employment as a tourist guide or a tourist photographer (3.7%), working in a store (4.1%) or as a sculptor, artist, or craft designer (10.2). Table 5.4 shows the distribution of respondents by occupation.

**Table 5.4: Distribution of resident respondents by occupations**

<b>Occupations</b>	<b>Frequency</b>	<b>Percent</b>
Farming/animal husbandry	22	9.0
Fishing/ fishing labor	40	16.3
Motor Bike/Auto/Van driver	51	20.8
Business	65	26.5
Tourist guide / Tourist photographer	9	3.7
Shop employee	10	4.1
Sculpture, art and craft designer	25	10.2
Government/private employment	16	6.5
Others	7	2.9
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

### 5.2.5 Resident respondents' occupations directly or indirectly dependent on tourism

The survey gives a strong message that majority of the resident respondents were doing tourism related job. The figure was 97 percent, whereas only around 3 percent were engaged in non-tourism jobs, as shown in Table 5.5.

**Table 5.5: Distribution of resident respondents by occupations directly or indirectly dependent on tourism**

<b>Occupations Directly or Indirectly Dependent on Tourism</b>	<b>Frequency</b>	<b>Percent</b>
Yes	238	97.1
No	7	2.9
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

### 5.2.6 Resident respondents by gender

In the Table 5.6, around 74 percent respondents from the local residents were male and about 26 percent were female. This gender breakdown happened when the majority of female local residents did not wish to complete the questionnaire and passed through to their husbands to complete.

**Table 5.6: Distribution of resident respondents by gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Female	64	26.1
Male	181	73.9
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

### 5.2.7 Resident respondents by age

The majority of respondents (52.6 percent) fall into the young age group of 18-35 years, followed by the medium age group of 36-50 years at approximately 43.7 percent, and the elderly age group of 50 years and beyond at approximately 3.7

percent. The frequency distribution of resident respondents by age is shown in Table 5.7.

**Table 5.7: Distribution of resident respondents by age**

<b>Age Category</b>	<b>Age</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
<b>Young</b>	18 – 25	24	9.8	
	26 – 30	41	16.7	52.6
	31 – 35	64	26.1	
<b>Middle</b>	36 – 40	60	24.5	
	41 – 45	32	13.1	43.7
	46 – 50	15	6.1	
<b>Old</b>	51 – 60	9	3.7	3.7
	60 and above	0		
	<b>Total</b>		<b>100.0</b>	

Source: Field Survey

### **5.2.8 Resident living location from Kuakata sea beach**

Observing the respondents living on Kuakata sea beach which is presented in Table 5.8, approximately 34 percent of the respondent residents lived within 4 to 6 km of Kuakata sea beach; followed by approximately 28 percent living between 2-3 km; 12.2 percent living between 0-1 km; 11.8 percent living between 7-8 km, 6.5% living between 11-15 km and approximately 4 percent of the respondent residents between 16-20 km and only 4.5 percent of the respondent living between 21 km or more.

**Table 5.8: Distribution of resident respondents living location from Kuakata sea beach**

<b>Resident Living Location from Kuakata Sea Beach</b>	<b>Frequency</b>	<b>Percent</b>
(0-1) km	30	12.2
(2-3) km	68	27.8
(4-6) km	82	33.5
(7-10) km	29	11.8
(11-15) km	16	6.5
(16-20) km	9	3.7
21 km or more	11	4.5
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

**5.2.9 Educational qualification**

Table 5.9 shows that the majority of respondents (35.5%) were in high school, followed by approximately 29 percent of local respondents in primary school; about 14 percent of local respondents went to college; approximately 9% of local respondents did not even have their school education; nearly 5% were graduate; approximately 4% of respondents had a post graduate or higher educational degree; 1.2% had a professional degree and only 1.6 percent had no organizational education.

**Table 5.9: Distribution of resident respondents by educational qualifications**

<b>Educational Qualification</b>	<b>Frequency</b>	<b>Percent</b>
No Literate	4	1.6
Literate	23	9.4
Primary School	71	29.0
High School	88	35.9
College	34	13.9
Professional Degree	3	1.2
Graduate	12	4.9
Post Graduate or above	10	4.1
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey



### 5.2.10 Resident respondents on the basis of monthly income

In terms of monthly income, about 39% of respondents in Kuakata earn between BDT 20001-30000, while around 26% earn BDT 10001-20000. More than one-fifth (21.2%) of survey respondent earn between BDT 30001-40000 per month and a significant number of respondents (11.4 percent) earn between BDT 40001-50000 per month. However, 11.4% earn between BDT 40001-50000 per month and only less than 1 percent earns more than BDT 50000 a month. The surprising matter was that no resident respondent's monthly income was below BDT 5000. It meant that no respondent was living in extreme poverty. The frequency distribution of resident respondents by monthly income is presented in Table 5.10.

**Table 5.10: Distribution of resident respondents by monthly income**

Monthly Income (BDT)	Frequency	Percent
BDT below 5000/-	0	0.0
BDT 5001-10000/-	4	1.6
BDT 10001-20000/-	63	25.7
BDT 20001-30000/-	96	39.2
BDT 30001-40000/-	52	21.2
BDT 40001-50000/-	28	11.4
BDT 50001/- or above	2	.8
<b>Total</b>	<b>245</b>	<b>100.0</b>

Source: Field Survey

### 5.3 Resident perceptions of tourism impacts (means and standard deviation)

The majority of the resident respondents agreed with the perception of sustainable tourism. When examining the mean value, maximum responses were in the range of 5.50 to 6.53, showing that respondents had strong observations on the effects of tourism. The economic impact of tourism activity was rated highly by respondents, followed by its environmental impact. However, locals believe that tourism has a detrimental effect on the socio-cultural environment, despite the fact that their answers tend to converge around an above-average value (Table 5.11).

The first component, named "Economic Impact", includes ten elements describing the economic effect on the Kuakata sea beach. Ten elements are displayed in Table 5.11,

together with their mean values and standard deviations. This feature has a high mean value of 6.53 for resident respondents in terms of increased revenue from tourist activities, which is a significant component of resident respondents' requirements. The statement 'Local people do not get management jobs' received the lowest meaning score of 5.23. The “Environmental Effect” had nine items. The highest value of mean rank in the case of the statement ‘Tourism industry should take care of environmental protection’ with a mean score of 6.27. The “Socio-Cultural Impact” consists of eleven items and it displays the mean value of 6.42 on the statement of “Tourism has increased the number of traffic accidents”.

**Table 5.11 Respondents perceptions of tourism impacts**

Sl. No.	Name of the Variable	Mean**	Std. Deviation	Rank
<b>Economic Impact</b>				
1	Tourism activities in Kuakata Sea Beach has increased my income	6.53	.760	1
2	Tourism has improved the way of living	6.47	.532	3
3	Tourism has created jobs for many people in my village	6.52	.562	2
4	Tourism has attracted more business to our locality	6.32	.639	5
5	Tourism creates jobs more for externals than local residents	5.88	1.019	9
6	Local people do not get the management level jobs	5.23	1.352	10
7	The price of land has increased due to tourism in Kuakata Sea Beach	6.45	.732	4
8	Tourism has increased the cost of living	6.20	.711	6
9	Tourism has contributed to overall development of local people	6.05	.774	7
10	Tourism has improved financial services such as banking facilities, ATM service and mobile banking	6.01	.844	8

	<b>Environmental Impact</b>			
<b>11</b>	Tourism development has improved the physical appearance of Kuakata Sea Beach	6.04	.734	6
<b>12</b>	The construction of hotels and tourism facilities have destroyed the natural environment	5.78	.984	9
<b>13</b>	Tourism causes overuse of water in the tourism region	6.02	.607	7
<b>14</b>	Tourism causes overuse of electricity in the tourism region	6.18	.823	3
<b>15</b>	Tourism has been increasing land and water pollutions	6.09	.807	5
<b>16</b>	Tourism has been increasing air and noise pollutions	6.12	.725	4
<b>17</b>	Tourism has caused the crowding of beaches, paths, parks, and other leisure places	6.19	.784	2
<b>18</b>	Tourism industry should take care of environmental protection	6.27	.774	1
<b>19</b>	Tourism has improved water supply, sewerage system and road-lighting	5.94	1.036	8
	<b>Socio-Cultural Impact</b>			
<b>20</b>	Tourism activities in Kuakata Sea Beach creates cultural exchanges between tourists and residents	5.73	.884	8
<b>21</b>	Tourism encourages a variety of cultural activities by the local residents (e.g., crafts, arts, music)	5.78	1.031	6
<b>22</b>	Tourism has a caused for replacing job like fishing, agriculture	6.21	.624	2
<b>23</b>	Tourism has increased the number of traffic accidents	6.42	.652	1
<b>24</b>	Tourism has increased social problem (crime/ theft, alcohol and drug abuse, diseases (HIV), prostitution)	5.91	1.192	4
<b>25</b>	Residents 'interest and satisfaction towards tourism industry gets importance	5.98	.849	3

26	There are some tourism impacts on dress, food habits and behavior of local people	5.88	.963	5
27	Tourism upgrades the social value of local people	5.47	1.395	9
28	Tourism is damaging to the local culture and traditions	4.31	2.000	11
29	I am satisfied with the current tourism activities in Kuakata Sea Beach	5.77	.909	7
30	I want these tourism sites to be well maintained for many generations to come	5.46	1.320	10

\*\*Response based upon a seven-point Likert scale, where 7 indicated strongly agree and 1 indicated strongly disagree.

#### 5.4 Factor analysis for resident towards sustainable tourism development (STD)

Factor analysis is a method used as a summarization and data reduction techniques to identify common underlying dimensions or factors in a set of variables (Dwyer et al. 2004). In this study, a set of 30 variables was used to capture local communities' understandings in terms of tourism impacts, their satisfaction and interest towards STD at Kuakata sea beach on different statements. The variables were provided in the form of statements using a seven-point Likert scale, where 7 indicated strongly agree and 1 indicated strongly disagree.

However, prior to doing Factor Analysis, Kaiser-Meyer-Olkin (KMO) testing is essential to ensure that there are sufficient data to conduct the analysis. KMO and Bartlett's test measure of sampling adequacy. Usually, KMO value greater than 0.5 is required (Malhotra N. K., Dash S. 2016). Table 5.12 presents the KMO and Bartlett's test of 30 variables relating to Sustainable Tourism Development. Here, the KMO value for this research is 0.724 (>0.5), indicating that Factor Analysis is applicable for this investigation. The significance level of Bartlett's Sphericity test is 0.000 (.0005). However, it is shown that the data is quite valid for applying Principal Component Analysis (PCA) together with a rotated component matrix of factor analysis.

**Table 5.12: KMO and Bartlet's test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.724
Bartlett's Test of Sphericity	Approx. Chi-Square	1791.582
	df	435
	Sig.	.000

Source: SPSS output

With the Total Variance Explained table aided in determining the number of factors from the total 30 variables. 41.645% of the variance is explained by five components whose Eigen values are larger than one. Thus, the Principal Component Analysis (PCA) approach is utilized for extraction, while the varimax approach is employed for rotation. Table 5.13 presents the Total Variance Explained.

**Table 5.13: Total variance explained**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.979	16.597	16.597	3.108	10.360	10.360
2	2.353	7.843	24.439	2.952	9.839	20.200
3	1.898	6.327	30.766	2.482	8.274	28.474
4	1.794	5.979	36.745	2.066	6.888	35.361
5	1.470	4.900	41.645	1.885	6.284	41.645

Extraction Method: Principal Component Analysis

Source: SPSS output

The findings of the Principal Components Method with Varimax Rotation are summarized in Table 5.14. The reliability coefficient alpha for all variables was 0.753, indicating a high correlation between the variables.

The five factors identified by factor analysis are described in detail below. Naturally, the titles given to the factors are subjective, but they take into consideration the

variables contained. Parentheses indicate the percentage of variance explained by each factor.

*Factor 1: Perceived Negative Impacts (16.597%)*

The first factor carried out 8 variables and obtained a coefficient of alpha of 0.731. However, it strongly encompasses that tourism activities have destroyed natural environment, increased land, water, air and noise pollutions and caused over use of water and electricity in Kuakata sea beach.

*Factor 2: Community Satisfaction and Interest towards STD (7.843%)*

The second factor explains six variables and include all the resident satisfaction and interest towards sustainable tourism development (STD). This factor attained a coefficient of alpha 0.630.

*Factor 3: Perceived Positive Impacts (6.327%)*

The positive impacts of economic, environmental and socio-culture dimensions for tourism activities in Kuakata sea beach comprise the third factor and obtained a coefficient of alpha 0.527. Six variables are included in this factor.

*Factor 4: Welfare Increase (5.979%)*

Factor four refers to community life changes and explains locals' perceptions of how their quality of life has altered as a result of tourism activities. When delating the one variable named 'Tourism has improved water supply, sewerage system and road-lighting', the Cronbach's Alpha for factor four is 0.507. According to Cortina (1993) and Nunnally and Bernstein (1994), in exploratory research, scales with a limited number of items (i.e., six or fewer) and an alpha of about 0.60 may be acceptable.

*Factor 5: Perceived Social Costs (4.900%)*

Factor five consists of three variables named 'Perceived Social Costs'. Land prices, traffic accidents, and crime have all grown as a result of the tourism operations in Kuakata, which is described as factor number five.

**Table 5.14: Factors along with respective variables pertaining to sustainable tourism development**

Variables	Factor Loadings	Eigen Values	Variance (%)	Cumulative Variance (%)	Cronbach's Alpha Based on Standardize Items
<b>Factor 1 Perceived Negative Impacts</b>		<b>4.979</b>	<b>16.597</b>	<b>16.597</b>	<b>.731</b>
The construction of hotels and tourism facilities have destroyed the natural environment	.764				
Tourism has been increasing land and water pollutions	.626				
Tourism is damaging to the local culture and Traditions	.591				
Residents 'interest and satisfaction towards tourism industry gets importance	.588				
Local people do not get the management level jobs	.574				
Tourism causes overuse of water in the tourism region	.571				
Tourism causes overuse of electricity in the tourism region	.521				
Tourism has been increasing air and noise pollutions	.422				
<b>Factor 2 Community Satisfaction and Interest towards STD</b>		<b>2.353</b>	<b>7.843</b>	<b>24.439</b>	<b>.630</b>
Local people want these tourism sites to be well maintained for many generations to come	.772				
Local people are satisfied with the current tourism activities in Kuakata Sea Beach	.654				
Tourism upgrades the social value of the local people	.636				
Tourism creates jobs more for externals than local residents	.437				
Tourism has contributed to overall development of local people	.430				
Tourism has created jobs for many people in village	.414				

<b>Factor 3 Perceived Positive Impacts</b>		<b>1.898</b>	<b>6.327</b>	<b>30.766</b>	<b>.527</b>
Tourism has attracted more business to our locality	.609				
Tourism industry should take care of environmental protection	.578				
Tourism activities in Kuakata Sea Beach creates cultural exchanges between tourists and residents	.529				
There are some tourism impacts on dress, food habits and behavior of local people	.524				
Tourism development has improved the physical appearance of Kuakata Sea Beach	.434				
Tourism encourages a variety of cultural activities by the local residents (e.g., crafts, arts, music)	.342				
<b>Factor 4 Welfare Increase</b>		<b>1.794</b>	<b>5.979</b>	<b>36.745</b>	<b>.507*</b>
Tourism has improved the way of living	.698				
Tourism activities in Kuakata Sea Beach have increased my income	.579				
Tourism has a caused for replacing job like fishing, agriculture	.408				
Tourism has increased the cost of living	.444				
Tourism has improved water supply, sewerage system and road-lighting. *	.339				
<b>Factor 5 Perceived Social Costs</b>		<b>1.470</b>	<b>4.900</b>	<b>41.645</b>	<b>.584*</b>
The price of land has increased due to tourism in Kuakata Sea Beach	.765				
Tourism has increased the number of traffic accidents	.654				
Tourism has increased social problem (crime/ theft, alcohol and drug abuse, diseases (HIV), prostitution) *	.450				

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 17 iterations.

\*One item deleted, Source: SPSS output



## 5.5 Residents' perceptions and attitudes towards sustainable tourism development (STD)

### Hypothesis 2

**H0: There is no significant mean difference in the perceptions of residents towards sustainable tourism development (STD) in Kuakata sea beach with respect to key demographic profiles.**

#### 5.5.1 Difference between residents of Kuakata and perception towards sustainable tourism development (STD)

An independent samples t-test was used to compare the mean STD score of native ( $n=223$ ) and non-native ( $n=22$ ) in Kuakata sea beach. Levene's test was also non-significant; thus, an equal variance can be assumed for both groups.

The t-test was statistically significant, with mean STD score of native ( $M=179.89$ ,  $SD=9.548$ ) was significantly higher (mean difference 7.024, 95%  $CI$  [2.741,11.308]), than the non-native ( $M=172.86$ ,  $SD=11.49$ ),  $t(243) = 3.23$ ,  $p < .001$ , two-tailed, Hedges's  $g_s = 0.72$ . The common language (CL) effect size indicates that the chance that for a randomly selected pair of individuals the STD score of a native is higher than the score of a non-native is 68% (see Table 5.15.). So, reject null hypothesis and there is significant difference between residents of Kuakata and their perceptions of sustainable tourism development in Kuakata sea beach.

**Table 5.15: Results of independent sample 't' test between residents of Kuakata and STD**

Residents of Kuakata	N	Mean	SD	t	Df	Sig. (2tailed)
Native	223	179.89	9.548	3.23	243	.001
Non-native	22	172.86	11.490			

Source: SPSS output

#### 5.5.2 Difference between residents' gender and perception towards sustainable tourism development (STD)

While examining whether there is any difference in the assessment of gender and their perceptions on STD, the test results of independent sample t test revealed that there is

statistically significant difference between gender and their perceptions of sustainable tourism development in Kuakata sea beach.

The mean of STD score of males ( $M=177.82$ ,  $SD=10.14$ ) was significantly higher (mean difference 5.49, 95%  $CI [2.73,8.25]$ ), than the females ( $M=183.31$ ,  $SD=8.03$ ),  $t(138.72) = 4.374$ ,  $p < .05$ , two-tailed, Hedges's  $g_s = 0.56$ . The common language (CL) effect size indicates that the chance that for a randomly selected pair of individuals the STD score of a male is higher than the score of a female is 66% (see Table 5.16.).

**Table 5.16: Results of independent sample 't' test between gender and STD**

Gender	N	Mean	SD	t	Df	Sig. (2tailed)
Male	181	177.82	10.14	4.374	138.72	0.000
Female	64	183.31	8.03			

Source: SPSS output

### 5.5.3 Difference between age and perception towards sustainable tourism development (STD)

A one-way between-groups analysis of variance (ANOVA) was used to investigate difference between the age of residents' respondents and their perceptions towards sustainable tourism development in Kuakata sea beach. From ANOVA table 5.17 it has been found that there was a statistically significant difference at the  $p < .05$  level in STD scores for the seven groups:  $F(6, 238) = 6.37$ ,  $p = .000$ . Despite reaching statistical significance, the actual difference in mean scores between the groups was quite high. Using eta squared, the effect size was determined to be 0.14.

**Table 5.17: Results of ANOVA between age and STD**

Age of Residents	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3321.299	6	553.550	6.371	.000
Within Groups	20677.501	238	86.880		
Total	23998.800	244			

Source: SPSS output

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for (18- 25) age group ( $M = 171.58$ ,  $SD = 6.57$ ) was significantly lower from other age

categories. On the other hand, resident respondents aged 36-54 years ( $M = 184.27$ ,  $SD = 7.10$ ) had a high perception of sustainable tourism development at Kuakata sea beach as compared to respondents in other age groups. Table 5.18 presents the results of Post-Hoc between ages and perceptions towards sustainable tourism development.

**Table 5.18: Results of Post-Hoc analysis between age and STD**

Category of Age	N	Subset for alpha = 0.05	
		1	2
(18- 25) years	24	171.58	
(36-40) years	60	176.58	176.58
(55-60) years	9	177.89	177.89
(31-35) years	64	179.27	179.27
(26-30) years	41		182.95
(41-45) years	32		183.31
(46-50) years	15		184.27
Sig.		.084	.084

Source: SPSS output

#### 5.5.4 Difference between residents' living location from Kuakata sea beach and perceptions towards sustainable tourism development (STD)

The findings of the One-Way ANOVA (Table 5.19) show that there is a statistically significant difference ( $0.000 < 0.05$ ) between resident respondents' perceptions of sustainable tourism development with respect to their house location on the Kuakata sea beach. The STD scores for the seven groups:  $F(6, 238) = 15.471$ ,  $p = .000$ . Using eta squared, the effect size was determined to be 0.28.

**Table 5.19 Results of ANOVA between resident's house location from Kuakata sea beach and perceptions towards STD**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6733.937	6	1122.323	15.471	.000
Within Groups	17264.863	238	72.541		
Total	23998.800	244			

Source: SPSS output

Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the residents who live on the sea beach (0-1 km) ( $M = 171.77$ ,  $SD = 7.87$ ) was significantly lower than other residents. On the other hand, resident respondents who lived (16-20) km from Kuakata sea beach ( $M = 184.27$ ,  $SD = 7.10$ ) had a high perception of STD at Kuakata sea beach as compared to respondents in other groups. Table 5.20 presents the results of Post-Hoc between resident's house location and perceptions towards sustainable tourism development.

**Table 5.20: Results of Post-Hoc analysis between resident's house location from Kuakata sea beach and perceptions towards STD**

Living withing	N	Subset for alpha = 0.05	
		1	2
(0-1) km	30	171.77	
(2-3) km	68	173.53	
(11-15) km	16		181.75
(7-10) km	29		182.69
(4-6) km	82		183.34
21 km or more	11		185.09
(16-20) km	9		187.67
Sig.		.995	.317

Source: SPSS output

### 5.5.5 Difference between educational qualification and perceptions towards sustainable tourism development (STD)

The One-Way ANOVA was used to examine the hypothesis that there was any difference in resident respondents' views of sustainable tourism development at Kuakata sea beach based on their educational qualifications. Inspection of the skewness, kurtosis and Shapiro-Wilk statistics indicated that the assumption of normality for the dependent variable (STD total score) was not violated.

From ANOVA table 5.20 it has been found that there was a statistically significant difference at the  $p < .05$  level in STD scores for the eight groups:  $F(7, 237) = 3.819$ ,  $p = .001$ . Despite reaching statistical significance, the actual difference in mean scores

between the groups was quite high. Using eta squared, the effect size was determined to be 0.10. The findings of the One-Way ANOVA are shown in Table 5.21.

**Table 5.21 Results of ANOVA between educational qualification and STD**

<b>Educational Qualification</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	2432.821	7	347.546	3.819	.001
Within Groups	21565.979	237	90.996		
Total	23998.800	244			

Source: SPSS output

Post-hoc comparisons using the Tukey HSD test indicated that the mean score of the residents who had no educational background ( $M = 168.50$ ,  $SD = 3.00$ ) was significantly lower than in the other educational categories. The professional degree holder had a higher perception ( $M = 185.00$ ,  $SD = 3.46$ ) on STD. Table 5.22 presents the results of Post-Hoc with the Tukey HSD Test between educational qualifications and perceptions towards sustainable tourism development.

**Table 5.22: Results of Post-Hoc analysis between educational qualification and STD**

<b>Educational Qualification</b>	<b>N</b>	<b>Subset for alpha = 0.05</b>	
		<b>1</b>	<b>2</b>
No Literate	4	168.50	
College	34	174.91	174.91
Literate	23	175.83	175.83
Graduate	12	176.83	176.83
Post Graduate or above	10	178.90	178.90
High School	88	179.67	179.67
Primary School	71		182.76
Professional Degree	3		185.00
Sig.		.193	.312

Source: SPSS output

### 5.5.6 Difference between monthly family income and perceptions towards sustainable tourism development (STD)

A one-way between-groups analysis of variance (ANOVA) was used to investigate the difference in the perceptions of resident respondents towards sustainable tourism development in Kuakata sea beach with respect to the monthly family income. Levene's statistic was non-significant,  $F(5, 239) = 1.991$ ,  $p = .08$ , thus the assumption of homogeneity of variance can be assumed.

While researching the differences in resident respondents' perceptions of sustainable tourism development in Kuakata sea beach based on monthly family income, the P value is 0.059 which is insignificant. This means that there is no statistically significant relationship between monthly family income and sustainable tourism development perceptions. The effect size was .043, using eta squared. Table 5.23 displays the results of the One-Way ANOVA between monthly family income and sustainable tourism development perceptions.

**Table 5.23 Results of ANOVA between monthly family income and STD**

Monthly Family Income	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1040.061	5	208.012	2.165	.059
Within Groups	22958.739	239	96.062		
Total	23998.800	244			

Source: SPSS output

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for BDT 5001-10000/- monthly income group ( $M = 172.50$ ,  $SD = 8.66$ ) was significantly lower from other monthly income groups. Table 5.24 presents the results of Post-Hoc with the Tukey HSD Test between monthly family income and perceptions of sustainable tourism development.

**Table 5.24 Results of Post-Hoc analysis between monthly family income and STD**

Monthly Family Income	N	Subset for alpha = 0.05
		1
BDT 5001-10000/-	4	172.50
BDT 10001-20000/-	63	177.65
BDT 50001/- or above	2	178.00
BDT 20001-30000/-	96	178.33
BDT 30001-40000/-	52	181.77
BDT 40001-50000/-	28	182.43
Sig.		.390

Source: SPSS output

### 5.5.7 Difference between occupations and perceptions towards sustainable tourism development (STD)

One-Way ANOVA result between resident respondents' occupations and perceptions towards sustainable tourism development present that there was a statistically significant difference at the  $p < .05$  level in STD scores for the nine groups:  $F(8, 236) = 3.643$ ,  $p = .001$ . Using eta squared, the effect size was determined to be 0.11. The findings of a One-Way ANOVA between occupations and perceptions of sustainable tourism development are displayed in Table 5.25.

**Table 5.25 Results of ANOVA between occupations and STD**

Occupations	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2637.817	8	329.727		
Within Groups	21360.983	236	90.513	3.643	.001
Total	23998.800	244			

Source: SPSS output

Post-hoc analysis using the Tukey HSD Test shows that there are two homogenous subgroups among the nine employment categories of resident respondents regarding their views of sustainable tourism development at Kuakata sea beach. The 'others'

occupation categories ( $M = 173.57$ ,  $SD = 12.38$ ) was significantly lower than the rest of the categories. The mean value of sculpture, art and craft designer was 186.2 as the second sub group, had a high perception of STD at Kuakata sea beach as compared to respondents in other groups. Table 5.26 presents the results of Post-Hoc between occupations and perceptions towards sustainable tourism development.

**Table 5.26 Results of Post-Hoc analysis between occupations and STD**

Occupations	N	Subset for alpha = 0.05	
		1	2
Others	7	173.57	
Motor Bike/Auto/Van driver	51	175.98	175.98
Farming/animal husbandry	22	176.86	176.86
Fishing/ fishing labor	40	177.88	177.88
Government/private employment	16	178.56	178.56
Business	65	180.42	180.42
Shop employee	10	181.80	181.80
Tourist guide / Tourist photographer	9		185.00
Sculpture, art and craft designer	25		186.20
Sig.		.264	.065

Source: SPSS output

### 5.5.8 Result of comparison of means

The findings of the Independent Sample 't' test and One-Way ANOVA for the perceptions of residents of sustainable tourism development at Kuakata sea beach in relation to the resident respondents' demographic characteristics presented that there is a significant difference between the variables with respect to residents' types, gender, age, residents' house location from Kuakata sea beach, educational qualification and occupations where  $p < 0.05$ .

However, there is no significant difference between the perceptions of resident respondents with regard to monthly family income where  $p > 0.05$ . Therefore, out of seven demographic variables, six variables rejected the null hypothesis. Table 5.27 shown the test results of Independent Sample 't' test and one-way between-groups



analysis of variance (ANOVA) between demographic variables and perceptions towards STD.

**Table 5.27: Results of Independent Sample ‘t’ Test and One-Way ANOVA**

<b>Sl. No</b>	<b>Residents Demographic Variables</b>	<b>Significant Value</b>	<b>Inference of Hypothesis</b>
1	Residents Types	.001 (t= 3.23)	Rejected
2	Gender	.000 (t= 4.374)	Rejected
3	Age	.000 (F= 6.371)	Rejected
4	Residents’ House Location from Kuakata Sea Beach	.000 (F=15.471)	Rejected
5	Educational Qualification	.001 (F= 3.819)	Rejected
6	Monthly Family income	.059 (F= 2.165)	Accepted
7	Occupations	.001 (F= 3.643)	Rejected

Source: SPSS output

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*Chapter 6*

*Prospects and Challenges*

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## **6.1 Introduction**

The empirical research presented in this chapter is conducted in the context of sustainable tourism development of the Kuakata sea beach in Bangladesh. Kuakata sea beach is the country's second-most-visited sea beach and one of the country's most popular tourist destinations overall, mainly for domestic visitors. November to March is the peak period for tourism in this place, and the rest of the year is the off-peak period. During the tourist season, Kuakata receives between 50,000 and 60,000 visitors each week, yet there is no adequate mechanism to handle the influx of visitors (FE Online Report, 2021).

This chapter explores prospects and challenges about sustainable tourism of a range of stakeholders on the Kuakata sea beach of Bangladesh focusing on the third and fourth research objectives: to explore the prospects of sustainable tourism development in Kuakata sea beach and to identify the challenges to sustainable tourism development in Kuakata sea beach. The objective of this chapter is to critically examine the prospects and challenges of sustainable tourism held by multiple stakeholders (tourism demand-supply side stakeholders; and local authorities and management agencies) of the Kuakata sea beach in Bangladesh.

## **6.2 Research approach**

The qualitative materials presented in this chapter are to identify the challenges and prospects of the sustainable tourism development in the context of the Kuakata sea beach in Bangladesh. The chapter examines the challenges and prospects of the sustainable tourism development of two broad stakeholder groups: the users of the Kuakata sea beach including community residents, tourism business operators and tourists; and the personnel of management agencies who are working for legal, administrative, communication, and safety-security of sustainable tourism development for the user groups.

The empirical data were gathered via 12 face-to-face semi-structured interviews conducted in March 2021 with a variety of stakeholders associated with the Kuakata sea beach in Bangladesh. The interviews for this study were performed in Kuakata, Patuakhali, Bangladesh. A judgmental sampling technique was adopted in this study. 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. 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 order to accomplish the research objective. It was decided to include participants who were really representative of each of the targeted stakeholder groups in the program of in-depth interviews. The participants that were chosen had to be at least 18 years old. Several neutral locations were used to conduct semi-structured open-ended interviews, which were all done in the Bengali language. According to the participants' consent, all interviews were digitally recorded and the average interview duration was 26 minutes (with a range of 18-52 minutes). **Table 6.1** contains a short summary of the individuals who took part in the study.

An extensive interview program yielded voluminous amounts of high-quality empirical data (Alvesson & Kärreman, 2011) that shed light on the broader context of sustainable tourism development. The empirical materials were translated into English and transcribed; the transcripts were then analyzed using a thematic interpretation – in which the interview materials were coded according to pre-selected and emergent new constructs (Fereday & Muir-Cochrane, 2006). The researcher's fieldwork experience and repeated reading of the coded materials aided the qualitative analysis research process.

The study provided in this chapter has identified two main themes based on thematic analysis of the empirical materials from the interview program, revealing the thesis's research objectives 3 and 4. In the course of the investigation, the first theme that emerged is titled 'challenges to sustainable tourism development' with five sub-themes: (1) Managing environmental degradation, (2) Managing infrastructure and facilities development (3) Managing socio-cultural issues, (4) Managing behavior problem/Knowledge and awareness, and (5) Managing marketing, monitoring and evaluation for sustainable tourism. 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) Develop Community Based Tourism (CBT) and (4) Introducing a new tourist route.

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.

**Table 6.1:** Description of the participants and interviews

Participant identity	Gender	Age	Occupation / role	Education	Interview Length (minutes)
Member of local government <sub>1</sub>	F	38	Politician	High school	20
Hotel employee <sub>1</sub>	M	41	Manager of a hotel	Masters	20
Tour operator <sub>1</sub>	M	48	Association leader	Graduate	30
Tour operator <sub>2</sub>	M	28	Guide and owner	High school	52
Hotel employee <sub>2</sub>	M	41	Manager of a hotel	Graduate	32
Transportation Worker <sub>1</sub>	M	22	Motor Cycle Driver	Primary level	22
Transportation Worker <sub>2</sub>	M	35	Motor Cycle Driver	Primary level	22
Hotel employee <sub>3</sub>	M	41	Manager of a hotel	Graduate	22
Security Officer	M	47	Tourist Police	Masters	20
Indigenous People	M	65	Association leader	Masters	18
Hotel owner	M	65	Owner and Association leader	Graduate	45
Member of local government <sub>2</sub>	M	60	Politician/ Mayor	High school	21

### **6.3 Empirical findings**

Stakeholders highlighted a variety of obstacles, either sea beach or business related, that have the potential to stymie sustainable tourism development on Kuakata sea beach.

#### **6.3.1 Theme A: Challenges of sustainable tourism development**

##### **(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 beaches erosion, ineffective waste management and littering issue, arsenic-laced tube well water, the restaurants lacking basic hygiene, loss of biodiversity, and plastic pollution killing marine life.

##### *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 in the sea beach of Kuakata. This beach is being broken every year.

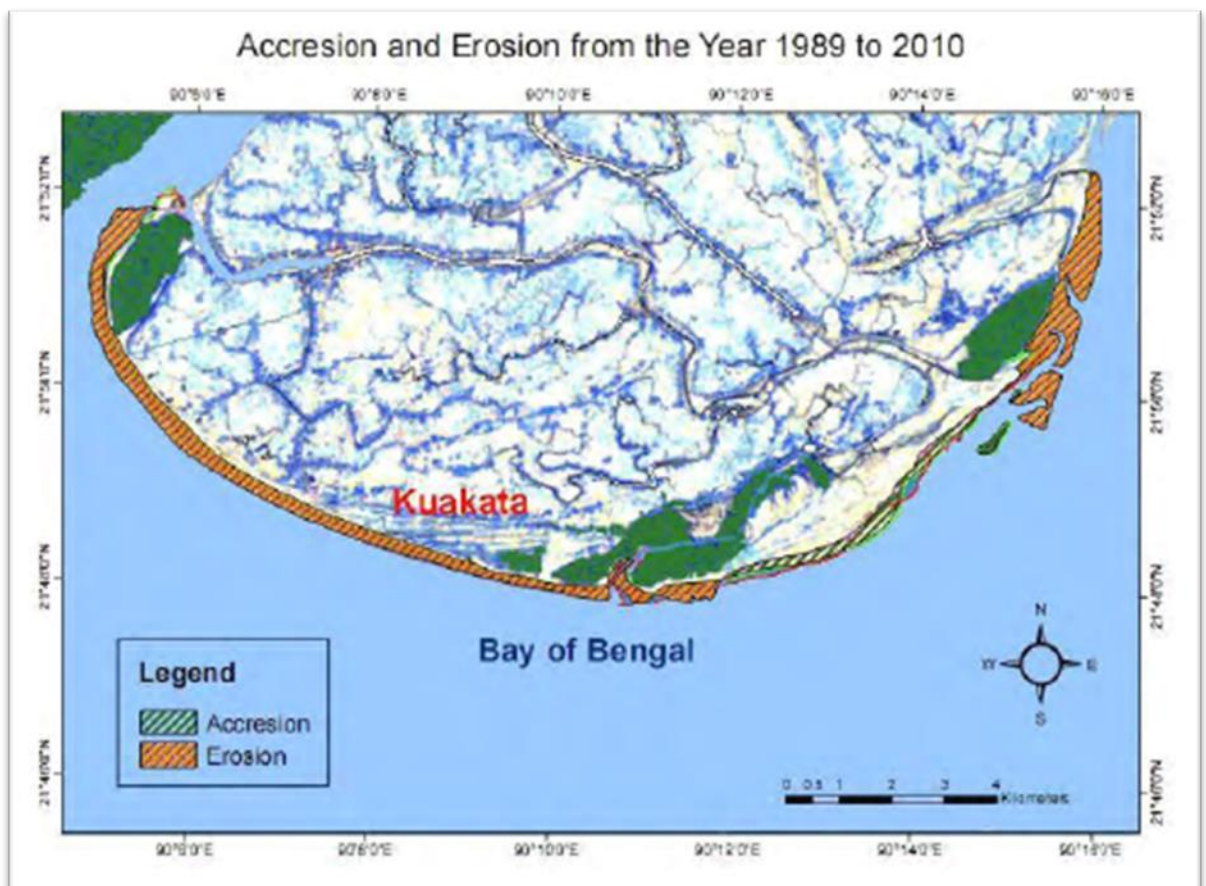
The beach was 18 kilometers long and 8 kilometers broad. Due to persistent erosion, the 8-kilometer-long beach has decreased to the point that visitors are unable to access it during high tide (Das, 2021). The maps (Map 6.1) show that the coastline has generally pushed inwards, and erosion is more dominant than accretion. The shoreline is progressively receding inwards in the eastern part, whereas the western horn of the island is lengthening owing to accretion. On the other hand, the central and eastern coasts have seen both erosion and accretion processes. Between 1989 and 2010, 2.34 km<sup>2</sup> of coastline land was added, while 11.81 km<sup>2</sup> was lost. As a result, the Kuakata Coast has lost 9.47 km<sup>2</sup> of coastline land (Bushra, 2013).

*...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 emptied the palm trees and all fell. - Hotel employee<sub>2</sub>*

For the time being, the authorities are attempting to defend the sea beach with sandbags and other barriers.

*I have heard that the government will soon start working. Even though Geo bag is supporting one kilometer, this is not sufficient. 18 kilometers is a huge place. The two rivers on both sides of the Sea Beach are largely responsible for this. It is not the erosion here that is sand erosion. - Tour operator<sub>1</sub>*

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. It is imperative that action be made to safeguard the beautiful beach.” 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.



Map 6.1: Accretion and erosion at Kuakata Coast (from 1989 to 2010)

(Source: Bushra, Nazla. 2013. “Detecting Changes of Shoreline at Kuakata Coast

Using RS-GIS Techniques and Participatory Approach.” Bangladesh University of Engineering and Technology.)

*Ineffective waste management and littering issue*

Despite the fact that the municipality of Kuakata is now eleven years existing, there is no defined location for dumping trash and appropriate waste management. Managing littering 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 is merged with the sea. There has been such a situation now that there is knee-deep water somewhere and nowhere else. Stinky rotten garbage, plastic polythene are all thrown here. ...Waterlogging and mosquito infestation are on the rise because of this plastic. Then the plastics fall into the sea. The canal is connected to the Bay of Bengal. As a result, the system that has a "Blue Economy" is being ruined. So many fishes are dying from this plastic, other animals are eating them and dying. So, now the lives of thousands of sea creatures are under threat. - Tour operator<sub>2</sub>*

Another tour operator said:

*It goes without saying that this waste management work is not done now. So, people are uneasy about the mosquito infestation in the area. - The people of the municipality take the waste and throw it somewhere in the locality or put it under the soil. It also pollutes the environment of the place. Once thrown into the forest, it is no longer taken away after complaining. They are now taking it to a location within the union. That place is also being made dirty. We had a proposal for that. The dirt is divided into three parts: silt, plastic, and perishables. Fertilizers can be produced with perishable wastes. But the municipality did not take the initiative. But it is an serious problem. - Tour operator<sub>1</sub>*

*Our municipality has not developed a good sewerage system. Unlike in other cities, there is no such thing as waste disposal. - Hotel owner*

The municipality of Kuakata has four vehicles for collecting waste from hotels, motels, and other houses or business enterprises. The Member of local government<sub>2</sub> explained that “So far, no place has been identified for it. For the time being, I am



putting it in a hole away from the locality in a chaotic way. ...I have applied to the Ministry for waste management to allocate space. Let 10 acres of land be allotted. Now we are waiting for that."

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. "

### *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). In this study, researcher highlights how tourism activities impact biodiversity.

After the cyclone Sidr on November 15, 2007, the erosion intensified at Kuakata beach in Patuakhali. According to the forest department, 2,000 acres of forest have been lost to the sea in 13 years. More than two lakh trees have been uprooted (Das, 2021). According to experts, water levels have increased unnaturally owing to the impacts of climate change and silt deposition on the sea bottom. As a consequence, massive water waves are slamming on the shore. Forests are being destroyed every year due to various disasters, tidal waves, and erosion. This is having a serious impact on the environment (**Figure 6.1**).



Figure 6.1: Climate change has uprooted trees on Kuakata sea beach

(Source: Das, S. (2021, August 25).

<https://www.prothomalo.com/bangladesh/environment/২-হাজার-একর-বনাঞ্চল-বিলীন>)

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). A renowned local tour operator said that “Once, we used to say lakhs. Three years ago, we said thousands of crabs. Two years ago, you could see hundreds of crabs. Now I say that, brothers, you may see one or two and you even may not find a single one.” 90% of the plastic used by the tourists is dumped on the beach every day, causing a serious danger to the marine ecosystem in the area (TBS Report 2021).

*In fact, wherever people set foot, there is some damage. Of course, the loss is happening, and it would not be right to say no. Because when we were four months off in Corona, we saw seaweed on Sea Beach, which is not there now. The dolphins were getting so close. We needed to figure out how to save the red crabs. - Tour operator1*

*Tourists' plastic polythene are floating into the mangrove forest. The trees are dying from the plastic being stuck in their roots. The forest is being destroyed. Again, the sea creatures are dying. If there is damage to nature, we have to pay a price for it because, this forest protects us from storms, hurricanes, and floods. A vicious circle is cutting down trees and selling them. There is no particular initiative for forest protection. Sunset and sunrise are the main business of Kuakata. After that, tourists visit the red crab area and the Sundarbans site. Plastic and polythene are going everywhere in our mangrove forest, and the forest is being destroyed. Thus, biodiversity such as red crabs is almost extinct. - Tour operator<sub>2</sub>*

## **(2) Managing infrastructure and facilities development**

### *Poor 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. The Kuakata-Kalapara-Patuakhali highway is in poor condition. Though the route's construction and development have progressed slowly, the road is inconvenient for traffic. Tourists and visitors to Kuakata often face danger. Once it took about nine ferries to cross Kuakata from Dhaka. Currently two ferries commute. The Lebukhali ferry is nearing completion and only the Padma Bridge remains.

*The problems with transport that were there before are now a little problem at Lebukhali ferry terminal. This is like sitting there for three to four hours since their construction work is going on. Due to this, the movement of the ferry is being disrupted. - Hotel employee<sub>1</sub>*

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*

*The site for the bus terminal has not been purchased yet. But it required very quickly. It's been 20 years already. But it is supposed to take so long. A bus terminal is very important for a tourist area. -Tour operator<sub>1</sub>*

The roads from the Sea Beach to the surrounding tourist area are not in good condition. Most roads are fragile. In some places, the roads are dirt roads. There is a place called Misripara where Rakhine village is located. The road to get there is very bad. Big cars, minibuses, and small cars cannot travel there. Only motorbikes or vans can be used. A motor bike driver said, “All the roads inside the municipality are paved. There is no good road outside the municipality. This becomes a very difficult for the of tourists to move.”

*Our roads are not so good. I am not able to go by myself. Even then, I do not understand how tourists come here. These roads should be made administratively at lightning speed. But the administration is doing nothing. We do not understand why. - Indigenous People*

#### *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 is not enough tourist infrastructure in these sights.

*Infrastructure development is required in the Kuakata beach area. Tourists have no choice but to walk down this beach when they visit Gangamati Char in the morning to watch the sunrise and when they visit the Labur Char to watch the sunset. Although there is an embankment on the side, it is not yet completed. People may travel on either side of the embankment by motorcycle or any other vehicle once it is built. Tourists could readily visit the sites back then, but now it is not happening. - Security Officer*

*There has been no sustainable work done so far. In terms of tourism, Kuakata's attractions are still underdeveloped. The existing system here is backdated. There's nothing new about transportation or spot development, which are needed in Kuakata on an emergency basis. - Tour operator<sub>2</sub>*

Kuakata sea beach is an 18-kilometer-long sea beach, but after evening, most of the area is dark. Only half a kilometer of the sea beach is under lighting. As a result, tourists lack a sense of security and have little interest in spending extended periods of time in dark locations.

*I am talking about lighting. If lighting can be installed for one kilometer on both sides, for a total of two kilometers, it is clear that guests will be able to spend time after evening. I know, there is no fear in the dark, but an accident can happen. - Hotel employee<sub>1</sub>*

*We do not have enough lighting systems on the beach. Only a quarter kilometer of the beach is lit. And by the evening, the beach area is completely dark. As a result, you are unable to spend time in the evening because there is nothing to do. - Tour operator<sub>2</sub>*

It is natural that when tourists visit a forest, they want to see some wild animals. It's the same story when it comes to visiting the mangrove forest near Kuakata sea beach. As a way of conveying the situation, a local tour operator said, "When tourists visit the mangrove forest site, we did not see any wild animals. We said many wild animals were here. But in reality, there was nothing to see."

Every week, at least 50,000-60,000 tourists visit Kuakata sea beach during the tourist season (TBS Report 2021). 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 kilometers away, there is no washroom beside the road for the passengers.

*After launching from Barisal, you can actually come a little bit comfortably, but then the 120 km road to Kuakata takes 4 hours by local bus. No one wants to admit it. And there is no washroom anywhere. What will the woman or the illness do then? This is why people don't want to come to Kuakata with so much hassle. They are those people, who come to Kuakata mistakenly. - Hotel employee<sub>2</sub>*

The 20-bed Kuakata Hospital is located three kilometers 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."

*Insufficient recreational facilities*

The term "recreation" refers to any action that is both joyful and socially sanctioned, and which also serves to rejuvenate the person (Simmons and Moore: in Jafari and Xiao, 2016). 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). Most of the visitors visit destinations for leisure, it is reasonable to assume that the recreational activities they engage in will be mostly recreational in nature. Tourism has been active in Kuakata for over two decades, but no recreational facilities for such visitors have yet been developed. When traveling 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. Due to this, the guests are heading towards Cox's Bazar. It's not coming that way. Higher-class tourists do not come here. The middle-class people are the most numerous in Kuakata. That's because the upper class doesn't come here. The only five-star category hotel is Sikder Resort. Having to depend on them, they have to accept their price. Tourists have no other choice than to justify their price. - Hotel employee<sub>1</sub>*

**(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 sample the food and meet the people (Carter et al., 2015). Not only the sea beach but also cultural heritage is another attractor of 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 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.

*Our culture is disappearing more than ever. The reason is that our population is decreasing. Even our language is lost today in order to preserve different kinds of culture. There is no language school. In particular, it has an economic impact. Our people used to be very well off, now not all are well off. There was land but now there is no land. These are especially lost in various ways. In that sense, it is impossible for us to get a master to teach our children at home. - Indigenous People*

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.

#### *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, they 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 visitor shopping. Tourists are in high demand for our wares. 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”.

#### *Conflict between the Rakhine-Bengali*

Conflicts between the Rakhine and Bengali people occur sometime, 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 them 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) Managing behavior problem**

Sometimes, tourists are confronted with a variety of behavioral issues from destination marketers and tourism service providers. So, these tourists are not happy or satisfied. As a result, they do not recommend to others to visit the destination. This is exactly what is happening in Kuakata. Tourists are being misbehaved by service providers. Sometimes tour operators cheat the tourists for visiting many sites. Actually, local tour operators take them to visit a few sites but they call 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 behavior of the local people with the tourists should be good. Necessary training should be given through the Tourism Board and even after the training, if there is no correction, there is no need to run tourism business. A tourism businessman has no right to misbehave with a tourist. These need to be monitored. - Tour operator<sub>2</sub>*

At present, most of the tourists in Kuakata are middle-class and upper-class tourists who generally avoid this destination. When the upper-class visits Kuakata, they face some behavioral matters from local residents. Local residents need to change their mindset regarding their views.

*Local tourists and foreigners will come to Kuakata. The tourist area will be the focus of their walk. When someone comes from the upper class, their dress is little different. But when you go out in that dress, the people around you will look at you with bitter eyes. In other words, we have not yet been able to come up with the modern mindset or the criteria that should be present in an ideal tourist area. This is our main problem here. As a result, high class tourists do not come here, mostly the middle class people come to Kuakata. - Hotel employee<sub>1</sub>*

#### *Misbehavior by the service providers*

In the voice of a hotel owner, the misbehavior of the service provider became clearer. Further, he said that “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, which is a



very bad thing. It requires particular attention from the Beach Management Committee, the municipality, and the tourist police”.

Since the motorcyclists often treat the tourists badly, this statement is made clearer from the voice of a motorcyclist. But he claims that the motorbike drivers in their association do not do this. Motorcyclists who come from outside Kuakata do most of the misconduct.

*We have an association. There is no problem with all the bikers in the association. It is seen that many motorbikes come from outside and drive here. Their behavior is not good with tourists. They cause a lot of trouble for the tourists. - Transportation Worker<sub>1</sub>*

The majority of the motorcyclists in Kuakata lacks a valid license. Many of them do not wear helmets when they drive, and that's dangerous. Riders under the age of 18 can be seen. There is no way to know whether the motorbike drivers of Kuakata or outsiders. They are not identified by a unique number or card. Although the drivers have been talking about their ID cards for a long time, no action has been taken by the administration. Motorcyclists and van drivers use their horns more often, contributing to increased noise pollution.

*There are about 500 drivers in our association, and a maximum of 100 of them have driving licenses. ...There are 300 vehicle documents out of 500 vehicles. The remaining 200 motorbikes go without necessary papers. But if a motorbike has an accident, the responsibility falls on everyone. ...A yellow T-shirt is given by the tourist police to the cameramen. As a result, seeing them, it is understood that they are cameramen. But tourists have no way of knowing that we are actually municipal drivers or tourist guides. It is our need to get an identity card from the municipality. This is our greatest need. - Transportation Worker<sub>2</sub>*

##### **(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. About 18-km of the longest 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.

*Kuakata is a popular tourist destination, but it is not being promoted commercially. The Tourism Board is in charge of it but has not been able to hold a beach carnival in the last two years. If it is commercially promoted and provided with facilities, Kuakata will receive a 12-month guests. Now we get guests only for six months. The rest of the year is hard for us. - Hotel employee<sub>2</sub>*

Planning is the cornerstone of any development initiative. And if there is no master plan, then there is no point. If the work is done according to the master plan, then any development work will proceed efficiently. In 2014, Kuakata's master plan was published as a gazette. Sadly, development work in Kuakata is not going according to that master plan. People have constructed buildings wherever they like. If these are not strictly monitored, Kuakata will face the threat of sustainable tourism. A tour operator states that: “Kuakata has a master plan which began in 2004 and was released in 2014 as a gazette. However, even if a master plan exists, it is not implemented. People in the area have constructed structures here and there”.

The Kuakata Beach Management Committee is the supervisor of the beach and the Deputy Commissioner of Patuakhali is the Chair of this committee. Local stakeholders have a lot of questions regarding the committee and they say, this beach management committee does not work properly. This committee does not arrange meetings regularly and does not monitor them properly. The Mayor of the Kuakata municipality wants to reform the committee and he wants the empowerment of the beach committee at the local level.

*The Kuakata Beach Management Committee is chaired by Mr. DC and we are the members. This time, at the meeting of the law-and-order committee, I proposed that the municipality be given a management committee. It would have been a bit better if he had delegated authority to me. Even if we wanted to, we couldn't accomplish much at times. That's what I said to Mr. DC. Now I am waiting for that decision. This committee should be reconstituted and kept at the local level. -Member of local government<sub>2</sub>*

*Beach management must also be improved. There are no meaningful actions taken by the person in charge of the beach management. The government's beach management steps have not been executed. They cannot work together through meetings or ensure accountability. - Hotel employee<sub>3</sub>*

### 6.3.2 Theme B: Prospects of sustainable tourism development

Hence, Kuakata is the second most popular sea beach in Bangladesh, so its long-term survival is critical. A more essential point is that without tourists, tourism will not be able to remain sustainable. Kuakata is witnessing good development, albeit a little fluctuation, in accordance with the pattern of visitor arrivals during the last almost two eras. Sustainable tourism educated tourism service providers (hoteliers, tour operators, and the government), as well as local residents and visitors, about the importance of conservation and eco-friendly tourism practices in tourist sites in order to preserve them for future generations.

*This area used to be very inaccessible. Almost everything in the area is developing because of Kuakata Beach. Communication, roads, and bridges have all developed based on Kuakata Beach. Then, based on this beach in the south, the Port of Payra is being constructed under the direction of the Prime Minister. - Hotel employee<sub>3</sub>*

#### (1) Exploring new tourist sites

Char Bijoy is a mesmerizing island in the Bay of Bengal, located around 40 kilometers southeast of the Gangamati forest and east of Sagarakanya 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." Additionally, the locals refer to it as "Haier Char." It is typical for Abdul Hai, a fisherman, to be the first to discover the island. This deserted island captivates all tourists with its spectacular beauty and the great expanse of water. That is why adventure-seeking travelers 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 engine-driven trawler or speedboat from Kuakata. On the impeccably beautiful Victory Island, you can also reach in two hours from Sonakata in Barguna.

Char Bijoy Island is around 5,000 acres in size and is 10 kilometers in length and 3 kilometers in width. It is the habitat of red crabs, thousands of migrating birds, and an abundance of marine fish. Additionally, the island has been planted with around 2,000 mangrove species, including Golpata, Keora, Chaila, and Sundari. The nature of the seasons' conquering undergoes several modifications. The island is submerged during the wet season but emerges as a huge expanse of sand land throughout the winter.

Char Bijoy Island is quite popular with marginal fishermen as a temporary residence. Fishermen remain for two to three months to capture fish, produce dried fish and sell it. Thus, the experience of camping with the fishermen in the midst of the sea at night will certainly provide a unique perspective. Additionally, Char Vijay offers a wonderful view of the sunrise and sunset drifting over the water.

*Recently, an island southeast of Kuakata beach was seen. We gave it the name "Char Vijay." Char Vijay is about 15 kilometers 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 discovered. If the government and various non-governmental organizations work on it, more visitors will arrive. - Security Officer*

*Here we have an island called Char Bijoy, which has been transformed into a tourist spot since 2017. Millions of crabs can still be seen on the spot. Millions of birds can be seen. These come from Siberia during the winter. Now, in the hot weather, they are gone. No tourist-friendly measures have been taken at this spot so far, but tourists come here. Tourists catch birds and red crabs as they desire. - Tour operator<sup>2</sup>*

## **(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 port is situated in Kalapara, a sub-district of Patuakhali, on the west side of the Rabnabad Channel, close to the Bay of Bengal. Payra Port Authority Act 2013 was approved by the National Parliament on November 10, 2013 in order to boost economic activity in the central zone and fulfill future demand. On November 19, 2013, the Honorable Prime Minister Sheikh Hasina opened the country's third seaport, dubbed "Payra Port Authority," near Rabnabad Channel in Patuakhali district. The port was initially intended to be a "deep sea port," but was demoted to a standard port in 2021, indicating that it would be unable to service very large ships, but that smaller vessels could be handled.

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 focused around the Payra Port and Kuakata. The outcome is that, passengers will have an easier time traveling to Payra harbor 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 center, 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.

*Kuakata will become a prominent tourist destination in the not-too-distant future. The government would construct an industrial zone at Payra seaport in Gangamati's Kowar Char region. There will be an EPZ, which will employ 2 lakh people. It would be required to house one lakh people. Five power plants will be dedicated to this. Being the convenience store. These are going to be a reality. Additionally, the government also has plans to build an airport at Kowar Char. There are several activities available in this region. The naval base will be constructed. Additionally, a Coast Guard base will be constructed. As a result, the whole region is now subject to the government's master plan. These changes will occur over the next 2-3 years. Then Kuakata tourism will not be limited to beach travel. Economic importance is expanding as a result of being the area's sole seaport. Everything is undergoing fast change. If a person arrives at the port to work, he will consider heading to the beach for recreation. The government is not allocating the space for all this; it is keeping it to itself. As a result, the whole region will grow into a developed business center similar to Singapore in the next ten years. The government is constructing roads in a big way in accordance with that strategy. Then, with the assistance of Korea, a railway line will be built from Payra to Mongla. The survey has been completed. This strategy will now be carried out as planned. This is what they are doing today, but people will profit in the next two to three hundred years. -Hotel employee<sub>2</sub>*

### **(3) Develop community based tourism (CBT)**

Rakhine is a minor ethnic group in Kuakata. They were 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 best way to see their way of life, culture, and tradition in their natural environment.

Sunasri (2003) states that, 'Community Based Tourism (CBT) is tourism that takes environmental, social and cultural sustainability into account. It is managed and owned by the community, for the community, with the purpose of enabling visitors to increase their awareness and learn about the community and local ways of life' (Suansri, 2003, pp. 14).

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.

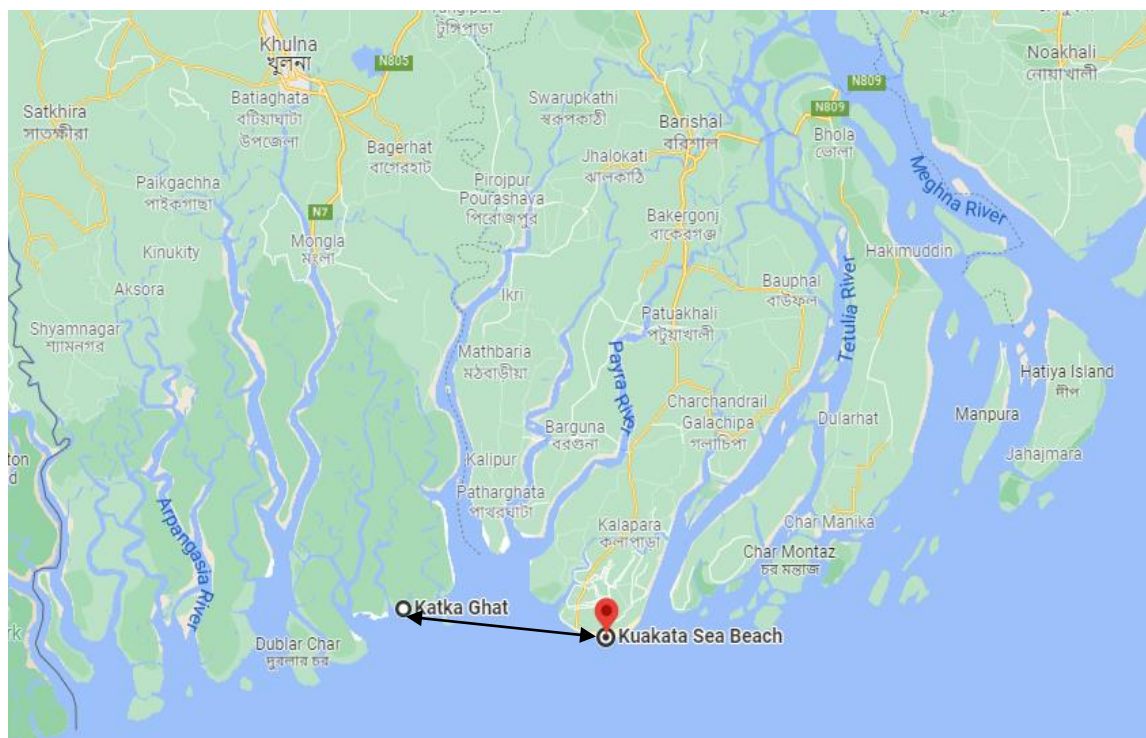
*Once upon a time, the Rakhines were the owner of the land in this area. They are now reaping significant benefits because of tourism. Their villages are becoming tourist destinations. Like the wells of Kuakata, 200-year-old boats and the temples are now tourist attractions. Shops and markets have developed in their places. We proposed to establish "Community Based Tourism" to create a connection between them and tourism. A training program has been organized by the Bangladesh Tourism Board with ten families as a result of that proposal. You do not have to finish a single training session; you just need to organize repeated training. It will take time to change their minds. Before, they had no educated children. Now they have. They, too, want to benefit from this tourism. - Tour operator<sub>1</sub>*

### **(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 Katka, Sundarbans, is about 40 kilometers (Map 6.2). 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 Sundarban. 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, which will take around three hours from here. 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. As a result, the tourists will be able to take a larger tour at a much lower cost. In this way, just as we will attract tourists from Khulna, Khulna will draw visitors from Kuakata. This will have no negative impact on anyone's business. There will be an agreement by both parties. - Tour operator<sub>1</sub>*



Map 6.2: Sundarban route from Kuakata sea beach to Katka ghat

Source: Google map

(<https://www.google.com/maps/dir/Katka+Ghat/Kuakata+Sea+Beach/@22.3356968,90.5687979,9z/data=!4m13!4m12!1m5!1m1!1s0x3a008a004e05885f:0x6b0b024c45a0b5b4!2m2!1d89.7735962!2d21.8540497!1m5!1m1!1s0x30aa62836f83b573:0x31e7fec84916471!2m2!1d90.1822792!2d21.8031005>)

#### **6.4 Conclusion**

This chapter initially addressed underlying challenges and obstacles that have been recognized by the stakeholders and those have the ability to affect tourist activities based on the Kuakata sea beach and the results of sustainable tourism development. Finally, the chapter discussed some of the possibilities for sustainable tourism development on Kuakata that are based on stakeholder perspectives.

A number of underlying challenges to future sustainable tourism development were highlighted by the stakeholders include: 1) Managing Environment degradation, 2) Managing infrastructure and facilities development, 3) Managing Socio-Cultural issues, 4) Managing behavior problem, and 5) Managing Marketing and Monitoring and evaluation. Along with these, certain prospects have been discussed that may help the long-term viability of the Kuakata sea beach tourism industry. These are the ones: 1) Exploring new tourist sites, 2) Payra Seaport- new door to possibilities of tourism, 3) Develop Community Based Tourism, and 4) Introducing a new tourist route.



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*Chapter 7*

*Discussion and Conclusion*

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## **7.1 Introduction**

This research focused on a comprehensive approach to sustainable tourism development in Kuakata, and it provided significant inputs based on the findings of the investigation. The important results of this research are discussed in this chapter in relation to the objectives of the study. In the latter section of the chapter, there is a discussion of future studies as well as a concluding statement.

## **7.2 Key research findings**

### **7.2.1 First objective – tourist survey**

The first objective of this thesis is to examine the sustainability of tourism in Kuakata sea beach in terms of tourists' perception. This objective was discovered by a questionnaire survey, which was conducted. For achieving this objective, the researcher had distributed 400 self-completion questionnaires to the tourists and 215 questionnaires were fully answered. The 28 statements included sustainable tourism development issues such as perceptions of and interactions with the local people, marketing and advertising, issues dealing with conservation and environmental preservation, as well as the quality of the service infrastructure. The findings of 'research objective 1' which examined the sustainability of tourism in Kuakata sea beach in terms of tourists' perception are presented in Chapter 4.

#### **7.2.1.1 Significant discoveries from the tourist demographic profile**

The majority of the tourists were male (75%), and this is because female visitors did not wish to complete the questionnaire and passed it on to their husbands to complete. The majority of respondents (34%) were between the ages of 18 and 25, with around 21% falling between the ages of 26 and 30.

In terms of the education level, the majority of the tourists (33.5%) were graduates, followed by about 25 percent of the visitors who were post-graduates or above; about 22 percent of the tourists went to college; about 9% of tourists had a professional degree; almost 5% had completed high school; about 3% of the respondents had other educational qualifications; 1.4% of tourist respondents were literate, meaning they could read and write; and fewer than 1% of tourists had completed primary education.

40% of respondents earned BDT 50,001 or more per month, compared to approximately 34% earning BDT 35001-50000, approximately 16% earning BDT 25001-35000, 6.5 percent earning BDT 15001-25000, and only 3.7 percent earning less than BDT 15,000.

From the demographic profile of the tourists, we see that young, educated, and high-income tourists visit the Kuakata sea beach.

#### **7.2.1.2 Significant discoveries from travel characteristics of tourists**

The majority (87%) of the 215 tourist respondents purchased souvenirs or antiques as a memento of their travels. This data demonstrates that the popularity of local handicrafts among the visitors has resulted in an increase in the amount of money that has been injected into the local economy.

The majority of visitors were unsure if they should return to Kuakata during their spare time. This was a very high figure. It was around 61%. Only 33% of those surveyed showed an interest in returning to Kuakata in future. On the other hand, it was quite interesting that almost 93 percent of the travelers expressed a desire to recommend Kuakata to their friends, families, and co-workers.

Kuakata received around 42 percent of its visitors as repeat visitors, with the remaining 58 percent being the first-time visitors to the area. It implies that Kuakata sea beach is retaining its existing visitors.

Almost 40% of the responses came from the people who said the internet was an important source of information for planning a trip to Kuakata sea beach. As a group, about 35% of the tourists asked said that word of mouth was a good source of information.

#### **7.2.1.3 Significant discoveries from travel behavior of tourists**

In order to promote tourism goods and services, it is essential to gauge how satisfied visitors are with their experiences. More than half of the tourists (53%) were satisfied with their stay in Kuakata sea beach.

#### **7.2.1.4 Significant discoveries from factor analysis**

Factor Analysis revealed the following key factors.

The first factor, accounting for 18% of variance, has been labelled “Quality of Destination”, as it consists of attributes associated to the basic quality of a tourist destination. The quality of sea water, accommodation facilities, cleanliness of beach areas and safeties of the tourists are related to this factor. The mean analysis of this factor indicated that tourists faced overcrowding in the beach area, and it was the second highest value.

The second component, "Desirable Features," contains factors that affect how visitors perceive products and services, as well as how much they are willing to pay for them. The mean analysis of this factor indicated that most of the tourists do not use dustbins.

The third factor, “Condition of Supporting Service”, contains attributes related to medical and first-aid services, parking area, transportation system, ticket counter, money exchange and internet services. The mean value for one statement under this factor, "Medical and first-aid services are sufficient," was 2.70, which was the lowest in the group. This finding clearly demonstrates that, in the event of a health-related emergency, visitors are placed at significant risk due to the poor medical services available in Kuakata.

Factor four, "Requisite Facilities", reveals that dustbins are placed at the right places in Kuakata with the highest factor loading, followed by the statement- Tourist police or guards are helpful to the visitors. The height loading statement had the lowest mean value of this factor. This research reveals unequivocally that visitors are strewing filth and trashcans everywhere due to the incorrect placement of the dustbin. This contributes to environmental pollution, which is damaging to the sustainability of tourism in Kuakata.

The fifth factor “Interest for STD” indicated that tourists prioritized environmentally friendly practices. Tourists prefer those hotels to stay that were more aware of environment and cognizant of their resource utilization. In this factor, tourists expressed the opinion that the revenue generated from tourism is spent on environmental protection and village development.

### **7.2.1.5 Significant discoveries from perceptions of tourists on STD**

The results of the Independent Sample t Test and One-Way ANOVA showed that there was no significant difference between the variables with respect to gender, age, and educational qualification, whereas the tourist's house location from Kuakata sea beach and the monthly family income of the tourists made a significant difference in their perception towards STD.

### **7.2.2 Second objective – resident survey**

The second objective is to measure the perceptions of residents toward sustainable tourism development in Kuakata sea beach. A questionnaire survey led to the discovery of this objective. To accomplish this objective, the researcher distributed 300 self-administered surveys to the households, and 245 questionnaires were entirely completed. As a matter of sustainable tourism development in Kuakata, three major sub-issues emerged: economic, socio-cultural, and environmental. Thirty statements were included in the household survey questionnaires to address these three sub-issues. The interviews focused mostly on the nearby communities of the Kuakata sea beach region. The findings of 'research objective 2' that measure the perceptions of residents toward sustainable tourism development have been presented in Chapter 5.

#### **7.2.2.1 Significant discoveries from the residents' demographic profile**

According to the findings of the resident survey, out of 245 respondents, 73.9 percent of respondents were male, and 26.1 percent of respondents were female. It also found that 91% of the people who have lived in Kuakata for a long time are natives of Kuakata by birth.

The study sends a clear message that the vast majority of the resident respondents were engaged in tourism-related jobs directly or indirectly. The proportion was 97 percent, with only about 3 percent working in occupations unrelated to tourism. As a result, tourism has a significant economic influence on Kuakata.

Those employed in tourism-related jobs are involved in 20.8% of motorcycle/auto/van driving, 26.5% of business, 3.7% of tourist guide/photographer, and 10.2% of sculpture, art, and craft designing.

Approximately 76 percent of survey respondents' educational level was high school or less. Therefore, environmental, service-related, and overall tourism-related awareness should be created among the local residents.

According to the resident survey, 98.4 percent of respondents' monthly income was BDT 10,001 to 50,000. So, this figure makes it clear that tourism has played a significant role in alleviating poverty in Kuakata. Tourism is one of the many development partners in the area's economy.

#### **7.2.2.2 Significant discoveries from residents' perceptions and attitudes towards STD**

When the mean values of 30 variables were examined, most of the local respondents agreed with the perception of sustainable tourism. The range ranged from 5.50 to 6.53, indicating that respondents had strong opinions on the impacts of tourism. Respondents evaluated tourist activity's economic effects as the highest, followed by its environmental impact. Locals, in contrast, think that tourism has a negative impact on the socio-cultural environment, despite the fact that their responses tend to converge around an above-average value.

The first dimension, titled "Economic Impact," consists of 10 variables that describe the economic impact on the Kuakata sea beach. In terms of increased income from tourism activities, this characteristic has a high mean value of 6.53 for resident respondents, and this is an important component of resident respondents' needs. Nine variables were included in the "Environmental Effect." The statement "Tourism industry should take care of environmental protection" had the highest mean rank, with a mean score of 6.27. On the other hand, the statement "The construction of hotels and tourism facilities have destroyed the natural environment" had the lowest mean score. Although the environment is being harmed while developing the facilities for tourism, the environment is being protected more than before due to tourism. The third dimension, named "Socio-Cultural Impact," shows that traffic accidents have increased due to tourism in Kuakata.

The results of the Independent Sample 't' test and One-Way ANOVA proved that for the perceptions of residents of STD at Kuakata sea beach in relation to the resident

respondents' demographic characteristics presented that there is a significant difference between the variables with respect to residents' types, gender, age, residents' house location from Kuakata sea beach, educational qualification and occupations where  $p < 0.05$ . However, there is no significant difference between the perceptions of resident respondents with regard to monthly family income where  $p > 0.05$ . Therefore, out of seven demographic variables, six variables rejected the null hypothesis.

### **7.2.2.3 Significant discoveries from factor analysis for resident towards STD**

The first factor, accounting almost for 17% of variance, has been labelled "Perceived Negative Impacts", as it consists of attributes associated to the negative impacts for tourism activities in Kuakata. Eight statements are under this factor. In Kuakata sea beach, it is clearly implied that tourist activities have degraded the natural environment by increasing land, water, air, and noise pollution, as well as by using excessive amounts of water and power.

Factor two consists of six variables named "Community Satisfaction and Interest towards STD". Residents' contentment and their involvement in sustainable tourist development are included in this second component.

The third factor, "Perceived Positive Impacts", contains six variables that express how economic, environmental, and socio-cultural dimensions benefit from tourism.

Factor four named "Welfare increase" refers to the changes in community life that residents perceive as a consequence of tourist activities and their impact on their quality of life.

The fifth factor is composed of three variables dubbed "Perceived Social Costs." Land prices, traffic accidents, and criminal activity have all increased as a consequence of the tourism activities in Kuakata, which is referred to in this factor.

### **7.2.3 Third and Fourth objectives – Prospects and Challenges**

The third and fourth objectives are to explore the prospects of sustainable tourism development in Kuakata sea beach and to identify the challenges to sustainable tourism development in Kuakata sea beach, respectively. The findings of "research

objective 3 and 4," which measure the challenges and prospects for sustainable tourism development on Kuakata sea beach is presented in Chapter 6. Semi-structured interviews were utilized to reveal those objectives (objective 3 and 4). For achieving those objectives, twelve participants, including members of the local government, tourist police, accommodation service providers, leader of the Hotel-Motel Owners' Association, transportation service providers, tour operators, tourism-related service providers, and community leaders were interviewed in Kuakata.

### **7.2.3.1 Theme A: Challenges to sustainable tourism development**

Theme A identified in Chapter Six dealt with challenges i.e., Kuakata's environmental degradation, infrastructure and facilities development, socio-cultural issues, behavior problem/Knowledge and awareness, and marketing, monitoring and evaluation which have the ability to affect the development of sustainable tourism in Kuakata. **Figure 7.1** summarizes these challenges into broad, interconnected concepts. It is crucial to remember that these themes should not be considered in isolation. It can be done only by bringing them together and analyzing their interactions that a clear picture of the fundamental challenges plaguing Kuakata's tourism became visible. These issues are critical to Kuakata's sustainable development and must be addressed if sustainable tourism is to materialize.



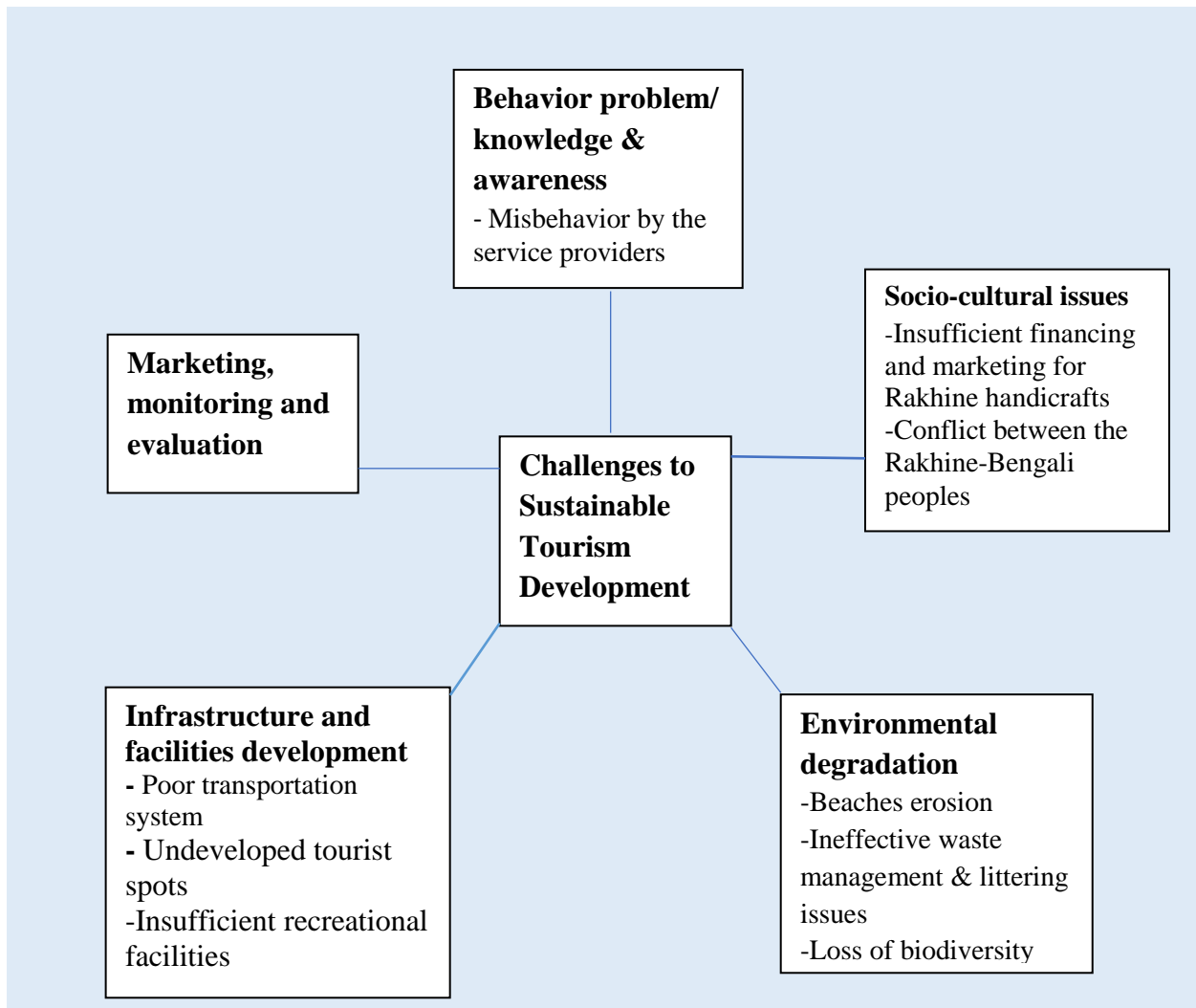


Figure 7.1: Perceived challenges affecting sustainable tourism development in Kuakata

Beach erosion, inadequate waste management and littering difficulties, 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 (Kimbu, 2010).

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 litany of mistreatment faced by the tourists from the service providers.

#### **7.2.3.1.1 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). There are many challenges to be faced in developing sustainable tourism in Kuakata. 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. It is almost impossible for the forest department to prevent erosion of the beach unless massive infrastructure projects, such as megaprojects, are implemented to prevent coastal erosion from occurring; otherwise, forests, biodiversity, and tourism would be jeopardized.

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 (**Figure 7.2**). 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). The first nourishment project in the United States took place on Coney Island, New York, between 1922 and 1923, and is currently a widely employed method of coastline protection by both public and private organizations (Dornhelm, 2004).



Figure 7.2 Sand-filled geo-bags to protect the fragile sea beach, March 2021  
(Source: Picture taken by the researcher)

Meanwhile, the Water Development Board has sent development project proposals to the ministry for the permanent protection and development of the beach. The mega project to prevent beach erosion needs to be implemented very soon. If this mega project is implemented, it is hoped that the erosion of Kuakata beach will be permanently prevented. Appendix 4 depicts a beach nourishment project at Virginia Beach, USA.

### **7.2.3.2 Theme B: Prospects of sustainable tourism development**

If Theme B is developed and/or improved and well-managed, the future tourism industry in Kuakata will be more attractive to the tourists. Exploring new tourist sites (Char Bijoy), Payra Seaport, Community Based Tourism, ‘Kuakata sea beach-deep sea-Sundarbans’ tourist route are the new prospects under the Theme B which is showing in **Figure 7.3**. Theme B has the potential to significantly contribute to the sustainable development and expansion of the tourism industry in Kuakata. When the government places a greater emphasis on promoting tourism, they, 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.

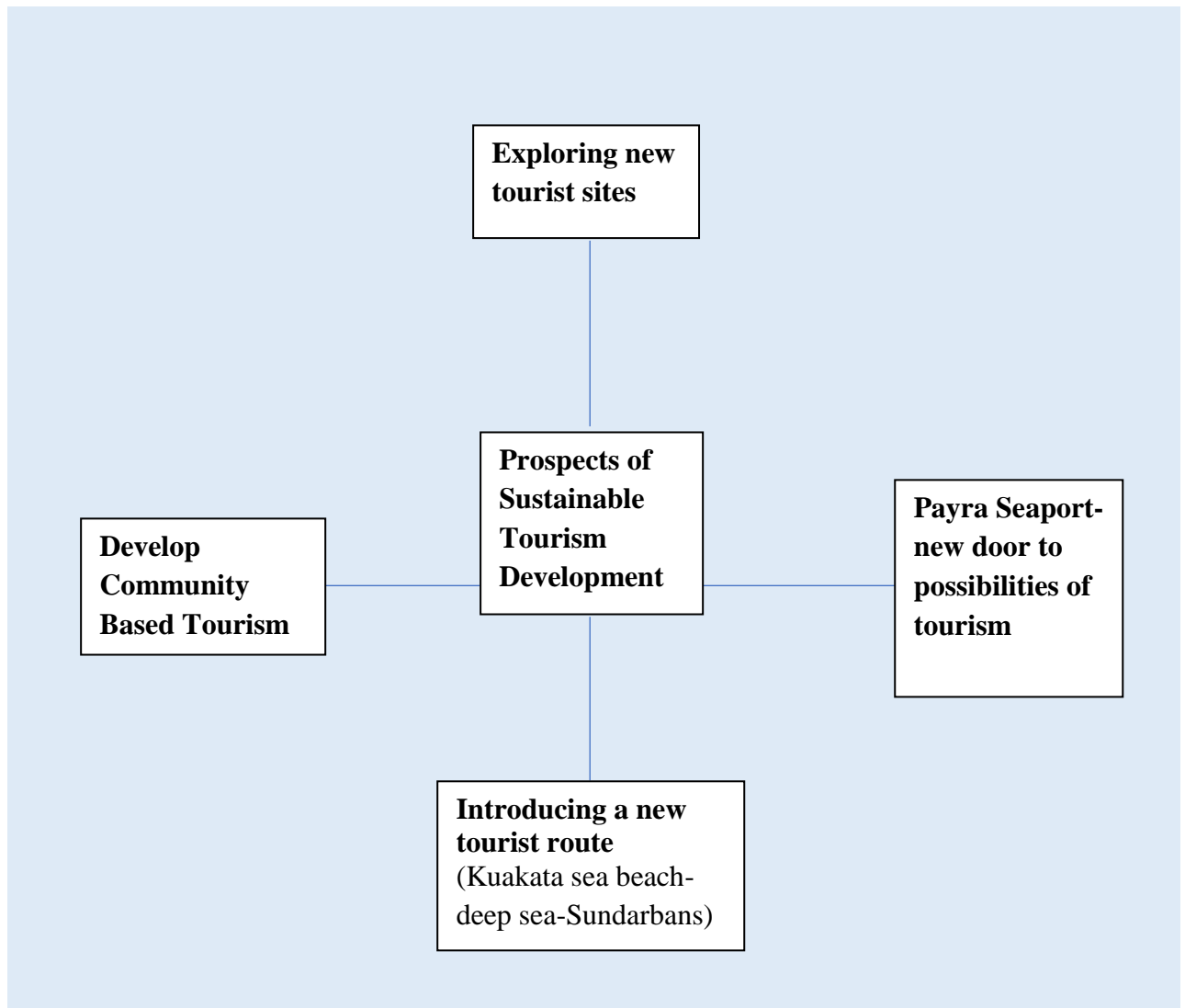


Figure 7.3: Prospects of sustainable tourism development in Kuakata

### 7.3 Implications of Research Findings

The four objectives of this thesis were chosen with a wide perspective in mind: the sustainability of tourism in Kuakata sea beach in terms of tourists' perception (first objective), residents' perceptions (second objective), the prospects (third objective), and the challenges (fourth objective) for sustainable tourism development on Kuakata sea beach.

The outcomes of the study reported in this thesis have various implications for practitioners. The findings presented in Chapter 4 (tourists' perception) may be useful

for the businesspeople who are engaged in providing tourist goods and services in Kuakata. This research describes the demographic profile of the tourists, explains respondents' travel behaviors as well as tourists' levels of satisfaction, and provides factor and mean analysis for sustainability issues in Kuakata, which might be useful for developing effective sustainable tourism. From the findings presented in Chapter 5, the management agencies may get an overarching idea about the demographic profile of the host communities, their (local residents) perceptions about sustainable tourism which may help them to select appropriate strategies for further actions. Chapter 6 critically examines the prospects and challenges of sustainable tourism held by multiple stakeholders (tourism demand-supply side stakeholders, and local authorities and management agencies) at the Kuakata sea beach in Bangladesh.

### **7.3.1 Strategic framework for sustainable tourism development in Kuakata**

The potentials, if completely and wisely utilized and carefully managed, may lead to the growth and formation of a thriving sustainable tourism sector in Kuakata. According to the findings of the research, the current state of tourism growth in Kuakata is beset by a slew of challenges and inconsistencies that are impeding its sustainable development. Following primary and secondary data analysis and theoretical study in Chapters Two through Six, the researcher constructed a strategic framework for Kuakata sea beach which is presented in **Figure 7.4**.

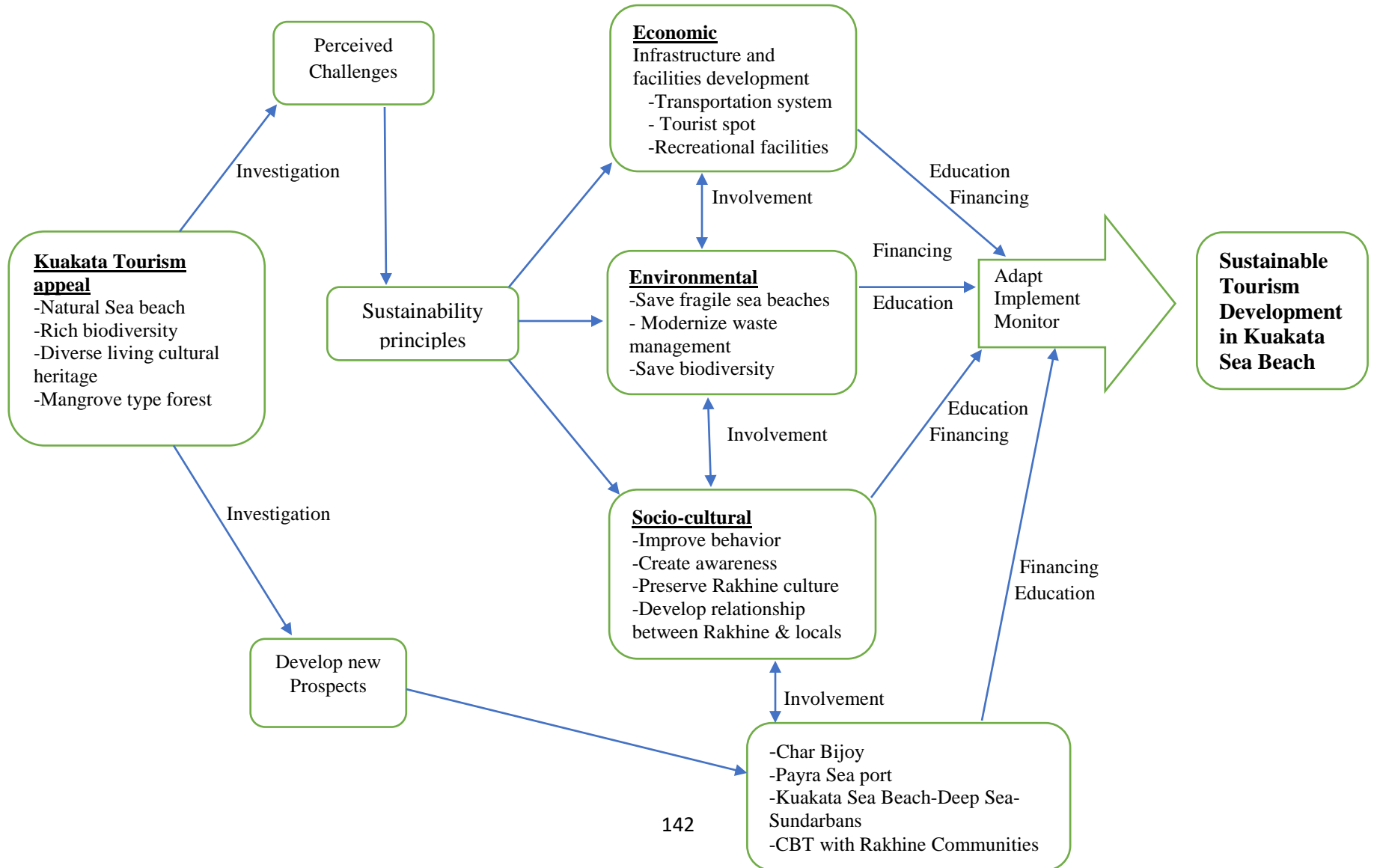
The strategic framework addresses multiple stages of tourism to develop sustainable tourism in Kuakata. In order for the sustainability ideas and principles outlined in Chapter Two to be utilized in Kuakata's tourism development, it is always necessary to conduct a thorough examination of all cross-sectoral concerns. All of the important issues in the strategic framework are related by lines, demonstrating that an integrated approach is required when examining the components required for sustainable tourism development in general, and in the town of Kuakata specifically. There are keywords written across these connecting lines showing what activities need to be followed at each step in order to achieve the intended results at the end of this framework and make this framework a reality.

As shown in Figure 7.4, the first step is to undertake an investigation of Kuakata's tourism when developing a sustainable tourism industry in Kuakata. Through an

investigation of Kuakata's tourism appeal, this framework identified perceived challenges and some new prospects. With the assistance of all of the prospective stakeholders, this research was carried out systematically and academically at all current and proposed locations. In addition, the approaches and strategies described in Chapter Three were also used.

According to the sustainability principles, Kuakata face three main types of challenges: economic, environmental and socio-cultural which were discussed in Chapter Four, Five and Six. Perceived challenges can be solved only if the stakeholders are educated about sustainable tourism and concerned about the negative impacts of tourism, and investments are needed. The national government will need to collaborate with other ministerial agencies for infrastructure and facility development, modernize waste management systems, and create awareness programs for socio-cultural issues. For example, the necessary capital is needed to save the fragile sea beach.

**Figure 7.4:** Strategic framework for sustainable tourism development in Kuakata sea beach





Four new prospects are shown in Chapter 6. These are: Exploring New Tourist Sites (Char Bijoy), Payra Sea Port, New Tourism Routes (Kuakata Sea Beach-Deep Sea-Sundarbans), and Community Based Tourism especially with Rakhine community. If these prospects can be implemented in a sustainable manner, it will open up new avenues for sustainable tourism in Kuakata. As a consequence, the economic and environmental aspects of the area are expected to improve, and the living standards of the people in the area and visitors will be able to get a new taste of Kuakata tourism. However, new investments are needed to harness these potentials. Simultaneously, there is a need for a robust government monitoring system and increased awareness among tourism stakeholders. Otherwise, the tourism situation in Kuakata may become worse than it is now.

Incorporating active monitoring techniques into these frameworks and strategies would help ensure adherence to the three fundamental pillars of sustainable tourism development. Implementing a framework like this one with the right monitoring and control mechanisms will have a lot of practical benefits for the field. It will help Kuakata become a more sustainable tourism destination in a way that ensures biodiversity conservation while also providing socio-economic benefits to the host communities and ensuring the highest possible levels of tourist satisfaction. It will only be possible to get all of the parts of the framework shown in Figure 7.4 above into place if everyone works together and the government helps them.

#### **7.4 Scope for further research**

Although this study analyzes Kuakata's prospects and challenges in terms of sustainable tourism, it does give some guidance for future research on Kuakata tourism.

- Due to the COVID-19 pandemic, this study has been completed with a focus on domestic visitors. However, the international tourism market has already developed in Bangladesh. Further research is required to investigate the attitudes, expectations, experiences, as well as levels of sustainable tourism practice, satisfaction or dissatisfaction of international (foreign) tourists and whether they match or differ from domestic tourists. The study's results will assist Bangladesh in developing and implementing sustainable development

and management strategies, particularly for Kuakata tourism, which caters to both categories of tourists.

- A more in-depth study of eco-label standards for hotels, resorts, and lodges is needed in future to assess their eco-friendly practices and then rate their responsible behaviors towards ecology and the environment. Tourists can also use this information to stay in eco-friendly places, which will lessen their impact on the local environment.
- According to the findings of the research, community-based tourism in Kuakata is deemed a viable instrument for the establishment of a sustainable tourist industry. As a result, future researchers will be able to demonstrate how community-based tourism will continue to help the Rakhine community and what needs to be done to make tourism more sustainable in order to prevent future difficulties.

For future research into specific aspects of sustainable tourism development in Bangladesh generally and Kuakata specifically, researchers can use this study as a starting/reference point.

### **7.5 The concluding statement**

The existing COVID-19 pandemic will have a substantial impact on the tourism sector and provide new challenges for the development of sustainable tourism. Considering the relevant concept of sustainable tourism development, this thesis focuses on the various prospects and challenges of sustainable tourism at Kuakata 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).

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 thesis examines the various prospects and challenges of sustainable tourism in the context of highly vulnerable developing nation so that it can meet the tourism needs of future generations.

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# *Appendices*

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**Appendix 1**

**Department of Tourism and Hospitality Management  
University of Dhaka  
Survey Questionnaire (Tourist)**

***Title: Sustainable Tourism: Prospects and Challenges of Kuakata Sea Beach***

1) Purpose of your visit to Kuakata Sea Beach	a) Holidays b) Business c) Education	d) Visiting Friends/Relatives e) Historical & Cultural f) Others.....
2) Length of your stay at Kuakata Sea Beach	a) Day Tour b) Over Nigh Stay c) 2 to 3 Days	d) 4 to 6 Days e) 7 to 10 Days f) 11 Days or more
3) Travel arrangements are made by	a) Self c) Others.....	b) Tour Operator
4) How do you come to know about Kuakata Sea Beach? (You can answer more than one)	a) Magazine b) Newspaper c) Word of Mouth d) Internet	e) T.V. f) Travel Agents g) Others.....
5) Who are your travel companions?	a) Alone b) Family c) Friends	d) Colleagues e) Others.....
6) Total size of your group:	a) None b) Two c) 3 to 5	d) 6 to 10 e) 11 to 20 f) 21 or more
7) Which type of Accommodation / Lodging you are using in Kuakata?	a) Star Category Hotel b) Budget Hotel c) Friends/Relatives Home	d) Guest House e) Others.....
8) Did you buy any souvenir/artefact as a remembrance of your tour?	a) Yes	b) No
9) Is this your first visit to Kuakata Sea Beach?	a) Yes	b) No
10) Will you visit the destination again?	a) Yes	b) No c) May be
11) Would you recommend your friends or relatives visit Kuakata Sea Beach?	a) Yes	b) No

12) Please indicate your level of satisfaction with your visit to Kuakata Beach:  
(Please tick the appropriate box)

<b>Extremely dissatisfied</b>	<b>Dissatisfied</b>	<b>Somewhat Dissatisfied</b>	<b>Neither satisfied nor dissatisfied</b>	<b>Somewhat Satisfied</b>	<b>Satisfied</b>	<b>Extremely Satisfied</b>
1	2	3	4	5	6	7

13) Please tick in the appropriate box about your perception and level of contribution to promote Sustainable Tourism in Kuakata.

- (7 = Strongly Agree  
6 = Agree  
5 = Somewhat Agree  
4 = Neither Agree nor Disagree  
3 = Somewhat Disagree  
2 = Disagree  
1 = Strongly Disagree)

<b>Sl.</b>	<b>Sustainable Tourism Indicators</b>							
1	Kuakata sea beach is neat and clean	7	6	5	4	3	2	1
2	Accommodation facilities are good	7	6	5	4	3	2	1
3	Sea water quality is good	7	6	5	4	3	2	1
4	Transportation system is good	7	6	5	4	3	2	1
5	Quality of food is good	7	6	5	4	3	2	1
6	Price of the product and service are reasonable	7	6	5	4	3	2	1
7	Dustbins are placed at the right places	7	6	5	4	3	2	1
8	Visitors mostly use the dustbins	7	6	5	4	3	2	1
9	Seating arrangements at the destination are sufficient	7	6	5	4	3	2	1
10	The overall amenities at the tourist places need to be improved	7	6	5	4	3	2	1
11	Tourist police or guards are helpful to the visitors	7	6	5	4	3	2	1
12	Kuakata is safe	7	6	5	4	3	2	1
13	Parking area is sufficient	7	6	5	4	3	2	1

14	Hotels, Lodges and Restaurants are adequately available	7	6	5	4	3	2	1
15	Evening and nightlife are not dull	7	6	5	4	3	2	1
16	Services at the hotel, motel, guest house and restaurant are prompt	7	6	5	4	3	2	1
17	Untreated drainage water entering into the sea causing pollution	7	6	5	4	3	2	1
18	Local people are friendly	7	6	5	4	3	2	1
19	Visitors can see and experience the local culture and lifestyle	7	6	5	4	3	2	1
20	Tourists are conscious about natural, cultural heritages and sits	7	6	5	4	3	2	1
21	Ticket counter, money exchange and internet services are tourist friendly	7	6	5	4	3	2	1
22	Medical and first-aid services are adequate	7	6	5	4	3	2	1
23	Kuakata Sea Beach is overcrowded with the visitors	7	6	5	4	3	2	1
24	Publicity to sensitize visitors about the negative effects of tourism is minimum	7	6	5	4	3	2	1
25	I like to purchase goods produced by local people	7	6	5	4	3	2	1
26	I prefer to stay in hotels that are doing good for the environment	7	6	5	4	3	2	1
27	I feel revenue generated from tourism can be spent for garbage cleaning and village development	7	6	5	4	3	2	1
28	Tourists are conscious of the use of resources such as the electricity and water	7	6	5	4	3	2	1

**Tourist Profile**

14) Gender	a) Female	b) Male
15) Which age group do you belong to?	a) 18- 25 years b) 26-30 years c) 31-35 years d) 36-40 years	e) 41-45 years f) 46-50 years g) 55-60 years h) 61 years or above
16) Nationality:		
17) How far is your home from Kuakata?	a) 0-50 km b) 51-100 km c) 101-150km	d) 151-200km e) 201-250km f) 251 km or more
18) Educational Qualification details:	a) No Literate b) Literate c) Primary School d) High School e) College	f) Professional Degree g) Graduate h) Post Graduate i) Others.....
19) Your estimated average household income per month (in BDT):	a) BDT 15,000 or below b) BDT 15,001 - 25,000 c) BDT 25,001 – 35,000	d) BDT 35,001 – 50,000 e) BDT 50,001 – or above

## Appendix 2



**Department of Tourism and Hospitality Management**  
**University of Dhaka**  
**Survey Questionnaire (Local Resident)**  
***Title: Sustainable Tourism: Prospects and Challenges of Kuakata Sea Beach***

1) Are you a native of Kuakata by birth?	a) Yes	c) No	
2) How long have you lived in Kuakata?	a) 0 – 3 years b) 4 - 6 years c) 7- 10 years	d) 11-15 years e) 16-20 years f) 21 years or more	
3) How many people are in your family?	No of adults _____	No of children_____	Total_____
4)What is your primary occupation?	a) Farming/animal husbandry b) Fishing/ fishing labor c) Motor Bike/Auto/Van driver d) Business e) Tourist guide	f) Shop employee g) Sculpture, art and craft designer h) Government/private employment i) Retired Employee j) Others.....	
5) Is your job directly or indirectly related to tourism?	a) Yes	c) No	
6) Gender	a) Female	b) Male	
7) Which age group do you belong to?	a) 18- 25 years b) 26-30 years c) 31-35 years d) 36-40 years	e) 41-45 years f) 46-50 years g) 55-60 years h) 61 years or above	
8) How far is your home from Kuakata sea beach?	a) 0-1 km b) 2-3 km c) 4-6 km d) 7-10 km	e) 11-15 km f) 16-20 km g) 21 km and more	
9) Educational Qualification details:	a) No Literate b) Literate c) Primary School d) High School	f) Professional Degree g) Graduate h) Post Graduate i) Others.....	

	e) College	
10) Your estimated average household income per month (in BDT):	a) BDT 5,000 or below b) BDT 5,001 – 10,000 c) BDT 10,001 – 20,000 d) BDT 20,000 – 30,000	e) BDT 30,001 – 40,000 f) BDT 40,001 – 50,000 g) BDT 50,001 or above

11) Please tick in the appropriate box about your perception of sustainable tourism in Kuakata.

- (7 = Strongly Agree  
6 = Agree  
5 = Somewhat Agree  
4 = Neither Agree nor Disagree  
3 = Somewhat Disagree  
2 = Disagree  
1 = Strongly Disagree)

Sl.	Sustainable Tourism Indicators							
1	Tourism activities in Kuakata Sea Beach has increased my income	7	6	5	4	3	2	1
2	Tourism has improved the way of living	7	6	5	4	3	2	1
3	Tourism has created jobs for many people in my village	7	6	5	4	3	2	1
4	Tourism has attracted more business to our locality	7	6	5	4	3	2	1
5	Tourism creates jobs more for externals than local residents	7	6	5	4	3	2	1
6	Local people do not get the management level jobs	7	6	5	4	3	2	1
7	The price of land has increased due to tourism in Kuakata Sea Beach	7	6	5	4	3	2	1
8	Tourism has increased the cost of living	7	6	5	4	3	2	1
9	Tourism has contributed to overall development of local people	7	6	5	4	3	2	1
10	Tourism has improved financial services such as mobile banking, banking facilities and ATM service	7	6	5	4	3	2	1
11	Tourism development has improved the physical appearance of Kuakata Sea Beach	7	6	5	4	3	2	1
12	The construction of hotels and tourism facilities have destroyed the natural environment	7	6	5	4	3	2	1



13	Tourism causes overuse of water in this destination	7	6	5	4	3	2	1
14	Tourism causes overuse of electricity in this destination	7	6	5	4	3	2	1
15	Tourism has been increasing land and water pollutions	7	6	5	4	3	2	1
16	Tourism has been increasing air and noise pollutions	7	6	5	4	3	2	1
17	Tourism has caused the crowding of beaches, paths, parks, and other leisure places	7	6	5	4	3	2	1
18	Tourism industry should take care of environmental protection	7	6	5	4	3	2	1
19	Tourism has improved water supply, sewerage system and road-lighting.	7	6	5	4	3	2	1
20	Tourism activities in Kuakata Sea Beach creates cultural exchanges between tourists and residents	7	6	5	4	3	2	1
21	Tourism encourages a variety of cultural activities by the local residents (e.g., crafts, arts, music)	7	6	5	4	3	2	1
22	Tourism has a caused for replacing job like fishing, agriculture	7	6	5	4	3	2	1
23	Tourism has increased the number of traffic accidents	7	6	5	4	3	2	1
24	Tourism has increased social problem (crime/ theft, alcohol and drug abuse, diseases (HIV), prostitution)	7	6	5	4	3	2	1
25	Residents 'interest and satisfaction towards tourism industry gets importance	7	6	5	4	3	2	1
26	There are some tourism impacts on dress, food habits and behavior of local people	7	6	5	4	3	2	1
27	Tourism upgrades the social value of local people	7	6	5	4	3	2	1
28	Tourism is damaging to the local culture and traditions.	7	6	5	4	3	2	1
29	I am satisfied with the current tourism activities in Kuakata Sea Beach	7	6	5	4	3	2	1
30	I want these tourism sites to be well maintained for many generations to come	7	6	5	4	3	2	1

### **Appendix 3: Semi-Structured Interview Questionnaire**

#### **Section 1 - Information about the interviewee**

1. Could you kindly tell me a little bit about yourself?
2. What is your job and your position in your firm?
3. How long have you been employed in the tourism industry?
4. What courses/programs/tertiary education have you completed?
5. Have you ever heard the term sustainable tourism?
6. Have you ever participated in a tourism-related seminar, workshop, or lecture?

#### **Section 2 - Kuakata sea beach and sustainable tourism**

1. Can you explain your operations/recreational activity?
2. Why is the Kuakata sea beach important to you?
3. What is your understanding of sustainable tourism development?
4. What impacts does tourism have on the environment (natural, economic, and socio-cultural environment) in Kuakata?
5. How to manage west management in Kuakata sea beach?
6. What is the municipality Kuakata actually doing to promote the sustainable development of tourism in the country?
7. What strategies do you use to ensure your business in a sustainable manner?
8. What key strategies do you implement to ensure sustainable tourism development of the Kuakata sea beach?
9. What is the relationship between tourism and the local people?
10. Is there any social problems or crime happening here because of tourism?
11. What are the major challenges to developing sustainable tourism in Kuakata, in your opinion?
12. What do you think is the new potential of tourism in Kuakata?
13. How do you want to see tourism on the Kuakata sea beach evolve in the future?
14. Are there any additional points you would like to raise?

#### Appendix 4

This beach nourishment project is under construction at Virginia Beach, USA



(Source: <https://www.iwr.usace.army.mil/Portals/70/docs/projects/HowBeachNourishmentWorksPrimer.pdf>)